

SPRING/  
SUMMER  
2021



# WEQUAQUET LAKE PROTECTIVE ASSOCIATION, INC.

*People that care about Lake Wequaquet*

## WLPA Annual Meeting

The Annual WLPA Meeting is scheduled for Saturday, September 11 at 9:00 a.m. Meeting location is Wequaquet Lake Yacht Club

## A Word from the WLPA Vice President

Hello everyone,

Spring fever is in the air and we are all looking forward to enjoying our beautiful resource, Lake Wequaquet. As the WLPA's mission, we work to keep our lake both clean and safe. We find ourselves in a situation now that requires each of us to participate in this goal. In this newsletter you will read about the exciting new sewer project that is moving forward, a necessity for us to have clean water in the future. We hope to have the support of all in keeping this project on track and under our control rather than that of some Federal agency or lawsuit. Please take a moment and send an email to [council@town.barnstable.ma.us](mailto:council@town.barnstable.ma.us) and show your support for not only the sewer project but also Eric Steinhilber's amendment to change the sewer assessment from \$17,000 to \$10,000.

Discontinuing the use of all lawn fertilizers by our landscapers as well as ourselves, is extremely important in maintaining safe water quality. This combined with each of us controlling our own runoff from our properties into the lake is what is needed to help avoid another summer of no swimming as well as children and pets being restricted from entering the water at all.

We are at a pivotal point in regards to saving our wonderful lake and failure cannot be an option. This resource must be saved as well as our property values. I thank you in advance for your support and willingness to champion this noble cause.

*Sincerely, Alan Horvitz, Vice President WLPA*

## Wanted: WATER TESTING VOLUNTEERS

Amber Unruh, from the Barnstable Department of Public Works, will be sampling ponds and lakes twice annually, once in the spring and once in the fall. To supplement this bi-annual data collection, she is seeking volunteers from around Lake Wequaquet, Bearses Pond and Gooseberry Pond to participate in more regular sampling of the deepest areas of the pond during the summer months. Interested volunteers will collect data for dissolved oxygen, water temperature, and water clarity. This additional summer water quality data will be aggregated with long term data sets to track seasonal and inter-annual changes in water quality. This water testing differs from the Health Department regular testing that is primarily designed to monitor bacteria and cyanobacteria levels at the beaches. High bacteria can threaten human and animal health.

Volunteers do not need previous experience to participate. Volunteers will need a boat, life jacket, anchor, and preferably a friend to conduct the sampling. A sampling map, data sheets, dissolved oxygen meter, and Secchi disk will be provided on loan and will be returned in a couple of days. Instruction will also be provided.

\*\* For those interested in participating in water testing, please contact Amber at the Town of Barnstable DPW or email [Amber.Unruh@town.barnstable.ma.us](mailto:Amber.Unruh@town.barnstable.ma.us)



WLPA Board members, Frank Ward and Gail Maguire accompanied DPW Project Manager, Amber Unruh on April 20. In photo Maguire is collecting water samples that will be sent to Tufts for various water quality tests.

*Photo by A. Unruh*

**FIND INSIDE SPECIAL FEATURED ARTICLE:**

***THE NEED FOR AND COST TO HOMEOWNERS OF A BARNSTABLE SEWER SYSTEM***

# AKC WARNS ABOUT DOGS AND BLUE GREEN ALGAE ..

## Tips to Avoid Blue-Green Algae Poisoning:

- Keep your dog leashed around bodies of water, especially if the water appears dirty, foamy, or has mats on the surface of the water.
- Don't let your dog drink out of ponds and lakes
- Harmful algae blooms, which can be blue, vibrant green, brown or red, are sometimes mistaken for paint floating on the water. Be aware the toxins aren't always visible.

Toxic algae often stink, sometimes producing a downright nauseating smell, yet animals may be attracted to the smell and taste of them, according to the EPA.

## What Do I Do if I Know my Dog Has Been Exposed to Blue-Green Algae?

Rinse your dog off immediately with clean water if he comes in contact with blue-green algae. Call your veterinarian immediately.

