COASTAL CONSERVANCY

Staff Recommendation
June 29, 2006

LOWER REFUGIO CREEK RIPARIAN RESTORATION PROJECT

File No. 05-058
Project Manager: Mary Travis/Janet Diehl

RECOMMENDED ACTION: Authorization to disburse up to $175,000 to the Land Trust for Santa Barbara County to implement the Lower Refugio Creek Riparian Restoration Project on the Gaviota Coast in Santa Barbara County.

LOCATION: Lower Refugio Creek, 12 miles west of the City of Goleta, Gaviota Coast, Santa Barbara County (Exhibit 1)

PROGRAM CATEGORY: Integrated Coastal and Marine Resources Protection

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EXHIBITS

Exhibit 1: Project Location and Site Map

Exhibit 2: Environmental Impact Report and 2006 Addendum

Exhibit 3: Photos

Exhibit 4: Letters of Support

RESOLUTION AND FINDINGS:

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

"The State Coastal Conservancy hereby authorizes the disbursement of an amount not to exceed one hundred seventy-five thousand dollars ($175,000) to the Land Trust for Santa Barbara County (Land Trust) for implementing the Lower Refugio Creek Riparian Restoration Project (project) on the Gaviota Coast in Santa Barbara County, subject to the following conditions:

1. Prior to the Land Trust's commencement of work, the Executive Officer of the Conservancy shall approve in writing:

    a. A detailed work program, including schedule and budget.

b. Any contractor to be retained to carry out the project work.

c. A signing plan acknowledging Conservancy funding.

d. Documentation that the Land Trust has obtained all permits and approvals needed under federal, state and local laws to complete the project, including, without limitation, a red-legged frog Biological Opinion issued by the U.S. Fish and Wildlife Service covering the project activities.

e. Documentation that the Land Trust has obtained written authorization from the owners of the properties on which project work is to occur to enter the property to undertake the work and to carry out required post-project monitoring.

2. In carrying out the project, the Land Trust shall comply with all applicable mitigation and monitoring measures for the project that are set forth in the EIR, as identified in the "Refugio Creek Routine Maintenance Addendum to the Program EIR for Santa Barbara County Flood Control Routine Maintenance" (Addendum), attached as Exhibit 2 to the accompanying staff recommendation, and the Mitigation Monitoring Program accompanying the Addendum, and with all mitigation, monitoring and other measures that are required by any permit or approval for the project.

3. The Land Trust shall implement post-project effectiveness monitoring for three years following construction according to a monitoring plan 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 the purposes and criteria set forth in Chapter 5.5 of Division 21, section 31220 of the Public Resources Code regarding integrated coastal and marine resources protection.

2. The proposed project is consistent with the Project Selection Criteria and Guidelines adopted by the Conservancy on January 24, 2001.

3. The Conservancy has independently reviewed and considered the information contained in the Final Program Environmental Impact Report, Updated Routine Maintenance Program, November 2001 (EIR), adopted by the Santa Barbara County Flood Control and Water Conservation District on December 11, 2001, and the Addendum to the EIR, attached to this staff recommendation as Exhibit 2. The EIR and Addendum identify potential significant impacts related to the Refugio Creek project in the areas of hydrology, water quality, wetlands, riparian habitat and rare plants, fish, aquatic species and wildlife, air quality, noise and visual. The Conservancy finds that changes, identified in the EIR and specified for the project in the Mitigation Monitoring Program accompanying the Addendum, have been made in

the project or its operating conditions to avoid, reduce or mitigate these possible significant environmental effects to a level of insignificance.

4. The environmental effects associated with the project as described by the Addendum and the mitigation measures to reduce or avoid those effects were fully identified and considered in the EIR."

PROJECT SUMMARY:

The Land Trust, in cooperation with three private agricultural landowners and the Cachuma Resource Conservation District (RCD) and the Santa Barbara County Flood Control District (District), seeks funding to implement an ambitious riparian restoration project on lower Refugio Creek. This project, which is identified on the Southern California Wetland Recovery Project's work program, aims to improve the wildlife value along 1.5 miles of the creek by:

1) Removing at least 100 separate patches, on 4 acres, of highly invasive Arundo donax (giant reed), as well as several smaller areas of other invasive plant species detrimental to the wildlife ecology of Refugio Creek.

2) Stabilizing the creek bank on over one mile of Refugio Creek to reduce the chances of large-scale bank failure, future sediment deposition into the creek, and bank-cutting that undermines riparian vegetation and habitat values and threatens high-quality orchard land.

