

COASTAL CONSERVANCY

Staff Recommendation  
May 24, 2007

**NORTH SAN DIEGO COUNTY COASTAL WATERSHEDS  
HYDROLOGIC MONITORING NETWORK**

File No. 07-030-1  
Project Manager: Deborah Ruddock

**RECOMMENDED ACTION:** Authorization to disburse up to \$200,000 to the San Elijo Lagoon Conservancy to continue hydrologic monitoring in northern San Diego County coastal watersheds.

**LOCATION:** Cities of Oceanside, Carlsbad, Encinitas, Solana Beach, Vista, San Marcos, and Escondido (Exhibit 1)

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

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**EXHIBITS**

- Exhibit 1: [Project Location](#)
  - Exhibit 2: [Photographs](#)
  - Exhibit 3: [Sample Monitoring Report](#)
  - Exhibit 4: [Letters of Support](#)
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**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 two hundred thousand dollars (\$200,000) to the San Elijo Lagoon Conservancy to continue hydrologic monitoring in coastal watersheds in northern San Diego County. This authorization is subject to the following conditions:

Prior to disbursement of any funds, the San Elijo Lagoon Conservancy shall submit for review and approval of the Executive Officer of the Conservancy a final work plan (including the names of any subcontractors to be used in the completion of the project), permits, approvals, environmental review and a project schedule and budget.”

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 Public Resources Code Section 31220 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, 200.
3. The San Elijo Lagoon Conservancy is a nonprofit organization existing under the provisions of Section 501(c)(3) of the U.S. Internal Revenue Code, and whose purposes are consistent with Division 21 of the Public Resources Code.”

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**PROJECT SUMMARY:**

Staff recommends an authorization of up to \$200,000 to the San Elijo Lagoon Conservancy (SELC) to continue hydrologic monitoring of coastal watersheds in northern San Diego County. The proposed project will use an existing network of monitoring stations that provide automated, real-time, continuous stream flow and precipitation information and, in the case of one monitoring station, data on water quality (Exhibit 1). Ongoing operation of the network performed by SELC, on behalf of the Carlsbad Watershed Network (CWN), will provide useful information for numerous stakeholders, including several state and local agencies and non-profit organizations with interests in conservation and regulation.

The Conservancy and the Southern California Wetland Recovery Project (WRP) will be among these stakeholders, tapping this coastal information resource for new and ongoing restoration and enhancement projects in this region, including the restoration of Buena Vista Lagoon, a State Ecological Reserve managed by the Department of Fish and Game.

The CWN coastal watershed monitoring project commenced in 2004 as a component of an invasive species control project funded by a Proposition 13 from the State Water Resources Control Board (SWRCB) grant obtained and managed by SELC on behalf of the coalition of lagoon conservancies, regulatory and local government agencies and environmental organizations. However, funding for the monitoring project expired on March 30, 2007.

SELC is seeking Conservancy assistance outside the context of prescriptive regulation in anticipation that continuation of the project for at least another two years will begin to deliver the kind of scientific baseline data needed to more reliably inform conservation and regulatory decisions. SELC hopes to attract broader support for a monitoring program and the funding needed to sustain it for the long term. SELC is committed to seeking alternative sources of financial support for network operation beyond the Conservancy grant. There is a strong possibility that local governments and other watershed stakeholders may be interested in continuing this program in the future.

The proposed Conservancy authorization will cover the costs for at least two years of network operation, associated chemistry and biological assays and maintenance. Routine maintenance will include cleanup and periodic checkups and adjustments of equipment; periodic resurveying of stream channels; and monthly reporting and information archiving.

SELC will make data from both hydrologic and water quality monitoring available quarterly by email update to CWN stakeholders and members of the monitoring workgroup of the Watershed Urban Runoff Management Program (representing 18 County jurisdictions). Others may access this data by request. The Final Report for this project will be available on the SELC web site ([www.sanelijo.org](http://www.sanelijo.org)); information for specific needs, again by request, will be accommodated via the SELC ftp site (<ftp://selc@sanelijo.org>).

In addition, SELC will be working with the Southern California Coastal Water Resources Project (SCCWRP) and consultants to the regional water board during development of Total Maximum Daily Load (TMDL) regulations for the lagoon. Flow data will help ensure North County cities get information needed to calculate watershed contaminant loads under both dry and wet weather conditions.

The proposed project is consistent with the Carlsbad Watershed Management Plan as required by Chapter 5.5 of Division 21, Integrated Coastal and Marine Resource Protection. Letters of support have been received from San Diego Regional Water Quality Control Board, County of San Diego, cities of Carlsbad, Oceanside, Encinitas, Solana Beach, Escondido, San Marcos, and Vista, the Batiquitos Lagoon Foundation, and the Escondido Creek Conservancy (See Exhibit 4).

**Site Description:**

The project area lies partially within and partially outside of the coastal zone, encompassing creeks in the jurisdictions of the cities of Oceanside, Carlsbad, Vista, San Marcos, Escondido, Encinitas, Solana Beach and San Diego County. The area includes the five largest coastal watersheds within the 210-square mile Carlsbad Hydrologic Unit (CHU), bordered by the San Luis Rey River to the north and by the San Dieguito River watershed to the south (Exhibit 1).

The creeks selected for monitoring feed highly sensitive receiving waters in the coastal zone including four major lagoons: Buena Vista Lagoon, Agua Hedionda Lagoon, Batiquitos Lagoon and San Elijo Lagoon. Loma Alta Creek and Loma Alta Slough also are part of the monitoring network. Exhibit 1 highlights the project areas in San Diego County.

