

FALL/
WINTER
2020



WEQUAQUET LAKE PROTECTIVE ASSOCIATION, INC.

People that care about Lake Wequaquet

ANNUAL MEETING POSTPONED UNTIL 2021

Due to ongoing COVID-19 concerns, the WLPA Board has canceled plans to hold a 2020 Annual Meeting. In recent years, a June meeting has been scheduled with the Wequaquet Lake Yacht Club as our venue. The membership will be informed when the 2021 Annual Meeting plans are solidified.

Until the next annual meeting, Acting Board Officers are: President, Mike Falkson, Vice President, Alan Horvitz, Secretary, Mary Ann Anthony, and Treasurer, Frank Ward.

Acting Directors are; Paul Canniff, Joe Falkson, Gale Klun, Richard Kramer, Gail Maguire, Armand Menegay, and Ahvi Spindell.

A Word from the President



Hi All,

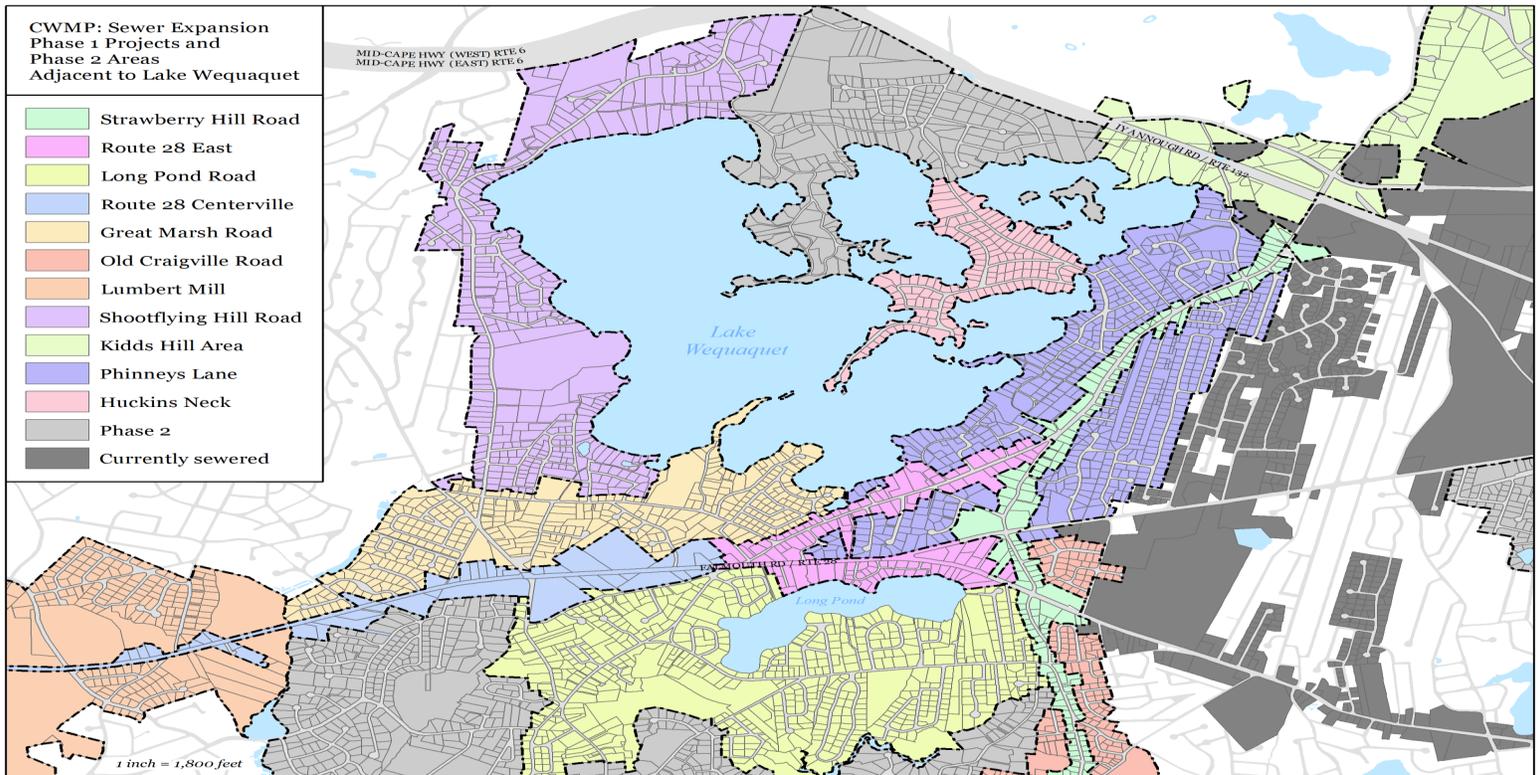
The lake seemed busier than ever this summer with boaters getting a break from the pandemic stress. The WLPA Board would like to send out a special thank-you to First Responders. Your dedication and courage these past months has not only saved lives but made life go on.

