Machado Lake and Wilmington Drain Improvement: Final Project Development

File No. 04-027
Project Manager: Karen Bane

RECOMMENDED ACTION: Authorization to disburse up to $300,000 to the Department of Recreation and Parks in the City of Los Angeles for development of final project development and preparation of environmental compliance documents for improvement of the water quality and habitat of Machado Lake and Wilmington Drain.

LOCATION: Machado Lake, which is a receiving water for the Wilmington Drain, is located in Ken Malloy Harbor Regional Park operated by the City of Los Angeles (Exhibit 1)

PROGRAM CATEGORY: Integrated Coastal and Marine Resources Protection

EXHIBITS
Exhibit 1: Project Location and Site Map
Exhibit 2: Dominguez Channel Watershed Map
Exhibit 3: Consultation with State Water Resources Control Board
Exhibit 4: Letters of Support

RESOLUTION AND FINDINGS:
Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31000 et seq. of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes disbursement of an amount not to exceed three hundred thousand dollars ($300,000) to the City of Los Angeles Department of Recreation and Parks (RAP) for final project development and preparation of environmental compliance documents for improvement of water quality and habitat in Machado Lake and Wilmington Drain. Prior to the disbursement of any funds, the RAP shall submit for the review and written approval of the Conservancy’s Executive Officer a work program, including scope of work, budget and schedule, and the names of any contractors it intends to use to conduct the project.”

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 of the Public Resources Code (Section 31220) regarding integrated coastal and marine resource protection.

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

PROJECT SUMMARY:
Staff is recommending that the Conservancy provide a grant of up to $300,000 to the City of Los Angeles Department of Recreation and Parks (RAP) for final project development and preparation of environmental compliance documents for improvement of water quality and habitat in Machado Lake and Wilmington Drain. Machado Lake is located in Ken Malloy Harbor Regional Park (KMHHP) and fed by the Wilmington Drain (Exhibit 1). The project area is a remnant of the tidal slough system once part of San Pedro Bay and is an important remnant of wetlands along the Pacific Flyway. Nine sensitive or listed species forage or nest in the project area including the California least tern. The County of Los Angeles designated the project area as a Significant Ecological Area (Exhibit 2).

The great wildlife value of the project area is threatened as the resource continues to degrade. The Los Angeles Regional Water Quality Control Board (LARWQCB) has identified Machado Lake as an impaired water body for DDT, PCBs, pesticides, ammonia, algae, eutrophic conditions, odors, trash; and Wilmington Drain as an impaired water body for copper, lead, ammonia, and bacteria. Sedimentation and inadequate control of water flow has exacerbated a chronic mosquito population as tule flourishes in the accumulated sediment and shallow areas cannot be flooded for access of mosquito fish and vegetation cutting equipment. Mosquitoes are a human health issue and an avian health issue. As water quality deteriorated and toxic sediment accumulated, boating was stopped and warnings about the risks of eating fish from the lake posted. In summer 2002, a botulism outbreak was triggered by stagnant water. Exotic plants installed at the park inception in 1970s are displacing natural habitat.

The project area is one of the best opportunities for wetland enhancement in the Los Angeles coastal plain. To date, problems have been addressed with temporary and single-focus solutions. For instance, the lake was dredged in the mid-1980s yet sediment continues to accumulate. Aeration pipes have been a maintenance nightmare. Annual trimming of aquatic plants to facilitate mosquito control measures is costly and repeatedly disrupts wildlife habitat.

The proposed project would develop integrated capital projects that address the water management issues in a manner compatible with maintaining the important habitats. Once a preferred suite of projects is selected, environmental compliance documents would be prepared.

The RAP owns and operates the KMHHP, which includes the Machado Lake. The RAP has been pursuing sustainable solutions to the resource problems for over a decade, as described in the Project History section below. RAP will continue to coordinate with other City and County of Los Angeles departments with responsibility for the water quality and flood control features of Wilmington Drain and Machado Lake as the proposed project is developed.
Site Description:
Ken Malloy Harbor Regional Park is a 231-acre park administered by the City of Los Angeles Department of Recreation and Parks and located west of the Harbor (I-110) Freeway (Exhibit 1). The park houses Lake Machado (40 acres) and associated wetlands (64 acres), which is one of the last surviving remnants of extensive wetlands system that once covered much of the area between Wilmington and Redondo Beach. The lake and wetlands serve as flood retention basins for approximately 20 square miles of the Dominguez Watershed (Exhibit 2). Discharges from the lake and wetlands enter the West Basin of the Los Angeles Harbor through the Harbor Outflow structure. The riparian woodland, seasonal wetland, and scrub upland that surrounds the lake supports hundreds of birds including sensitive, threatened and endangered species such as brown pelican, California least tern, western least bittern, American peregrine falcon, coastal California gnatcatcher, western snowy plover, white-tailed kite, yellow warbler, and tri-colored blackbird.

