

# THE TIDINGS



LAKE MERRITT INSTITUTE

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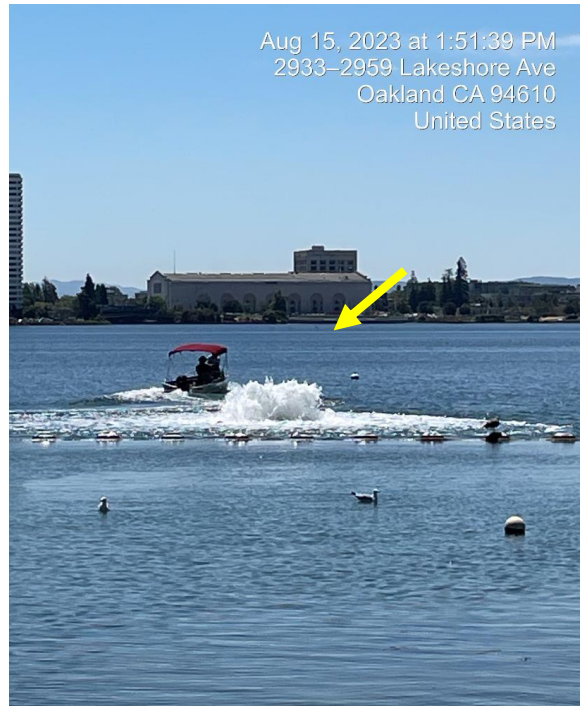
"The Tidings" is an editorial newsletter. Posted opinions are not necessarily those of the City of Oakland

## ANOTHER FISH KILL COMING? Not if LMI and Oakland can help it!

In August 2022, Lake Merritt suffered a catastrophic [fish kill](#) caused by a harmful algae bloom (or red tide). It originated in San Francisco Bay, affecting much of the central east bay coast. The Lake Merritt Institute (LMI) responded quickly by placing a donated LakeTech water quality monitoring buoy in the lake in September 2022. Following decades of concern about low dissolved oxygen (DO) in the lake, LMI worked with the City of Oakland Public Works and Measure DD Community Coalition to contribute to a [Lake Merritt Management Plan](#) proposed by Watershed Manager Terri Fashing that addressed DO levels.

According to Watershed Program Specialist Jennifer Stern (Aug 11<sup>th</sup> update) the city is fast-tracking the [Lake Merritt Water Quality Management Pilot Project](#) to reduce the risk of another fish kill. They will install an oxygenation system and a surface aerating device in the Lake to improve DO levels. Improving Lake DO is expected to provide an aquatic life refuge if a red tide moves in.

With pride and jubilation, we witnessed the installation of an [aeration device](#) on August 15<sup>th</sup> in the Trestle Glen arm of the lake near LMI's water quality monitoring buoy. The device will churn the water and increase the mixing of air into the water.



Aug 15, 2023 at 1:51:39 PM  
2933-2959 Lakeshore Ave  
Oakland CA 94610  
United States

Above, the new aeration device is installed in the Trestle Glen arm of the lake. Location was informed by LMI's water quality monitoring buoy data.



Photo by Lee Aurich

At left, a Great Blue Heron gazes toward the LMI fountain at Grand and Harrison for perhaps the last time as city infrastructure installation will soon remove the fountain to make way for new oxygenation pumps.

**LMI in JUNE 2023:** 11,850 gallons of trash were removed from the lake by staff and volunteers in June and July. A total of 44,910 gallons of trash have been removed to date in 2023.

In July, LMI Executive Director James Robinson hosted 131 volunteers, attended 10 meetings and gave 1 presentation.

25 used syringes were removed.

