

COASTAL CONSERVANCY

Staff Recommendation
May 24, 2012

**LOS PEÑASQUITOS LAGOON ENHANCEMENT –
MONITORING PROGRAM**

Project No. 78-046
Project Manager: Deborah Ruddock

RECOMMENDED ACTION: Authorization to disburse an amount not to exceed \$250,000 to the Southwest Wetlands Interpretive Association to continue physical, chemical, and biological monitoring of Los Peñasquitos Lagoon.

LOCATION: Los Peñasquitos Lagoon, City of San Diego, County of San Diego

PROGRAM CATEGORY: Resource Enhancement

EXHIBITS

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

Exhibit 2: [Project Letters](#)

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy (Conservancy) adopt the following resolution pursuant to Sections 31251 *et seq.* of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes the disbursement of two hundred and fifty thousand dollars (\$250,000) to the Southwest Wetlands Interpretive Association to continue physical, chemical, and biological monitoring of Los Peñasquitos Lagoon consistent with the Los Peñasquitos Lagoon Enhancement Plan, subject to the following conditions:

1. The Southwest Wetlands Interpretive Association shall submit for the review and approval of the Conservancy’s Executive Officer a work program, including schedule, budget and deliverables; and
2. The names of any contractors it intends to use to conduct the studies.”

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:

***LOS PENASQUITOS LAGOON ENHANCEMENT –MONITORING PROGRAM AND
ENHANCEMENT PLAN UPDATE***

1. The proposed disbursement of funds is consistent with the purposes and criteria set forth in Sections 31251-70 of the Public Resources Code, regarding enhancement of coastal resources.
2. The proposed disbursement is consistent with the Los Peñasquitos Lagoon Enhancement Plan approved by the Conservancy on October 30, 1985.
3. The proposed disbursement is consistent with the City of San Diego, North City Local Coastal Program as necessary for restoring and enhancing the environmental qualities of the lagoon.
4. The proposed disbursement is consistent with the purposes of the Los Peñasquitos Special Deposit Fund established to provide for management and enhancement of the lagoon.
5. SWIA is a nonprofit organization existing under Section 501(c)(3) of the United States Internal Revenue Code, and has among its principal charitable purposes the restoration of Los Peñasquitos Lagoon, and the preservation of land for scientific, historic, educational, ecological, recreational, scenic or open space opportunities.”

PROJECT SUMMARY:

Staff recommends that the Conservancy authorize the disbursement of up to \$250,000 to the Southwest Interpretive Association (SWIA) to continue physical and biological monitoring of Los Peñasquitos Lagoon (LPL) (See Exhibit 1).

The proposed funding would ensure that the long-term monitoring program at LPL continues uninterrupted for an additional five years, resulting in a rare data set that will provide 30 years of monitoring data.

The long-term monitoring program is the heart of the adaptive management program at LPL and is crucial to the implementation of the Los Peñasquitos Lagoon Enhancement Plan (Enhancement Plan). Results guide management actions by the Los Peñasquitos Lagoon Foundation (Foundation), the California Department of Parks and Recreation (State Parks) and the City of San Diego, as well as track responses to these actions.

Specifically, water quality parameters (dissolved oxygen and salinity) are the specified regulatory triggers for performing mouth maintenance. Monitoring provides this information, as well as how the lagoon responds to mouth opening. The long-term water quality monitoring also is providing an improved understanding of basic estuarine dynamics, especially with the recent addition of nutrients (which will inform efforts to understand and regulate eutrophication).

Long-term monitoring of vegetation at the lagoon tracks vegetation changes to anthropogenic inputs of water (especially during the dry-season). This is being used to steer potential restoration responses and management action related to these inputs. This monitoring also tracks elevation changes in the lagoon, which are key variable of concern in lagoon management and restoration.

***LOS PENASQUITOS LAGOON ENHANCEMENT –MONITORING PROGRAM AND
ENHANCMENT PLAN UPDATE***

Importantly, this monitoring program is not designed to immutably measure the same parameters over and over. While it retains a core element of consistently monitoring some key parameters (thus providing a tremendous regional resource), it is also designed to adapt to changing management needs. This is why SWIA is incorporating an advisory group that will help steer the monitoring effort.

The proposed project is supported by State Parks, San Diego Coast District; Region 9 Regional Water Quality Control Board (RWQCB); City of San Diego; and the Foundation. See Exhibit 2.