Wilmington Drain delivers 65% of the runoff entering Machado Lake. It extends north from the lake for 1.8 miles. The channel is soft bottom with natural banks from where it passes under the Harbor Freeway until it joins with Machado Lake. The Los Angeles County Flood Control District has designated this section the Wilmington Drain Waterway and Wildlife Area. Mature riparian woodland lines both sides of the channel and localized areas support freshwater marsh. The area is well-known for bird watching.

Project History:
Staff has considered the Machado Lake and Wilmington Drain important resources to protect and restore for many years and monitored the development of enhancement projects. In 1994, the Park Advisory Board for Ken Malloy Harbor Regional Park submitted a draft Master Plan to the City of Los Angeles. In 2000, the California Department of Parks and Recreation (DPR) awarded $985,000 to the City for KMHRP and Parsons was contracted to develop an Improvement Program and updated Master Plan. Unfortunately, DPR’s funds were withdrawn during California’s energy related budgetary crisis and Parson’s scope of work was affected. In summer 2002, as Parson’s work products were delivered, a botulism outbreak at Machado Lake spurred the formation of a Task Force to guide work at the Park. Everest International Consultants was retained by Conservancy staff to assist the Task Force’s selection of a subset of solutions from the KMHRP Improvement Program and Master Plan. The Everest team determined that additional analysis was needed to select a suite of integrated capital improvements. At the recommendation of the Task Force, a proposal was submitted to the Southern California Wetland Recovery Project, which added Machado Lake Restoration Planning to its 2003-2004 Work Plan in September 2003.

PROJECT FINANCING:

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<th>Source</th>
<th>Amount</th>
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<tr>
<td>Coastal Conservancy (Prop 40)</td>
<td>$300,000</td>
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<tr>
<td>City of Los Angeles (Prop K)</td>
<td>200,000</td>
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<tr>
<td><strong>Total Project Cost</strong></td>
<td><strong>$500,000</strong></td>
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The anticipated source of Conservancy funds is an appropriation to the Conservancy from the California Clean Water, Clean Air, Safe Neighborhood Parks, and Coastal Protection Act of 2002 (Proposition 40). Consistent with the purposes of this funding source, the proposed project
would be carried out in accordance with the provisions of the Conservancy’s enabling legislation and would involve restoration of land and water resources.

Matching funds are being provided by the City of Los Angeles, Bureau of Engineering. The City of Los Angeles allocated one million dollars of Proposition K funds for improvement of water quality and water infiltration at Machado Lake. The bulk of the funds are for project implementation; however, $200,000 has been budgeted for project development.

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

Implementation of the proposed project would be undertaken pursuant to Chapter 5.5 of the Conservancy’s enabling legislation, Public Resource Code Section 31220. The proposed project would accomplish several of the goals set out in §31220(b). Consistent with §31220(b)(2), the proposed project would protect and restore fish and wildlife habitat within coastal watersheds, by improving the hydrologic processes necessary to sustain healthy aquatic habitats. Consistent with §31220(b)(3), the proposed project would reduce threats to coastal and marine wildlife, by improving water quality and mosquito control that has affected bird health. Consistent with §31220(b)(4), the proposed project would seek to reestablish natural erosion and sediment cycles, by recommending source controls in the watershed. Consistent with §31220(b)(6), the proposed project would protect and restore coastal wetland, riparian and other sensitive watershed lands, by improving hydrologic processes and water quality and reducing trash and sedimentation. Consistent with §31220(b)(8), the proposed project provides for public access compatible with resource protection, by incorporating recreational uses in the project design.

Consistent with §31220(c), the proposed project would develop an integrated set of solutions to support the beneficial uses and reduce or eliminate the water quality impairments identified in the water quality control plans adopted by the SWRCB and the Los Angeles Regional Water Quality Control Board (LARWQCB). The LARWQCB’s Water Quality Control Plan identifies several existing beneficial uses of Wilmington Drain and Machado Lake and Wetlands including, but not limited to, municipal and domestic water supply, contact and non-contact water recreation, warm freshwater, wetland and wildlife habitats, and rare, threatened and endangered species (LARWQCB Basin Plan, 1994). The list of California’s impaired water bodies, developed under US Clean Water Act Section 303(d)) and approved by the SWRCB February 4, 2003, identifies Machado Lake and Wilmington Drain as impaired water bodies for DDT, PCBs, pesticides, ammonia, algae, eutrophic, odors, trash and copper, lead, ammonia, bacteria respectively.

