

COASTAL CONSERVANCY

Staff Recommendation  
February 14, 2013

**CARPINTERIA CREEK WATERSHED RESTORATION:  
PINKHAM PROPERTY FISH PASSAGE IMPROVEMENTS**

Project No. 12-059-01  
Project Manager: Rachel Couch

**RECOMMENDED ACTION:** Authorization to accept restoration grant funding from National Oceanic and Atmospheric Administration and to disburse up to \$80,000 to the Earth Island Institute for a fish-barrier removal project on the Pinkham property on Carpinteria Creek in Santa Barbara County.

**LOCATION:** Carpinteria Creek watershed, Santa Barbara County

**PROGRAM CATEGORY:** Integrated Coastal and Marine Resources

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**EXHIBITS**

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

Exhibit 2: [Photos and Figures](#)

Exhibit 3: [Mitigated Negative Declaration](#), with Appendices A-E, Exhibits A & B (relating to Pinkham Project Statement of Work and Map), and Mitigation and Monitoring Plan (Appendix B)

Exhibit 4: [Project Letters](#)

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**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 a grant from National Oceanic and Atmospheric Administration under the Community-based Habitat Restoration Partnership Program, and disbursement of up to eighty thousand dollars (\$80,000) to the Earth Island Institute (Earth Island) to implement a fish-barrier removal project at the Pinkham property along Carpinteria Creek to improve migration and habitat for steelhead trout, as shown on Exhibit 1 to the accompanying staff recommendation. Prior to disbursement of any Conservancy funds, Earth Island shall submit for the review and approval of the Executive Officer of the Conservancy the following items:

1. A work program, schedule and budget and the names and qualifications of any contractors to be employed in carrying out the work.
2. Evidence that Earth Island has the all the funds needed to complete construction.
3. Evidence that all necessary permits and approvals for the project have been obtained, including those necessary to expend the NOAA grant funding.

In addition, prior to completion of the project:

1. Earth Island shall enter into and record an agreement approved by the Executive Officer to protect the public interest in the improvements, and to ensure access to the site for construction, maintenance, and monitoring.
2. Earth Island shall implement, or shall cause to be implemented, the applicable mitigation, monitoring and reporting measures contained in the 2012 Mitigated Negative Declaration for the California Department of Fish and Wildlife Fisheries Restoration Grant Program, prepared under the California Environmental Quality Act and attached to the accompanying staff recommendation as Exhibit 3.”

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 whose purposes are consistent with Division 21 of the California Public Resources Code.
5. The Coastal Conservancy has independently reviewed the 2012 Mitigated Negative Declaration for the California Department of Fish and Game (attached as Exhibit 3 to the accompanying staff recommendation) for the project pursuant to California Environmental Quality Act, and finds that there is substantial evidence that the project, as modified by incorporation of the mitigation measures identified in the Negative Declaration, including its appendices and exhibits, avoids, reduces or mitigates the possible significant environmental effects of the project.”

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### **PROJECT SUMMARY:**

Staff recommends that the Conservancy accept and grant up to \$80,000 to the Earth Island Institute (Earth Island) to implement a fish-barrier removal project at the Pinkham property along Carpinteria Creek (see Exhibit 2, project photos). This project is part of an ongoing comprehensive effort to restore and promote steelhead recovery in the Carpinteria Creek watershed and is a companion project to the Circle G Ranch project also proposed for

Conservancy funding. The proposed project is identified as a tier-one priority project by the Southern California Wetlands Recovery (SCWRP).

The Carpinteria Creek watershed is one of the largest streams 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 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. But because of human modifications to the watershed—the construction of several road crossings and reduced instream flows due to groundwater pumping, anadromous steelhead now return to the stream in very small numbers.

However, the possibility for restoring steelhead runs within the watershed is significant. Carpinteria Creek is listed as having a “Core 1” focus for recovery in the *NOAA Southern California Steelhead Recovery Plan* (NMFS 2011). Critical Recovery Actions in the Plan specifically call for the development and implementation of a plan to remove or modify fish passage 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 biological value and the relative impact of passage barriers on the creek. (*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](http://www.conceptioncoast.org/projects_steelhead.html)).

The Pinkham barrier would be the seventh barrier removed in Carpinteria Creek watershed (see “Project History” section, below). There is one remaining barrier downstream of the Pinkham site at the Circle G Ranch, and the landowner recently agreed to move forward with removal of this barrier. The proposed Pinkham project involves the removal of an undersized bridge and abutments along with 90 linear feet of cemented stream channel. The bridge will be replaced by a new 60-foot pre-fabricated bridge that will span Carpinteria Creek. The bridge foundations will be constructed outside of the active stream channel. The stream channel and banks will also be restored to protect the banks from erosion and produce high quality aquatic and riparian habitat. Because the project area encompasses an avocado orchard, the project could also serve to demonstrate and promote stream restoration and sustainable land use practices for other growers and ranchers in the area.

