COASTAL CONSERVANCY

Staff Recommendation
February 14, 2013

CARPINTERIA CREEK WATERSHED RESTORATION: CIRCLE G RANCH FISH PASSAGE IMPROVEMENTS

Project No. 12-060-01
Project Manager: Rachel Couch

RECOMMENDED ACTION: Authorization to accept restoration grant funding from National Oceanic and Atmospheric Administration and to disburse up to $90,000 to the Earth Island Institute to prepare design and engineering plans for a fish barrier removal project at the Circle G Ranch on Carpinteria Creek in Santa Barbara County.

LOCATION: Carpinteria Creek watershed, Santa Barbara County

PROGRAM CATEGORY: Integrated Coastal and Marine Resources

EXHIBITS

Exhibit 1: Project Location and Site Map

Exhibit 2: Photos and Figures

Exhibit 3: Project Letters

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31220 *et seq.* of the Public Resources Code:

"The State Coastal Conservancy hereby authorizes acceptance of grant funding from National Oceanic and Atmospheric Administration under the Community-based Habitat Restoration Partnership Program, and disbursement of up to ninety thousand dollars ($90,000) to the Earth Island Institute (Earth Island) to prepare design and engineering plans for a fish-barrier removal project to improve steelhead trout passage and habitat at the Circle G Ranch property along Carpinteria Creek, as shown on Exhibit 1 to the accompanying staff recommendation. Prior to the disbursement of Conservancy funds, Earth Island shall submit for review and approval of the Conservancy's Executive Officer a work program, budget, schedule and any contractors to be employed for the project and evidence that Earth Island can provide all the funds needed to complete the plans."

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 current Project Selection Criteria and Guidelines.
2. The proposed authorization is consistent with the purposes and objectives of Chapter 5.5 of Division 21 of the Public Resources Code, regarding integrated coastal and marine resource protection.
3. The proposed project is consistent with applicable local watershed management plans and water quality control plans.
4. Earth Island Institute is a nonprofit organization qualified under Section 501(c)(3) of the U.S. Internal Revenue Code, and its purposes are consistent with Division 21 of the California Public Resources Code."

PROJECT SUMMARY:

The proposed project would grant up to $90,000 to the Earth Island Institute (Earth Island) to prepare design and engineering plans to improve passage and habitat for steelhead trout at the Circle G Ranch along Carpinteria Creek. (See Exhibit 2, project photos). This project serves as the final project of an ongoing, comprehensive effort to restore and promote steelhead recovery in the Carpinteria Creek watershed and is a companion to the Pinkham Crossing Project also proposed for authorization by this Board.

The Carpinteria Creek watershed is one of the largest on Santa Barbara County's south coast and offers one of the region's best opportunities for restoring significant runs of endangered southern steelhead (*Oncorhynchus mykiss*). The upper watershed has perennial water flows and extremely high-quality trout habitat, while the lower creek, unlike most south coast streams, is not channelized and runs freely under full-span bridges at both the Union Pacific Railroad tracks and Highway 101 crossings. Historically, Carpinteria Creek supported plentiful runs of anadromous steelhead, and the upper watershed continues to sustain a population of resident rainbow trout. Because of human modifications to the watershed—primarily the construction of several road crossings —anadromous steelhead now enter the stream in very small numbers. This is the final project in a series of demonstration projects designed to open up the watershed to historic steelhead runs.

Carpinteria Creek is listed as having a "Core 1" focus for recovery in the *NOAA Southern California Steelhead Recovery Plan* (NMFS 2011). Core 1 populations are a high priority for recovery actions based on a variety of factors, including:

- the intrinsic potential of the population in an unimpaired condition;
- the role of the population in meeting the spatial and/or redundancy viability criteria;
- the conditions of the population, the severity of the threats facing the populations;
- the potential ecological or genetic diversity the watershed and population could provide to the species; and
- the capacity of the watershed and population to respond to the critical recovery actions needed to abate those threats.

Core 1 populations form the nucleus of the Recovery Plan. Critical Recovery Actions in the Plan specifically call for the development and implementation of a plan to remove or modify fish barriers within the Carpinteria Creek watershed. The Plan states that restoring species access to historical habitats will reduce the extinction risk and increase population growth rate. A comprehensive inventory of all fish passage barriers along the county's south coast identified Carpinteria Creek as having the highest total habitat value and best restoration potential for endangered steelhead among all south coast streams because of its habitat quantity and quality relative to other creeks along the southern coast of California. (*Steelhead Assessment and Recovery Opportunities in Southern Santa Barbara County, California,* Matt W. Stoecker and Conception Coast Project, June 2002; http://www.conceptioncoast.org/projects_steelhead.html).