We were relieved that cyanobacteria did not cause our beaches to be closed this summer. The drought and other factors may have contributed to there being fewer bacteria. It's possible that better lake side property management played a part in keeping bacteria numbers down. However, the best safeguard to Wequaquet's water is getting the sewer installed. A progress report is included in this newsletter.

Best wishes to all for a safe, happy, and healthy new year.

Mike Falkson

Comprehensive Wastewater Management Plans for Wequaquet Area



CWMP progress report on page 2. Report focus on Wequaquet and does not include the entire wastewater plan for Town of Barnstable.

Please remember to visit us at: WWW.WEQUAQUETLAKE.COM

COMPREHENSIVE WASTEWATER MANAGEMENT PLAN UPDATE

Report Focused on Lake Wequaquet Area

Special thanks to Town Engineer, Griffen Beaudoin, for assisting WLPA with this article.

The Department of Public Works (DPW) Director Dan Santos often updates the Town Council during their second meeting of each month. Video is available on the Town Council section of Town's website. Presentations are also available in the DPW section of the Town's Website. As an example see the 9/17/20 presentation.

As we all should know by now, most of the properties around Lake Wequaquet are included in Phase 1 of the CWMP and are scheduled to receive municipal sewer within 10 years.

The Town appears to be progressing as planned:

Survey work for portions of Phase 1 is underway and will continue for several months. Most of us have seen the small white surveying squares painted in the road. The squares are part of the first step in documenting and mapping existing conditions which will be used for the development of sewer design plans. Test borings have been completed in the Route 28 area. Design work is progressing and is being coordinated with the Vineyard Wind design activities.

Portions of construction activity, in conjunction with Vineyard Wind, could begin as early as the spring of 2021. The first project will be "Strawberry Hill", as labeled on Figure 1 (reference to map on front page), including the placement of the sewer infrastructure along the Vineyard Wind duct bank route, including within Phinney's Lane from Wequaquet Lane to Route 132. The second project (labeled Route 28 East on Figure 1 (front page map)) will include the necessary pump station at the intersection of

Route 28 and Phinney's Lane, sewers on Route 28 and the remainder of Phinney's Lane, and sewer force mains in Route 28 which will connect to the existing treatment plant. Neighborhood projects should follow and are likely to begin on the east side of the lake (due to relative proximity to existing sewer infrastructure) and work to the west.

Immediate next steps include the Town Council setting fiscal policy to be used for sewer costs, including but not limited to, answering the following questions:

- What assessment method will be used for allocating costs?
- What limit, if any, will be set on the maximum amount for a sewer assessment?
- What interest rate will be charged on sewer assessments?
- What amortization periods will be used for sewer assessments?
- When will a property abutter be required to hookup?
- Will bond amortization be authorized beyond 20 years?
- Should the town pursue special legislation to create a revolving loan program?
- If so, what amortization period and loan rate?
- Should the town administer a connection program?

These issues and many more are currently being discussed by the Town Council, stay tuned and stay involved.



Leaf and Pumpkin Litter- Lake Wise Fall Clean up

"Leaves release phosphorus when they break down. If left on the street, they make a phosphorus rich tea that washes down storm drains and directly into our lakes. "It takes one pound of phosphorus to produce 500 pounds of algae in our lakes," states Phil Gaebler, Water Resource Specialist city of Madison. If leaves are not raked and removed, other prudent solutions include: mulch mow leaves, compost them, rototill into gardens, or make a leaf blanket to cover your winter garden.

