

Kanasatka Water Matters

News & Updates

March 2024, Issue 11

Lake Kanasatka Aluminum Treatment Project Overview and FAQ

NHDES Contact: David Neils, Chief Aquatic Biologist, david.e.neils@des.nh.gov, (603) 271-8865

An aluminum treatment plan was submitted to NHDES in January 2024. The plan served as an application for a temporary surface water quality discharge permit under Env-Wq 301 as authorized by RSA 485-A:13. The project is considered to be a demonstration project focused on the mitigation of cyanobacteria blooms using in-lake treatment techniques. Below is a basic summary of what the proposed project entails and answers to questions that may be of interest.

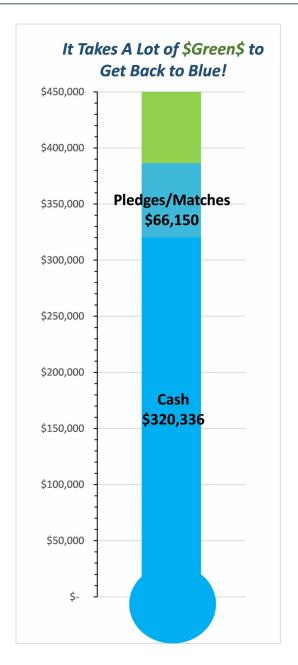
NHDES has deemed the application complete and intends on making a final determination of permit issuance based on the content of the application in conjunction with public comments submitted prior to or after a public hearing. Public comments may be submitted to david.e.neils@des.nh.gov or to 29 Hazen Dr., C/O David Neils, Concord, NH 03833 through April 3, 2024.

Project Goal: To reduce the frequency and severity of cyanobacteria blooms in Lake Kanasatka and return it to those conditions consistent with an oligotrophic lake.

For further details and FAQs see: https://www.des.nh.gov/news-andmedia/state-surface-water-discharge-permitapplication

A recording of The Lake Kanasatka Department of Environmental Services Hearing from March 19 can be found at:

https://townhallstreams.com/stream.php? location_id=51&id=59295



195 Donors

\$386,486



Funding Update!

The New Hampshire Department of Environmental Services (NHDES) notified LKWA on 3/15/24 that our Cyanobacteria Mitigation Fund grant application has been selected for a grant award in the amount of \$500,000.00.

The grant agreement will be sent to the Governor and the Council meeting on April 10th for review. If approved, their vote will secure the funds for a project start in late April.

This award is 93% of the requested amount. While this is great news, and provides a little breathing room - insuring that the alum treatment will move forward as scheduled in mid-May, we still need all pledged monies to complete the post treatment monitoring process, and cover additional expenses incurred over the last 6 months leading up to the May treatment and for future expenses as outlined below.

In addition to the alum treatment itself, coming in at roughly \$500,000, we have incurred expenses related to the treatment process - consultant fees, filing fees, printing, mailing and postage expenses and additional water quality testing costs totaling \$54,000~. Water quality monitoring will also be required during treatment and continuing through at least October of 2024. The cost is estimated by FB Environmental to be around \$55,000.

Watershed and shoreline site remediation efforts to further reduce stormwater runoff and secure the longevity of the alum treatment is continued and ongoing. This work will include engineering plans for more difficult sites and likely streams, some of which will also involve wetland considerations. Monthly enhanced water quality monitoring for two years post treatment and additional sets of core samples recommended by FB Environmental, as well as continued site visits for calculations of external load reductions are all future expenses for LKWA. Additional funding for these projects must be taken into account as well as financial matching which may be required as a part of any future grants. We are not able to provide specific cost estimates at this time.

If you have not completed your planned contribution, please do so now.

Honor your pledge to insure ongoing lake health. Send your check to LKWA at PO Box 744, Center Harbor 03226.



MEMBERSHIP MATTERS!

Neighbors and friends, as we look forward



Photo by Lloyd Berry

MOULTONBOROUGH

to the upcoming spring season we want to take this opportunity to remind you that your LKWA membership matters!