0.0 inches of rain were recorded by the LMI rain gauge in July



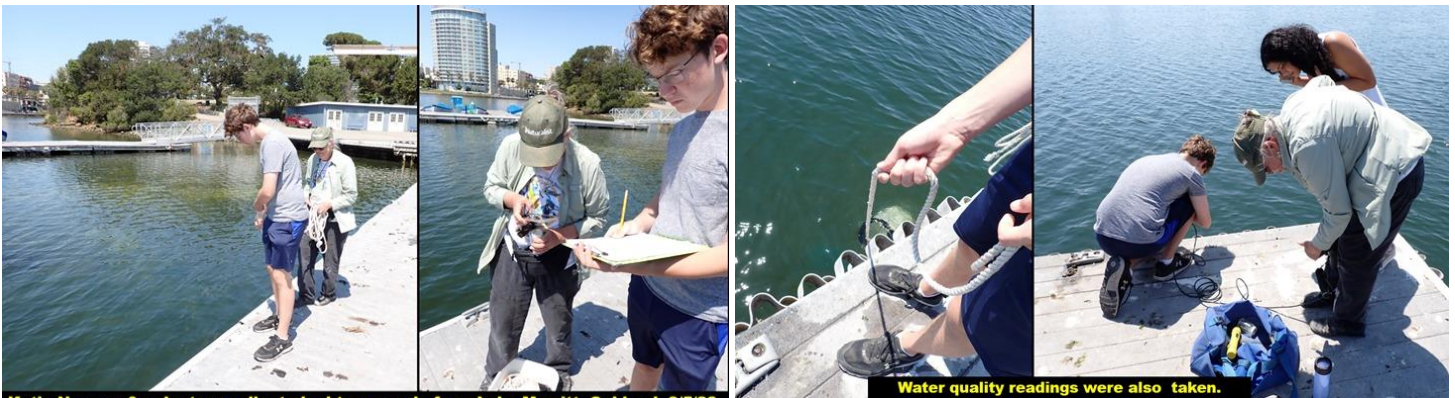
**THANK YOU TO ALL OF OUR JUNE AND JULY VOLUNTEERS!** See new column **Lake Merritt Hero of the Month**, **LMI Creek-to-Bay Day** announcement and other LMI events at the end of this issue of The Tidings. Become a [supporter](#) and receive our digital newsletter every month.

## Hunting Harmful Algae in the Bay and Lake Merritt

Below left: SF Waterboards Harmful Algal Bloom sampling was carried out by RNCF co-chairs Katie Noonan and David Wofford with Miriam Valesco and Andy Young of LMI. The samples collected on August 1<sup>st</sup> contained no harmful algae at levels requiring advisory to be issued according to the Sacramento lab.

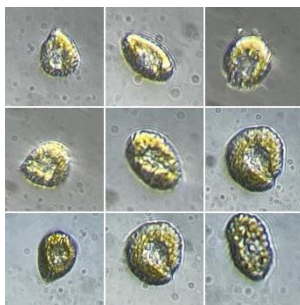


RNCF hosted a pop-up microscopy table near the Lake Merritt Boating Center Dock on August 5<sup>th</sup> to explore Lake Merritt plankton. Thank you to Jim Ervin, Piedmont Scout Theo, Richard Hasagawa & all volunteers.

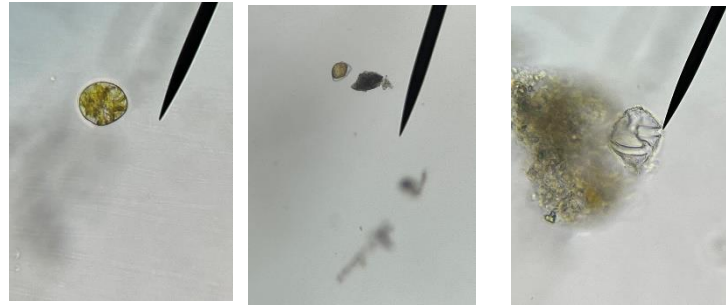


Katie Noonan & volunteer collect plankton sample from Lake Merritt, Oakland. 8/5/23

Water quality readings were also taken.



