

THE TIDINGS



LAKE MERRITT INSTITUTE

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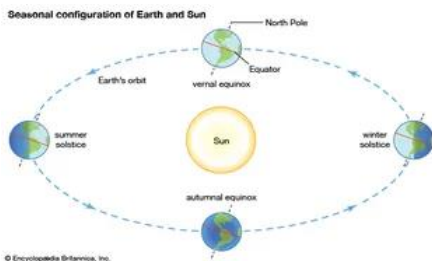
SPECIAL ISSUE

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

HOLIDAY WISHES from The Lake Merritt Institute – A Better World



We clean the lake. Join us!



As we near the [winter solstice](#), the day of the year with the least sunlight (Thursday December 21st this year) our lake is shrouded in darkness and concern. Crime, injustice, homelessness, closed buildings, iffy dissolved oxygen levels, and ever-present trash keeps us up at night. But if Oakland is distressed, the whole world seems in deeper crisis. The Lake Merritt Institute wishes you and yours a safe and hopeful holiday season and better world in the new year.

There is cause for hope at Lake Merritt and you can help. **Hopeful signs:**

- No fish kill in 2023.
- LMI's Clean Lake Program turns out to clean the lake and Lakeside Park every day (see statistics in box below).
- The City of Oakland is building a Lake Management Plan to protect the lake ecosystem for all to enjoy.
- More species of birds are at the lake now than in previous years.
- People are meeting all over town to talk about a future for Lake Merritt that would benefit everyone.

<= It is the tilt of the Earth's axis that brings us a winter solstice.

TIME TO MAKE A CHARITABLE DONATION TO THE LAKE MERRITT INSTITUTE!

[The Lake Merritt Institute](#) is a 501(c)3 non-profit charity, founded in 1992.

We educate the public about urban runoff and involve them in solving that problem. Result: Volunteers remove [thousands of gallons](#) of trash each year that would otherwise increase the world ocean's plastics crisis *and* Oakland's regulatory liability for water quality.

LMI is funded by the City of Oakland and by donations from caring people like you. Help us preserve our beautiful and hard-working lake in the heart of downtown Oakland.



[Donate here](#)

LMI in DECEMBER 2023: 6,900 gallons of trash were removed from the lake by staff and volunteers in October and 6390 gallons of trash were removed in November.

A total of 64,080 gallons of trash had been removed as of November 1st and 70,470 total gallons of trash have been removed to date in 2023.

In November and December, LMI Executive Director James Robinson hosted 427 volunteers, attended 9 meetings, and gave 4 presentations.

105 used syringes were removed. 0.0 inches of rain were recorded by the LMI rain gauge in November.

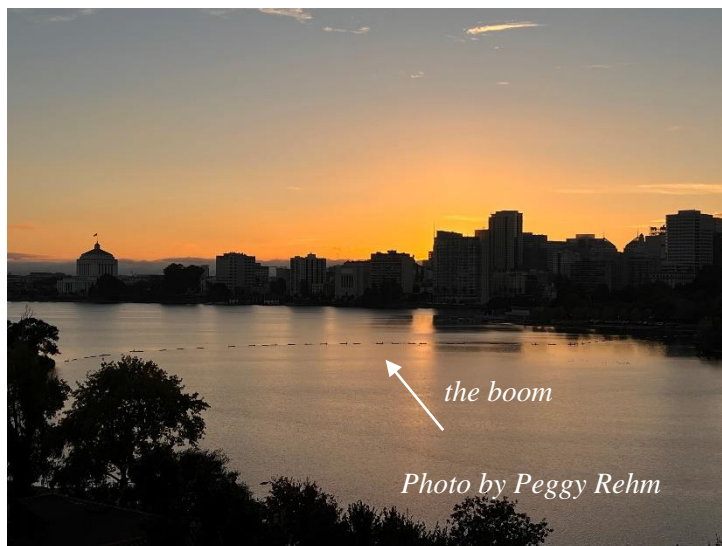
THANK YOU TO ALL OF OUR VOLUNTEERS! A special shout out to Park Day School, Women in Water Energy, Coca Cola, Arise High School, [LaunchDarkly](#), a tech company with offices near Lake Merritt, and Achieve Students high school volunteers from Holy Names High School in Oakland and St. Joseph's High School in Alameda. Join us at the LMBC boathouse for Martin Luther King Day of Service on January 13th!