Receiving waters for the creeks are among the most fragile and most impacted habitats in California. All five lagoons have existing beneficial uses that include water contact recreation, marine ecosystem support, wildlife habitat and rare threatened or endangered species. Three of the five lagoons are designated as biological habitats of special significance and are designated as State Ecological Reserves by the Department of Fish and Game (Batiquitos, Buena Vista and San Elijo). Both San Elijo and Batiquitos lagoons are designated by the Coastal Commission as Critical Coastal Areas.

The monitoring network consists of six stations situated low in the watershed but high enough to avoid tidal influences and their potential affect on measurements. The stations record water level and precipitation information continuously (15-minute intervals; more often if data have changed) and report hourly via a VHF radio communicating with a base station operated by the

County of San Diego (Exhibit 2). In addition to water level and rainfall information, the San Elijo Lagoon installation collects continuous water quality information, including the constituents believed to be most important from a conservation standpoint (Exhibit 3). These constituents include dissolved oxygen, nitrates, dissolved solids and salinity.

**Project History:**

Until the installation of the existing monitoring network, northern San Diego County has lacked reliable historical stream flow information and the real-time data required by resources managers and water quality regulators. The monitoring project commenced in 2004 as a component of an invasive species control project funded by a State Water Resources Control Board Proposition 13 grant obtained and managed by SELC on behalf of CWN. Proposition 13 funding for the project expired on March 30, 2007. The monitoring network collected data that included the rainy seasons of 2006 and 2007, an extremely wet and an extremely dry year. Continuing data collection for at least two more years will dramatically increase the usefulness of the dataset.

**PROJECT FINANCING:**

Coastal Conservancy	\$200,000
<b>Total Project Cost</b>	<b>\$200,000</b>

The expected source of Conservancy funds for the proposed project is from an appropriation to the Conservancy from Proposition 50. Proposition 50 authorizes the use of such funds to protect coastal watersheds through projects that restore land and water resources. Funds may be used for planning and permitting associated with restoration, as well as restoration activities. (Water Code Section 79570). The proposed project will accomplish those objectives by providing important information to inform on-going planning efforts in North San Diego watershed.

A State Water Resources Control Board Proposition 13 grant provided \$378,000 for establishment of the monitoring network and the first two years of data collection. This project will compliment that investment.

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

This project is consistent with the Conservancy's enabling legislation, Division 21 of the Public Resources Code, specifically with Chapter 5.5, pertaining to integrated coastal and marine resource protection.

Consistent with § 31220(a), information produced as a result of this watershed and water quality monitoring project will be used by resource managers and regulators to protect coastal and marine resources. Also consistent with this section, the Conservancy staff has consulted with the State Water Resources Control Board staff in the development of the project.

Consistent with § 31220 (b), information produced and used as a result of this project will facilitate reduction of contamination of waters within the coastal zone and marine waters; protection of fish and wildlife habitat within coastal and marine waters and coastal watersheds; reduction of threats to coastal and marine fish and wildlife; and reduction of the impact of population and economic pressures on coastal and marine resources.

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

Consistent with Coastal Resources Conservation Goal 5, Objective A, Strategy 3 the proposed project will allow the watershed monitoring network, serving as a coastal resource information system, to continue to identify threats to coastal resources, including, for example, threats to coastal biodiversity caused by excessive fresh water flows into salt water systems and threats posed by pollution.

Consistent with Coastal Resources Conservation Goal 6, Objective B, Strategy 3 the proposed project will provide information that will facilitate development of projects to control the volume and constituents of urban runoff, a significant problem in semi-arid Southern California, and reduction of the impacts of runoff to coastal watersheds, beaches, and the ocean.

**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:** See Exhibit 4, "Letters of Support".
4. **Location:** The proposed project lies partially within and partially outside of the coastal zone (Exhibit 1).
5. **Need:** Without Conservancy assistance, SELC will have to decommission the network. Dismantling of the equipment will be required by local jurisdictions if the network cannot be properly maintained. Bringing a decommissioned system back on line at some point in the future would be a wasteful duplication of costs already borne by California citizens.

**Additional Criteria**

7. **Urgency:** Proposition 13 funding from the State Water Resources Control Board for the invasive species control project that enabled installation of the monitoring network expired on March 30, 2007.

**CONSISTENCY WITH THE COASTAL ACT:**

Consistent with Section 30231 of Division 20 of the Public Resources Code pertaining to marine resources, the proposed authorization will provide information on coastal draining watersheds that will facilitate policies and projects to protect, enhance and, where feasible, restore the marine environment.

Consistent with Section 30231 pertaining to biological productivity and water quality, the proposed project will provide useful information for resource managers, policy makers and regulators responsible for understanding, predicting, managing and controlling the impacts of water volume and water quality on human health and the biological productivity of coastal waters.

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

The proposed project is consistent with the plan objectives identified in the Carlsbad Watershed Management Plan (2002) as follows:

- Protect beneficial water uses (Objective 1, p.5-2)
- Model hydrology for both floodway protection and stream restoration (Objective 11, p. 5-3)

**COMPLIANCE WITH CEQA:**

The proposed authorization is exempt from the California Environmental Quality Act under 14 California Code of Regulations, Article 19 Categorical Exemptions, Section 15306 pertaining to information collection. Upon approval, staff will file a Notice of Exemption for the project.