"Pumpkins if left to rot or are smashed on the roads, will cause the same problems as leaves," writes Mina Sinai in Recycle Nation (Nov. 2017). She suggests that pumpkins be added to compost, chopped up and buried, cut up and fed to wild birds, left (away from your house) for animals to consume, used as fall planters, or, she suggests, eat them yourself.

STATUS OF LAKE WATER AT TEST SITES

Go to the Town of Barnstable Website at;
<https://townofbarnstable.us/Department/healthdivision>

Pet advisories, Warnings, and Closures
of all Barnstable Beaches are listed

Go to the Association for the Preservation
of Cape Cod Interactive Map at:

<https://www.apcc.org/cyano/>

Test results for cyanobacteria in all
Cape Lakes are posted

RESULTS OF WEQUAQUET CYANOBACTERIA MONITORING 2020

The 2020 season in Lake Wequaquet, Barse and Gooseberry saw lower levels of cyanobacteria compared to 2019.

- 9 sites monitored
- No closures
- Barse Pet Advisory 6/19/20-7/7/20
- Cyanobacteria present - two dominant species:
 - ➔ Dolichospermum lemmermannii
 - ➔ Microcystis aeruginosa

Phycocyanin is used to measure the biomass or amount of cyanobacteria in the sample. Residents often ask me - **What can we expect next season?**

Cyanobacterial blooms are hard to predict year to year. Weather can make a big difference! Cyanobacteria cells have a life cycle, which depends on many factors including water temperature, nutrient availability, light intensity and wind. Unfortunately, if the conditions are right - blooms can occur. Cyanobacterial blooms are hard to forecast just like hurricanes and mosquitoes- they are part of the natural world and the best strategy is to use caution and be aware of the situation.

Another question I frequently hear is - **What can we do to treat the pond?**

The first thing to think about is that a pond is not a swimming pool which can be shocked or treated with chemical for quick results. A pond is a complex balance of life and nonliving components interacting creating important balances. Cyanobacteria indicate that the pond is out of balance.

Sadly, there is no quick treatment for cyanobacteria. Watershed management is the most important approach, and it takes time.

Heavy rain in 2019 carried a lot of nutrients into the lake from roads, lawns and bare shorelines. It is vital to continue helping the pond even if things appeared better this season. Shore line efforts to reduce nutrients entering the pond remain an important way to help reduce blooms. Moreover, whether you live near the water or miles away your actions matter.

If anyone is interested in being on the Town of Barnstable's Cyanobacteria e-mail alert list, or you have questions about the Town's Cyanobacteria monitoring program, please feel free to contact me:

Karen Malkus
Town of Barnstable Health Division
Coastal Health Resource Coordinator
karen.malkus@town.barnstable.ma.us
Phone: (508) 862-4641

Amber Unruh Joins DPW Water Quality Program

The Town has hired Amber Unruh as the new Senior Project Manager for Special Projects at the Department of Public Works. She is involved in the Town of Barnstable's Comprehensive Wastewater Management Plan (CWMP), coordinating the annual estuaries and PALs water quality monitoring, managing the Shubael Pond water quality monitoring and management plan, storm water improvement projects, and applying for various grant funding. The water quality program coordinated by Amber is different from the cyanobacteria and E. coli monitoring performed by Karen Malkus at the Division of Health. The water quality monitoring performed by Amber and volunteers for lakes and ponds focuses on sampling for nutrients, chlorophyll-a pigments, dissolved oxygen, and water clarity to determine overall pond health. While the nutrient monitoring and cyanobacteria monitoring efforts are coordinated separately, the Town DPW, Health Division, and Conservation Commission work together to ensure best management of our freshwater resources. Beginning in April 2021, the Town of Barnstable, coordinated by Amber, will begin sampling ponds and lakes twice annually, once in the spring and once in the fall. In addition, Amber plans to engage pond abutters to begin a more regular sampling of the pond dissolved oxygen, temperature, and water clarity during the summer months. More frequent testing will be done throughout the summer with the help of volunteers including pond abutters. People interested in participating in the water sampling program are invited to reach out to Amber at the Town of Barnstable Department of Public Works or email: Amber.Unruh@town.barnstable.ma.us.