Become a [supporter](#) and receive our digital newsletter every month.

WELCOME BIRDS!

On October 4th, the Lake Merritt Institute boating center connected a string of white floats called a boom all across the lake (arrow). It runs from the geodesic dome near the Rotary Nature Center to Lakeshore Avenue near Brooklyn Avenue. During migratory bird season from October 1st through April 30th the east end of the lake (Trestle Glen arm ending at the Pergola) is closed off to boat traffic to protect birds passing through Oakland on the Pacific flyway or spending their winter here.

This is a good time to remember that fishing, remote-control boats and drones have no place in the lake. Scaring birds robs them of critical energy needed to migrate or just survive the winter.



A shorter boom around the bird islands is a favorite place for birds to rest all year long and is a great place to observe birds of the wildlife refuge. In the columns below, Hilary Powers describes the species observed on her Golden Gate Bird Alliance Fourth Wednesday bird walks.

BIRD COLUMNS: **Breaking into Fall at Lake Merritt**

— by Hilary Powers, Golden Gate Bird Alliance Volunteer (October column)



Lesser Scaup; Photo by Kerstin Firmin, iNaturalist

The air and water filled with pelicans, both white and brown, to greet the October 4th-Wednesday walkers. Understandable; co-leader Lyla was attempting to feed Hank-the-rescue-pelican her morning's ration of Oakland-Zoo-provided fish, and the rest (plus several Black-crowned Night-Herons and a Snowy Egret) all saw no reason why they shouldn't have one too despite Lyla's every effort to frustrate them.

Numbers of several species were well up from September (though still not huge in historical terms). But for this age of the world, there were lots of Snowy Egrets (including half a dozen in a bunch on one end of an island) and lots of Black-crowned Night-Herons scattered here and there. Ruddy Ducks swam in rafts in the Embarcadero half of the lake, looking altogether normal for the season – though a little lonely, there being only two Lesser Scaup and a handful of Bufflehead around. And the American Coots were out in force too – hard to believe we saw only a couple last month and none at all two months ago.

Assorted individuals enlivened the day. We saw an Eared Grebe – a relatively frequent winter visitor – and a much-less-common-for-us Horned Grebe as well, and someone reported seeing a big Western Grebe out on the far center of the lake, but we couldn't find it again. In the park, we saw two burglar-masked Townsend's Warblers in widely separated trees, and a Steller's Jay flitted through the branches along Bellevue. Steller's Jays usually stay up in the hills, so this was a surprise that almost but didn't quite make up for our inability to find a California Scrub Jay (usually reliable) anywhere along the walk. (And we'll probably have to relearn two of those names and a whole lot of others over the next year or so; the American Ornithological Society has just announced a plan to change *all* "So-and-So's Bird" names to "Something-or-Somewhere Bird" names; a nuisance for people who've learned the old ones, but helpful in the long run by providing information about the bird rather than about someone who saw it. Now if they'd just fix the names that provide *bad* information about the bird, like the infamous Ring-necked (um, why not Ring-billed?) Duck....)

Overhead, *three* red-tailed hawks circled with a handful of crows, making it hard to tell who was chasing whom. (At least, others swore there were three; me, I've never seen more than two in that sort of dispute and didn't recognize the third this time either, but it was fun to watch.)