3) Re-establishing native riparian habitat on 17,000 square feet along the creek corridor by planting 900 trees, shrubs and herbaceous annuals. These plantings will stabilize the creek banks, create shade to cool and conserve water in the creek, and provide better habitat for a wide array of local wildlife.

4) Conducting three years of post-installation monitoring, re-treatment and replacement planting to ensure a successful outcome.

5) Demonstrating a model for collaboration among private agricultural landowners, government agencies and non-governmental organizations to address watershed enhancement on the Gaviota Coast.

The work will begin at the top of the Arundo infestation, about two miles upstream from the ocean, and continue downstream for the 1.5-mile length of the infestation, until the creek becomes bordered by the rock revetement and the massive structures that support Highway 101 and finally empties into the ocean at Refugio State Beach. The project plan identifies restoration treatments for 22 distinct work sites along 7,000 feet of stream corridor (Exhibit 3, aerial photo).

Weed eradication will be done by contractors engaged by the Land Trust to hand-cut and haul out the Arundo stands. The stumps will be hand-painted immediately with the

herbicide Roundup® or Rodeo® by a licensed applicator, under the supervision of a biological monitor. This effectively prevents re-growth and eliminates the need to dig up the roots, which is both expensive and disruptive to the creek banks and bottom. Other invasive weeds will be cut and individually sprayed by hand or dug out with hand tools. Cut vegetation will be hauled out of the creek area by the contractor. If approved by the landowners, Arundo may be chipped and used as mulch in areas of the orchard far from the creek. Other invasive plant material will be hauled away by the contractor. For three subsequent years, the Land Trust will eradicate re-sprouting Arundo and other weeds.

Several major sources of erosion – undercutting banks, side drainages from the orchards, and failed pipe and wire revetments installed years ago – will be stabilized in the upper two-thirds of the work area. Where appropriate, the Land Trust and RCD will cut one- to two-foot trenches along the toe of eroding slopes and insert locally harvested willow fascines (cylindrical bundles of twigs) in those trenches. In some areas where the erosion is more severe, large boulders and heavier willow debris would be installed to reinforce the toe of the slopes. As much as possible, this work would be done outside of the main stream channel to minimize disturbance to the streambed.

To convey runoff from four side gullies on the upper stretch of the project area, the project also includes the construction of corrugated "drop pipes" that will carry water from the orchard and "drop" it into the creek's main channel. The pipes will be placed in the erosive gullies that now run from the orchards to the creek banks. The banks will be graded to a more stable slope and planted with a native grass mix on the dirt over and around the pipes.

Finally, the Land Trust and RCD will build planted and mulched border berms along the top of the bank in six sites, totaling 680 linear feet, to direct rainfall runoff away from erosive slopes and toward the drop pipes or more stable drainage slopes. The grassed berms and drainage slopes will be irrigated with a drip system.

In portions of the project area identified in the plan, the upper banks and toes of the creek bank will be replanted with native perennial trees and understory plants appropriate to the creek environment. Active revegetation will be done primarily at the base of significantly eroding banks and on repaired banks and berms built to channel surface flow to the creek. Areas without significant erosion or sporadic infestation of weeds will not be planted, as there are existing native tree species (willow, sycamore, cottonwood) and understory (mugwort, poison oak) that should grow where the Arundo is removed. Planting will not be done in the channel where much of the Arundo exists, in order to maintain stream flow capacity and facilitate re-treatment of the Arundo in subsequent years to ensure total eradication.

Project Phasing:

The project will be done in two phases, over two years. Phasing the project will allow the Land Trust to accommodate three factors: (a) restrictive windows of time in which riparian work can be done, due to bird nesting/breeding and rainfall considerations; (b) the desire to limit the extent of area that is cleared at one time, to reduce potential erosion, weed invasion and maintenance costs; (c) the need to secure supplemental funding for the second phase of work.

The Land Trust is requesting Conservancy funding to complete the first year of work on the project, for a total cost of $211,500, planned for Fall 2006. The Land Trust has secured matching funds from the U.S. Fish and Wildlife Service, landowner pledges of in-kind support (labor, equipment, water), and design and environmental services provided to date by the RCD and the District. The three partnering landowners are committed to providing in-kind resources or funds, up to $10,000 per property, as work is done on their reaches of the creek.

