

# The Lake Merritt Institute

A COMMUNITY BASED, NON-PROFIT CORPORATION

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## **HIGH TECH PROBLEM REPORTING** (stolen from Councilmember Pat Kernighan's Newsletter)

The City of Oakland is offering a new tool that streamlines reporting of a Public Works type problem. Oakland has unveiled the portal into the mobile app called SeeClickFix for reporting non-emergency problems such as illegal dumping, graffiti, broken street lights and other infrastructure issues. Smartphone users of mobile web, web, iPhone, Android and Blackberry apps can use GPS to enter the address of a problem and take a photo. Oakland Public Works crews benefit by having the photo to clearly document the area of concern. All of the data goes into the City's existing Public Works system. Go [here](#) for the online application

form. To download the free mobile app, go to <http://seeclickfix.com/apps> or visit the iPhone App Store or Android Market.

Don't have a smart phone? I don't either. But we can still report a problem by phoning (510) 615-5566, emailing [pwacallcenter@oaklandnet.com](mailto:pwacallcenter@oaklandnet.com) or going [here](#).

## **OAKLAND LANDMARKS**

Being "an artistic portrayal of history" this new book by our good friends Annalee Allen and Heidi Wyckoff provides beautiful descriptions of 34 wonderful landmarks in Oakland, including seven at or near Lake Merritt. Original watercolor drawings depict each one and an authoritative text fills in the details. With 77 pages, it is copyrighted 2011 and available for \$21.48 (including shipping) at [OaklandLandmarks.com](http://OaklandLandmarks.com) or by calling 415/386-9626. The ISBN number is 13:978-0615573175. Many of you know Annalee from her news column and her work with the Oakland Tours Program (where we hope she may be able to keep her job).

*The landmark Cathedral of Christ the Light graces the Lake Merritt shoreline.*



## **C LIMATE CORNER: ICE**

We don't have much ice around Lake Merritt these days, but there were times when ice covered more than half of the Earth's surface. Our lagoon did not exist then because so much water was locked up in ice that sea level was about 600 feet lower. Today, only about a tenth of the Earth's surface is covered by ice (mostly in Greenland and in the Antarctic and Arctic ice caps) and sea level has risen to create our wonderful downtown estuary.

But the ice is melting, fast. The Arctic ice cap, which is only about 10 – 20 feet thick above several thousand feet of ocean water, and which has been there for three million years, will be gone during summer months within a decade or two. It is now fairly common for ships to make the fabled Northwest Passage from Greenland to Alaska and tourists from the Soviet Union who were expecting to picnic on the ice at the North Pole in August, 2000 were surprised to find only open water at 90 degrees north. But what will happen to sea level if all of the ice on Earth were to melt?

There have been times, during major eruptions of the greenhouse gas methane, when the Earth was about 18 degrees warmer and the planet really was ice free. The fossil record from that time shows alligator like creatures living north of the Arctic circle and sea level about 200 feet higher than today. Hollywood apparently did not realize this when they made the movie “Waterworld” that showed Kevin Costner finding the last dry ground atop Mount Everest, which is at an elevation of 29,000 feet. It is not comforting to realize that methane is released from melting permafrost, which exists on twenty percent of the planets land mass and that this area is warming faster than the rest of Earth. Methane release is accelerating.

Today, few people are worried about all the planetary ice melting to create a 200 feet sea level rise in our lifetimes, but the oceans did rise eight inches in the twentieth century. Most of the rise was due to the thermal expansion of water, but about a third of it was due to melted ice. When you realize that if only half of the ice covering Greenland plus half of the ice on the West Antarctic ice sheet were to melt, sea level would rise 20 feet, the problem begins to come into focus.