Emeryville and  
Berkeley 2023  
*Heterosigma akashiwo*



<= Lake Merritt 2023 - **NOT** *Heterosigma akashiwo* =>  
Photo credits at end.



Lake Merritt 2022  
*Heterosigma akashiwo*

## What is the status of the recent red tide in the Bay? Did it enter Lake Merritt?

There is no evidence that the recent red tide entered Lake Merritt (see above). According to naturalist and LMI Board member Damon Tighe, “Based upon satellite and microscopy it seems the peak bloom was July 29 and 30th which resulted in 15 observations of dead sturgeon ranging from Berkeley to the Napa River, but luckily we have not seen any other blooms”. <https://www.inaturalist.org/projects/sf-bay-harmful-algae-bloom-2023/journal/archives/2023/08>

## Busy Day at Lake Merritt – by Hilary Powers

Golden Gate Audubon Society Volunteer

The July 4th-Wednesday Golden Gate Audubon walk drew another crowd – 25 birders – to see what if anything could be seen at this quietest season of the year. And we found what to see! It was a good thing two of us brought scopes, so one could focus on the two tiny yellow-footed Least Terns perching on a float for a first-ever second month in a row, while the other took in the flock of first- and second-year Brown Pelicans lounging with a few Double-crested Cormorants on one of the farther islands. Lake Merritt has fish again, it seems safe to say!

Other signs of probable fish: Two more tern species (Forster's and Caspian) patrolled the lake, and a couple of Great Blue Herons flew in, along with a Great Egret and some Snowy Egrets too. With the always-present Black-crowned Night-Herons, that filled our heron-Bingo card except for Green Herons, which we haven't seen here since last August.

Once again, a dry and weed-choked mess greeted us in the bird paddock. If not for a few scraped-together piles of dead brush, there'd be no sign of human attention there at all. We asked a park worker when the ponds would be refilled and he said he didn't know who was in charge of that – but promised to find out so he could report all the questions he was getting about it. It's getting to be a serious problem; the birds *need* fresh water, and they're not getting it on the lake side of Bellevue. The lake is brackish, with a tidal flood of salt water from 12th Street and a trickle of fresh from El Embarcadero, and while there's supposed to be a freshwater pond on one of the islands, that's said to be empty, too.

Northern Rough-winged Swallows were still nesting in the lake wall west of the playground, and we also saw both Violet-green and Barn Swallows patrolling the lawns and the water for bugs. Also on patrol, a group of American Crows chased a Cooper's Hawk (which the signs say I should call a Swift Hawk, but that's not gonna happen) across the sky. One crow took a detour, darting upward a few yards to attack a passing songbird; the songbird dodged and went on its way while the crow returned to its proper business – persecuting raptors.



One American White Pelican glided down to settle in the water beside Hank (our resident rescue) and they greeted each other formally, sweeping and crossing their long beaks. That was sweet to see, even though we know the relationship will go nowhere (Hank can't leave, and her friend won't stay here to breed). Some of the juvenile Browns were swimming close by at the time, illustrating the dramatic size difference – both species are *big*, but the Whites (at 62 inches from beak to tail) have almost a foot on the Browns. (How do you spot a juvenile Brown Pelican? It's full grown but all mouse brown, except for the white belly. A second-year bird has white on the head and throat, while a nonbreeding adult has a white head and neck, a gray back, and a black belly. Breeding adults are indescribable, but we rarely get to see them here; go find a picture!)

At left: Hank the rescue pelican, photo by Steven Summers.

I took the group through the stand of redwoods behind the Rotary Nature Center, hoping so hard to find a Brown Creeper there that I was sure I had one, right on cue. My gleeful announcement was quickly countered as calmer folk recognized the bird on the tree trunk as a White-breasted Nuthatch – more evidence if any was needed that it's the brain that *sees*, and not the eye alone. But that was an even better sighting: we'd never recorded one of those on a 4th-Wednesday walk, while we see Brown Creepers fairly often (and indeed picked up one of those too, later in the morning).



