COASTAL CONSERVANCY

Staff Recommendation
June, 29, 2006

ARROYO HONDO CREEK STEELHEAD PASSAGE ENHANCEMENT

File No. 03-021-02
Project Manager: Mary Travis/Trish Chapman

RECOMMENDED ACTION: Authorize the disbursement of up to $650,000 to the Land Trust for Santa Barbara County for the Arroyo Hondo Creek Steelhead Passage Enhancement project.

LOCATION: Gaviota Coast, Santa Barbara County

PROGRAM CATEGORY: Integrated Marine and Coastal Resources Enhancement

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EXHIBITS

Exhibit 1: Project Location and Site Map

Exhibit 2: Arroyo Hondo Culvert Modification/Steelhead Passage Conceptual Design Report (without Appendices)

Exhibit 3: Mitigated Negative Declaration (MND)

Exhibit 4: Application to Fisheries Restoration Grant Program

Exhibit 5: Statement of Work from Appendix A of MND

Exhibit 6: Letters of Support

RESOLUTION AND FINDINGS:

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

"The State Coastal Conservancy hereby authorizes the disbursement of an amount not to exceed six hundred fifty thousand dollars ($650,000) to the Land Trust for Santa Barbara County (Land Trust) for the Arroyo Hondo Creek Steelhead Passage Enhancement project, subject to the following conditions:

1. Prior to commencement of construction and to disbursement of any Conservancy funds for construction, the Land Trust shall submit for the review and written approval of the Executive Officer of the Conservancy:
   a. A detailed work program, project budget and timeline.
   b. A plan for installation of a sign acknowledging the Conservancy's assistance.

c. The names and qualifications of any contractors or subcontractors that the Land Trust intends to employ to construct the project.

d. Evidence that all applicable permits and approvals for the project have been obtained.

e. Evidence that the Land Trust has obtained an encroachment permit, license agreement or other form of permission from Caltrans to modify the culvert.

f. An executed and recorded agreement consistent with Public Resources Code Section 31116(c) to protect the public interest in the project.

2. The Land Trust shall implement the applicable requirements of the Mitigated Negative Declaration (attached as Exhibit 3 to the accompanying staff recommendation), adopted by the California Department of Fish and Game under the California Environmental Quality Act for the 2005 Fisheries Restoration Grant Program.

3. Conservancy funding shall be acknowledged by erecting and maintaining a sign in the project area, which has been reviewed and approved by the Executive Officer of the Conservancy."

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 Public Resources Code 31220 regarding watershed restoration.

2. The proposed project is consistent with the guidelines and criteria in the Conservancy's Project Selection Criteria and Guidelines adopted on January 24, 2001.

3. The Conservancy has independently reviewed the Mitigated Negative Declaration (attached as Exhibit 3 to the accompanying staff recommendation) adopted by the California Department of Fish and Game under the California Environmental Quality Act for the 2005 Fisheries Restoration Grant Program; and finds that, with the proposed mitigation measures and mitigation-monitoring program, there is no substantial evidence that the project will have a significant effect on the environment, as defined in 14 California Code of Regulations Section 15382.

4. There is no evidence before the Conservancy that the project will have a potentially adverse effect either individually or cumulatively, on wildlife resources as defined under California Fish and Game Code Section 711.2.

5. The Conservancy has on the basis of substantial evidence rebutted the presumption of adverse effect contained in 14 California Code of Regulations Section 753.5(d) regarding the potential for adverse effect on wildlife resources as defined under California Fish and Game Code Section 711.2.

6. The Land Trust for Santa Barbara County 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."

PROJECT SUMMARY:

The proposed project would provide a grant of $650,000 to the Land Trust for Santa Barbara County to implement the Arroyo Hondo Steelhead Passage Enhancement Project.

