

RECOMMENDATIONS:

That the Board approve the Machado Lake Emergency Vegetation Removal Project.

SUMMARY:

In response to the growing threat of mosquito-borne West Nile virus (WNv) at Ken Malloy Regional Park (Harbor Park), the Department of Recreation and Parks (RAP) proposes to conduct an Emergency Vegetation Removal Project (Project) in Machado Lake at Harbor Park. The Project will use a combination of mechanical harvesting and aquatic pesticide application to remove and control the vegetation that provides a breeding ground for mosquito populations. The Project will be implemented through a RAP on-call landscaping contract using a contractor that has past experience with the removal of invasive emergent vegetation at Machado Lake.

Machado Lake is part of the 290-acre Harbor Park that has several large active recreational facilities as well as many passive amenities, including an 18-hole golf course and driving range, youth soccer fields, playgrounds, hiking and jogging trails, bike paths, a campground, and picnic areas. The park is surrounded by multi-and single-family housing, Kaiser Permanente medical facilities, and Harbor Community College. Machado Lake itself is a wildlife sanctuary and migratory bird refuge with native habitats and wetlands. All of these park uses are potentially at risk of exposure to the mosquito populations and WNv.

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Machado Lake like most of the City's urban lakes serves as a storm water retention basin that virtually has a continuous inflow of silt, trash, nutrients and other undesirable materials. This has made the Machado Lake eutrophic because of nutrient loading and shallow waters due to sedimentation from natural, nonpoint and internal sources. Symptomatic of the eutrophic or nutrient-enriched condition, the Machado Lake develops dense stands of emergent vegetation, predominantly tules, which in recent years has faced competition from the aggressive growth of Ludwigia.

Ludwigia is a robust, rapidly growing, perennial aquatic plant. There is growing concern about its aggressive spread in sensitive wetlands throughout Southern California. The exact species of Ludwigia at the Machado Lake has not been identified, so it is not clear whether the species is native or exotic. Regardless, the aggressiveness of the species present at the Machado Lake has led biologists to consider the Ludwigia an invasive species that threatens the biodiversity and health of the lake. Widespread and dense Ludwigia, interspersed with large mats of dead and decaying tule vegetation, create stagnant, isolated pools that are favorable mosquito-producing habitat. These conditions severely hamper the ability of the Greater Los Angeles County Vector Control District (GLACVCD) crews to effectively apply pesticides. Concerns about encephalitis and WNv have prompted increased oversight from the GLACVCD, and Machado Lake continues to be one of GLACVCD's highest priorities for control of mosquito populations.

According to the Vector-Borne Disease Section for the California Department of Public Health, there have been twenty-one (21) mosquito samples from six (6) counties that have tested positive for WNv in 2013, and four (4) of the eleven (11) samples in Los Angeles (LA) County were in since June 6, 2013. In addition, there have been four (4) dead birds reported in LA County that tested positive for WNv, which was the highest count of the ten (10) reporting counties. According to GLACVCD, there have been six (6) confirmed mosquito samples at the Lake that tested positive for WNv. Thus far this year, there has been only one (1) reported fatal case of human WNv and that was in Sacramento County.

The City of Los Angeles is currently in the process of implementing the Machado Lake Ecosystem Rehabilitation Project under the Proposition O bond measure program for water quality improvements. The Machado Lake Ecosystem Rehabilitation project is designed to rehabilitate and restore the lake's ecosystem by removing invasive aquatic and riparian vegetation, enhancement of native habitats and wetlands, and improvement of water quality through various stormwater and lake management features to meet the Total Maximum Daily Loads mandated by the Los Angeles Regional Water Quality Control Board. The project was originally scheduled to begin construction in Spring 2011, but has been delayed until December 2013. Therefore, RAP proposes to begin the aquatic vegetation removal component as an emergency interim action in anticipation of the full implementation of the Machado Lake Ecosystem Rehabilitation project.

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The Proposition O project has executed a Lake and Streambed Alteration Agreement (LSAA) on December 13, 2012 with the California Department of Fish and Wildlife (CDFW) that governs the treatment of fish and wildlife during its implementation. RAP will work with CDFW on the proposed Project under the terms of this LSAA to mitigate impacts to wildlife to the extent feasible.

Staff has determined that CEQA compliance for the Project is covered by the Final Environmental Impact Report (FEIR) that was prepared for the Machado Lake Ecosystem Rehabilitation Project and the Wilmington Drain Multiuse Project (Proposition O projects) that was certified on September 28, 2010.

FISCAL IMPACT STATEMENT:

There will be no impact to the RAP's General Fund associated with approval of the Vegetation Removal Project. Proposition O Program funds will cover the costs of the Project.

This report was prepared by David Attaway, Environmental Supervisor, of the Planning, Construction and Maintenance Branch.