As we headed for the garden, the lawns offered up the usual flocks of Western Bluebirds and House Finches, plus one jaunty male House Sparrow (surprisingly rarely seen in the park) as well. And when we got to the compost demo area and settled in for a much-needed rest in the shade, we were not really disappointed to find that the resident hawks were all pursuing their affairs elsewhere, as that left the chickadees and titmice to their happy pursuit of hand-held peanuts.

All told, and despite the complete absence of coots, grebes, and scrub jays, it was a rewarding trip. Counting the Osprey that checked out the lake before the last leader left, we picked up 40 species of birds, a record for the past few July walks, demonstrating yet again that every day at Lake Merritt has its own ways of being a very good day indeed.



*Photo by Lyla Arum*

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**AUDUBON BIRDWALKS AT THE LAKE:** Join bird expert Hilary Powers any fourth Wednesday of the month for a free “Bird walk” at the lake. Muster at the geodesic bird cage near the Nature Center at 9:30 a.m. for what are always fascinating introductions to lake birdlife. This trip happens rain or shine. It is free but advance registration is requested by Golden Gate Audubon. Use this link below.

<https://goldengateaudubon.app.neoncrm.com/np/clients/goldengateaudubon/event.jsp?event=10813>

TT Editor’s note: The duck ponds were built in the 1920’s and are a national landmark. They supply fresh water for migratory birds which cannot drink the brackish water at Lake Merritt. All the birds need fresh water for bathing.

## Community Water Quality Report

Thank you to RNCF Volunteers, Piedmont Scouts, ORC! (Oakland Rowing Club)

Water quality was **CLEAR** at the LAKE CENTER on August 5<sup>th</sup>. Thank you to Piedmont Scouts and [Rotary Nature Center Friends](#) for testing!

Depth 2.7 meters

Water Clarity 2.7 meters (Very clear but normal for this season)

Temperature: 21.4 degrees Celsius at the top/20.6 degrees at the bottom (70.52 degrees Fahrenheit/69.08 deg Fahrenheit)

Normal for this time of year.

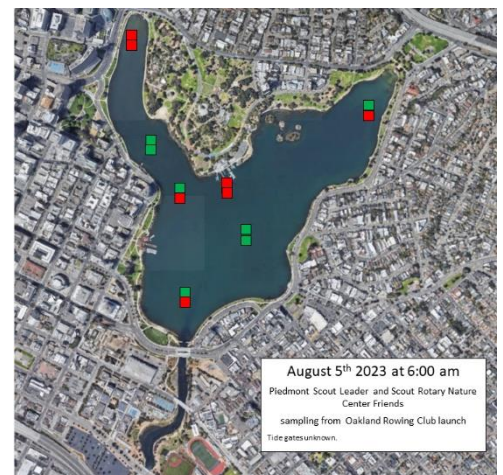
Salinity 27.4 parts per thousand (ppt) top/27.56 ppt bottom

Normal, not significantly stratified (top and bottom are nearly equal)

pH: 7 top

Dissolved Oxygen (D.O.) 6.11 parts per million (ppm) at the top and 5.72 ppm on bottom. (Meets EPA standard of 5 ppm).

Other locations in mid-Lake did not meet EPA standard for DO at 6:30 a.m. after a long night of no photosynthesis by algae.



Top square is top water, bottom square is bottom water.  
Green = dissolved oxygen > 5 ppm. Red = < 4 ppm



Kate Benson and Katie Noonan monitor water quality at six lake stations just after dawn on 8-5-23.

Photo by Kate Benson.

## COMING UP!

### September 8<sup>th</sup>, 7-8 p.m. - Lakeside Chat #34: “US/Climate Change Chaos and the effect on Native communities and Bering Sea ecology: Integrating Global Topics into Community College Curriculum”

Laney Geography Professor Mark Rauzon. Professor Rauzon recently returned from a research cruise to the Arctic and completed Stanford University’s Education Partnership for Internationalizing Curriculum (EPIC) Fellows Program for the 2022-23. He will share insights about climate change and the importance of global education for all.



