

# The Lake Merritt Institute

*LAKE TRASH REMOVAL, FOUNTAINS, EDUCATION, LAKE MANAGEMENT EXPERTISE*

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**CLEAN TODAY / DIRTY SOON:** Trash levels in the Lake have been at their typical low levels this summer, even lower than in previous summer months. On most days, only 1 – 3 bags of the nasty stuff were collected, even when long areas of shoreline are cleaned. During June, July and August, our truck has hauled only 1,600, 780, and 760 pounds to the transfer station. These low numbers were partially due to low levels of widgeon grass this summer, but also reflect less trash in the Lake. But all that is about to change. When the rains come, and they will, expect the monthly totals to jump up, reaching at least 3,000 pounds. Its waiting out there on the streets, in the parking lots and on the sidewalks.

**Trash marking 101:** To get a better handle on where it comes from, how long it remains in the watershed, and how much washes in through the storm drains, St. Paul's school has been marking trash. Periodically, they return to the marking sites and search for their markers. When the storm drains again flow, we will compare what we find in the lake with what was released. This is a continuation of the ping pong ball experiment last year when only about 9 of 100 released balls were recovered. Several different types of trash are being marked this season, most of which float and are less likely to be picked up by curious pedestrians.



The journey begins: Trash in the Lake starts here at storm drain inlets, then flows directly to public waters. If you keep the inlets by your house clean, there will be that much less debris in the Lake.

And, the streets will be less likely to flood.

Seven square miles drain into Lake Merritt. Water and whatever flows with it (including trash, car wash soap, excess lawn fertilizer, animal doo doo, leaves, and sometimes because of unscrupulous contractors or homeowners, even paint and cement) enters the Lake through 60 storm drain outfalls, some several feet across.

*Clean streets-clean Lake: Dirty streets- dirty Lake.*

**PARK STEWARDS NEEDED:** Oakland Parks need your T.L.C. So begins the new brochure calling for stewards to adopt and watch over one park, evaluate the park's condition by completing a 10 point survey several times a year, monitor and report problems to the Oakland Parks and Recreation Department, and initiate hands-on projects to improve the park (such as clean-ups, greening and holding events). This includes not only Lakeside Park, but also about 99 other areas in Oakland.

See a problem and want to do something about it? This is your chance. To volunteer, call the Oakland Parks Coalition at 287-2693 for information. You may also attend their monthly meetings.



**STORM DRAIN FILTER CLEANED:** Lake Merritt's only storm drain filter was cleaned last month, and now awaits a fresh load of trash, leaves, gravel etc.

*Left: Before cleaning.*

*Right: Lowering the vacuum.*



**MORE STORM DRAIN FILTERS:** Planning has begun on three more storm drain filters. Being evaluated are continuous deflection separation units (like the one shown above) upstream of outlets 2, 4 and 45. These locations and sizes are, respectively, at the Rotary Nature Center (33+ inches in diameter) at the end of Staten Avenue (24 inches) and on the hill adjacent to the Cameron Stanford House (24 inches). But before installation can occur, the size of the watershed, expected flow, gradient and elevation above high tide (after channel improvements) must be determined. Once these are evaluated, building and installing the units could be done in a few months. They would be funded out of the \$1,000,000 for “storm drain filters, trash barriers, aeration et cetera” in the first round of DD bonds, which is now available.

**DD FUNDING REQUESTED TO REPLACE GLEN ECHO FOUNTAIN:** The Institute has requested DD funding to replace the aeration fountain at Glen Echo. Installed about 10 years ago, it has been difficult to maintain due to its use of an impeller rather than a propeller. Impellers clog easily, and require an intake screen with much smaller holes. Smaller holes clog more easily, resulting in less water flow, sometimes zero. In addition to other problems, the motor is not built for salt water, and is only 2 horsepower. A new unit similar to the one to be installed at 18<sup>th</sup> Street would simplify both electrical and hydraulic maintenance.

**BACTERIA LEVELS RISING:** Weekly monitoring by Alameda County of fecal coliform bacteria (indicator species, not pathogens) has revealed an increase in numbers this summer. Shown below are Most Probable Number per 100 ml, a standard unit of measurement in bacteriology.

DATE	Trestle Glen Station	Lake Center	Glen Echo Station	Sailboat House
Aug. 20	240	240	1600	80
Aug. 27	500	Not detected	1600	280
Sept. 3	7	Not detected	240	900
Sept. 10	1600	4	900	300

Although levels at Lake Center remain adequate for body contact based on EPA guidelines (single sample below 235 or a log mean of less than 126 from 5 samples in 30 days) numbers at the other 3 stations have been exceeding these guidelines. Cooler water temperatures are expected to result in lower numbers, which are expected rise again when the runoff season starts and winter migratory birds arrive. Sources of such bacteria typically include waterfowl, urban runoff and sewer leaks. At Lake Merritt, likely sources are waterfowl and runoff from animals at Fairyland.

**UPDATE:** The next DD coalition meeting will be Monday, 10/20, 7-9 pm at a site to be determined.

The Lake Merritt Institute is sponsored and supported by the Oakland Public Works Agency