

The Lake Merritt Institute

LAKE TRASH REMOVAL, FOUNTAINS, EDUCATION, LAKE MANAGEMENT EXPERTISE

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NATURAL HISTORY SERIES – Part Three, The Yellow Finned Goby: *Acanthogobius flavimanus* is the scientific name for this fish which (like many of us) came from somewhere else. This small – up to 10 inches – bottom dwelling fish is native to Japan, China and Korea. It was first observed in the Sacramento river delta in 1963, and is now well established in San Francisco Bay, central and southern California. It was probably first transported here in the ballast water of ships or in live seed oysters. While people from other countries are welcomed and contribute to our diversity, other species that invade natural habitats typically have negative consequences.

This brownish colored goby is one of the most abundant bottom fishes in San Francisco Bay. It prefers shallow, muddy shoreline areas, and is capable of withstanding abrupt changes between fresh and salt water, as well as temperatures greater than 28 ° C. This explains why it can survive so well in Lake Merritt. It is considered a delicacy in Japan, where it is often sold alive in markets. At Lake Merritt, people often capture them to be used as bait for larger fish, or sell them to bait shops.



James Robinson examines a tree trunk removed from the Lake by Boating Center staff. It appeared after the big storms of December, apparently having been washed down Glen Echo creek.

First seen wedged under the dilapidated Bandstand dock, it later menaced rowers and then washed up on the 12th Street Beach. It ranks up in the top three for largest things removed from the Lake. Note: James is over 6 feet tall.

Other large items removed from the Lake have been a sofa chair, cars, part of a safe and a dumpster. We cut up the trunk with a chain saw and hauled it off to the transfer station.

DD UPDATE: The January meeting was postponed due to the holiday lull, but the coalition will meet again on Monday, February 9th.

A grant application was submitted by the City for matching funds for the Cryer Site at Union Point Park along the waterfront. Such matching money will be essential for completion of DD projects.

Oakland's second storm drain filter was installed at Lake Merritt on January 23rd at the corner of Bellevue and Staten.

The continuous deflection separation filter intercepts flows from the 24 inch storm drain (see bottom of picture) and removes 100 % of floatable material, as well as up to 80% of total suspended solids.

It is the first DD funded project to break ground at Lake Merritt.

The filter has no moving parts, works 24 hours a day - 7 days a week, and treats runoff from 26 acres of our 4,650 acre watershed.



DR. ALEX HORNE ADDRESSES WATER QUALITY TASK FORCE: Recently retired UC Berkeley professor of ecological engineering Alex Horne spoke to the multi-agency water quality task force in January. The task force was re-formed in October of last year. Dr. Horne holds a Ph.D. in limnology and oceanography, has worked on over 200 water related projects on seven continents, and currently works as a consultant on many local and controversial water resource issues. Recent work includes direct oxygen injection and saline lake revival.

To get Lake Merritt off of the list of impaired bodies of water, he reviewed (in order of his recommendation): 1. An estuarine aeration mixing system, proven on lakes of this size in semi-tidal estuaries such as Lake Merritt; 2. Pure oxygen addition; 3. Small, isolated systems such as SolarBees and aeration fountains; and 4. Propellers or magic. Options 1 and 2 can be combined, and both can work in conjunction with fountains. Propellers and magic were not recommended.

At the same meeting, City inspector William Madison presented an analysis of water quality data taken from June, 2002 – June, 2003. From a station near the Lake center, 22% of bottom samples and 15% of surface samples did not meet the 5.0 mg/L objective for dissolved oxygen. The final report by Applied Marine Sciences noted that stratification and tide gate closure were sometimes, but not always, associated with exceeding the oxygen objective. Future monitoring efforts will be required to characterize the extent of oxygen impairment, especially in other areas of the Lake.

The task force is also considering a proposal to install 5 solar powered pumps, the locations of additional storm drain filters, control of leaf debris, replacement of the Glen Echo aeration fountain and other projects.

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