Register here: <https://Russia-us-climate-change-chaos-native-communities-bering-sea.eventbrite.com>

Enjoy a thoughtful interactive nature and sustainability-oriented program hosted by [Rotary Nature Center Friends](#). FREE, online. A zoom link is sent with confirmation email.

## City-wide Creek to Bay Day – September 23<sup>rd</sup>!

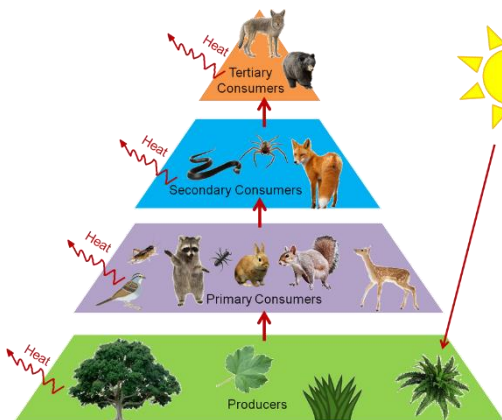
Executive Director James Robinson invites you to The Lake Merritt Institute’s annual Creek-to-Bay Day Clean-up from 9 am to 12 noon. Orientation, organization, safety talk and tools will be provided. See you there! LOVE YOUR LAKE!

## CLIMATE CORNER: THE FIFTH DIMENSION

- An editorial by Dick Bailey

With this essay, “Tidings” returns briefly to the Climate Corner. Essays relating to Lake Merritt, and a possible future Lake Merritt Conservancy will resume in September.

What is the fifth dimension? No, not another musical group. No, not time, which carries us through the standard three dimensions of length, width, and height. I describe here a planetary dimension, one which exists below the four food levels of tertiary consumers, secondary consumers, primary consumers, and producers. Each of these levels feeds upon and depends upon the level beneath it. Top predators, like hawks, killer whales, and wolves, devour secondary consumers, such as small birds, salmon, and sheep. Secondary consumers eat primary consumers, like small animals. Primary consumers eat green things (like plants, algae, leaves, etc.).



But supporting, (and necessary) for these four dimensions, is a larger, fifth layer, consisting of air, soil, and water. This is the fifth dimension.

Climate change has been, is, and will continue to degrade and destroy the fifth dimension. The scale, speed and scope of this loss are accelerating, and will continue to do so for centuries unless civilization weans itself from fossil fuels.

As of 2023, we could slow this destruction if we had the political will, but we cannot stop it. Why not? Because most of the heat is already stored in the ocean, and even God, or whatever you choose to call your greater power, cannot cool the ocean.

The five dimensions are vaguely relevant to our economic system. In that, the super wealthy (CEO’s and such) subsist upon the middle class (is there any left?) which is supported by the workers who drive the busses, teach our children, prepare our food, build our cell phones and do pretty much everything else. In economics, the fifth dimension is the same: Air, water, and soil, without which any economic system would collapse.

The fifth dimension is everywhere: In the water that is 90% of our bodies, in the air now in your lungs, and in the atoms from soil that made the food you ate for breakfast.

What is climate change doing to the fifth dimension? The answers are all around us: In the continent-wide smoke from wild fires, in the diminishing water supply of ice caps, glaciers and river flows (like the Colorado river), and in the soil that will support fewer crops because of temperatures that are becoming too hot or dry for wheat, corn, rice and cows.

Continued degradation of the fifth dimension can only lead to the degradation of civilization. As this happens, civilization becomes more un-civilized, leading to famine (as we now see in Africa), mass migration (to Europe and the U.S) and war. Come to think of it, destruction of the fifth dimension invites the four horsemen of the apocalypse: Famine, conquest, death, and war.