The Land Trust will pursue supplemental project funding for the $415,000 second phase in 2006-07, with implementation planned for Fall 2007 if sufficient funds are secured. Potential grant sources include the Santa Barbara County Coastal Resource Enhancement Fund, USDA/Natural Resource Conservation Service, the Wildlife Conservation Board, and the Coastal Conservancy. In addition, the U.S. Fish and Wildlife Service may be able to provide additional "Partners for Fish & Wildlife" funding to the project. The approved $25,000 grant from the Service applies to work on only one of the three ranches, and the Partners program can award grants to multiple property owners in the same project area.

If full funding for the second phase cannot be secured, the Land Trust will defer installing some or all of the more expensive drop pipes and complete the invasive weed removal, revegetation and low-cost bank stabilization methods. The work completed in Phase 1 will stand alone as beneficial, even if the Land Trust is not able to accomplish all the work proposed for Phase 2.

Site Description:

The Refugio Creek watershed is located twelve miles west of the City of Goleta. At 5,200 acres, it is one of the largest watersheds on the Gaviota Coast. Between Refugio State Beach at the base and the Los Padres National Forest at the summit, the broad Refugio canyon supports a mix of commercial farming and ranching, rural residential neighborhoods, and the legendary Circle Bar B dude ranch and dinner theater.

Land use on the three private ranches adjacent to the creek within the project area includes cattle grazing (lower reach) and commercial citrus and avocado production (upper reach). The natural resources on one of these ranches are protected in perpetuity by a conservation easement partially funded by the Conservancy in 1999 and held by the land trust. The other two ranches are under Williamson Act contracts.

All of the landowners/managers are committed to supporting this project within their ranches, in order to: remove and control Arundo; to restore native riparian vegetation; and to stabilize eroding creek banks that threaten valuable orchards, ranch roads and in-stream habitat. The scope of this project is unprecedented on the Gaviota Coast. A successful completion, it is hoped, would encourage other landowners to pursue similar projects with the Land Trust and RCD.

Lower Refugio Creek supports a diverse riparian woodland with sycamore, cottonwood, willow, oak, poplar, bay laurel and California pepper trees and an understory of mixed natives and

invasive weeds. It also supports one of the South Coast's largest Arundo donax infestations, along 1.75 miles of the creek channel, crossing three private ranches.

The Arundo infestation has spread to about 100 locations, covering over four acres of creek bottom and banks. Arundo donax affects riparian systems by growing aggressively into monocultural stands, displacing entirely the native riparian vegetation. Arundo chokes stream channels and creates debris dams that cause increased bank erosion and clogging of road culverts, impeding fish travel during storm flows. The high, straight stalks of Arundo provide little shade to the creek environment, while consuming large amounts of water compared to native plant species. Arundo has little or no value as food for local wildlife, or as nesting/roosting sites. Other invasive plants found in the project site include castor bean, ivy, false tobacco and Kudzu vine.

Steelhead have not been found in recent times in Refugio Creek, due to four major impediments to fish migration. All four barriers are at public road crossings with substandard culverts that clog and become impassible during major storm events, preventing fish migration and causing road flooding and contributing to stream bank erosion. While steelhead barrier removal is not within the scope of the Land Trust project, a successful private-public partnership to restore lower Refugio Creek could elevate Refugio Creek as a priority for steelhead recovery and lead to future partnerships to make essential creek channel improvements upstream and downstream of the project site.

Project History:

The proposed project, which has been on the Southern California Wetland Recovery Project's work program for the past three years, grew out of a study prepared by the RCD for the Land Trust in 2002 funded by the Recovery Project's small grant program. The District recently joined the project team, and has helped the RCD and the Land Trust with environmental review and updating field studies and cost estimates.

The Land Trust's work in this watershed began about eight years ago, when it negotiated the first agricultural conservation easement on the Gaviota Coast on the Freeman Ranch. The Coastal Conservancy provided funding in 1999 toward that easement acquisition.

In developing the baseline data for that easement, the Land Trust and Mr. Freeman noted the Arundo infestation. Mr. Freeman initiated a meeting among the site managers for the two upstream landowners, the Land Trust and the RCD to discuss the problems along the creek on their properties. The property owners agreed to make their land available for a study to identify measures that would remove invasive Arundo and other weeds, reduce soil erosion and side channel-cutting, and improve habitat quality along the three properties.