## Signs/Symptoms Your Dog May Have Ingested Blue-Green Algae:

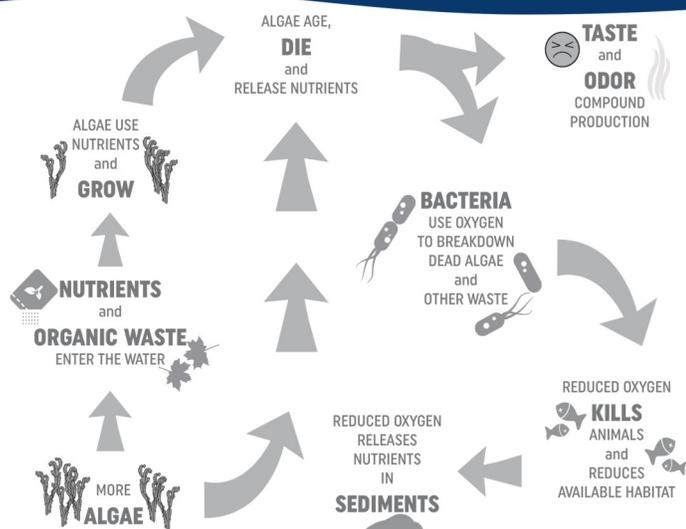
**Symptoms**, which usually arise anywhere from 15 minutes to several days after exposure may include:

- Diarrhea or vomiting
- Drooling
- Neurological signs such as:
- Weakness
- Disorientation/confusion
- Collapse/unconsciousness
- Seizures
- Breathing difficulties



If any of these signs occur, contact your vet immediately. If caught early enough, your vet may be able to flush out the toxins before your dog becomes completely affected.

## What Happens When Fertilizers & Organic Waste Enter Our Lakes & Streams



## “One pound of phosphorus can produce 300-500 pounds of algae.”

(The following is reprinted courtesy of Wisconsin Lakes Partnership newsletter Vol. 28 Issue 3)

While it is not known who first coined the (above) adage, the rationale for it is laid out in a section titled Effects of Phosphorus Concentration on Lake Productivity (Second Edition, page 285). A main reference for the section is J.R. Vallentyne's book *The Algal Bowl – Lakes and Man* (Ottawa Department of the Environment, 1974).

According to J.R. Vallentyne, a 500 pound “batch” of wet algae requires: 1 pound phosphorus 7 pounds nitrogen 40 pounds carbon. Since there is usually more than adequate levels of nitrogen and carbon in lake and river water, for every pound of phosphorus added, another 500 pound batch of wet algae can be produced. Since 500 pounds is the theoretical maximum that can be produced, the range of 300 to 500 pounds is typically used when the adage is quoted.

# "For water's sake, don't fert the lake!"

# BARNSTABLE NEEDS SEWERS

By: Frank Ward

## BACKGROUND

The State has determined Barnstable has a nitrogen loading problem negatively affecting our estuaries and it must be corrected. The State and the Town have studied this issue for many years resulting in the **Barnstable Comprehensive Wastewater Management Plan (CWMP)**. Town Council approved the CWMP in November 2019 and the plan is moving through the State approval process as anticipated.

The causes of the water issues are believed to be: 80% septic/urine and 20% road runoff and fertilizer. Reducing road runoff and fertilizer will help, but the ultimate solution to reduce the nitrogen loading is to bring sewer to an additional almost 12,000 properties. Barnstable has roughly 25,000 properties generating septic waste and currently approximately 3,100 are connected to sewer.

The Town spent years developing the CWMP and it will continue to evolve as needs change and technology improves. The CWMP is a 30-year plan with three 10-year phases. The total cost is currently estimated to be close to \$1.5 billion, potentially payable over 60 years.

Presently, little Federal Funding is available and State support is currently in the form of low interest loans. If new sources of funding become available, Barnstable will certainly pursue them aggressively.

Barnstable's financial plan is to address funding in 5-year increments. Each 10-year phase brings sewer lines to thousands of homes.

A map of each phase is on the Town website (<https://town.barnstable.ma.us/>). Each phase is broken into multiple projects and each project will be reviewed and approved separately.

## WHAT WILL SEWERS COST?

There is a lot of incorrect information being discussed around town. Let me try to put the numbers in perspective for you.