Earth Island Institute and its local affiliate, South Coast Habitat Restoration (SCHR) 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 (SCC 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-passage 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 (Exhibit 2). 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 lower watershed still retain a dense forest canopy. While the quality of habitat is somewhat compromised in the lower reaches compared with that in the upper reaches of the creek, restoration potential is high 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 Mr. Nelson Pinkham and is designated as "CA\_7" on Exhibit 2, (Carpinteria Creek Watershed Fish Barrier Map). The site is located 3.12 miles upstream from the ocean and 0.81 miles upstream of the confluence with Gobernador Creek. The project site is also upstream from the completed Bliss and Cate School fish passage projects and approximately one-half mile 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 Pinkham 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 an active avocado 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 and black cottonwood. The creek banks and understory contain a mixture of native and non-native species, dominated by such natives as California blackberry, poison oak, toyon, coyote bush, and mugwort. Nonnative plants include blue gum eucalyptus, *Arundo donax*, German ivy, periwinkle and sweet fennel. Resident *Onchorhynchus mykiss* (rainbow trout) and western pond turtle inhabit the site.

The average channel gradient through the project site is approximately 3 percent. The channel bedload is generally dominated by small- to medium-size cobbles in the 6 to 12 inch class. Scattered throughout the creek bed are large multi-ton boulders up to several feet in diameter. 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 Game'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 the 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 those on the following properties: Bliss (2008), Cate School (2008), the Raya Property (2008), Widdoes (2011), and Gobernador Debris Basin. Currently efforts are underway to modify the Lillingston Debris Basin with completion expected in 2013, and to plan for the removal of the final barrier in the watershed on the Circle G Ranch.

### PROJECT FINANCING

Coastal Conservancy (NOAA Funds)	\$80,000.00
Edison In-lieu Fee Mitigation Funds	\$25,000.00
DFW Fisheries Restoration Grant Program	<u>\$409,000.00</u>
<b>Total Project Costs</b>	<b>\$514,000.00</b>

The anticipated source of Conservancy funds is a grant awarded to the Conservancy in 2010 from the NOAA Community-based Restoration Program. The funds from this Partnership 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. 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 Pinkham portion of Carpinteria Creek to its historic natural condition by removing instream barriers to migrating southern steelhead, a NOAA trust resource.

Matching funding for the project is provided by the Department of Fish and Wildlife's Restoration Grant program which provides grant funds to assist in recovery of California Endangered Species Act- and Federal Endangered Species Act-listed anadromous salmonid populations and their habitat in California. In addition, in-lieu fee funds administered through DFW will also be applied to this project.

**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 (Pub. Res. Code § 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 coastal watersheds by reducing and impediment to fish passage; 2) reduce threats to coastal and marine fish and wildlife; and 3) reduce unnatural erosion and sedimentation of coastal watersheds 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’s 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 D of the Conservancy’s 2013 Strategic Plan the proposed project will restore and enhance coastal riparian habitat in the Carpinteria Creek by removing an instream structure and re-vegetating and stabilizing creek banks.

Consistent with Goal 5, Objective F, the proposed project will preserve and restore a coastal watershed thereby improving habitat for anadromous steelhead trout.

**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, US 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 4).

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. Neither the landowners, Earth Island Institute, nor members of the Carpinteria Creek Watershed Coalition 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:** As discussed above, Carpinteria Creek is listed as having a “Core 1” focus for recovery along in the *NOAA Southern California Steelhead Recovery Plan* (NMFS 2011). Removal of this barrier is critical to steelhead recovery in this watershed. 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 (although the project site does not contain habitat for all of these species).
7. **Sea level rise vulnerability:** The project site is located 225 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. **Leverage:** See the “Project Financing” section above.
10. **Readiness:** The project would be ready to commence upon authorization of funding and upon approval of final permits. Construction would likely occur in 2013.
11. **Realization of prior Conservancy goals:** See “Project History” section above.
12. **Cooperation:** Development of this project represents a significant level of cooperation among Earth Island, the landowners, and the members of the Carpinteria Creek Watershed Coalition, including staff from DFW, FWS and NMFS who provided design assistance.
13. **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 window, 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.

14. **Minimization of greenhouse gas emissions:** GHG emissions have not been calculated for this project, but measures to reduce GHG emissions from the project include: the stockpiling of all excavated materials on site and reusing of as much material as possible rather than hauling it off site. The MND determined that GHG emissions from the projects proposed under the MND would not be significant.