PROJECT FINANCING

Coastal Conservancy	$175,000*
USFWS Partners for Wildlife Grant**	15,000
Matching funds – Landowners**	14,500
SB County Flood Control District**	7,000
Total Project Cost, Phase 1	**$211,500**

* The expected source of Conservancy funds is a Fiscal Year 2002/2003 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 § 31220) and appropriated funds from Proposition 40 to the Conservancy to carry out coastal watershed projects that are authorized under Section 31220(see next section). In addition, the proposed project is appropriate for Proposition 40 grant funding priority, since it includes a commitment of matching funds.

** Matching funds and in-kind services secured.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

This project would be undertaken pursuant to Chapter 5.5 (Section 31220) of the Conservancy's enabling legislation, Division 21 of the Public Resources Code, regarding Integrated Coastal and Marine Resources Protection.

Consistent with § 31220(a), staff has consulted with the State Water Resources Control Board in the development of the project to ensure consistency with Chapter 3 (commencing with § 30915) [Clean Beaches Program] of Division 20.4 of the Public Resources Code [Watershed, Clean Beaches, and Water Quality Act].

Consistent with § 31220(b)(2), the project will restore fish habitat within a coastal watershed by removing significant infestations of Arundo donax along approximately two miles of Refugio Creek.

Consistent with § 31220(b)(4), the project will reduce unnatural erosion and sedimentation of a coastal watershed by stabilizing several major erosion features with installation of engineered drop pipes, construction of vegetated berms and use of bio-engineered bank stabilization techniques.

Consistent with § 31220(c), the project includes a monitoring component for three years following construction to evaluate project effectiveness.

Finally, as required by § 31220(c), the project is recommended in or consistent with local watershed management plans. See discussion under "CONSISTENCY WITH LOCAL WATERSHED MANAGEMENT PLAN(S)" section, below.

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

Consistent with **Goal 5, Objective C** of the Conservancy's Strategic Plan, the project will result in the removal of invasive species from the project site, which will be graded and planted with native species.

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 California Wetlands Recovery Project, a collaboration of federal, state and local agencies, community groups, and scientists. It also has the support of state and local legislators, cooperating government agencies and others. Letters of support are included in Exhibit 4.
4. **Location:** The project is located on lower Refugio Creek, a coastal watershed of which a portion is in the coastal zone. By stabilizing several major erosion features along the site, the project will benefit the coastal watershed and coastal resources by reducing sedimentation. The project also entails habitat restoration work that will take place in the coastal zone.
5. **Need:** The proposed project will ensure the timely implementation of a coastal watershed restoration opportunity that has been on the Southern California Wetlands Recovery Project's work program for several years. The Land Trust has gathered some matching funds, but still needs support from the Conservancy to allow the project to be constructed this year.
6. **Greater-than-local interest:** Arundo is rated "A-1" on the California Exotic Pest Council list of invasive weeds statewide. The proposed project will provide a model for other nonprofit organizations hoping to work with landowners and local governments and RCDs to eradicate this state-wide threat.

Additional Criteria

7. **Urgency:** Arundo is infamous for its ability to spread rapidly. If the work is postponed another year, the infestation will continue to spread.
8. **Resolution of more than one issue:** In addition to restoring riparian habitat, this project would establish the Land Trust and the RCD as viable partners for future creek restoration projects with willing agricultural landowners on the Gaviota Coast.
9. **Leverage:** See the "Project Financing" section above.
12. **Readiness:** Project designs are complete and most permit applications have been submitted. The Land Trust and the RCD are ready to implement the project this September.
13. **Realization of prior Conservancy goals:** On the Southern California Wetland Recovery Project's work program for the past three years, the proposed project grew out of a study prepared by the RCD for the Land Trust in 2002 with funding from the Recovery Project's small grant program. The Conservancy also funded a conservation easement on one of the project site properties.
15. **Cooperation:** This project was developed cooperatively by the Land Trust, the RCD, the Santa Barbara County Flood Control Department, and the landowners along the creek.

CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:

The proposed creek restoration project is consistent with the certified LCP of Santa Barbara County as follows:

- 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 riparian habitat is the goal of this project.
- Section 3.3.4 of the LCP notes that watersheds "have potential for impacts on coastal streams, wetlands, [and] estuaries," and states that protection of watersheds is necessary to "insure continued biological productivity of coastal streams and wetlands." Although portions of the project area of this recommendation are outside the coastal zone, the project is consistent with LCP policies calling for protection of entire watersheds because of their hydrologic and biologic links to coastal zone resources.