So, what can we do to dismount the four horsemen and save our fifth dimension? It is now obvious that we need to slow global temperature rise by every means possible. This means dramatically replacing fossil fuels with renewable energy, including solar, wind, geothermal and nuclear. We need heat/AC pumps, electric vehicles, better forest management and agriculture, more efficient buildings, a simpler life style, fewer children, and (critically important) better politicians.

This then is civilization's future test. Fail it, and the fifth dimension will fail us.

Perhaps the best way to save our supportive fifth dimension is summarized in the principles that guide the indigenous Haida people in Canada who have sustainably co-existed with the natural environment for over 10,000 years: Never take more than you need; enjoy, share, and respect the lands and water that sustain you; look after nature, and in turn, it will always look after you. To quote the Haida land use vision:

Our physical and spiritual relationship with the lands and waters of Haida Gwaii, and our history of co-existence with all living things over many thousands of years, is what makes up Haida culture. Yah'guudang – our respect for all living things – celebrates the ways our lives and spirits are intertwined and honors the responsibility we hold to future generations.

We would do well to apply these principles to Lake Merritt.



A new banner at the Fairyland entrance to Lakeside Park celebrates the nation's first wildlife refuge and sets the right tone of respect. Thank you to Rotary Nature Center Friends for donating the banner and to Fairyland for expert installation.



# Lake Merritt Hero of the Month

## Alfredo Sanchez

Volunteer Coordinator for Lake Merritt Institute  
People Person, 'Aquatic Garbologist' and Master Chef

As the Executive Director of LMI, James Robinson has said “the volunteers are the backbone of LMI”. Without the coordination of them, no cleaning of the Lake would happen well. While we are planning on featuring individual volunteers in the coming months in Tidings, it seems right to start with the person who keeps this diverse and interesting group of environmentally conscious and social equity minded members of our Lake Merritt community in line.



Alfredo Sanchez has been a part of the Lake community for a number of years. Our first meet up with him was when he was working for Lime Electric Scooters from 2017-2020. During that time, when the streets of Oakland were flooded with scooters of all kinds, many of which were landing in the Lake, our Executive Director James Robinson, negotiated a deal with Lime for assistance in pulling them out of the Lake. Previously this was being done by LMI volunteers. UGH.

In comes Alfredo as the Lime employee who accompanied the Tuesday A Team volunteers around the Lake to collect the

waterlogged scooters. As stewards of the Lake we were anxious to remove them in order to keep toxins out of the water.

In 2020, when many businesses were down-sizing due to Covid, Alfredo was furloughed. One day while walking the Lake he ran into some of us volunteers and upon learning he was no longer working for Lime, and knowing James was looking for an assistant, we immediately put him in contact with James. The rest is history!!!!!! Everyone who knew him was so pleased he was now really on our team.

For 5 years prior to working for Lime, Alfredo was an EMT in Alameda County. He attended Chabot and later graduated from San Jose State University.

Alfredo describes the fun part of his job working at LMI as being outdoors at the Lake daily, and the joy of connecting with people by fostering interest in the environment. He regularly organizes groups of 3-30 volunteers of all ages who are eager to clean the Lake, including the Achieve students for whom he has a special fondness. He loves seeing the “wide-eyed curiosity of children and their genuine passion for caring about, and their appreciation for nature.” He says he has “not had a bad volunteer experience yet.” Besides using his skills as a people -person, Alfredo reports that he has learned valuable technical skills in order to maintain, repair and operate boats, equipment in U Clean It boxes, and the beloved fountains which beautify and aerate the Lake.

The least favorite part of his job is pulling large pieces of furniture out of the Lake, including mattresses, bed frames, cabinets, gym equipment, punching bags, shopping carts, wheelchairs, office chairs, bicycles, and the list could go on! But no more Lime scooters!!!!!!! The most unexpected thing he has pulled from the Lake was in 2021 when he removed what he describes as a “make-shift Viking funeral style casket for a cat, filled with flowers, set out to sea”. Similarly, volunteers have removed bottles with tender notes to loved ones, either in faraway countries or who have passed, also set upon the waters of Lake Merritt.