Site Description: Los Peñasquitos Lagoon is a 0.62-square-mile intertidal wetland located in the north coastal area of the City of San Diego, about sixteen miles north of downtown, and just north of the intersection of Interstates 5 and 805, between the communities of La Jolla and Del Mar. (Location map, Exhibit 1). It is one of the few remaining intertidal wetlands in southern California. Much of the lagoon is owned and managed by State Parks as the Los Peñasquitos Lagoon Preserve. The lagoon is adjacent to Torrey Pines State Park and State Beach, which lie immediately to the west and south.

The 98.5-square-mile watershed of the lagoon is a rapidly urbanizing area of the City of San Diego and is comprised of three major drainages: Carroll Canyon, Los Peñasquitos Canyon and Carmel Canyon. Both the lagoon and its watershed have been identified by the State Water Resources Control Board as an impaired water body with sedimentation and siltation from nonpoint sources threatening habitats, particularly in the lagoon and lower stream corridors.

Project History: The Conservancy approved the Los Peñasquitos Lagoon Enhancement Plan in 1985 to provide for a monitoring program "...to gauge the health and ecological value of the lagoon system...to document changes in the functional values of the lagoon...and to evaluate the success of the various elements of the enhancement program." The Foundation and the Pacific Estuarine Research Laboratory (PERL) at San Diego State University began the monitoring program in 1987 with a baseline study sampling adult and juvenile fishes, benthic invertebrates, vegetation and physio-chemical parameters within the lagoon. Until 2004, PERL carried out the LPL monitoring program under an agreement with the Foundation. In 2004, PERL's monitoring functions and staff was transferred to SWIA, which continues to carry out LPL monitoring and is also conducting the NOAA monitoring of the Tijuana River National Estuarine Research Reserve (TRNERR) and post-construction monitoring of the South San Diego Bay Salt Pond Restoration Project. In previous grants, funding requested by the Foundation was subsequently disbursed to SWIA. The Foundation and other interested entities (e.g., State Parks) will continue to be engaged in this work and will help shape a monitoring program that addresses management needs.

PROJECT FINANCING

Conservancy (Los Peñasquitos Lagoon Special Deposit Fund)	\$250,000
--	-----------

**LOS PEÑASQUITOS LAGOON ENHANCEMENT –MONITORING PROGRAM AND
ENHANCEMENT PLAN UPDATE**

The Los Peñasquitos Lagoon Special Deposit Fund consists of fees assessed on development permits issued by the City of San Diego and the California Coastal Commission in the coastal zone portion of the LPL enhancement area. (Pub. Res. Code § 30526(a)). These funds are held by the Conservancy and may be spent only for enhancement activities in the lagoon. *Id.*, subsec. (b) and §31108.5). The proposed actions are consistent with the purposes of the fund because the monitoring program is an element of the enhancement plan for the lagoon as approved by the Conservancy and Coastal Commission in 1985. The Conservancy has supported the monitoring program since 1991 with an authorization from the fund in 1991 and subsequent augmentations in 1996, 2004 and 2006. The Tijuana River National Estuarine Research Reserve (TRNERR) will provide in-kind support for the monitoring project valued at \$10,000 annually. This support includes facilities for laboratory processing and savings associated with incorporating the LPL monitoring in with the larger TRNERR monitoring programs.

CONSISTENCY WITH CONSERVANCY’S ENABLING LEGISLATION:

The proposed action is consistent with Chapter 6 of the Conservancy’s enabling legislation, Division 21 of the Public Resources Code Sections 31251-70. Consistent with Section 31251, the proposed action is part of a coastal resource enhancement plan and will provide information to enhance the natural and scenic character of an area inside the coastal zone that has been impacted by incompatible land uses. Consistent with Section 31252 the proposed action is identified in City of San Diego, North City Local Coastal Program as requiring public action to help resolve questions concerning impact of local development on natural resources.

Consistent with Section 31263, the Conservancy may fund up to the total cost of the resource enhancement activities proposed. The amount of funding recommended for the proposed project is based on the amount of funding available for LPL resource enhancement projects, the fiscal resources of the applicant and its project partners, and the urgency of the project relative to other projects eligible for funding.

**CONSISTENCY WITH CONSERVANCY’S 2007
STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):**

Consistent with **Goal 5, Objective B** of the Conservancy’s Strategic Plan, the project will provide information required to protect, restore and enhance the 0.62-square-mile Los Peñasquitos Lagoon intertidal wetland.

Consistent with **Goal 5, Objective C**, the project will provide information required to preserve and restore habitat corridors connecting the core habitat area along the coast with Los Peñasquitos Canyon Preserve and Carmel Valley habitat areas.

Consistent with **Goal 5, Objective D** the project will provide information required to design a project to eradicate non-native invasive species that threaten Los Peñasquitos Lagoon’s native coastal habitat.