### Currently the Town plans to spend almost \$1.5 billion over the next 30 years:

The major components (in rounded numbers) are:

- \$650 million for Project Costs/Collection Systems (pipes/pumps in the streets)
- \$150 million for Treatment and Disposal (includes upgrade to the treatment plant)
- \$100 million for Project Management (added resources needed for implementation)
- \$300 million for financing costs (interest on the bonds used to pay for the project)
- \$250 million for inflation over 30 years (costs are expected to rise over 30 years)

The Town plans to update these estimates every 5 years.

## WHAT ARE THE PROPOSED FUNDING SOURCES FOR THE \$1.5 BILLION OVER 30 YEARS?

Unless Federal and State Funding sources change, the current Town Staff funding recommendation includes 3 funding sources:

### Over 50% should come from:

1. Specifically aligned revenues (hotel/motel room tax, short term rental tax, meals taxes etc.) already allocated to pay for clean water. These revenue streams are currently ongoing with high probability of continuing.

### The remaining 50% needs to come from:

2. **The Proposed Sewer Assessments** to be assigned to properties receiving sewer. This is subject to Town Council discussion and approval, likely to happen on May 20, 2021
3. **A General Fund Contribution** to be paid by all Barnstable property taxpayers because we all receive value from clean water. This contribution could replace other planned spending or a potential override of some sort allowing for additional general taxation. Town Council will likely determine 2 above first and then act on 3, which may require a town wide vote.

# BARNSTABLE NEEDS SEWERS

By: Frank Ward

## HOW SEWER ASSESSMENTS WILL AFFECT YOU AS A HOMEOWNER RECEIVING SEWER.

As a homeowner receiving sewer service you will be responsible for **3 costs**:

**Sewer Assessment fee:** cost to bring pipes into your neighborhood

**Connection fee:** cost to run a pipe from your house to the pipe in the street.

**Annual Waste Removal charge:** cost to treat your waste at the treatment plant, which averages \$400 per year.

Town Staff (Town Manager Ells, Finance Director Milne and DPW Director Santos) have recommended a Sewer Assessment Ordinance and funding plan for Town Council discussion and action, highlighted as follows:

Have the Town provide single source management for all in street sewer construction and pipe connection in yard to each home. (This includes old septic system abandonment costs and any grinder pumps needed for the new sewer connection.)

Utilize the financial strength of the Town to allow property owners to repay assessment and connection costs over a 30 year time period with very low interest (2% over Town borrowing rate), all while requiring no credit check.

### EXAMPLES:

The current cost estimates using a half acre lot example are:

- **Assessment Fee:** to bring main pipe lines into neighborhood would be capped at a maximum cost of \$17,000. Payable over 30 years as \$972 per year.
- **Connection fees:** ranging from \$4,200 for a level line in the front yard, to \$7,900 for a below grade back yard connection requiring a pump. Payable over 30 years as \$242 to \$455 per year.
- **Annual Waste removal** costs average \$400 per year per parcel.

**Total annual cost for a half acre lot is estimated to be \$1,827 or less per year depending on your lot specifics. (Please see chart below.)**

(Note: if one has a very large lot and needs an additional 100 feet of pipe to reach the home, today's estimate would be an additional \$5,000 cost payable as \$288 per year over 30 years.

*So, in a chart format, the estimated cost range would be:*

Type of Cost	Total Cost		Range	Annual Cost		Range
Assessment	\$5,000	to	\$17,000	\$288	to	\$972
Connection	\$4,200	to	\$7,900	\$242	to	\$455
Annual Waste				\$400		\$400
<b>Totals</b>	<b>\$9,200</b>	<b>to</b>	<b>\$24,900</b>	<b>\$930</b>	<b>to</b>	<b>\$1,827</b>

*Additionally, on 4/29/21 our Precinct 2 Town Councilor Eric Steinhilber indicated he would offer an amendment to the above recommendation reducing the \$17,000 assessment cap to \$10,000. The estimated cost figures would then be:*

Type of Cost	Total Cost		Range	Annual Cost		Range
Assessment	\$5,000	to	\$10,000	\$288	to	\$576
Connection	\$4,200	to	\$7,900	\$242	to	\$455
Annual Waste				\$400		\$400
<b>Totals</b>	<b>\$9,200</b>	<b>to</b>	<b>\$17,900</b>	<b>\$930</b>	<b>to</b>	<b>\$1,431</b>

Homeowners may be eligible for a 40% income tax credit up to \$6,000 offered by the State of Massachusetts to reduce the cost of connecting to sewer, but that is a topic for future article.

