

REVISED

EXECUTIVE OFFICER SUMMARY REPORT
April 8, 2009

- ITEM: 8
- SUBJECT: Status Report: The Lake San Marcos owner, dischargers, and members of the community will provide updates to the San Diego Water Board on progress made in the past year to improve water quality in Lake San Marcos. (*Chiara Clemente*)
- PURPOSE: To be briefed on progress made to improve water quality in Lake San Marcos.
- PUBLIC NOTICE: Notice was provided by publication of the Board agenda on January 22, 2010. The agenda was forwarded by e-mail to the lysis list of Lake San Marcos interested parties on January 25, 2010.
- DISCUSSION: According to the 2008 303(d) list of impaired water body segments, Lake San Marcos is listed as impaired due to ammonia as nitrogen, phosphorous, and nutrients. San Marcos Creek is listed as impaired due to phosphorous, DDE, toxicity, sediment toxicity, and selenium. The Lake has been subject to periodic algal blooms, confirmed presence of cyanobacteria toxins, and occasional fish kills, likely due to the confirmed presence of excessive nutrients in the water. Residents living near the Lake have reported nuisance algae and odor conditions to the Regional Board for several years. Due to the wide range of potential contributors, it has been difficult to determine how to abate these pollutants.
- Lake San Marcos is the product of a dam that was built in 1953 through San Marcos Creek. The impoundment was originally used for agricultural irrigation, but the area was later developed, and the water rights appropriation was transferred to the Citizen's Development Corporation (CDC) for the current irrigation of its lakeside golf course. The Lake is still subject to agricultural discharges from surrounding groves, but the majority of the Lake

(Supporting Document No. 1 [& 2](#)) watershed now consists of commercial and residential land use.

In April 2009, the San Diego Water Board invited all known interested parties to meet and discuss a collaborative effort to identify and abate nutrient sources to the Lake. Participating dischargers included the CDC (La Jolla Development Corporation), the Cities of San Marcos and Escondido, the County of San Diego, and the Vallecitos Water District which is responsible for the sewage collection system in the Lake watershed. Additional participants included the Lake San Marcos Community Association, the Lake San Marcos Remediation Group, and Coast Law Group. Since that time, there have been multiple meetings, and participation has extended to include Caltrans and some of the Phase II MS4 designees.

Collectively, the group has:

- 1) Compiled all existing Lake San Marcos historical information and water quality monitoring data into a compendium document.
- 2) Collected additional monitoring data.
- 3) Identified all drains discharging to the Lake.
- 4) Contracted with Dr. Michael Anderson (UC Riverside) to review existing data, fill in data gaps, and provide a report on the Lake's characteristics and possible remedial measures ([Supporting Document No. 3](#)).
- 5) Increased the surrounding community's awareness of potential pollution practices, and possible source control measures through public meetings, community publications, and heightened complaint response (by the MS4 entities). [Pursuant to the Watershed Urban Runoff Management Plan \(WURMP\) requirements of the MS4 permit, the Cities and County have submitted a Nutrient Management Plan for the Upper San Marcos Creek Watershed \(Supporting Document No. 4\).](#)
- 6) Codified source control BMPs in HOAs (e.g. prohibiting car washing, controlling irrigation and landscape application of pesticides, herbicides, and fertilizer, and disposal of yard waste).
- 7) Drafted a Participation Agreement that stipulates the process, roles, and cost-sharing mechanism for future work.

- 8) Reviewed the existing water rights agreement, and sought to bring certain requirements in compliance with their license conditions.
- 9) Become aware of groundwater discharges to the Lake and the need to enroll and comply with the groundwater dewatering permit.

The group currently faces challenges in:

- 1) Defining the desired outcome (i.e. defining the "lake" area and agreeing on success criteria).
- 2) Agreeing on remediation alternatives to consider.
- 3) Agreeing on who should be engaged in this process, and at what level the public should be engaged.
- 4) Obtaining appropriate representation from certain dischargers. The agricultural growers, homeowners, and HOAs that have direct and indirect discharges to the Lake are not represented by a single entity.
- 5) Soliciting participation and funding commitments.
- 6) Agreeing on a framework for how to proceed.

The Regional Board faces the additional challenge of identifying the best authorities under which our limited resources should be directing the reduction of pollutant loading to, and clean-up of, the Lake.

SIGNIFICANT CHANGES: N/A

COMPLIANCE: N/A

LEGAL ISSUES: None.

SUPPORTING DOCS:

1. Site Map
2. [Lake San Marcos Area Map](#)
3. [Report by Dr. Michael Anderson](#)
4. [Upper San Marcos Creek Watershed Nutrient Management Plan](#)
5. [Background Materials Submitted by the Lake San Marcos Community Association](#)

RECOMMENDATION: Informational item only.