CONSISTENCY WITH LOCAL WATERSHED MANAGEMENT PLAN(S):

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 and wildlife habitat. There is no watershed management plan for the South Coast hydrologic unit in general or Refugio Creek, specifically.

COMPLIANCE WITH CEQA:

The Refugio Creek project has been evaluated for compliance with the California Environmental Protection Act (CEQA) under a programmatic "Final Program Environmental Impact Report, Updated Routine Maintenance Program, November 2001" (EIR) and the subsequent "Refugio Creek Routine Maintenance Addendum to the Program EIR for Santa Barbara County Flood Control Routine Maintenance" (Addendum), both prepared by the District and attached to this staff recommendation as Exhibit 2, as follows:

In order to provide a systematic approach to reviewing the District's future flood control activities and annual routine maintenance projects, the District first developed a Programmatic Environmental Impact Report (1991 EIR) in 1991. That document addressed all of the anticipated environmental effects of the District's routine flood control projects, and included standard protocols for avoiding impacts to species of concern, including State and Federally-listed threatened and endangered species. Each year since then, the County has written an Addendum to the EIR to provide specifics on the upcoming year's flood control activities. The proposed Refugio Creek project is included in one such Addendum (details below).

The District updated the 1991 EIR in 2001, following this process: The Draft EIR for the Updated Routine Maintenance Program was released for public review on March 7, 2001. The public review period closed on April 27, 2001. Environmental hearings were held on April 11 and 12, 2001. All comments received on the Draft EIR were responded to in the Final EIR, and where appropriate, changes were made to the text. The District Board of Directors approved the EIR on December 11, 2001.

This year the District staff prepared the Addendum, along with addenda for other 2006 maintenance activities, to identify the specific nature and environmental setting and assess the impacts and required mitigation associated with the project. The various addenda, including the Addendum, were distributed to interested parties, and comments were received and responded to by staff. On June 20, 2006, the District Board of Directors adopted the addenda to the Program EIR, including the Addendum for Refugio Creek. In doing so, the District Board made findings and a Statement of Overriding Considerations with respect to unavoidable significant environmental effects as to which mitigation was infeasible (none of which are environmental effects associated with the Refugio Creek project) and adopted the Mitigation and Monitoring Programs attached to the addenda for individual projects (including the Mitigation and Monitoring Program for the Addendum for Refugio Creek).

The Addendum for Refugio Creek addresses all of the anticipated environmental effects of the project and identifies from the EIR the required mitigation measures for those potentially significant impacts. Based on the limited scope of the project and the current state of the creek, the impacts of this project are considered significant but mitigable. The mitigation measures that are associated with the Refugio Creek project and that reduce the potentially significant effect to less than significant include:

Hydrology (EIR sections 5.1.2 and 5.1.3)

Removing Arundo donax from Refugio creek may reduce channel resistance and increase velocity. This impact is expected to occur very infrequently, if at all, and would only have localized hydraulic impacts. To ensure that this impact is avoided under the current program, the District or Land Trust shall implement the following mitigation measure:

H-1 – Maintenance Needs Analysis. District staff will conduct an "engineering analysis" to determine the need, nature, and extent of maintenance activities each year along maintained drainages, including Refugio Creek, and give full consideration of incidental adverse hydraulic effects associated with channel maintenance.

Reduced bank stability may arise due to giant reed removal. To ensure that the bank will remain stable after treatment, the Land Trust will implement the following mitigation measure:

H-6 – Removal of Giant Reed from Banks. The Land Trust (wherever the Land Trust is identified as carrying out mitigation measures, it will take on the responsibility to do so on behalf of the District under the Addendum and Mitigation Monitoring Program) shall ensure that the least invasive method of giant reed removal shall be used, and the removal of native vegetation from the banks shall be minimized. The Land Trust shall stabilize the banks after giant reed removal using biotechnical methods that include native plants. Land Trust staff will conduct and/or oversee the maintenance work, and ensure that the appropriate weed removal and bank stabilization method is used.

Water Quality (EIR sections 5.2.2 and 5.2.3)

Removal and/or thinning of vegetation from channel bottom can potentially reduce the amount of natural biofiltering. To avoid an overall decrease in water quality, the Land Trust will implement the following mitigation measure:

B-2 – Minimize Vegetation Removal from Channel Bottom. The Land Trust shall restrict vegetation removal from the channel bottom to the least amount necessary to achieve the specific maintenance objectives for the reach.