**So, for likely less than \$1827 or \$1,431 per year, one has:**

- A permanent wastewater solution
- Increased home value
- Roads get repaved in the process.
- Clean water in our estuaries and lakes & ponds
- Clean drinking water

Once the Town Council has voted on the Assessment Ordinance they should be moving on to the General Fund Contribution.

### **These are reasonable numbers for clean water.**

This benefits all residents, businesses, and visitors.

We do not have a choice; we must clean up our water resources.

The cost of clean water must be shared equitably by all.

**Please stay involved, talk or write to the Town Councilors before May 20<sup>th</sup> and support these recommendations.**

# Rainscape Your Lawn

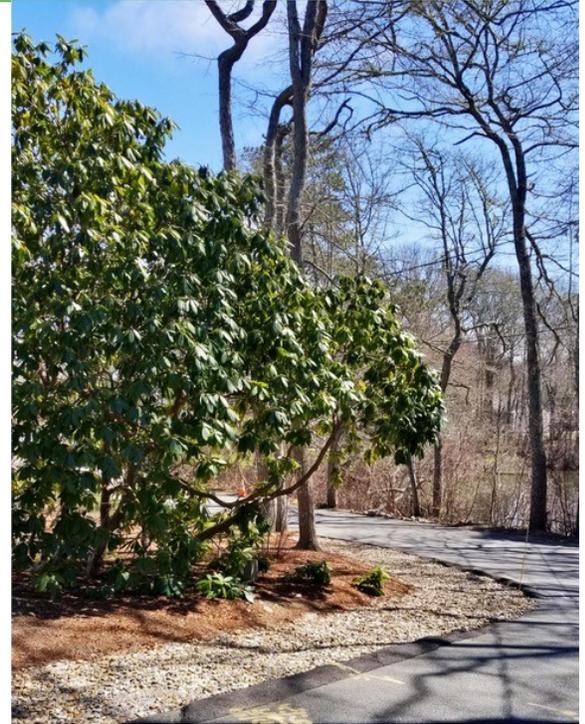
The refreshing period after a storm has passed always leaves in its wake a certain energy about the air. Rain is also a natural and welcome part of the process for keeping plants happy and sustaining wildlife. But unless properly managed, the excess water that runs down driveways and sloping lawns can have a negative impact on yards and local waterways and watersheds. When it rains, water runs off of roofs, sidewalks, driveways, roads, parking lots and other impervious surfaces. The resulting runoff picks up and carries with it contaminants such as fertilizers, pesticides, de-icing salts, bacteria from animal waste, and petroleum products. Ultimately this cocktail of contaminants ends up in local streams, rivers, lakes and other bodies of water. However, there is an alternative approach to managing stormwater runoff and lightening the load on our local ecosystems.

## LANDSCAPING FOR RAIN

The benefits of rainwater harvesting are multifaceted and include improved water quality, soil infiltration, and wildlife habitat along with reducing your community's carbon footprint. A variety of approaches can help manage stormwater runoff and lighten the load on watersheds. Collectively called "rainscaping," a term that evolved in the Mid-Atlantic region in the late 1990s, these techniques mimic natural processes by helping capture, divert and store rainwater for later use.

Rainscaping techniques range from straightforward solutions that include redirecting downspouts to garden beds, setting up rain barrels and cisterns, installing a French drain, digging a dry well, and planting a canopy of trees and shrubs, to progressive approaches such as rain gardens and rainwater harvesting water features.

A rain garden can be a low-maintenance option for managing stormwater runoff in your yard.



One form of 'rainscaping' is a rain garden. This rain garden along Holly Point Road is not only pretty but also protects the lake.

## RAIN GARDENS

More like a garden in a saucer, a rain garden is a natural or artificial depression usually ranging from 3 to 6 inches deep. Its primary function is to slow down runoff, store it temporarily, and release it gradually so it has time to spread out and soak in. A rain garden also filters sediment and pollutants while adding color and interest to the home landscape.

Excerpts from: [Kris Wetherbee | For The Oregonian/OregonLive](#)

Updated Jan 09' posted Mar 04, 2017



## RAIN BARRELS ON SALE FROM THE ASSOCIATION TO PROTECT CAPE COD

Collect rainwater from your gutter downspout into a 55 gallon rain barrel. Rain barrels can be hooked up in tandem for greater water storage. These rain barrels are made from repurposed food barrels that would otherwise be destined for the landfill. In our book, that's a twofer!