The project objective is to complete the final barrier removal efforts and improve conditions for steelhead migration throughout the Carpinteria Creek watershed. To date, the larger effort to restore anadramous fish habitat on both the mainstem and its main tributary, Gobernador Creek, has resulted in removal or modification of seven barriers (see "Project History" section below), with the eighth (Pinkham property crossing) scheduled for removal in 2013, if it receives Conservancy approval.

The Circle G Project has been in development since 2004 and aims to improve migration conditions for the federally endangered southern steelhead trout on private property owned by Circle G Ranch, LLC in the Carpinteria Creek watershed. The project involves the completion of preliminary design and engineering plans for the removal of an undersized bridge, abutments and cement and grouted rock banks along 117 linear feet of stream channel. The tasks involved in this project include a conducting a topographic survey, geotechnical investigations, development of hydrologic and hydraulic calculations, and preparation of conceptual, intermediate and final designs, and cost estimates.

Earth Island Institute and South Coast Habitat Restoration (SCHR), a subsidiary of Earth Island, would undertake the project in cooperation with the landowner. Earth Island is a nonprofit organization established under section 501(c)(3) of the Internal Revenue Code, and has operated successful environmental programs internationally for 30 years. Earth Island/SCHR have managed a number of stream restoration planning and implementation projects in Santa Barbara and Ventura Counties, including two sites in Carpinteria watershed funded by Conservancy grants: Bliss and Cate Fish Passage Improvements (Project No. 02-088). SCHR has removed or modified a total of 13 barriers to steelhead migration in Santa Barbara and Ventura Counties and is involved in the planning for removal of over a dozen other fish migration barriers in the region.

Site Description: Carpinteria Creek is located in coastal Santa Barbara County, about 10 miles southeast of the City of Santa Barbara and 16 miles northwest of the City of Ventura, and drains a watershed of about 15 square miles, or about 9,700 acres. The stream and its major tributary, Gobernador Creek, originate in the Santa Ynez Mountains and in less than eight miles drop more than 4,700 feet from their headwaters to the Pacific. In the mountains, the creek flows through narrow canyons with steep slopes of exposed bedrock, large boulders and thin topsoil. Downstream it flows through orchards, agricultural fields, and residential areas before passing through the City of Carpinteria to its mouth at Carpinteria State Beach.

The upper watershed contains a thick overstory of riparian trees and native plant understory. In addition to trout populations, the watershed provides habitat for tidewater goby, mule deer,

arroyo toad, coast range newt, Belding's savannah sparrow, red-tailed hawk, two-striped garter snake, and least Bell's vireo. Although development has altered the lower portion of the watershed, many sections of the creek still retain a dense canopy. While the quality of habitat is somewhat compromised in the lower reaches, the restoration potential for this area is significant because (unlike other streams along the south coast) there is no concrete channelization anywhere along the creek.

The project site is located on private property owned by Circle G Ranch, LLC and is designated as "CA_6" on Exhibit 2, (Carpinteria Creek Watershed Fish Barrier Map). The site is located 2.94 miles upstream from the ocean. The project site is also upstream from the completed Bliss and Cate School fish passage projects and approximately .64 miles downstream of the Lillingston Debris Basin, which is currently being modified by the Santa Barbara County Flood Control District to allow for fish passage (Exhibit 2).

The Circle G property contains both residential and agricultural land uses, specifically an active commercial avocado orchard. The dominant vegetation communities along the creek are riparian woodland and riparian scrub, with the orchard extending to the top of the bank in some areas. Native trees in the riparian woodland include western sycamore, coast live oak, arroyo willow, white alder and black cottonwood. The creek banks and understory contain a mixture of native and non-native species, dominated by such natives as California blackberry, creek clematis, gooseberry, and mugwort. Nonnative plants include periwinkle, pampas grass, cape ivy, and sweet fennel among others. Resident rainbow trout (*Onchorhynchus mykiss)* inhabit the site when water is present. During summer months the creek is generally dry.

Project History: For more than 11 years, the Coastal Conservancy and other state agencies have supported community efforts to enhance and restore Carpinteria Creek, beginning in 2001 with support for the formation of the Carpinteria Creek Watershed Coalition. The Coalition is a broad-based task force of agencies, nonprofit organizations and private landowners that was formed to help plan and guide implementation for fish passage projects in the Carpinteria Creek watershed. The Coalition's vision was to improve stream and watershed conditions for steelhead recovery; to assist landowners in protecting their property from bank erosion; to restore the habitat and water quality of the creek; and to generate public and landowner support for creek protection and enhancement. Between 2002 and 2005, the Conservancy authorized funds to plan and implement habitat improvement projects at two locations (the Bliss and Cate properties) along Carpinteria Creek to improve steelhead migration and habitat. In 2008, two Arizona crossings (fish barriers) were removed and two new bridges were installed. In 2010, Conservancy funds were used to complete a bank stabilization project on the Cate School site. Earth Island was awarded construction funding for the project through the Department of Fish and Wildlife's Fisheries Restoration Grant Program in March of 2012.