The Garden Center garden brought us several chickadees and titmice (most with too much healthy nervousness about the crowd to show much interest in peanuts) and a hermit thrush fossicking about under the bushes. And in the right-hand pond of the much-improved central water feature, two airily beautiful abstract figures captured the essence of a Great Egret and a Great Blue Heron, bobbing and nodding and turning toward each other and away, evoking much the same feelings as living birds – more intense, perhaps, for being metal and enamel propelled by wind and gravity rather than flesh and blood.

In the field by the stone pine, a Cackling Goose joined the much larger Canada Geese grazing the lawn – at first glance identical except for size, but a closer look revealed its beak and neck as proportionately shorter and smaller than its cousins' and not just smaller on a smaller bird. And down behind the Boat House, one Glaucous-winged Gull lounged among the Westerns on a pier, its pale gray wingtips easy to spot – once they were pointed out.

The weather was lovely, sunny with a bit of a bite welcome after the recent heat. All told, we saw 44 species of birds, up from the past two years but not quite matching 2020's several-year record, and had (as we've come to expect) yet another grand day at Lake Merritt, where every day competes for the title of best ever.

Hope and Thanksgiving at Lake Merritt

– by Hilary Powers, Golden Gate Bird Alliance Volunteer (November column)

Thanksgiving Eve at Lake Merritt was a Goldilocks day, fresh and clear and just right for a cheery walk. White Pelicans crowded the outer island they've taken over for a roosting spot, then plopped into the water – some to head for our corner of the Boat House parking lot where co-leader Lyla was waiting with her cooler of fish and others toward the Bellevue shore where there were wild fish to pursue. Awkwardly, Hank-the-rescue-pelican was with the "others" group, and the human birders left a scene of mutual frustration behind as we strolled out for our walk. Lyla's fish are supposed to go only to Hank, and while the opportunists have a reasonable hope of snatching some once the feeding starts, none will be in play until and unless Hank shows up. (We didn't see Lyla again for a couple of hours, but she said Hank did eventually come to collect – most of – her fish.)

We made our way around the bird paddock, eyes averted from the dead vegetation and still-empty concrete pond pans. Someone said she'd heard that the bill for fixing the leak would be \$20,000, which makes the delay sort of understandable. There are lotsa uses for that kind of sum, but I still hope someone makes it happen.

[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.]

Perhaps we had a sign. Perched in an island evergreen above a Great Blue Heron, we saw a scrap of perfect white – white as an egret, but far too small. It turned out to be a snow white dove with the pale pink bill and shadowed dark red eye of a full albino, slim and graceful and not at all like a plain white park pigeon. Chances are it was a refugee from someone's wedding with grim chances of survival ahead – but it *could* have been a wild Mourning Dove or Collared-Dove that had managed to grow up despite the eat-me-now suit it was wearing, and that would have been a good omen indeed.



Snowy Egrets (black bills) and a Great Egret (yellow bill); Photo by Kerstin Firmin, iNaturalist

We did have egrets too, and in much larger numbers than usual. Lots and lots of Snowy Egrets, some so young that their legs were still greenish instead of black, and one Great Egret, making one more than we saw last year, or last month either. Black-crowned Night-Herons were scarcer than usual but still present; they're basically always here, and haven't missed a November report since 2012.

Another island tree gave us a good view of a Belted Kingfisher – a male, by his plain blue cravat and unmarked white shirt front, an unusual sight for Lake Merritt. It isn't clear why, but most often when we see a single kingfisher at the lake, it's an orange-belted female. A male is usually in pursuit of a female, not there on his own. The winter ducks were out in what passes for force in these sad days: a dozen Common Goldeneyes, mostly brown-headed gray females but a few dramatic black and white males with their full-moon cheek patches, along with enough Ruddy Ducks and Bufflehead for the season and a paltry couple of hundred scaup (all or mostly all Lesser Scaup as far as we could tell). We also had several Eared Grebes and more Horned Grebes – reversing the usual ratio – for easy comparison of the two tiny and easily mixed-up species.