The application of herbicides to control emerging vegetation on the channel bed is not expected to introduce substantial amounts of herbicide to the water in the drainage. To minimize potential damage to the environment while applying herbicides, the Land Trust will implement the following mitigation measures:

W-2 – Responsible Herbicide Application. The Land Trust shall limit herbicide application to the months of August through November, when stream flows are minimal. Herbicides shall be applied by hand-held sprayers rather than from truck mounted sprayers to the extent feasible. The dilution and application of herbicides shall be conducted in strict accordance with all label recommendations, including all restrictions related to public health, worker safety, and the

protection of aquatic organisms. Herbicides shall not be applied when winds at the application site exceed 5 miles per hour, within 12 hours of a forecasted rain event, or when vegetation surfaces are covered with water from recent rainfall or dew. Herbicides shall be applied carefully to plant surfaces in minimal effective amounts, minimizing drift to non-target plants and overspray onto the ground or to open water. Signs shall be placed to warn the public if herbicides are applied within 50 feet of any public recreation location. The Land Trust shall also notify residences and businesses located adjacent to drainages to be treated with herbicides.

W-4 - Prevent Accidental Spills and Leaks**.** Accidental leakage or spill of fuel and/or oil from heavy equipment working within or directly adjacent to Refugio Creek will be prevented by mandating that the mixing and dispensing of herbicides and equipment fueling or maintenance shall not occur within a channel or a basin. Spill containment and clean-up procedures for herbicides and vehicle fuels and oils shall be developed by the Land Trust. All field personnel shall be trained and all field vehicles shall be equipped with appropriate materials

Additionally, the District or Land Trust shall prepare information brochures for residents located along maintained drainages that explain responsible herbicide use (Mitigation Measure W-6). The District or Land Trust shall train its maintenance crews to identify and report incidents or materials observed in the creeks during routine maintenance work that could cause significant water quality impacts (Mitigation Measure W-7). Finally, the Land Trust shall make every feasible effort to reduce the overall amount of herbicides used in the maintenance program (Mitigation Measure W-8).

Wetlands, Riparian Habitat and Rare Plants (EIR Sections 5.3.2 and 5.3.3)

To avoid habitat disturbance and a reduction in the vigor or the riparian habitat while removing vegetation from Refugio Creek, the Land Trust shall implement the following mitigation measures:

B-3 - Construction Monitoring During Maintenance Activities. The Land Trust shall provide qualified staff or consulting biologists to monitor project activities daily to ensure that the appropriate methods and limits are used. Results of the monitoring shall be documented in the annual post-maintenance report. These activities include brushing, herbicide application, channel shaping, desilting, bank stabilization by placing fill or grading banks, bank protection construction or repair, grade stabilizer construction or repair, pilot channel construction, and access ramp construction.

B-4 - Restore Temporarily Disturbed Areas. The Land Trust shall restore channel banks containing riparian or wetland vegetation that are temporarily disturbed by maintenance or construction activities associated with the following: channel shaping, placement of bank protection, ramp construction, and repair or construction of bank protection and grade stabilizers. Restoration objectives, methods, plant species, maintenance, and monitoring shall follow the guidelines in the updated restoration plan described in the Program EIR.

Fish, Aquatic Species, and Wildlife (EIR sections 5.4.2 and 5.4.3)

Vegetation removal in and around Refugio Creek has the potential to adversely impact wildlife, fish and other aquatic organisms. The EIR identifies the following sensitive species that could be directly impacted by the Refugio Creek project: the southern steelhead trout, arroyo chub, southwestern pond turtle, two-striped garter snake, San Diego horned lizard, California red-legged frog, silvery legless lizard, and tri-colored blackbird. Species that could be indirectly affected due to habitat modification include southwestern willow flycatcher, least Bell's vireo, yellow warbler, yellow breasted chat, purple martin, warbling vireo, Wilson's warbler, Swainson's thrush, blue grosbeak. In order to avoid adverse effects on sensitive fish and wildlife during vegetation removal in and around Refugio Creek, the District or Land Trust shall implement Mitigation Measure H-1 (see Hydrology Section, above), and the Land Trust shall implement the following measures: Mitigation Measures B-2 and W-2 (see Water Quality Section), and Mitigation Measures B-1 and B-3 (see Wetlands, Riparian Habitat, and Rare Plants Section).