*If all the ice Greenland melted, Lake Merritt would be below sea level.*

The scary part is a prediction based on recent rapid increases in the rate of melting and new information on dynamic ice flow, that sea level could rise three feet by the year 2100 (only eighty eight years from now). What would happen then? Well, about 100 million people would be driven from the world's coastlines and become climate refugees, which would be added to the current 43 million refugees. That would definitely be a problem, especially since it would impact such places as the Lake Merritt, the Bay Delta, the Nile Delta, New Orleans, Miami,

Galveston, Hong Kong et cetera and many island nations.

Why is ice a sleeping giant that we have awakened? Probably because the average planetary temperature during the last three decades has been rising faster than at any time since thermometers came into widespread use. For more details regarding these topics, about ice and on the role it plays on our planet, pick up a copy of “A World Without Ice” by Dr. Henry Pollack (2009, the Penguin Group, New York, NY, 290 pages).

## **BIRD COLUMN**

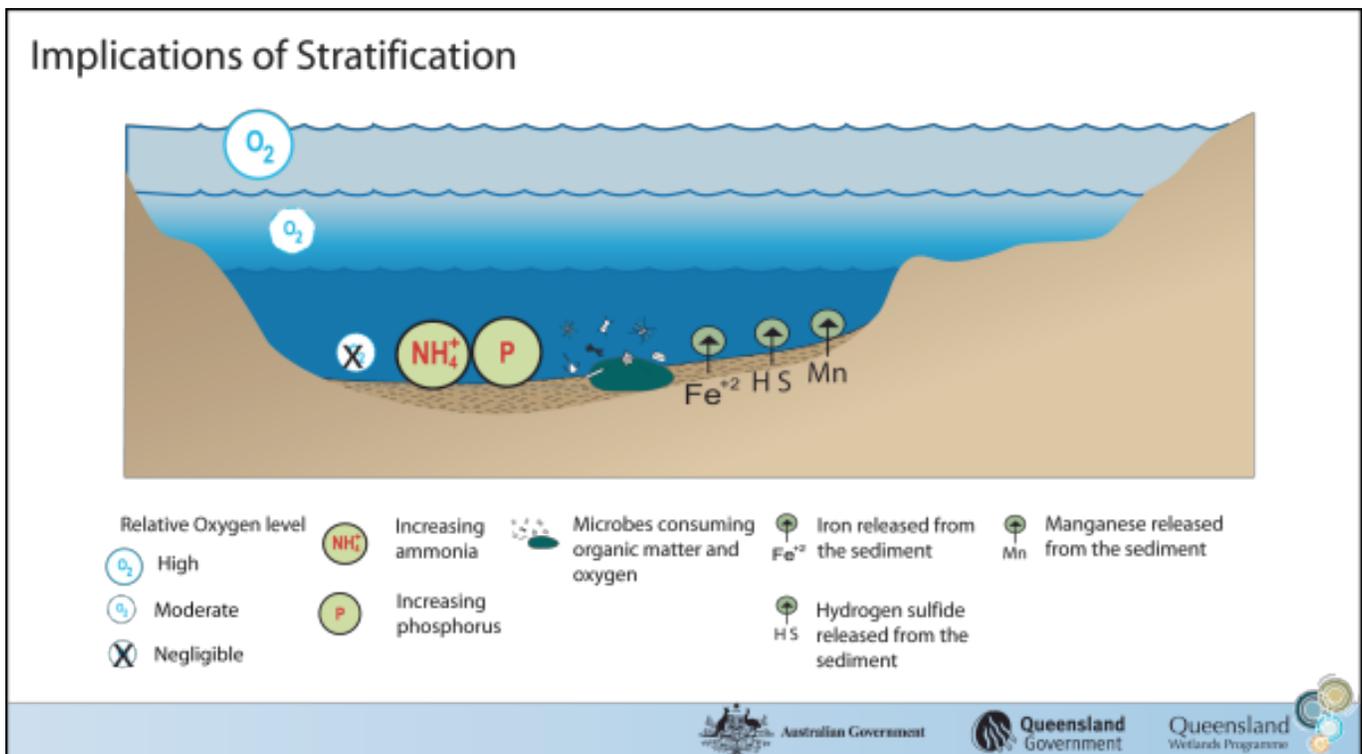
Summer in February: It was bright and hot for the February 4th-Wednesday bird walk, and people were shedding clothes all along the way. Out on the islands, we saw TWO Belted Kingfishers - first time for more than one - chasing each other through the trees. This may be the last time we see them for a while, though; the Double-crested Cormorants haven't started to nest yet, but the first-comers were twisting their snaky necks and sizing up the real estate (which is once again severely limited this year).