Arroyo Hondo Creek presents one of the best opportunities for enhancing steelhead habitat in southern Santa Barbara County. Most of the creek is in near pristine condition with good water quality and no dams, flood control basins, grade control structures, or inappropriate road crossings. The primary limiting factor for steelhead in the creek is a serious impediment to fish passage located just upstream of the creek mouth. Here the creek passes through a 167-foot-long concrete box channel that passes under a railroad trestle and a bridge supporting the old coast highway. The creek then immediately enters a 334-foot-long concrete culvert that tunnels through the Highway 101 embankment. Under most stream flow conditions, the two structures are impassable to returning adult steelhead attempting to migrate upstream to spawn.

The Arroyo Hondo Creek Steelhead Passage Enhancement Project would remove most of the concrete box channel, modify the concrete culvert, and enhance aquatic and riparian habitat both upstream and downstream of the two structures. The key project elements are summarized below and described in greater detail in Exhibit 2, the Arroyo Hondo Culvert Modification/Steelhead Passage Conceptual Design Report.

Lagoon Enhancements

One of the main goals of the project is to create a stable lagoon at the mouth of the creek. Under existing conditions, the lagoon is located very close to the ocean and is impacted frequently by large wave events and littoral sand movement. The result is that the lagoon shrinks throughout the summer and is only re-established in years with large flow events. To help establish a more stable lagoon, all but 30 feet of the concrete box channel under the railroad trestle will be removed. A new lagoon will be excavated at the end of the concrete channel, and the scour hole formed where water exits the concrete channel will help to maintain the lagoon over time.

Removal of the box channel will result in the creek flowing through and around the bridge and trestle foundations. In order to protect these foundations from scour and erosion, the project design includes an extension of the channel structure to protect the old coast highway bridge footings, and stone revetments to protect the railroad trestle foundations.

Culvert Modifications

The concrete culvert is a barrier to fish passage because flows move through the culvert at high velocities and low depths. There is only a small window of flow regime where depth and velocities allow for successful fish passage. Improving fish passage within the culvert means increasing depth and reducing velocities at the lower flow scenarios. To do this, baffles will be installed on the bottom of the culvert. Low flow collector walls will also be installed on the upstream apron of the culvert to concentrate and focus low flows into the baffle structure. In addition to these improvements for fish, a maintenance pathway through the culvert will also be constructed and will connect to a new trail to the beach starting at the mouth of the box channel.

Upstream Habitat Enhancements

Two enhancements are planned upstream of the culvert structure. First, a resting pool will be constructed near the entrance of the culvert. This pool will compensate for resting pools that are

assumed to have been lost when this portion of the stream was straightened as part of the culvert construction. Immediately upstream of the culvert, the stream bank is over-steepened in several locations. These banks will be regraded at a gentler angle, and the toe of the bank will be protected with boulders, willow stakes, and biodegradable erosion control fabric.

While the proposed project is aimed primarily at steelhead recovery, it would also benefit other aquatic organisms inhabiting Arroyo Hondo Creek and its lagoon. Among these are the red-legged frog, federally listed as threatened; the Coast Range newt and southwestern pond turtle, both listed as species of special concern in California; and the tidewater goby, federally listed as endangered.

The Land Trust for Santa Barbara County owns and manages approximately 826 acres in Santa Barbara County, including the Arroyo Hondo Preserve. The Land Trust has undertaken habitat restoration projects on several of its properties. It developed the proposed project with funding from the Coastal Conservancy and National Marine Fisheries Service. The Land Trust is well qualified to undertake this project which is located within its Preserve.

Site Description: Arroyo Hondo Creek watershed is located on the Gaviota Coast midway between Gaviota and Refugio state beaches. Most of the lower watershed falls within the Arroyo Hondo Preserve, owned and managed by the Land Trust, and the upper watershed is located within the Los Padres National Forest. Like most of the streams draining the coastal slope of the Santa Ynez Mountains, Arroyo Hondo Creek is small, with a total stream length of just over six miles and a watershed of only 2,797 acres. But the creek's small size belies its biological significance, particularly for the southern California steelhead Evolutionarily Significant Unit (ESU). The creek has perennial flow and an intact riparian corridor, and the lower two miles provide excellent spawning and rearing habitat.