Removal of migration barriers along Carpinteria Creek is a regional priority as well. In 2003, the Coastal Conservancy awarded funds to Santa Barbara County to plan, design and permit a select number of barrier removal projects along the county's south coast, an effort that ultimately selected Carpinteria Creek as the top priority watershed in the region to focus efforts for fish passage barrier removal. These collaborative efforts over the years have resulted in the completion of seven fish passage removal projects in the watershed including the following properties: Bliss (2008), Cate School (2008), Raya (2008), Widdoes (2011), and Gobernador Debris Basin. Currently efforts are underway to modify the Pinkham Crossing (see

accompanying staff recommendation) and the Lillingston Debris Basin with completion of these projects expected in 2013, if funding is approved.

PROJECT FINANCING

Coastal Conservancy (NOAA Funds)	$90,000.00
Total Project Costs	$90,000.00

The anticipated source of Conservancy funds is a grant awarded to the Conservancy in 2010 from the NOAA Community-based Restoration grant program. The funds from this grant program may be used to implement qualified restoration projects listed on the Work Plan of the Southern California Wetlands Recovery Project that specifically protect and enhance NOAA trust resources. Southern steelhead trout are a NOAA trust resource.

As noted in the Project Summary section, the proposed Project is on the Recovery Project's Work Plan. Restoration projects to be funded with these monies should "contribute to the return of degraded or altered marine, estuarine, coastal and freshwater. . .fish habitats to a close approximation of their condition prior to disturbance" and are expected to have "strong on-the-ground habitat restoration components that provide educational and social benefits for communities, in addition to long-term ecological habitat improvements for NOAA trust resources." The proposed project will contribute to the return of the Carpinteria Creek watershed to its historic, natural condition by removing instream barriers to migrating southern steelhead and demonstrate how agriculture and fish habitat restoration can be accomplished locally.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

The proposed project would be undertaken pursuant to the Conservancy's enabling legislation, Division 21 of the Public Resources Code (PRC); in particular Chapter 5.5 (PRC Section 31220), regarding integrated coastal and marine resources protection.

Section 31220(a) authorizes the Conservancy to undertake and award grants for projects that meet one or more criteria of Section 31220(b). Consistent with 31220(b), the proposed project will achieve the following objectives: 1) protect or restore fish and wildlife habitat within coastal and marine waters and a coastal watershed by reducing an impediment to fish passage; 2) reduce threats to coastal and marine fish and wildlife; and 3) reduce unnatural erosion and sedimentation of a coastal watershed through stream bank stabilization. Consistent with Section 31220(a), Conservancy staff has consulted with the State Water Quality Control Board in developing this project.

As Section 31220(c) requires, the proposed project is consistent with local and state watershed plans. This is discussed in detail below under "Consistency with Local Watershed Management Plan/State Water Quality Control Plan." Section 31220(c) and the NOAA grant require that the project include a monitoring and evaluation component. Extensive monitoring and evaluation will be integrated into the design of the project.

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

Consistent with Goal 5, Objective C of the Conservancy's 2013-2018 Strategic Plan, the proposed project will develop a plan for the restoration and enhancement of coastal aquatic and riparian habitat in the Carpinteria Creek watershed.

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 November 10, 2011, in the following respects:

Required Criteria

1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
2. **Consistency with purposes of the funding source:** See the "Project Financing" section above.
3. **Support of the public:** The proposed project is supported by State Senator Hannah-Beth Jackson, Assemblymember Das Williams, First District County Supervisor Salud Carbajal, the California Department of Fish and Wildlife, NOAA Fisheries, U.S. Fish and Wildlife Service, and the Santa Barbara County Flood Control District, as well as by local community-based organizations including the Carpinteria Creek Watershed Coalition (see Exhibit 3).
4. **Location:** The proposed project site is located within the coastal zone of the County of Santa Barbara.
5. **Need:** The number of spawning southern California steelhead trout—a federally-listed endangered species—in Carpinteria Creek has declined to a small fraction of historic levels, and continues to fall. The landowners, Earth Island Institute, and other members of the Carpinteria Creek Watershed Coalition do not have sufficient funds to complete this project and must secure significant external funding if the project is to proceed. At this time, the project cannot be implemented without Conservancy participation.
6. **Greater-than-local interest:** Carpinteria Creek is listed as having a high priority for recovery in the *NOAA Southern California Steelhead Recovery Plan* (NMFS 2011). Removal of this barrier is critical to steelhead recovery in this watershed and recovery of the sub-species as a whole. In addition, the watershed supports a number of other regionally significant species, including tidewater goby, arroyo toad, coast range newt, Belding's savannah sparrow, two-striped garter snake, and least Bell's vireo, though not all of these species are present on site.
7. **Sea level rise vulnerability:** The project site is located 207 feet above sea level and will not be affected by sea level rise.