Consistent with **Goal 6, Objective F** the project will provide information required to design a project to improve water quality to benefit coastal resources.

**LOS PENASQUITOS LAGOON ENHANCEMENT –MONITORING PROGRAM AND
ENHANCMENT PLAN UPDATE**

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

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines, last updated on November 10, 2011, in the following respects:

Required Criteria

1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
2. **Consistency with purposes of the funding source:** See the "Project Financing" section above.
3. **Support of the public:** Los Peñasquitos Lagoon remains a highly regarded natural area within the city. The community and public agencies concerned with the lagoon's management support the long-term monitoring program as a key element necessary to support management actions (Project Letters, Exhibit 2).
4. **Location:** The proposed project is located within the coastal zone of the City of San Diego.
5. **Need:** The recommended action is needed to maintain the continuity and integrity of the monitoring program outlined in the Los Peñasquitos Lagoon Enhancement Plan adopted by the Conservancy in 1985, and no other source of funding is currently available . The cost of the monitoring program exceeds the financial capacity of the Foundation.
6. **Greater-than-local interest:** Los Peñasquitos Lagoon and the Torrey Pines Reserve are major natural and recreational resources in the region. The lagoon itself is popular for bird watching and there is hiking on established trails. The lagoon also is part of a larger State Park and State Beach complex. The tidal wetlands of the lagoon represent a habitat type that largely has been lost from the region. Also, the long-term monitoring program offers a quarter-century perspective on this system, and is a signature effort in Southern California. The lagoon monitoring program provides insight into trends in condition of lagoons throughout Southern California and a source of monitoring methods that could be incorporated into monitoring programs at other estuaries and lagoons in the region.
7. **Sea level rise vulnerability:** This project is not vulnerable to the effects of sea-level rise since this is a monitoring project. However, it will track water level variations and other ecosystem responses to climate change.

Additional Criteria

8. **Urgency:** Funding is urgently needed to maintain the continuity of the 20-year monitoring program through the 2012-2017 monitoring period that commences in September.

**LOS PENASQUITOS LAGOON ENHANCEMENT –MONITORING PROGRAM AND
ENHANCEMENT PLAN UPDATE**

9. **Resolution of more than one issue:** The monitoring program provides critical data for timing and executing actions required to maintain an open lagoon mouth, key data needed to inform management actions in the salt marsh/riparian habitat interface, and information needed to develop future enhancement activities at the lagoon.
11. **Conflict resolution:** The long-term monitoring record is highly regarded by regulatory agencies in evaluating development proposals including: the I-5/I-805 widening project, the Pacific Coast Highway bridge replacement and the construction of sediment management basins in the lower watershed.
13. **Readiness:** The Southwest Wetlands Interpretive Associates is currently undertaking the monitoring program and is prepared to act to maintain its continuity.
14. **Realization of prior Conservancy goals:** See “Project History” above.”
17. **Vulnerability from climate change impacts other than sea level rise:** This project will not be affected by other climate change factors, but will track ecosystem changes in LPL.
18. **Minimization of greenhouse gas emissions:** The monitoring project involves limited driving to field sites, but the use of telemetered dataloggers will help minimize unnecessary trips by indicating when systems are functioning properly.

CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:

Biological monitoring at Los Peñasquitos Lagoon is consistent with the policies contained in the City of San Diego North City Local Coastal Program (LCP) effectively certified by the Coastal Commission in 1988. Specifically, the LCP states that: “A coastal restoration project should be undertaken with the Coastal Conservancy in order to properly establish the environmental management strategies necessary to enhance the natural viability of the Los Peñasquitos Lagoon.” (Torrey Pines Community Plan, LCP Addendum, 1981). Elsewhere, the LCP states, “The [LCP] concurs with the Los Peñasquitos Lagoon Enhancement Plan and Program, which has been developed to provide the measures necessary for restoring and enhancing the environmental qualities of the lagoon...” (Torrey Pines Community Plan, p. 33) An ongoing monitoring program is necessary to inform design of future restoration projects and evaluate the effectiveness of past restoration activities.

COMPLIANCE WITH CEQA:

This authorization involves data collection, research and resource evaluation activities that will not result in a major or serious disturbance to the environment. Any future enhancement projects that may be developed from this data have not been reviewed, approved or funded by the Conservancy. The project therefore is categorically exempt pursuant to Title 14, California Code of Regulations §15306. Upon approval, staff will file a Notice of Exemption.

***LOS PENASQUITOS LAGOON ENHANCEMENT –MONITORING PROGRAM AND
ENHANCMENT PLAN UPDATE***
