

COASTAL CONSERVANCY

Staff Recommendation

May 24, 2007

**SANTA MONICA BAY RESTORATION PLAN:  
LAS VIRGENES CREEK RESTORATION, PHASE II**

File No. 00-117

Project Manager: Bob Thiel

**RECOMMENDED ACTION:** Authorization to disburse up to \$326,850 to the City of Calabasas for restoration and enhancement of a portion of Las Virgenes Creek in the upper Malibu Creek watershed, City of Calabasas.

**LOCATION:** Las Virgenes Creek, City of Calabasas, Los Angeles County (Exhibits 1 and 2).

**PROGRAM CATEGORY:** Resource Enhancement

---

**EXHIBITS**

- Exhibit 1: [Regional location map](#)
- Exhibit 2: [Map and aerial photo of project location](#)
- Exhibit 3: [Site photos and simulations of proposed project](#)
- Exhibit 4: [SMBRC Resolutions 2001-06 and 2002-02](#)
- Exhibit 5: [Mitigated Negative Declaration](#)
- Exhibit 6: [Letter of request](#)
- Exhibit 7: [Letters of support](#)

---

**RESOLUTION AND FINDINGS:**

Staff recommends that the State Coastal Conservancy adopt the following resolution, pursuant to Sections 31251-31270 of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes disbursement of an amount not to exceed three hundred twenty-six thousand eight hundred and fifty dollars (\$326,850) to the City of Calabasas for restoration and enhancement of a portion of Las Virgenes Creek in the upper Malibu Creek watershed to implement the Santa Monica Bay Restoration Plan, approved by the Conservancy on August 2, 2001. This authorization is subject to the condition that prior to the disbursement of any funds, the City shall submit for the review and written approval of the

Conservancy's Executive Officer a work program, budget, and schedule and the names of any contractors to be employed in carrying out the work.”

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 of Chapter 6 of Division 21 of the Public Resources Code (Sections 31251-31270) regarding enhancement of coastal resources.
  2. The proposed project is consistent with the Project Selection Criteria and Guidelines adopted by the Conservancy on January 24, 2001.
  3. The proposed project is undertaken at the request of the local jurisdiction consistent with Public Resources Code Section 31251.2.”
- 

### **PROJECT SUMMARY:**

Staff recommends that the Conservancy authorize disbursement of up to \$326,850 to help fund restoration of a 500-foot channelized segment of Las Virgenes Creek between the Highway 101 freeway and Agoura Road in the City of Calabasas. The basic objectives of the project are to remove the concrete channel and restore the stream channel to a more natural form with native riparian vegetation.

In the late 1970s, a 45-wide concrete channel lining was constructed along this reach, fragmenting the wildlife corridor that ran between Baldwin Open Space and Malibu Creek State Park. The City believes that restoration of this segment of Las Virgenes Creek will reestablish direct connectivity between the two existing riparian communities, restore wildlife passage, improve the aesthetics of the creek, reduce erosion, increase percolation of stormwater runoff, reduce flooding potential, and improve water quality.

The project would remove approximately 500 feet of partially armored, highly-urbanized creek channel and replace it with a stable, natural, revegetated channel. The project reach consists of three general sections: the upstream natural channel, the middle concrete trapezoidal channel, and a channelized portion below Agoura Road Bridge. The upstream section---a natural bed with rock riprap side slopes---is approximately 40 feet long and extends from the downstream edge of the Highway 101 box culvert to the beginning of the concrete trapezoidal channel. The middle section consists of a concrete trapezoidal channel that is relatively flat, and extends for approximately 370 feet. Along the 92 foot section below Agoura Road Bridge, the upstream half is channelized, while the downstream half consists of grouted rock riprap. Finished concrete bridge piers form the bridge foundations and line this section of the reach below the bridge.

The restoration project consists of six main components (see Exhibit 3):

- gradient control

- bank slope reconfiguration;
- fish passage improvement;
- erosion control;
- flood control; and
- public access.