**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 protecting habitat for the endangered southern California steelhead and removing structures that prevent their 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 Pinkham site in its highest category of recommended restoration projects.

### **COMPLIANCE WITH CEQA:**

In order to implement projects to improve fish spawning and rearing habitats through its statewide Fisheries Restoration Grant Program (FRGP), the Department of Fish and Wildlife (DFW) developed a Programmatic Mitigated Negative Declaration (MND) for all of its 2012 FRGP funded projects (Exhibit 3: Programmatic Mitigated Negative Declaration). The proposed project is one of the 2012 FRGP funded projects. The MND identified impacts to biological, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology/water quality and noise elements of the environment related to project construction. The MND addresses all of the anticipated environmental effects of the funded projects by providing mitigation measures for the various types of projects that would be implemented throughout the state. This includes standard protocols for avoiding impacts to species of concern, including state- and federally-listed threatened and endangered species, which are identified for this project in Exhibit A to the MND.

DFW included Carpinteria Creek-Pinkham fish passage project in the 2012 MND. After approving the project for funding, DFG prepared a contract with Earth Island, incorporating the key mitigation measures as identified in Exhibit A to the MND, (attached). These are described as follows:

- Work in flowing streams is restricted to June 15 and October 31. Actual project start and end dates, within this timeframe, are at the discretion of the Department of Fish & Wildlife. All habitat improvements shall be in accordance with the *California Salmonid Stream Habitat Restoration Manual*. Planting of tree seedlings shall take place after December 1 or when sufficient rainfall has occurred to ensure the best chance of survival of the seedlings. The standard for success is 80% survival of plantings, after a period of three years.
- Earth Island shall notify the DFW Project Manager a minimum of five working days before any fish bearing stream reaches are dewatered and the stream flow diverted. The notification shall provide a reasonable time for Department personnel to supervise the implementation of the water diversion plan and oversee the safe removal and relocation of salmonids and other aquatic species from the project area. If the project requires

dewatering of the site, and the relocation of salmonids, Earth Island shall implement the following measures to minimize harm and mortality to listed salmonids:

- Fish relocation and dewatering activities shall only occur between June 15 and October 31 of each year unless otherwise specified in the Lake and Streambed Alteration Agreement issued by the Department and with the concurrence of the federal permitting agencies.
- Earth Island shall minimize the amount of wetted stream channel dewatered at each individual project site to the fullest extent possible.
- Earth Island shall provide fish relocation data to DFW's Project Manager on a form provided by the Department of Fish and Wildlife.
- Additional measures to minimize injury and mortality of salmonids during fish relocation and dewatering activities shall be implemented as described in Part IX, pages 52 and 53 of the *California Salmonid Stream Habitat Restoration Manual*.
- Earth Island shall follow the National Marine Fisheries Service (NMFS 2001) Guidelines for Salmonid Passage at Stream Crossings and DFW criteria for fish passage as described in the Third Edition, Volume II, Part IX, February 2003 and Part XII, April 2009, of the *California Salmonid Stream Habitat Restoration Manual*. Culvert replacement or modification designs shall be visually reviewed and authorized by NOAA Fisheries (or DFW) engineers prior to commencement of work.
- The Grantee shall maintain the modifications to the project sites as well as inspect the bridge in a timely manner and remove debris as necessary during the storm season.
- Prior to the contractor selection process, the Grantee will need to define the role of Questa (the design-engineering firm) when installing rootwads and placing rock in the channel. All contractors bidding on the project should understand that Questa will be given the authority to direct the selection and placement of all rock and rootwad structures during that phase of the project. During the contractor selection process, the Grantee should select a contractor and subcontractors with prior experience constructing bridges and in-stream structures and a good track record for doing so as these components are critical to the success and durability of the project.

Any modification to the design that occurs during construction must be approved by the design engineers and designated NMFS or DFW engineers in writing prior to the change being implemented. The grantor's project manager will also be notified by telephone.

In addition to the above mitigation measures described in Exhibit A, Appendix B of the MND describes general mitigation measures applicable to all projects funded under the FRGP. This appendix contains numerous measures to reduce or avoid impacts to fish and wildlife, including those that are endangered, rare, and/or threatened. It also contains measures to reduce or avoid impacts on cultural, geological, greenhouse gas emissions, hydrological resources/water quality, and noise. General mitigation measures that relate to the Carpinteria Creek project are described below.