More Testing Information to be continued in the 2021 Spring/Summer Newsletter



LAKE RELATED BULLETINS

APCC Receives MET Grant for Cyanobacteria Monitoring

The Association to Preserve Cape Cod is the recipient of a \$49,812 grant from the [Massachusetts Environmental Trust](#) to monitor and evaluate the effects of harmful cyanobacteria blooms in Cape Cod's freshwater ponds. The funding will assist in APCC's efforts to assess the threat of cyanobacteria blooms on the health of aquatic ecosystems and at-risk fish such as river herring, as well as the impacts of toxic blooms on public health. (From the APCC Newsletter)

Town Officers Meet with WLPA Directors

On May 29th, Directors Frank Ward and Alan Horvitz were invited to join a Zoom meeting whose subject was Lakes and Ponds. Several Town Officials attended the meeting that was chaired by Eric Steinhilber. Subjects particularly pertaining to Wequaquet Lake included an update on the Sewer Project, fertilizer run off, road run off, drain pipes flowing into the lake, and fanwart removal.

Buoys:

During the September 23, 2020 (Zoom) Board meeting, Directors noted that buoys drifted and some sank last summer. Plans are to again work with the Harbor Master and the Town to accurately update buoy placement and maps.

Fanwart Update:

New England Aquatic Services conducted DASH (Suction Harvest) on the invasive weed again this year. Financing was allotted for 12 days (7 hours per day) of work on Bears Pond and 5 days for Wequaquet Lake. Two suction harvesting boats were used. The NEAS report states that 490 bags of fanwart were removed. Each bag holds about two 5 gallon buckets. The report states that the areas where weeds were removed in 2019 showed much reduced density of plant growth. The company recommends that next year's project provide more days for work to allow more through harvesting, continue reducing fanwart growth and to remove heavy growth seen in the eastern cove of the lake next to Gooseberry Island. It is suggested that divers visually confirm fanwart locations earlier in the season.



The Town recommends rinks and cranberry bogs for the safest skating. Last years' mild winter rarely allowed ice to form on Wequaquet thus limiting most winter water sports. If this upcoming winter is much colder causing Wequaquet to freeze over, the following article by Magee Walker provides tips to consider before going on the ice.

FIRST AND FOREMOST, MEASURE THE ICE

There's no way around it. While there are many visual cues that can help you determine whether or not it's safe to step out onto the ice, the safest way to find out is to measure the stuff.

There are a few tools you can use to measure the ice. An ice chisel can be stabbed into the ice until it penetrates all the way through. Then, a measurement of the rod can be taken to determine the thickness of the ice. You can also use an ice auger to drill a hole through the ice, then measure the depth with a measuring tape — gas, electric, and hand augers are all options here. A cordless drill with a wood auger bit can also drill a hole through the ice.

WHAT IS A SAFE THICKNESS?

Many people believe anything less than 3 inches should be avoided at all costs. 4 inches can support activities like ice fishing, walking, and cross-country skiing. 5 inches can support a snowmobile or an ATV. And while these guidelines are generic, ice conditions vary and the above is for newly formed ice. Make sure to read more on ice thickness and if any doubt about safety do not go on the ice.

Measuring in one place is not enough. Take the thickness measurement in several different areas to ensure that the entire area is safe. Ice thickness can vary, even over a fairly small area — especially over moving water.

ASSESS THE AREA VISUALLY

A visual assessment can help supplement your measurement, and can also help if you're relying on someone else's measurements.

Watch for dangerous signs like cracks, seams, pressure ridges, dark areas (where the ice is thinner) and slushy areas — even slight slush signals that the icing isn't freezing at the bottom anymore, which means it's getting progressively weaker.

THE COLOR WHEEL

Check out the color of the ice. Clear, blue or green ice might be thick enough to skate on. White ice typically has air or snow trapped inside, weakening it. Dark ice might be an indication that the ice is quite thin—probably too thin for skating.

THE FRESHER, THE BETTER

New ice is typically stronger than older ice. As time passes, the bond between ice crystals decays even in very cold temperatures.

When spring hits, find a man-made rink. Once the spring thaw begins, ice weakens considerably. It can be tempting to head out for one last skate in the event of a late-season frost, but it's safest to just say no. Even if ice fits the measurement criteria, it can still be very dangerous.

Above excerpt from "Eight Safety Tips for Playing On Frozen Lakes" Author: Magee Walker on "Shoptheeclymb.com" website