Gradient control along the restoration reach would be achieved with five vertical drops at varying intervals. The drops would consist of rock weirs with pools and runs between drops. The drops would be constructed to allow for fish passage and are designed according to guidelines established by the National Marine Fisheries Service and the California Department of Fish & Game. Reducing the gradient would reduce sediment transport, encourage bar and floodplain development, and increase the chances of developing a stable low flow channel and associated floodplain channel morphology for the creek. All rock stone revetments would be planted with long willow stakes to ensure that vegetation cover would become part of the overall cover of the structure. The streambanks would be reconfigured so that lower sections of the existing 1.5: 1 concrete slopes would be laid back at a 2: 1 slope. Fish passage will be improved by constructing a rock weir gradient control structure and removing the concrete channel beneath the bridge. The channel would be graded to a compound configuration and the bed would be returned to a natural channel composition.

The project also includes a combination of erosion control measures designed to protect streambanks from a 5,000 cfs (or 10-year) event. They include (a) coir fiber blocks installed along a low-flow channel and (b) willow-staked loose rock revetment in both the low-flow channel and the bank slope toes. Rock toe protection would extend 5 to 6 vertical feet up the bank slope. This rock would be planted with willow stakes and backfilled with channel bed sediments and topsoil for erosion control. An extensive riparian planting program of local native plant material, including willows, mulefat, cottonwood and sycamore, would provide additional erosion control.

Rehabilitation of the project reach would be a step towards restoring a link of the highly urbanized creek system that runs through Ventura and Los Angeles counties. Riparian habitat along the project reach is significantly degraded, and the concrete trapezoidal channel hinders wildlife migration. Restoration would help establish a corridor of significant native riparian vegetation and habitat along the project reach.

The project would include new facilities for public access: a 6-foot wide pathway along the reach and wooden hexagonal gazebo constructed over the creek, with ADA-compliant pedestrian ramps to insure handicapped accessibility. The current trapezoidal concrete channel is devoid of any vegetation, except for algae blooms. Restoration of this section of Las Virgenes Creek will provide a naturalized scenic view for pedestrians, consumers and employees located in the adjacent commercial center. This site will also educate the public on natural alternatives to concrete channels for flood control as well as valuable connections to riparian habitat in an urban environment.

The restoration would re-establish direct connectivity between two existing wildlife and riparian communities to the north and south of this channelized segment and provide an alternative route

for wildlife traversing under the 101 freeway. Restoring the natural bottom to the channel will promote greater water percolation and support for native vegetation, while reducing the erosion potential to downstream commercial and residential developments and parklands.

Las Virgenes Creek is a headwaters tributary to Malibu Creek and Lagoon. But it is also a 303(d)-listed impaired water body as a result of sediments, coliform, algae, nutrients and selenium. By helping treat urban runoff, the proposed project will help reduce downstream sedimentation; absorb and filter out nutrients, coliform, and other pollutants; help reduce eutrophication levels in the creek; and improve the water quality in Malibu Creek and Lagoon.

To implement this project, the City has requested the \$326,850 in funds that remain from the \$403,000 in funding previously authorized by the Santa Monica Bay Restoration Commission (SMBRC) for this project. By SMBRC Resolution 2001-06 (dated 19 April 2001 for \$282,000) and SMBRC Resolution 2002-02 (dated 20 June 2002 for \$121,000), the Governing Board of the SMBRC approved a total of \$403,000 of this project from the Proposition 12 funds administered by the Coastal Conservancy for projects within the Santa Monica Bay watershed (see Exhibit 4). In December 2001, the Coastal Conservancy awarded the City a grant of \$76,150 from those funds to complete Phase I of the project, which consisted of completing the design and engineering work for the project.

**SITE DESCRIPTION:**

The Santa Monica Bay watershed encompasses approximately 400 square miles subdivided into 28 separate sub-watershed drainages. It includes two major topographic areas: the Los Angeles coastal plain and the Santa Monica Mountains. The Santa Monica Bay watershed is one of the nation's most highly urbanized regions. It encompasses residential areas, commercial and industrial areas and undeveloped open space lands, primarily within the Santa Monica Mountains. It is bordered on the north by the Santa Monica Mountains divide, on the east by Griffith Park, on the south by Point Fermin, and on the west by the eastern portion of Ventura County.