At \$79, they are a bargain. Especially because your purchase will be delivered directly to your door, free of charge.

Purchase online at [upcycle-products.com](http://upcycle-products.com)

(Please be certain you are ordering from the webpage with the APCC logo.)

Your choice of black, gray, terracotta, and blue. The barrel comes pre-assembled.

Your purchases will help support the Association to Preserve Cape Cod and its efforts to preserve, protect and enhance the Cape's natural resources

Questions on the program, contact [kandres@apcc.org](mailto:kandres@apcc.org) or ph (508) 619-3185

Questions on the products, contact [www.Upcycle-Products.com](http://www.Upcycle-Products.com) or ph (815) 735-9583



**FAN WORT UPDATE:** DASH (suction harvest) will be the fan wort treatment in Bearses Pond for summer 2021. The Town has provided additional funding to allow more hours for the work this year.

# Big Bold Bald Eagle facts from US Fish and Wildlife



Bald Eagle grabs a northern pike on Bears Pond.

Photo by Heather Swenson

Adult bald eagles have the dark brown body and distinctive white head and tail. In contrast, juvenile bald eagles have mottled brown and white plumage. They gradually acquire the adult plumage as they mature, which takes about five years. Most bald eagles can breed at 4 or 5 years of age, but many do not start breeding until much older. Bald eagles may live 15- 30 years in the wild.

Adult bald eagles are powerful, brown birds that may weigh 14 pounds and have a wingspan of 8 feet. Male eagles are smaller, weighing as much as 10 pounds and have a wingspan of 6 feet. Sometimes confused with golden eagles, bald eagles are mostly dark brown until they are four to five years old and acquire their characteristic coloring. There is a distinction between the two species, though, even during the early years. Only the tops of the bald eagle's legs have feathers. The legs of golden eagles are feathered all the way down.

Bald eagles are opportunistic feeders with fish comprising much of their diet. They also eat waterfowl, shorebirds, colonial waterbirds, small mammals, turtles, and carrion (often along roads or at landfills). Because they are visual hunters, eagles typically locate their prey from a conspicuous perch, or soaring flight, then swoop down and strike.

Bald eagles require a good food base, perching areas, and nesting sites. Their habitat includes estuaries, large lakes, reservoirs, rivers, and some seacoasts. In winter, the birds congregate near open water in tall trees for spotting prey and night roosts for sheltering.

(excerpts updated from May 2020 website)

## HELPFUL PHONE NUMBERS FOR WLPA MEMBERS TO HAVE...

Below is a chart with contact numbers for important sources to our WLPA Community.

A police boat will be docked on the lake. Manned hours depend upon perceived time needed. Call the following number to report unsafe boating, boating violations, excessive noise or other safety issues: **508-775-0812**. When reporting a problem, **always remember to ask for a DOCKET number**. In case of emergency, call 911.

Town Councilor, Eric Steinhilber has invited persons with **questions concerning** the Comprehensive Wastewater Management Plan (CWMP) which includes **sewer expansion** to contact him. He advises that people sign up for the E-newsletter at [www.townofbarnstable.us](http://www.townofbarnstable.us) Councilor Steinhilber has also offered his personal web site and phone number to address questions concerning such matters as the sewer plans and budget. The contact info is: [ERSteinhilber@gmail.com](mailto:ERSteinhilber@gmail.com) or 781-859-9138.

The Town Health Department conducts regular cyanobacteria testing in Barnstable public beaches. Test results can be found on their website. This site includes pet advisories, warnings and beach closures. The APCC provides an interactive map with cyanobacteria test results for all Cape lakes. The map can be found on their website.

### CONTACT NUMBERS

Non Emergency Police: 508-775-0812 Ask for Docket Number after report

Sewer Expansion Questions: [ERSteinhilber@gmail.com](mailto:ERSteinhilber@gmail.com) or 781-859-9103

Lake Water Status at Test Sites:

Barnstable Beaches: <https://townofbarnstable.us/Department/healthdivision> and

Cyanobacteria map of All Cape Lakes: <https://www.apcc.org/cyano/>