The species count was down a bit - only 42 - but we saw some unusual birds. In the paddock, a gull wading in the pond was clearly a mix of Glaucous-winged (light gray back and wingtips; not common here but fairly consistently seen by ones and twos) and Glaucous (even lighter gray back and white wingtips; vanishingly rare south of Oregon). Among other hybrid characteristics, the eyes were a luminous medium amber, halfway between the dark of the Glaucous-winged and the pale yellow of the Glaucous Gull. And in the Sensory Garden, an alert walker spotted a not-a-Towhee, not-a-Robin, a brown bird with a bright white eye ring and a grayish streaky breast: a Swainson's Thrush - a bird none of us could recall seeing here before; (And we probably didn't see one this time either; one of the group went back and got a much better look at a thrush in the same spot, and called it as a Hermit Thrush. That's still uncommon, but way more likely in the here and now....)"

Other than that, it was pretty much the usual suspects - but lovely views in lovely weather, and all in all another good day at Lake Merritt, where every day....

### WHEN LAKES GO BAD

You can't see low oxygen from the shoreline, but it's there, near the bottom. It happens when rain stratifies our lagoon into a surface layer of fresh water and a bottom layer of salty, heavier water. The surface layer, which can be a few feet thick, is typically rich in oxygen, which it gets from the air and from photosynthesis during the daytime. But light does not penetrate to the bottom, and water down there loses its oxygen, often becoming a dead zone.



It can get pretty nasty down there, as evidenced when you stir up the black mud and perhaps smell hydrogen sulfide. Life for fish, clams, mussels and worms that waterfowl like to eat would be better if there were oxygen down there all the time, but the question is: How do we do that?

Increased tidal flushing such as will happen when the channel bottlenecks are widened will help, but not when the tide gates are closed to prevent floods during periods of rain. Aeration fountains are another option since they provide oxygen to about an acre around each one; but we can't have 140 fountains. In an unnatural lagoon like ours, the only way to insure ample oxygen at the bottom would be a system of bubblers, like what you see in aquariums. According to a professionally developed proposal a few years ago,

one bubbler per acre would be enough. They would be out of sight on the bottom and would operate only when needed, as determined by automatic sensors. Four small compressor stations (smaller than our “U-Clean-It” boxes) would be along the shoreline, feeding air into a few weighted hoses that would bring air to the bubblers. The rising column of air would mix the surface and bottom waters, creating a much healthier Lake Merritt.

*Bubbles from the pilot project aerator in 2005.*



### **A SELKIE IN LAKE MERRITT?**

When the flood control bypass channel is finally opened (perhaps by 2015) allowing boat and fish passage from the Lake to the Bay, what kinds of things may swim in and call Lake Merritt home? Certainly we will see larger fish and perhaps a seal or sea lion, but those of us who have seen the movie “The Secret of Roan Inish” realize that someday, they may see a Selkie along our shoreline. That of course is a seal that can shed its skin and turn into a human when on land. Often compared to mermaids, such creatures can be quite beautiful.

If you can catch the Selkie and hide her skin, she will be with you forever, or at least until she finds her seal skin and returns to her ancestral home. So the next time you are out on the gondola, scan the shoreline by the bandstand beach. You may see a Selkie!

### **RECENT SCENES FROM THE LAKE**



*Trash at the mouth of Glen Echo Creek. Proposed nets upstream would keep this out of Lake Merritt.*



*Come on out and help us clean it up!*

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