Under the redwood trees by the playground, we got a good look at a Hutton's Vireo. Then a Ruby-crowned Kinglet showed up in the garden, making the difference clear: Their markings are almost identical, but if you get a good look at one of them, it's probably a vireo. Vireos sit and look around, and they fly predictably from place to place. Kinglets, by contrast, are always moving, and they're *fast* – they give their wings a fluttering flap, then you realize that they teleported elsewhere while you were looking at where they weren't anymore.

The garden gave us a Hermit Thrush again this month – always a welcome sight – and an American Robin for the first time since August. (Robins feel like they ought to be considered everywhere, all-the-time birds, but around here they're really not.) And the crowned sparrows, which are definitely winter and not all-the-time birds, are well and truly back: We saw both White-crowned and Golden-crowned Sparrows again this month and expect to see them through next March.

It was hard to compete with all this, but my favorite sighting of the day was a juvenile human, a girl of 10 or 11 eagerly watching and making notes of what she saw. Good to see the joy spreading into a new generation.... All told, we observed 47 species (if you include that white dove, which I do but eBird, a widely used online listing service, wouldn't), a several-year record for the count – 46 is the best we've seen in about a decade's worth of Novembers, and the total for the month has fallen to 40. So it was – even without the debatable bird – a very good day at Lake Merritt, where every day brings goodness of its own.

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 Bird Alliance. Use this link below.

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

Community Water Quality Report

Thank you to RNCF Volunteers, New Voices Are Rising Fellows, Achieve Scholars, the ORC! (Oakland Rowing Club), , Laney College students and [Rotary Nature Center Friends](#).

Water quality was tested at the LAKE MERRITT BOATING CENTER DOCK on December 9th, 2023 at 12:30 p.m. PST

Depth 1.3 meters

Water Clarity >1.3 meters (clear, clear is normal for this season)

Temperature: 12.1 degrees Celsius at the top/11.9 degrees at the bottom (53.8 degrees Fahrenheit/ 53.5 deg Fahrenheit)

Normal for this time of year.

Salinity 29.1 parts per thousand (ppt) top/28.9 ppt bottom

Very slightly stratified (top > bottom)

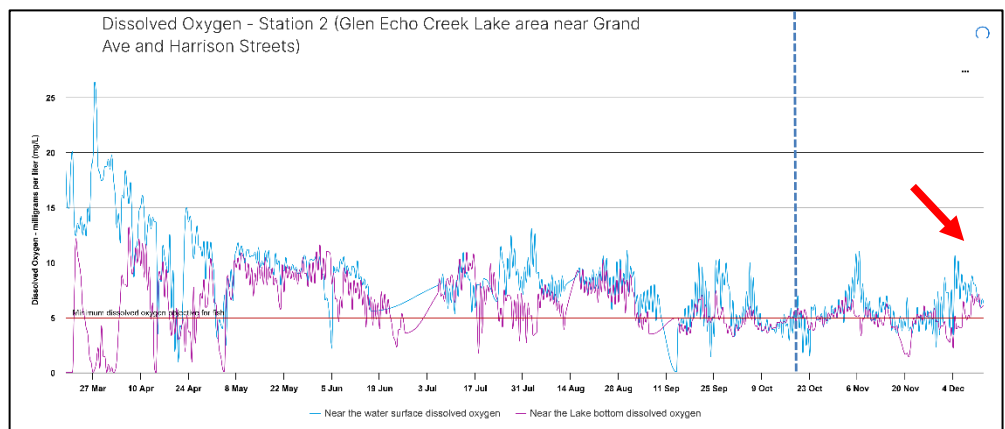
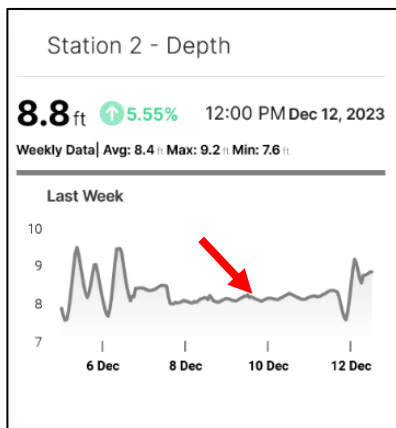
pH: 8.01/7.96 top and bottom (normal)

Dissolved Oxygen (D.O.) 9.58 parts per million (ppm) at the top and 9.21ppm on bottom. (Meets EPA standard of 5 ppm).