When not at work Alfredo spends time enjoying being outside, hiking with friends at Alamere Falls in Marin, a 13-mile round trip hike, or similar hikes in Joaquin Miller Park. To prepare for these hikes he likes to search out new coffee spots where he finds good coffee and interesting people. His current favorite is Timeless in Jack London Square.

Other favorites include: Best tacos at El Paisa on 46th and International  
Best book is Crying in H Mart by Michelle Zauner.

When not hiking, Alfredo is cooking. He started in middle school French class making Croque Monsieurs and Croque Madames. His family honors passed-down recipes and Alfredo is annually in charge of the family Christmas Tamales. His sister is the baker in the family. He shared this recipe for something he just whipped up recently:

### Chilaquiles

For the sauce:

Roma tomatoes

White onion

Garlic

Serrano pepper

Guajillo chile pepper

Salt/pepper

Egg

Tortillas

Garnish:

Red onion

Avocado

Cilantro

Sour cream

Cotija cheese

Sear the tomatoes in a pan with oil, remove once softened up, add the onion, garlic and peppers (I like toasting the Serrano over flame before adding them). Once they are seared, add the tomatoes back in and season with salt and black pepper then cover with water. Once everything is cooked and the Guajillo is rehydrated, pour into a blender and blend.

Take some tortillas and cut into quarters or strips, then fry them up in oil, very lightly seasoning them ( the sauce and the Cotija will add enough salt). Once they are toasted to your liking, remove from pan and dry off excess oil.

In a pot, pour the sauce over the tortillas.

For the egg, it's up to your preference. Some folks like scrambling them with the tortillas, I like it over easy on top so I cook the eggs in a separate pan,.

Garnish with red onion, avocado, cilantro, sour cream and cotija cheese. Yum, Alfredo, we will all be right over.



To spot him around the Lake, instead of wearing a cooking apron, he will be wearing a blue T-shirt and ear pods. You will find him there Tuesday through Saturday, whipping up enthusiasm and goodwill among the many volunteers who find their way to the Boat House, making sure they have all the equipment they need for a successful experience while doing this vital and essential work of keeping our Lake clean.

Join Alfredo every Tuesday or Saturday at 10:00 am at the Boat House at 568 Bellevue Ave.

Photo credits for Microscope images on page 2

1 - Aug 3 2023 Berkely Marina and Emeryville, Alameda - photo by Damon Tighe;

2 a,b,c – Aug 3 2023 Lake Merritt - photos by K.Noonan;

3 – *Heterosigma akashiwo* in Lake Merritt Aug 3 2022 - photo by K.Noonan

Photo sources for Climate Corner essay by Dick Bailey:

<https://www.guychurch.com/october-24th-demystifying-the-four-horsemen-of-the-apocalypse/>

<https://onlinesciencenotes.com/trophic-levels-and-ecological-pyramids/>

## Support our Clean Lake Program!



**Do you know the difference between a storm drain and a sewer?**

One third of the nutrient overload in SF Bay that can contribute to red tides comes from urban run-off (Rosenfield, [KQED Forum](#)). In this photo by Lyla Arum, urban runoff from the many storm drains that coalesce in Glen Echo Creek enter Lake Merritt at Grand and Harrison.

The daily operations of The Lake Merritt Institute keep thousands of gallons of trash out of the lake every month and prevents dissolved pollutants from getting into the lake by educating the community.

**Another way to help:** Become a supporter of The Lake Merritt Institute (form downloadable from our [website](#)).

**Donate:** [The Lake Merritt Institute's gofundme campaign](#) could improve capabilities to remove trash from the Lake, create islands of adequate oxygen when lake-wide conditions decline, increase staffing for social media and maintenance, monitor water quality and help Oakland prevent a fish kill rather than respond to one.

**Please direct questions and comments to The Tidings Editor, Katie Noonan, at [ktnoon@aol.com](mailto:ktnoon@aol.com).**

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