The Dominguez Watershed Management Master Plan is being prepared by the Los Angeles County Department of Public Works to “assist stakeholders in the protection, enhancement, and restoration of the environment and beneficial uses of the Dominguez Watershed” (Exhibit 2). Machado Lake and Wilmington Drain are identified as significant resources within the Dominguez Watershed, and members of the Dominguez Watershed Advisory Committee participated in the Ken Malloy Harbor Regional Park Task Force that recommended the proposed project. Consistent with Section 31220(c), the proposed project will include a monitoring and evaluation component.

Consistent with §31220(a), staff has consulted with the State Water Resources Control Board (SWRCB) in two ways. First, the SWRCB participated with the Conservancy in the Southern California Wetlands Recovery Project’s project evaluation and selection process, in which staff
of the agencies recommend projects to be added to the Work Plan and the agency representatives on the Board of Governor's approve the Work Plan. Second, the Conservancy has consulted in writing with the SWRCB to ensure the project is consistent with Chapter 3 (commencing with §30915 [Clean Beaches Program]) of Division 20.4 of the Public Resources Code (Exhibit 3).

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

Consistent with **Goal 5, Objective A**, the proposed project would restore coastal habitats including riparian woodland along stream channel and lake edge as well as seasonal wetlands thereby supporting and possibly enhancing the diversity of sensitive species using the habitats, including the California least tern.

Consistent with **Goal 6, Objective B**, the proposed project would develop integrated capital projects to improve water quality and water management for the Wilmington Drain and Machado Lake, a watershed that drains to the Los Angeles Harbor and San Pedro Bay.

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:** The Palos Verdes Audubon, Park Advisory Board for Ken Malloy Harbor Regional Park, Councilwoman Hahn’s Task Force for KMHP, and the Dominguez Watershed Advisory Committee have been working – in some cases for decades – to improve the water and wildlife resources of the Wilmington Drain and Machado Lake. The Southern California Wetland Recovery Project approved placing this project on its 2003-2004 Work Plan. Support letters are attached in Exhibit 4.

4. **Location:** The Wilmington Drain and Machado Lake and Wetlands discharge into the west basin of the Los Angeles Harbor in San Pedro Bay. Once implemented, the proposed project would benefit coastal resources by improving the quality of water discharged to the harbor and the quality of habitat for wildlife, including California least terns that forage in the project area.

5. **Need:** Originally the City of Los Angeles planned to prepare a programmatic environmental document for the KMHP Master Plan. The addition of Conservancy funds enables a specific integrated suite of capital projects to be developed and project specific environmental compliance to be prepared such that implementation would be the next phase.
6. **Greater-than-local interest:** The riparian woodland and wetland habitat in the project area support nesting and foraging for hundreds of bird species, including sensitive, threatened and endangered species such as brown pelican, California least tern, western least bittern, American peregrine falcon, coastal California gnatcatcher, western snowy plover, white tailed kite, yellow warbler, and tricolored blackbird. Since the large area of the aquatic habitats is rare in the coastal plain of Los Angeles, it is a very important resource for species migrating in the Pacific flyway.

**Additional Criteria**

7. **Urgency:** Matching funds must be in contract by June 2004.

8. **Resolution of more than one issue:** The proposed project would develop integrated solutions to water quality, water management, sedimentation, and habitat problems.

9. **Leverage:** See the “Project Financing” section above.

12. **Readiness:** The grantee has qualified contractors available through on-call contracts to begin work immediately.

15. **Cooperation:** Development of integrated solutions will require coordination of multiple departments within the City and County of Los Angeles that have some responsibility for the management of the Wilmington Drain and Machado Lake. Fortunately, these groups already work together along with state and federal resource agencies and interested residents through the Task Force for KMHRP.

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

See the “Consistency with Conservancy’s Enabling Legislation” section above.

**COMPLIANCE WITH CEQA:**

The proposed project is statutorily exempt from the provisions of CEQA under 14 California Code of Regulations Section 15306 in that it involves information collection to develop a final project concept, prepare documentation to comply with CEQA, and consult with permitting agencies. Staff will file a Notice of Exemption upon approval of the proposed authorization.