The Bantam Lake Protective Association

Board of Directors Constance Trolle, President Anne Murdica, VP Peter Longo, Treasurer Devon O'Neill, Secretary James Fischer Kathy Hill Caitlin Pattison Sara Santora Robert Sherry Mark Sniffen Kristine Truta Tom Weik

bantamlakect.com

bantamlakeprotective @gmail.com

The Bantam Lake Protective Association is a non-profit 501(3) (c) corporation. Our mission is the protection and preservation of Bantam Lake, its watershed and shorelines.



The State of the Lake

Invasive and Nuisance Aquatic Plant Management

Maintenance for invasive weeds has been an ongoing issue on Bantam Lake for many years. No treatments were required in 2022 because we have consistently controlled the plants every summer and we are now seeing the reward for all our hard work. We continue to monitor the lake every summer because new invasive plants can be easily introduced. Therefore PLEASE remember to throroughly <u>Clean, Drain, Dry and Inspect</u> every watercraft before launching into the lake.

Cyanobacteria Bloom Management

Controlling Cyanobacteria (aka blue-green algae) has become our greatest priority for improving water quality. Cyanobacteria are microscopic phyto plankton that are found naturally in all types of water; however, they tend to mass produce in water that is warm, stagnant, and rich in nutrients. They use the temperature gradient layers in the lake to descend and ascend which enables them to carry phosphorous from the sediment at the bottom of the lake, and transport it up to the surface where the sun enables photosynthesis to occur, which feeds these organisms. The by-products of these mass blooms (the green scum) are unhealthy to humans and animals. Escalating Phosphorus and Nitrogen levels in the lake along with increased temperatures contribute to encouraging earlier and more intense blooms.

The BLPA has been collecting scientific data for more than thirty years. We have been able to clearly monitor the downward trend of the water quality in our lake. In recent years, we have treated the lake with copper sulfate to mitigate these harmful algae blooms. In 2022 the lake was treated twice, in July and September. Unfortunately, copper sulfate is only a short-term solution. BLPA is seeking long-term solutions.

Nutrient Reduction Goals

The State of CT DEEP in conjunction with the US Environmental Protection Association (EPA) recently produced two documents titled The Bantam Lake Watershed Total Maximum Daily Load (TMDL) and The Bantam Lake Watershed-based Plan. These papers (over 300 pages) serve as an action plan created to help address nutrient loading, which drives the algae blooms. They also illustrate how reducing the nutrient load by approximately 25% will result in remarkable water quality improvements. These documents clearly demonstrate, for the



Cyanobacteria bloom Nicks Cove October, 2022

first time, that the Woodridge Lake Sewer District (WLSD) system is a profound source of nutrient pollution entering Bantam Lake, and accounts for nearly 60% of the nutrient loading.

Excessive Boat Wakes = Damage

Oversize boat wakes are in vogue right now - the bigger the better when it comes to recreational wake surfing. But the **damage** these wakes are causing has become excessive. These large wakes send rollers crashing into the shoreline which cause property damage to docks, seawalls, and boats not to mention many wildlife habitats particularly wildfowl nesting areas.

PLEASE be considerate of the effects of your wake on our lake and shoreline property. Operating your wake boat responsibly in the middle of the lake will help diminish these large waves once they approach the the shoreline.

Signage is being created and will be installed at the boat launch for the next boating season.

As per CT DEEP Boating Regulations, "...motorboats operating at high speeds must remain 100 feet from shoreline and docks, (200 ft for jet -

skis), unless taking off or landing a water-skier." Additionally operators are responsible for damage caused by their wakes. Please see the CT DEEP website for more information.

proposed sign for boat launch

Your Support is critical

needs to continue, now more than

Your support for Bantam Lake

Membership and monetary

donations are vital for an Alum

continued progress. Please

tax benefitting strategies for

consider us in your end-of-year

charitable giving such as donor

charitable giving. There are many

treatment in the near future, and our

ever.

Reckless or unsafe boating operations can be reported to the CT DEEP at 860-434-8638 (provide a hull number)

FINANCES:

The BLPA works closely with the Town of Morris, Town of Litchfield, and the White Memorial Foundation to carry out its mission.

As per the adjacent chart, the Town of Morris has increased its contribution to \$30,000 annually. The White Memorial Foundation pledges \$13,500 annually and Litchfield had made an annual pledge of \$10,000.

We encourage our members to thank their local representatives for this support and urge them to continue this very important funding.

The BLPA fills in the remaining funds with dues, donations and fundraisers. We hope to have a Spring Gala event - standby for more information. Even if you can only donate a small amount - your membership is important as we need the support and voice of all lake users. We thank all of our donors for their generosity and support.