Las Virgenes Creek lies in the west-central section of the County of Los Angeles, east of the City of Agoura Hills and west of the City of Calabasas (Exhibit 2). The creek is perennial, with a watershed of approximately 12.5 square miles. The existing channel is contained in a trapezoidal channel between Highway 101 and Agoura Road. The areas above both banks are developed: a commercial shopping center lies to the east of the project reach; a business park is located to the west. Reaches of the creek downstream from the project have natural bottoms and thick riparian vegetation but outer banks are often lined with riprap or other structural bank protection.

Although Las Virgenes Creek does not currently offer habitat for migratory fish, good steelhead habitat does exist along lower Malibu Creek from the mouth of the creek in upper Malibu Lagoon to Rindge Dam, which acts as a complete barrier to migration north of the dam. In the event that Rindge Dam were removed or modified to allow fish passage, the project reach could provide a corridor between the pristine coastal scrub habitat in the Ahmanson Ranch area to the habitat below Rindge Dam.

**PROJECT HISTORY:**

In recognition of the need to protect Santa Monica Bay and its sub-watersheds, in May, 1988, the State of California and the U.S. Environmental Protection Agency (US EPA) nominated and included Santa Monica Bay in the National Estuary Program (NEP). Established under the Water Quality Act of 1987 and managed by the US EPA, the NEP includes more than two dozen significant estuaries and coastal water bodies nationwide.

As an NEP, the Santa Monica Bay Restoration Project (SMBRP) is charged with assessing the Bay's pollution problems, and with producing the Bay Restoration Plan to serve as the blueprint for the Bay's long-term recovery. In 1995, the Santa Monica Bay Restoration Plan was approved by the State of California and the US EPA. The Bay Plan includes 250 actions, including specific actions focused on habitat conservation, enhancement and restoration, pollution prevention and treatment control, and assessment, education and monitoring.

The Bay Plan includes several goals, including: (1) reducing pollutant loadings to and prevent degradation of the waters of Santa Monica Bay; (2) reducing human health risks associated with swimming in or harvesting seafood from the Bay; and (3) restoring, rehabilitating and protecting the marine ecosystem, living resources and biodiversity of the Bay and its watersheds. Specifically, the Bay Plan has identified the protection, restoration, and creation of wetlands within the Bay as a major goal of the project.

The Safe Neighborhood Parks, Clean Water, Clean Air and Coastal Protection Bond Act of 2000 (Proposition 12) earmarked \$25,000,000 to the Coastal Conservancy for restoration of Santa Monica Bay in accordance with the goals and priorities of the Bay Plan. The Coastal Conservancy approved the Bay Plan on August 2, 2001.

Proposition 12 requires the Bay Watershed Council, the stakeholder board of the Restoration Project, to determine project eligibility and grant priorities. Working with Conservancy staff, the Santa Monica Bay Restoration Project staff has solicited project proposals that would achieve the goals of the Bay Restoration Plan and address its water quality and natural resource protection objectives. The project being recommended for funding here has been approved for funding by the Bay Watershed Council and Santa Monica Bay Restoration Commission (Exhibit 4).

The Las Virgenes Creek restoration project was identified as an important potential project in a 1998 Las Virgenes Gateway Master Plan. A feasibility study prepared in 2000 determined that the restoration of the site would be hydraulically possible, and the City subsequently applied to the Santa Monica Bay Restoration Commission for a Proposition 12 grant to help fund the planning and implementation of a restoration project along the reach.

The \$76,150 grant from the Coastal Conservancy in 2003 allowed the City to retain Questa Engineering Corporation to prepare a conceptual analysis and engineering designs for the project. After a public workshop in February 2004, City staff presented Questa's Preliminary Design and Feasibility Analysis to the City Council in the spring of 2004. At the suggestion of SMBRC staff, Questa's plans and specifications were peer reviewed by both Dr. Ann Riley of the State Water Resources Control Board in 2004 and Tom Moody of Natural Channel Design Inc. in 2006. The reviewers's key suggestions have been incorporated into the design criteria and specifications, and City and SMBRC staff now concur with the current design of the project. In the interim, the Calabasas City Council adopted a resolution on 2 March 2005 approving the

project and its basic design.