The Arroyo Hondo Creek culvert conveys the creek under Highway 101. The approximately 334-foot long by 16-foot wide concrete culvert is owned and maintained by the California Department of Transportation (Caltrans). Downstream of the culvert is an approximately 167-foot long concrete open box channel that conveys the creek flow underneath the old concrete arch Highway 1 Bridge and a 540-foot long Union Pacific Railroad trestle bridge. During low flow conditions, the culvert can be used as a tunnel for as a maintenance pathway from the north side of Route 101 to the beach. Passage through the culvert is along the concrete floor on the sides of the culvert. A wooden walkway is attached on the inside of the box channel on the east wall. The box channel empties into a small estuary immediately south of the railroad bridge footings. Steelhead trout, tidewater goby, red-legged frogs and southwestern pond turtles have been documented in this estuary.

Apart from the culvert and box channel structures, though, Arroyo Hondo Creek is nearly pristine, and the watershed is largely undisturbed. Past ranch operations in the lower watershed have resulted in localized erosion into the creek, but these impacts are comparatively minimal, and overall water quality is high. The creek is unmarred by dams, flood control basins, grade control structures, or inappropriate road crossings, structures that afflict most southern California streams. In fact, local biologists consider Arroyo Hondo Creek one of the finest trout streams in the region and believe that it has the potential to support a significant run of anadromous steelhead.

Project History: In October 2000, the Coastal Conservancy provided a $4,000,000 grant to the Land Trust to acquire the 800-acre Arroyo Hondo Preserve (formerly the J.J. Hollister Ranch).

One of the key benefits of the acquisition was the preservation and potential future enhancement of habitat for steelhead trout and other special status species that use the high quality riparian corridor. The 2002 report on *Steelhead Assessment and Recovery Opportunities in Southern Santa Barbara County, California* found that Arroyo Hondo Creek had the highest habitat quality of all 44 watersheds analyzed, and identified its culvert and box channel as the region's second highest priority for immediate barrier removal. Based largely on this recommendation, in April 2003, the Conservancy approved a grant of $58,900 to the Land Trust to prepare a plan for addressing the impediment. The proposed project would implement the plan that was developed.

PROJECT FINANCING:

Coastal Conservancy	$650,000
Department of Fish and Game	788,588
Smart Family Trust	15,000
Land Trust for Santa Barbara County	12,000
Total Project Cost	**$1,465,588**

The expected source of Conservancy funds is an appropriation to the Conservancy from the "California Clean Water, Clean Air, Safe Neighborhood Parks and Coastal Protection Fund" (Proposition 40). The Proposition 40 funds were appropriated to the Conservancy under the Watershed, Clean Beaches and Water Quality Act ("AB 2534"). AB 2534 added Chapter 5.5 to the Conservancy's enabling legislation (Public Resources Code Section 31220) and appropriated funds from Proposition 40 to the Conservancy to carry out projects that are described under Section 31220. As discussed below, authorized projects include those that, like the proposed project, serve to reduce contamination of waters within the coastal zone, protect or restore fish and wildlife habitat within coastal watersheds or reduce unnatural erosion and sedimentation of coastal watersheds. Proposition 40 also requires the Conservancy to give priority to grant projects with matching funds (Public Resources Code Section 5096.651). The Department of Fish and Game has approved a grant for this project, and the Land Trust has secured a grant from the Smart Family Trust and will provide additional funding of its own. The Conservancy would contribute approximately 44% of the total funding for this phase of the project.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

This project would be undertaken pursuant to Chapter 5.5 of the Conservancy's enabling legislation, Section 31220 of Division 21 of the Public Resources Code, 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 Section 31220(b), the proposed project aims to achieve the following objectives: 1) protects or restores fish and wildlife habitat within coastal and marine waters and coastal watersheds by reducing an impediment to fish passage; 2) reduces unnatural erosion and sedimentation of coastal watersheds through stream bank stabilization; 3) provides for public access compatible with resource protection and restoration objectives by improving access for pedestrians through the culvert and out to the beach.