Income \$104K Large Donor Gifts \$15K Member Dues & Donations \$30K Member Dues & Donations \$30K

Bantam Lake Protective Association – Income and Expense YTD 10/31/22

3 Minimize repetitive passes on any one portion of shoreline. Once you've run the same line for a while, move on to another area. YOU ARE RESPONSIBLE FOR YOUR WAKE

come and Expense YTD 10/31/22advised funds (DAF) or charitable
trusts. We are a 501(3)(c) non-
profit.Expenses \$49KIf you are a sewer customer of
Litchfield Water Pollution Control

WAKE

2

RESPONSIBLY

Stay at least 200 feet away

Keep music at reasonable levels.

If you are a sewer customer of Litchfield Water Pollution Control Authority or Morris Sewer District, please inform them that you wish to see Woodridge Lake Sewer District connect with the Litchfield Pollution Control Facility.

Have your septic system inspected/ pumped out regularly

Learn more about how to be a responsible lake partner and water conservationist. See our website for more information.

The State of the lake (cont'd):

Nutrient Reduction Goals (cont'd)

The WLSD Treatment Facility discharges into the West Branch of the Bantam River and ultimately enters the lake. The TMDL reduction model recommends that we remove WLSD from the Bantam Lake Watershed which would get us 60% closer to meeting our goals. Meeting the total nutrient reduction goals requires addressing various nutrient loading sources internal to the lake including septic systems, fertilizer runoff, waterfowl and pet feces, etc.

Collaborating with our partners:

BLPA has recently initiated The Bantam Lake Watershed Task Force which has brought together the towns of Litchfield, Morris, Goshen, and Torrington along with the WLSD, White Memorial Foundation. and the Housatonic Valley Association for dialogue and formulations of long term solutions regarding the protection of not just Bantam Lake, but also its 21,000 acre watershed.

WLSD is concerned about their obsolete system and have been negotiating with adjacent municipalities for several years regarding a tie-in of their sewer system. The Town of Litchfield appears to be the best possible option.

The BLPA board also met with several CT DEEP staff members in late October to discuss this issue and urge their immediate attention to help bring about a solution. CT DEEP encourages WLSD to merge with a modern system. Our meeting with CT DEEP was an effective first step and we learned a great deal. Everyone agreed to meet again soon to continue our discussions.

Seeking long term solutions:

We are now turning our focus to the long-term solution which addresses internal nutrient loading. An Alum treatment appears to be the best choice. Alum (Aluminum Sulfate) is an inert mineral that has been used in drinking water purification plants and lake treatments for decades. It is approved for use by US EPA and CT DEEP. Alum is applied near the surface and sinks to the sediment on the lake bottom quickly, where it chemically combines and locks with the phosphorous in the sediment layer, hence locking out the food source for the Cyanobacteria. It is only applied to lake sediments that have no dissolved oxygen in the summer. This is approximately 560 acres or nearly half the lake. Unfortunately it is an expensive treatment estimated at a cost of \$1.5 million. Assuming that the load from the watershed continues at its current rate we expect the treatment to mitigate the internal nutrient loads for approximately 10-12 years. If we decrease the watershed loading, then the Alum treatment would be effective for approximately 20 years.

We thank members for your support and we will keep you informed as we proceed.



Help us while you holiday shop!

Designate Bantam Lake Protective as your amazon

smile charity choice. It's quick, easy and free and BLPA receives donations based on your qualifying purchases at amazon. See our website for a link or:

Visit smile.amazon.com.

- Sign in with the same account you use for Amazon.com.
- **Choose Bantam Lake Protective** Association as your charity
- Start shopping! Remember to checkout at smile.amazon.com to generate donations for your chosen charity.
- Tip: Add a bookmark to make it easier to shop at smile.amazon.com.

Watershed Plan

The publication of the Bantam Lake Watershed based Management Plan by the EPA and CT DEEP, allowed us to apply for a grant under the EPA's Clean Water Act. This plan addresses nonpoint source nutrient run-off pollution throughout the watershed, which encompasses 21,000 acres in four towns (Goshen, Litchfield, Morris, & Torrington). We can proudly report that we were awarded \$266,000 in grant money! The CT DEEP is supervising the project and has broken the plan down into numerous individual projects that range from erosion control along the banks of the Bantam River near the Litchfield Country Club to multiple runoff buffers at various boat launches. There is much work to be done to coordinate amongst the many entities; however, we are looking forward to our joint collaboration and making a remarkable reduction in nutrient infiltration into the watershed.



to all our website sponsors. We appreciate their support and we encourage all our members and visitors to patronize these local businesses

ACE Hardware of Litchfield Bantam Bread Bantam Lake Ski Club Bantam Lake Yacht Club Berkshire Engineering & Surveying Fabric Studio Grela Well Drilling Litchfield County Marine Litchfield County Orthopedic Litchfield Ford Litchfield Hills Properties Materia Ristorante The Market Minuteman Press Waterbury Regatta Dock Systems Sportsmens The Village Restaurant Waters Edge Land & Marine West Shore Seafood Westover Lane LLC





BLPA relies on the generosity of our supporters to help us preserve and protect Bantam Lake and to keep you informed. We are an all volunteer, hard working board. We greatly appreciate your help and financial support. Donations and membership can be made electronically on our website or with the enclosed envelope.