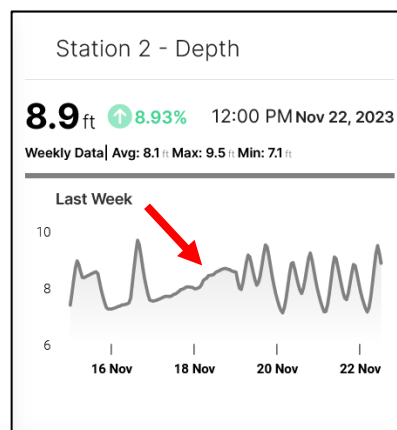


New Voices Are Rising RNCF Fellows

MORE WATER QUALITY DATA



Thanks to the city of Oakland and LakeTech for providing public access to data collected at the three monitoring buoys. At left, we see water levels indicating that the tide gates were closed when the Fellows tested the water on December 9th (arrow). A year's worth of dissolved oxygen data at right shows that the surface is generally more oxygenated than the bottom. The dashed line indicates date the oxygenation system was activated.



Thanks to the Oakland Rowing club for helping us collect water quality data on November 19th (charts above). At left, we see the locations of the three monitoring buoys. In the center chart we see that the tide gates were at least partially closed. In the map at right the green squares show that dissolved oxygen met the EPA standard of 5 ppm at the top, while red squares indicate oxygen below standard at the bottom.

A TMDL CAN SAVE LAKE MERRITT

An editorial by Dr. Richard Bailey – November 7, 2023

A what? A TMDL can lead to, and (unlike mere plans and studies) actually require solutions to Lake Merritt's problems. But just what do those letters stand for? Grammatically speaking, they stand for Total Maximum Daily Limit, a term applied to restrictions on pollutants. The term refers to a process by which solutions to severe water quality problems are explored, developed, and implemented.

The U.S. Environmental Protection Agency recommended a TMDL to address our estuary's perennial low oxygen problems waaaaay back in 1999. During the ensuing years, there were deadlines for completion of the process, which must lead to removal of the Lake from the federal list of impaired bodies of water. Lake Merritt is included in that list because of low oxygen, excess nutrients, and trash. The last deadline was 2019. EPA has since been silent.

The problem was brought to a head by the massive, 2022 zero oxygen fish kill, which triggered talk of legal action to enforce the Clean Water Act, and created interest by the SF Bay Regional Water Quality Control Board (which is responsible for enforcing water quality regulations). The Water Board has now assigned staff and started the Lake Merritt low oxygen TMDL process. Stakeholder engagement is expected to begin in the first quarter of 2024.



What Might Be Recommended? Possible outcomes of the TMDL process could lead to long overdue dredging (see October Tidings article) or a Lake wide aeration and/or oxygenation system. Enforceable, hourly controls on tide gate operation have been suggested, as have constructed wetlands and major reductions in nutrients entering from the watershed. What we don't need is another plan to do another study.

The process (with our own dates) should be:



Headwaters Soil & Water Conservation District

But How Can It Be Funded? Presently, funds have only been allocated for a two-year monitoring project. No capital improvement funds have been set aside to implement recommendations that are expected to be developed following the pilot study. Funds from the Measure DD bond campaign in 2002 are all but tapped out and spoken for, but there could be another round of bond sales, which could conceivably be dedicated to capital improvements needed to get the Lake off the bad water list. Other suggestions have been funds from Measure Q (passed in 2020) or from parking meter money from meters around the Lake. Other major sources should be major companies that are headquartered in Oakland (Kaiser, Clorox, Oracle, and several, large foundations that could provide grants, *if they are interested*). If Oakland can find funds for a ballpark, surely it can fund needed improvements to meet federal water quality requirements.