Section 31220(c) requires that projects funded under Section 31220 be consistent with the Integrated Watershed Management Program established under Section 30947, local watershed management plans, if available, and water quality control plans adopted by the State Water Resources Control Board and regional water quality control boards; and include a monitoring and evaluation component. As discussed in detail below under "Consistency With Local Watershed Management Plan/State Water Quality Control Plan," the proposed project is consistent with local and state watershed plans. In addition, the project includes a monitoring and evaluation component as required by the DFG Fisheries Restoration Program. Consistent with Section 31220(a), which requires consultation with the State Water Resources Control Board (SWRCB) to ensure consistency with Chapter 3 (commencing with Section 30915) of Division 20.4 of the Public Resources Code, staff has notified the SWRCB of the nature of the project and provided the opportunity for comment, input and review.

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

Consistent with **Goal 5 Objective A**, the proposed project will enhance coastal aquatic and riparian habitat in the Arroyo Hondo watershed and will improve habitat for steelhead trout by reducing a fish passage barrier.

Consistent with **Goal 5 Objective B**, the proposed project will restore fish passage along Arroyo Hondo Creek, allowing steelhead to use it as a corridor to upstream spawning and rearing habitat. The proposed project will open access to approximately six miles of upstream habitat.

Consistent with **Goal 6 Objective A**, the proposed project will 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 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:** This project is included on the Work Plan of the Southern Califonria Wetlands Recovery Project, a collaboration of federal, state and local agencies, community groups, and scientists. It has the support of both the National Marine Fisheries Service and the Department of Fish Game, which oversee steelhead recovery at the federal and state level, respectively. The Gaviota Coast Conservancy, a local nonprofit organization dedicated to preservation of the Gaviota Coast and its resources, also supports the project.

4. **Location:** The proposed project would be located within the coastal zone of Santa Barbara County.
5. **Need:** The proposed project requires modifying major infrastructure and is beyond the financial capacity of the Land Trust to undertake on its own. The Department of Fish and Game has provided a $788,588 grant for the project, but Conservancy funding is needed to makeup the remainder.
6. **Greater-than-local interest:** Interest in protecting southern steelhead was elevated to a national level in 1997 when the ESU was listed as endangered under the federal Endangered Species Act. Arroyo Hondo Creek was included in the subsequent designation of critical habitat for the southern steelhead. The proposed project would improve habitat for a species whose significance extends well beyond the immediate project area.

Additional Criteria

7. **Leverage:** See the "Project Financing" section above.
8. **Readiness:** The Land Trust has submitted its permit applications and intends to begin project construction this summer if all of the funding can be secured.

CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:

The proposed Steelhead Passage Enhancement project is consistent with the certified Local Coastal Program (LCP) of Santa Barbara County. Section 3.9.2 of the LCP defines environmentally sensitive habitats as including those areas in which plant or animal life or their habitats are rare or especially valuable because of their special nature or role in an ecosystem. Section 3.9.2 specifically identifies as environmentally sensitive "rare and endangered species habitats" and "specialized wildlife habitats which are vital to species survival." Such habitats are to be preserved and protected. Improvement of habitat for the endangered southern California steelhead is the goal of this project.

Section 3.9.5(7) recommends that "public action is needed to restore South Coast streams that have been interrupted or altered by culverts along Highway 101." The proposed project would directly address this recommendation

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

Projects undertaken pursuant to Chapter 5.5 of Public Resources Code Division 21 (Section 31220) must be consistent with local watershed management plans, if available, and with water quality control plans, adopted by the state and regional water boards. The proposed project is consistent with the Water Quality Control Plan for the Central Coastal Basin adopted by the Regional Water Quality Control Board because the project will facilitate the restoration of fish and wildlife habitat in a coastal watershed thereby furthering the following beneficial use objectives: cold fresh water habitat, wildlife habitat; rare, threatened or endangered species; migration of aquatic organisms; and spawning, reproduction, and/or early development. There is no watershed management plan for the South Coast hydrologic unit in general or Arroyo Hondo, specifically. The 2002 report on *Steelhead Assessment and Recovery Opportunities in Southern*

Santa Barbara County, California identifies Arroyo Hondo as the second highest priority for fish passage improvement within the region.