**PROJECT FINANCING:**

Coastal Conservancy grant (Proposition 12, Santa Monica Bay Restoration program)	\$326,850
Urban Streams grant (Department of Water Resources)	\$187,250
Other matching funds (pending Prop 50, Ch 8 grant for \$520,000 and matching City funds of \$23,505)	\$543,505
<b>Total Project Cost</b>	<b>\$1,057,605</b>

The source of Conservancy funds is an appropriation to the Conservancy from Proposition 12, the "Safe Neighborhood Parks, Clean Water, Clean Air and Coastal Protection Bond Act of 2000," for projects to implement the Santa Monica Bay Restoration Plan.

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

The proposed project would be undertaken pursuant to Chapter 6 of the Conservancy's enabling legislation, Division 21 of the Public Resources Code (Sections 31251-31270), regarding enhancement of coastal resources.

Under §31251, the Conservancy may award grants for enhancement of coastal resources that, because of natural or human-induced events, or incompatible land uses, have suffered loss of natural and scenic values. Consistent with this section, the proposed project would lead to improvements in the quality and availability of degraded habitat in the Las Virgenes Creek sub-watershed of the upper Malibu Creek watershed of Santa Monica Bay and is therefore consistent with this section.

Under §31251.2, the Conservancy may undertake a project affecting an area partly outside the coastal zone if the local public agency having jurisdiction over the project area requests the Conservancy's assistance. The City of Calabasas as the local public agency has requested Conservancy's assistance on this project. (See Exhibit 6: Letter of Request for grant).

The proposed authorization is consistent with §31253, which states that the Conservancy may provide up to the total cost of any coastal resource enhancement project. In the present instance the Conservancy's contribution would represent about 31 percent of the funds needed to carry out the project.

**CONSISTENCY WITH CONSERVANCY'S STRATEGIC PLAN GOALS & OBJECTIVES:**

Consistent with **Goal 5, Objective A**, the proposed project will help protect, restore and enhance biological diversity in a coastal stream corridor by restoring wildlife habitat in a tributary to

upper Malibu Creek, an important watershed of Santa Monica Bay and by promoting local capacity to plan and implement resource enhancement projects.

Consistent with **Goal 5, Objective B**, the proposed project will help enhance and restore a habitat corridor that links coastal and upland habitats in the Santa Monica Mountains.

Consistent with **Goal 6, Objective A**, the proposed project will improve water quality, habitat and other coastal resources within a priority coastal watershed by enhancing riparian habitat.

Consistent with **Goal 6, Objective B**, the proposed project will improve water quality, habitat and other coastal resources within a priority coastal watershed by reducing sediment reducing erosion and sedimentation into Las Virgenes Creek and Santa Monica Bay and thereby improving water quality to benefit coastal resources.

The Santa Monica Mountains are cited in the Coastal Conservancy's *Strategic Plan* (2003, at page 56) as a locus for Goals 5 (Coast/Ocean Habitat) and 6 (Wetlands, Rivers & Watersheds) of the Plan.

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

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines, adopted on January 24, 2001:

#### **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:** These projects will be funded with monies appropriated to the Conservancy from Proposition 12 for implementing the Santa Monica Bay Plan. The proposed project is consistent with the Bay Plan and this project has been approved by the Santa Monica Bay Restoration Commission (Exhibit 4).
3. **Support from the public:** Implementation of the Santa Monica Bay Restoration Plan has widespread public and agency support. The Santa Monica Bay Watershed Council includes members from private industry, the general public, community environmental organizations, as well as local, regional, state and federal agencies. Non-native invasive species are a continuing threat to the ecological health of the Santa Monica Bay watershed, and the restoration of native watershed habitats has been identified as a priority objective by the Council.
4. **Location:** The proposed project is located within Santa Monica Bay and the Malibu Creek sub-watershed drainage.
5. **Need:** The project will help restore an important wildlife corridor in the Santa Monica Mountains, as well as improve water quality in Las Virgenes Creek. Conservancy funding is needed to implement this project.
6. **Greater-than-local interest:** By restoring a highly visible section of an urban creek in the Santa Monica Mountains area, the City will provide an important demonstration of how channelized sections of streams in the Los Angeles region can be restored and enhanced for

habitat and water quality benefits. The project is also located in the critical Malibu Creek sub-watershed of Santa Monica Bay, which has been identified by both the State of California and the US EPA as a coastal water body of national significance. Restoration of native vegetation and protection of riparian habitat is also one of the priorities of the Southern California Wetlands Recovery Project.