California red-legged frogs are known to occur in Refugio Creek. The proposed trimming of vegetation will be monitored by the Land Trust biologist so the hand crews will not injure any frogs located in this area.

The majority of the Arundo removal will be accomplished by working on the banks or from the tops of the banks and is unlikely to impact red-legged frogs. Some of the Arundo patches and rebuilding of the banks will require the use of heavy equipment within the creek bottom. All Arundo removal will be monitored by a biologist to ensure no frogs are injured or otherwise negatively impacted.

Impacts to the red-legged frogs, as well other species discussed in the Program EIR, are expected to be less than significant with the incorporation of proposed mitigation measures, special conditions in a red-legged frog Biological Opinion to be issued by the United States Fish and Wildlife Service, and close monitoring by a biologist.

Air Quality (EIR sections 5.5.2 and 5.5.3)

To reduce the temporary effects of emissions from equipment and dust from earth-moving activities, the Land Trust shall implement the following measures:

A-1 – Reduce Emissions. The smallest number of vehicles with the minimum practical engine size shall be operating at any one time.

A-2 – Reduce Fugitive Dust. After clearing, grading, earth moving or excavation is complete, the disturbed area must be treated with watering, or revegetating, or by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur. During construction, water trucks or sprinkler systems shall be used to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. The amount of disturbed area shall be minimized. If importation, exportation, and stockpiling of fill material is involved, soil

stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped, and dust control requirements shall be shown on all grading plans.

Noise (EIR sections 5.6.2 and 5.6.3)

The noise level of the project shall be reduced by implementing the following measure:

N-1 – Minimize Noise. Routine maintenance work shall be limited to weekdays and the hours of 7:30 AM and 4:30 PM. Equipment and haul trucks shall be equipped with functioning and properly maintained muffler systems, including intake silencers where necessary. Additional reductions in noise emissions shall be provided, as feasible, by performing noisy operations, such as chipping and loading spoils into dump trucks on the banks, as far away as practicable from sensitive receptors.

Visual (EIR sections 5.9.2 and 5.9.3)

To minimize the visual effects of vegetation removal, the Land Trust shall implement the following measure:

V–1 - Minimize Visual Impacts in Channels. The Land Trust shall minimize brushing in the channel bottom (per Mitigation Measure B-2), incorporate natural channel dimensions during channel reshaping (per Mitigation Measure H-1), restore all temporarily disturbed areas with native riparian trees and shrubs (per Mitigation Measure B-4), and use biotechnical methods with riparian vegetation for bank protection and repair, as feasible (per Mitigation Measure H-5).

The Addendum concludes that the incorporation of the above mitigation measures will reduce impacts to the above-listed resources to less than significant levels. District and Land Trust staff will inspect and monitor 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.

Under the CEQA Guidelines (California Code of Regulations, Title 14, Section 15096) the Conservancy, as a responsible agency funding an activity that is the subject of another agency's environmental review, complies with CEQA by considering the environmental documentation prepared by the lead agency, and by reaching its own independent conclusion on whether and how to approve the project and by making it own findings with respect to any potential significant effects of the project. Here, the EIR, a programmatic document, identifies the impacts associated with work in and around the various creeks by the District, analyzes the environmental effect of the work under varying circumstances and proposes required mitigation to reduce those effects to a less than significant level, where feasible. The Addendum identifies the nature of the project-specific work, takes into account the specific setting and its attributes and then determines the environmental effects and required mitigation measures under the programmatic EIR.

A subsequent activity that follows under a program EIR that has been assessed pursuant to CEQA must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared. If the agency proposing the later activity finds that its effects and required mitigation to reduce those effects were already identified and considered under the program EIR, the activity can be approved with no further environmental documentation (CEQA Guidelines, Section 15168(c)). The Guidelines suggest the use of a written checklist or similar device to document the evaluation of the activity to determine whether the environmental effects of the operation were covered in the program EIR. Here, the Addendum appropriately serves the role of identifying the site-specific project activities and the associated environmental effects and comparing those to the effects analyzed in the EIR.

Conservancy staff believes that, as explained in the Addendum, the environmental effects of the proposed project were analyzed in detail in the EIR and no new or more severe effects of the project have been identified or new mitigation required. In addition, upon its independent review of the EIR and Addendum for the project, staff concurs with the District's finding that the project, as mitigated, avoids, reduces or mitigates the possible significant environmental effects to a level of insignificance. Accordingly, staff recommends that the Conservancy make these findings in approving the project.

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