The MND requires timing of work to avoid impacts to biological resources, including restricting fish relocation and dewatering of streams to the period between June 15 and November 1, or the first rainfall; restricting the period for upslope work to roughly the same period; conducting surveys to determine presence of nesting or breeding birds or terrestrial animals and a further restricting of the construction timing as necessary to avoid impacts; avoiding disturbance or dewatering of more than 500 feet of contiguous stream reach; regular removal of trash from the construction site to avoid attracting predators; adherence to work site best management practices to assure equipment and materials do not harm the environment; adherence to policies forbidding the spread or introduction of invasive exotic plants; demarcation of the work area to assure that access routes, staging areas, and the total area of disturbance is kept at a minimum; requiring that any work within the stream channel will be performed in isolation of the flowing stream; installation of bridges, culverts, or other structures so that water flow is not impaired and upstream and downstream passage of fish is assured at all times; placement of bottoms of temporary culverts at or below stream channel grade level; facilitation of safe passage of non-special status wildlife through or from the work site; requirement that grantee keep a dependable radio or phone communication on-site for safety reasons; removal of temporary fill in its entirety prior to close of work-window; work site surveys for endangered, rare or threatened plant species prior to any ground-disturbing activities, and institution of protective measures, if necessary, as prescribed under DFW guidelines. If it becomes impossible to implement the project at a work site without potentially significant impacts to rare plants, then activity at that site will be discontinued.

Additional mitigation measures relating specifically to protection of anadromous salmonids include: requiring fish screen on intakes for dewatering pipes; adherence to work site best management practices associated with fish screens to minimize effects to salmonids associated with fish screen construction, maintenance, and repair; restoring disturbed banks upon completion of construction; leaving large wood removed from fish passage barriers within the riparian zone; and minimizing the amount of wetted stream channel that is dewatered. If it becomes impossible to implement the project at a work site without potentially significant impacts to anadromous salmonids, then, again, activity at that site will be discontinued.

DFW will implement the following measures to minimize harm to listed salmonids resulting from instream construction work:

- a) All stream crossing replacement or modification designs, involving fish passage, shall be reviewed and approved by NOAA (or DFW) engineers prior to onset of work.
- b) If the stream in the project location was not passable to, or was not utilized by all life stages of, all covered salmonids prior to the existence of the road crossing, the project shall pass the life stages and covered salmonid species that historically did pass there.

The MND found that the Pinkham project is not within the range of the least Bell's Vireo or the Arroyo toad, though habitat for these species occurs in the larger Carpinteria Creek watershed. The project site shows the tidewater goby downstream of project site. Actual work sites are not within the tidal zone and as such will not affect suitable habitat for the tidewater goby.

Ground disturbance in the Carpinteria Creek project is not expected to result in effects to cultural resources and no mitigation measures are included. However, Earth Island and DFW will report any previously unknown historic or archaeological remains discovered at the site to the

appropriate agencies and will comply with approved avoidance procedures. In order to avoid significant impacts to geology and soils, existing road sites will be used to access works sites; bare soil will be seeded, mulched and planted as necessary using best management practices and soil will be compacted to the extent necessary to reduce any surface erosion that may occur with the first heavy rainfall.

The MND analyzed greenhouse gas emissions, however no specific mitigation measures are required and the overall impact of the project was considered less than significant. Re-vegetation practices included in the project will help offset the short term, less than significant impacts associated with greenhouse gas emissions. Potential impacts from the release of hazardous materials associated with heavy equipment operation will be avoided through use of standard measures detailed in DFW's adopted Mitigation Measures, Monitoring and Reporting Program. Potential impacts from noise during construction will be avoided by requiring personnel to wear hearing protection while operating or working near noisy equipment (producing noise levels  $\geq 85$  db, including chain saws, excavators, and back hoes). The project is located in a rural area.

Potential impacts to hydrology and water quality will be avoided through use of best management practices to minimize turbidity and siltation into the stream, and to prevent poured concrete from entering the wetted channel until dry.

DFW's adopted Mitigation Measures, Monitoring and Reporting Program for the project is included as Appendix B to the MND. (See Exhibit 3).

DFW found that all potentially significant impacts associated with the funded projects, including the Carpinteria Creek Pinkham Fish Passage project, would be avoided or mitigated below a level of significance under CEQA. DFW approved the MND and filed a Notice of Determination on January 13, 2012.

Upon its independent review of the MND and Scope of Work, staff found that no additional mitigation measures for this project are required. Staff concurs with the DFW finding and recommends that the Conservancy find that there is no substantial evidence that the Carpinteria Creek Pinkham Fish Passage project, as modified by incorporation of the mitigation measures identified in the MND, Appendix A and the appendices, will have a potential for a significant effect on the environment as defined under 14 California Code of Regulations Section 15382. Upon approval, staff will file a notice of determination.