COMPLIANCE WITH CEQA:

In order to implement projects to improve fish spawning and rearing habitats through its statewide Fisheries Restoration Grant Program, the Department of Fish and Game (DFG) developed a Programmatic Mitigated Negative Declaration (MND) for all of its FY 2005-06 funded projects, including the proposed Arroyo Hondo Creek Steelhead Passage Enhancement project. The Mitigated Negative Declaration 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 (Appendices B and C of the MND (Exhibit 3)). DFG found that any and all potentially significant impacts associated with the funded projects, including the Arroyo Hondo Creek project, would be avoided or mitigated below a level of significance under CEQA. DFG approved the MND and filed a Notice of Determination on May 19, 2005. The Notice of Determination and the MND for this project are included as Exhibit 3.

The mitigation measures and species protocols that are applicable to each project implemented under the Fisheries Restoration Grant Program vary depending on the proposed restoration activities. The project in Arroyo Hondo Creek watershed includes removal of approximately 130-feet of a concrete box channel, relocation of the lagoon at the mouth of the creek, installation of baffles to aide fish passage within the culvert passing through the Highway 101 embankment, and construction of a new resting pool just upstream of the culvert. The project site and proposed restoration activities are described in detail in the application submitted to DFG for the project (Exhibit 4). This application included an environmental project questionnaire which helps to identify the potential impacts of the proposed project (Exhibit 5). After approving the project for funding, DFG prepared a Statement of Work for the project which incorporates the key mitigation measures required and provides a list of species of concern known to occur in the general vicinity of the project. This list was generated from DFG's Natural Diversity Database. The Statement of Work is included as part of Appendix A of the MND and is attached separately to this staff recommendation as Exhibit 6.

Based on the scope of the project, there are several mitigation measures in the MND which apply to the Arroyo Hondo project, including: 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; 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; 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 DFG 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; 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 activity at that site will be discontinued.

Additional mitigation measures relating specifically to protection of California Red-Legged Frog (CRLF) include: surveying the site for CRLF prior to construction and removing any CRLF that are found; training construction personnel on CRLF protection measures; having a DFG-approved biologist onsite during removal of CRLF, worker training, and habitat disturbance activities; requiring frog screens on dewatering intake pipes; limiting ground-disturbing activities in potential CRLF habitat to between July 1 and October 15; and permanently removing any exotic species such as bullfrogs, centrarchid fishes or non-native crayfish from the project area.

Ground disturbance in the Arroyo Hondo Creek watershed is not expected to result in effects to cultural resources and no mitigation measures are included. However, the Land Trust and DFG 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, 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. Potential impacts from release of hazardous materials associated with heavy equipment operation will be avoided through use of standard measures detailed in DFG's adopted Mitigation Measures, Monitoring and Reporting Program. The Land Trust and DFG's Contract Manager will inspect the work site before, during, and after completion of the work action to ensure that all necessary mitigation measures to avoid impacts are properly implemented. DFG's adopted Mitigation Measures, Monitoring and Reporting Program for the project is included as Appendix B of Exhibit 3.

Upon its independent review of the MND, the project application to the Fisheries Restoration Grant Program, the environmental project questionnaire, and the Statement of Work including the Natural Diversity Database listing, staff concurs with the DFG finding and recommends that the Conservancy find that the Arroyo Hondo project does not have a potential for a significant effect on the environment as defined under 14 California Code of Regulations Section 15382, or on wildlife resources, as defined under Fish and Game Code Section 711.2. Upon approval, staff will file a Notice of Determination for this project.