**Additional Criteria**

7. **Urgency:** The proposed grant will significantly aid current efforts to protect natural resources at risk from various encroachments and threats, including non-point source pollution.
8. **Resolution of more than one issue:** The project will address coastal resource protection, habitat restoration and species protection, water quality and watershed resource protection, and public education.
9. **Leverage:** See the “Project Financing” section above. Additional funds, represented by a \$187,250 urban streams grant from the Department of Water Resources and \$543,505 in other matching funds will represent almost 70 percent of the total cost of the project.
10. **Readiness:** By implementing and completing the previous (planning) phase of this project under a Conservancy grant, the City of Calabasas has demonstrated its ability to start and finish this project in a timely manner. The City currently plans to complete construction drawings, hire a contractor, and initiate construction in 2007.
11. **Realization of prior Conservancy goals:** The Coastal Conservancy has been involved in resource protection, enhancement and restoration projects within the Santa Monica Bay watershed for more than a decade, including projects focused on improving coastal water quality and coastal nearshore resources within the Bay. Implementation of this project at this time will contribute to the fulfillment of long-standing Conservancy goals. The Coastal Conservancy has also been involved in enhancement and restoration planning in the watersheds of the Santa Monica Mountains for the past several years. Currently the Coastal Conservancy is providing staff and financial resources for the several habitat restoration and coastal access projects within the Santa Monica Mountains.
12. **Cooperation:** The Santa Monica Bay Restoration Project is a cooperative venture involving a broad range of interested and affected stakeholders including private industry, citizens, environmental groups, and local, regional, state and federal agencies.

**CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:**

The proposed project is located outside the designated Coastal Zone within Los Angeles County. The project, however, is consistent with the City of Calabasas’s Creeks Master Plan, is identified as a high priority project in the Los Angeles County Integrated Water Management Plan (IRWMP), and will assist in implementing the Santa Monica Bay Restoration Plan.

**COMPLIANCE WITH CEQA:**



On 2 March 2005, the City Council of the City of Calabasas adopted a Mitigated Negative Declaration that was prepared for this project (Exhibit 5). The City also adopted a Mitigation Monitoring and Reporting Program for this project on April 18, 2007 (Exhibit 5)

The Initial Study and Mitigated Negative Declaration found that without mitigation, the proposed project has the potential to result in short-term Class II impacts to air quality, biological resources, cultural resources, geology, hazards and hazardous materials, hydrology and water quality and noise. With the adoption and implementation of the following mitigation measures, however, such short-term impacts would be reduced to less than significant levels

### **Biological Resources**

Three special status wildlife species---California red-legged frog, Southwestern pond turtle, and coastal California gnatcatcher---and two special status plant species---Braunton's milk vetch, and San Fernando Valley spineflower---occur within the upper reaches of the Las Virgenes watershed, but all are considered unlikely to occur in the vicinity of the proposed project because of the lack of appropriate habitat conditions. Nevertheless, because it would still be possible for short-term impacts to occur during construction, implementation of the four mitigation measures listed below would reduce construction-related impacts on endangered, threatened, or rare species to less-than-significant levels. Similarly, potential impacts to seasonal wetlands and to wildlife migration and movement of resident fish and other aquatic organisms along Las Virgenes Creek caused by construction activities would also be reduced to less-than-significant levels by these mitigation measures:

- (a) As close to the beginning of construction as possible, but not more than 14 days prior to construction, a qualified biologist should conduct a final pre-activity survey of the construction zone to ensure that no special status wildlife and/or plant species have recently occupied the site. If any special status wildlife and/or plant species are found, exclusion zones should be established and maintained until all construction activities are completed. In some cases it may be preferable to remove and/or relocate the individual plant or animal. If special status species are found during the preconstruction survey, the biologist should be present immediately prior to construction activities that have the potential to impact special status species to identify and protect potentially sensitive resources.
- (b) Large shrubs should be avoided to the extent possible to minimize impact to wildlife impact.
- (c) The City of Calabasas Engineering and Public Works Department shall secure appropriate permits from the US Army Corps of Engineers, the California Department of Fish and Game (DFG), and the Los Angeles Regional Water Quality Control Board (RWQCB). Once the permits have been granted, the Engineering and Public Works Department shall comply with any additional measures imposed as permit conditions beyond those proposed and outlined in this document.
- (d) The contractor hired for project construction shall implement erosion control and water quality Best Management Practices (as specified in the mitigation measures for Water Quality) to reduce discharges to live streams during and after construction.

### **Air Quality**

The Initial Study and MND noted that temporary increases in air emissions could result from grading and earthmoving activities and that an increase in exhaust emissions associated with construction truck traffic could also occur. These short-term impacts would be reduced to less-than-significant levels with the implementation of the following mitigation measures:

- (a) During clearing, grading or earth moving activities, water shall be sprayed on exposed surfaces and loose dirt and soils to prevent dust from leaving the site. At a minimum, all exposed areas and areas of vehicle movement should be wetted down in the morning and after work is completed for the day and whenever winds exceed 15 mph.
- (b) Stockpiled earth material will be sprayed as needed to minimize dust generation
- (c) During construction, the amount of disturbed areas will be minimized and on-site vehicle speeds limited to 15 mph or less.
- (d) All trucks hauling dirt, soil, or other loose material shall be covered or shall maintain at least one foot of freeboard.
- (e) After clearing, grading, earthmoving, or excavation is completed, the entire areas of disturbed soil shall be treated by watering, revegetating, and/or spreading soil binders to minimize dust generation.

### **Cultural Resources**

The site is located in a heavily urbanized area of the City of Calabasas and no known archeological resources are in close proximity to the project site. Nevertheless implementation of the following mitigation measures would reduce any potential project-related impacts to cultural resources to less-than-significant levels:

- (a) If deemed necessary by the City of Calabasas Planning Department, a qualified archeologist monitor shall be present to monitor significant earth movement at the project site.
- (b) In the event that artifacts of archeological significance are uncovered, a qualified archeologist shall be empowered to halt construction in the immediate vicinity of such unearthed artifacts until disposition of the site has been determined by the Planning Department.

### **Geology and Soils**

Because temporary impacts from construction could result in soil erosion, effective erosion control during the initial phases of project construction was considered mandatory, and the mitigation measures prescribed to protect Water Quality (specified in that section below) would reduce any such short-term increases to less-than-significant levels.

### **Hazards and Hazardous Materials**

Although the project would not involve the construction of a facility associated with the transport, use or disposal of hazardous materials, there is a slight risk of fuel or other petroleum spills during construction. Adoption and implementation of a hazardous materials plan (with specified requirements) into the overall Stormwater Pollution Prevention Plan for construction activities would reduce any such potential short-term impacts to less than significant levels.

### **Hydrology and Water Quality**

Because grading and earthwork during construction could disturb or expose soil, and potentially result in erosion and degradation of water quality in Las Virgenes Creek, Water Quality

mitigation measures that would reduce potential construction-related impacts to less-than-significant levels are:

- (a) Preparation of a Stormwater Pollution Prevention Plan (to be reviewed and approved by the Los Angeles RWQCB before construction activities begin) that identifies Best Management Practices to reduce erosion of disturbed soils during construction activities, including ones to minimize wind and water erosion and the transport of sediments. According to the mitigation measure, the plan must include a number of minimum provisions, such as temporary measures for flow diversion and silt fencing; use of hay bales, berms and geofabric to control sediment; and mulching or revegetation of all disturbed areas following construction.
- (b) Limit in-channel construction activities to the summer low-precipitation period and dewater the channel bottom and channel banks during construction.
- (c) Ensure that construction activities do not result in increased turbidity during and after construction.

Conservancy staff has independently reviewed the Mitigated Negative Declaration and recommends that the Conservancy find that the project, as mitigated, does not have the potential for any significant adverse environmental effects. Staff will file a Notice of Determination upon approval of the project.