Your Involvement: When the stakeholder process begins, chime in. But first, educate yourself about the issues and implementable, efficient, and affordable solutions. Workability, like hope, must be earned.

<https://headwatersswcd.org/tmdl/>
<https://dnr.wisconsin.gov/topic/TMDLs/LowerFox/index.html>

HOW FAR CAN THE CAN BE KICKED?

An editorial by Dr. Richard Bailey – November 25, 2023



In 1999, the U.S. Environmental Protection Agency (EPA) declared that the waters of Lake Merritt were “impaired” due to low oxygen and placed our Lake on the national 303(d) list of impaired bodies of water. Bodies of water on this list are required to develop a TMDL (actions to restore clean water). That was 24 years ago.

For the next fifteen years or so, in response to this listing, a multi-agency committee met to develop recommendations that would lead to removal from this list, but a formal TMDL process was never initiated, or demanded by EPA. Deadlines came, and deadlines went. In May 2022, EPA approved a report that still listed the deadline as 2019, which had already passed.

2023: The CA Regional Water Quality Control Board has finally begun the TMDL process for oxygen at Lake Merritt. But in the latest “2024 California Integrated Draft Report” which the CA Water Resources Control Board will meet to consider in February 2024 (1), *the TMDL deadline is proposed to be 2037; fourteen years from now!*

The can is obviously being kicked down the road, but how far can it be kicked? The legal answer is that if the process has begun and is continuing, the regulations are being met. Unfortunately, the process did not save the thousands of fish that died at the Lake in the great fish kill of 2022.

Why the Delay? Could it be that there are too many impaired waters? How many bodies of water are listed on the 303(d) list? The Integrated report lists 5,916 individual bodies of water, and that is just for California alone. There you have it; too much polluted water and not enough staff. But some waters are being addressed, and actions to improve impaired areas are being developed. Sadly, the process is slow and very time-consuming.

Now What? The comment period for the ridiculous 2037 deadline is closed. But the draft report must still be revised (by January 4) based on submitted comments, and considered for adoption by the State in February. Those wishing to express their displeasure at kicking the can down the road for fourteen more years can address the State Board at the February meeting.

If you do contact the Regional and State Water Boards, tell them to stop kicking the can; 24 years is long enough, and the can is falling apart. Also tell them that the committee must develop and implement real, on the ground improvements that will improve oxygen conditions enough to get Lake Merritt off the 303(d) list. These improvements should include dredging the entire Lake, a lake-wide oxygenation system, perhaps a wetland to remove nutrients, storm drain filters (including curb inlet filters and nets that can be lowered across the mouth of Glen Echo Creek during storms), enforceable, hourly controls of the tide gates, and major reductions in nutrients entering from the watershed.



Purchased from CartoonStock.com

Removal of Lake Merritt from the impaired list of waters will not only avoid potential penalties, it will also improve property values, favor wildlife, and put the can to a better use.

https://www.waterboards.ca.gov/water_issues/programs/water_quality_assess

COMING UP!

Lakeside Chat #38 from 7 -8 pm on January 5th, 2024: “**MOST DELICIOUS POISON: The Story of Nature’s Toxins — From Spices to Vices**” with Dr. Noah Whiteman, UC Berkeley Professor of in the Departments of Integrated Biology, Molecular and Cell Biology and Director of the Essig Museum of Entomology. Dr. Whiteman will explore connections between the evolved chemical defenses of plants and other organisms and our cravings, medicines, addictions and social life.



REGISTER => Use the QR at right. The zoom link will be sent to you by email.



This month’s oddest trash find!

Please direct questions and comments to The Tidings Editor, Katie Noonan, at ktnoon@aol.com.

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