Additional Criteria

8. **Urgency:** The continued existence of barriers to upstream fish migration presents a threat to the long-term viability of steelhead populations in Carpinteria Creek.
9. **Readiness**: The project is currently seeking additional funding from other sources to complete permitting and environmental compliance.
10. **Realization of prior Conservancy goals**: See "Project History" section above.
11. **Cooperation**: Development of this project represents a significant level of cooperation among Earth Island, the landowner, and the members of the Carpinteria Creek Watershed Coalition, including staff from DFW, FWS and NMFS who provided design assistance.
12. **Vulnerability from climate change impacts other than sea level rise:** Projections of future climate change predict uncertain changes in precipitation in California, but they suggest wetter winters and drier summer conditions. The project design decreases the potential extent of flooding by increasing the flow capacity under the bridge and throughout the channel. This is important as winter rains are expected to increase in overall intensity, but not in duration. Increased winter rain events may benefit steelhead in the region, increasing their potential migration period; however, this could result in greater flood risks throughout the watershed. Increased summer temperatures and decreased summer rainfall will increase the chances that the intermittent middle section of the river will go dry. This increases the need to remove barriers from the watershed to allow fish to move upstream to perennial waters as the mainstem river may flow less days out of the year.

CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:

The proposed project is consistent with policies in the Santa Barbara County Coastal Plan (January 1982) that provide for the protection and enhancement of environmentally sensitive habitat areas.

Section 3.9.2 of the County's LCP defines environmentally sensitive habitat areas as those in which plant or animal life or their habitats are rare or especially valuable because of their special nature or role in an ecosystem. Under the LCP, such areas include rare and endangered species habitats, wetlands, streams, and "specialized wildlife habitats which are vital to species survival." Such habitats are to be preserved and protected. In addition, Policies 9-38 and 9-39 of the County's LCP prohibit any structures within a stream corridor, especially dams or other structures that prevent upstream migration of anadromous fish (unless other measures are used to allow fish to bypass obstacles).

The proposed project would be consistent with the goals and policies of the LCP by planning for the protection of habitat for the endangered southern California steelhead and for the removal of structures that prevent upstream migration. The proposed project is also consistent with Section 3.3.4 of the LCP and its attendant watershed protection policies, whose objectives include the long-term preservation of the biological productivity of coastal streams and wetlands.

CONSISTENCY WITH LOCAL WATERSHED MANAGEMENT PLAN/ STATE WATER QUALITY CONTROL PLAN:

Because the project will facilitate the restoration of fish and wildlife habitat in coastal watersheds and wetlands, the project is consistent with the Water Quality Control Plan for the Central Coastal Basin (adopted by the Regional Water Quality Control Board Central Coast Region in 1994 and reviewed every three years) in that it will further the following beneficial use objectives: estuarine habitat; wildlife habitat; rare, threatened or endangered species; and migration of aquatic organisms.

The project would also help implement several major regional goals and objectives for Santa Barbara County in the Regional Strategy of the Southern California Wetlands Recovery Project (SCWRP). The project would help meet two of the County's key objectives: improving steelhead habitat "by modifying and removing passage barriers and enhancing habitat. . . and [helping] implement high-priority steelhead recovery projects identified in Conception Coast Project's South Coast Steelhead Recovery Study." (SCWRP Regional Strategy: http://www.scwrp.org/pdfs/RS-Ch4-County-Objectives.pdf). It would also promote three of the six regional goals of the Wetlands Recovery Project: restoring stream corridors in coastal watersheds, recovering native habitat and species diversity; and integrating wetlands recovery with other public objectives.

In 2005, the Carpinteria Creek Watershed Coalition and the Cachuma Resource Conservation District completed a comprehensive assessment and management plan for the entire Carpinteria Creek watershed. The watershed plan included modification of the Circle G Ranch site in its highest category of recommended restoration projects.

COMPLIANCE WITH CEQA: The proposed project is statutorily exempt from review under the California Environmental Quality Act pursuant to Public Resources Code Section § 21102 as it involves feasibility or planning studies for possible future actions not yet approved, adopted or funded. The project is also categorically exempt by the Secretary of Resources pursuant to 14 Cal. Code of Regulations Section § 15306, as it requires only data collection, research and resource evaluation activities which do not result in serious or major disturbance to the environment.

Upon approval, staff will file a Notice of Exemption for this project.