The summer of 2023 presented challenges due to weather and cyanobacteria blooms but also some unique opportunities to work together towards our common goal of restoring the water quality of Lake Kanasatka. All of us need to consider the importance of Lake Kanasatka in our lives and what we can do as individuals and as a community to support this goal.

Becoming an active, dues-paying member of LKWA will not only show your support for our Association but will also provide the Association with an operating budget that works to sustain the "behind the scenes" work of the planned alum treatment.

Rising costs for the website, newsletter, insurance and other operating expenses necessitated that beginning on July 1, 2023, dues needed to be increased to cover operating expenses. Association members voted at the Annual Meeting to increase dues to \$50.00 per voting member. To clarify, a voting member is defined in our Bylaws as an individual, not a couple or a family.

Currently, roughly 50% of homeowners around the lake are LKWA members. If you have not yet paid your dues for fiscal year 2024 (July 1, 2023 - June 30, 2024), please do so now by filling out the dues form found on our website at:

https://kanasatka.org/wpcontent/uploads/2023/07/2023-2024-Dues-Notice.pdf and mail it to LKWA at P.O. Box 774 Center Harbor, NH 03226.

Any amount you choose to donate above the dues amount will be greatly appreciated and will be deposited into the Watershed Management account. LKWA is a registered 501(c)(3) nonprofit organization. Check with your financial advisor regarding donations and tax deductions.

LKWA Barn Sale / Yard Sale June 1-2, 2024

The LKWA giant two-day barn/yard sale is gaining momentum! To date, over 500 items with a total value well over \$10,000 have been donated! Donations include art work, furniture, boats, holiday items, books, yard tools, kitchenware and much more.

CYANOBACTERIA COMMITTEE

by Kevin Kelly

In February, 2024, the Moultonborough Conservation Commission established a Cyanobacteria Committee and appointed Lake Kanasatka's Kevin Kelly as Chairperson. Volunteers from the Conservation Commission, the Lake Winnipesaukee Association and the Moultonborough community immediately stepped forward and joined with great enthusiasm.

Current Committee Members are:

Kevin Kelly - Chair (Lake Kanasatka resident) Cornelia Schneider - Secretary (Lee's Pond resident) Bree Rossiter - Member (Lake Winnipesaukee Association) Max Hoene – Member (Moultonborough Conservation Commission / Lake Kanasatka resident) Donna Dow - Member (Lake Winnipesaukee resident) Cynthia O'Connell – Member (Moultonborough Conservation Commission) Jim Nelson - Member (Moultonborough Conservation Commission/Lee's Pond Resident)

The Moultonborough Cyanobacteria
Committee will focus on the
recommendations of the recently released
New Hampshire Department of
Environmental Services (NHDES)
Cyanobacteria Advisory Committee report,
which identifies four strategies for
managing the increasing threat of toxic
cyanobacteria blooms:

- 1. Reducing Polluted Runoff
- 2. Enhancing Monitoring
- 3. Education and Outreach
- 4. Maintaining Drinking Water Safety of Public Water Supplies (This does not apply to Moultonborough)

There are several small lakes and ponds in Moultonborough, plus a vast area of Lake Winnipesaukee and a small section of Squam Lake. This is a big task for the Committee. Our plan is to recruit volunteer "spotters," who will be trained to identify suspected cyanobacteria blooms and report them to a specialized sampling team. Kate Hastings at New Hampshire Department of Environmental Services

EVERY DOLLAR WE TAKE IN FROM THIS EVENT WILL GO DIRECTLY TO LKWA.

Please consider donating items in good condition that you are no longer using. Kevin Kelly is currently accepting donations. You will be provided with a confirmed list of items you donate, and you will have the opportunity to recommend a sale price, and also a "reserve" price. The reserve price would be your bottom line. If the reserve is not met, your item(s) will be returned.

For questions, or to schedule a drop-off date contact: kevinkelly700@yahoo.com

Sales will be cash only

(NHDES) Harmful Algal Blooms Division indicated that she is developing a training video for cyanobacteria identification. This will work perfectly for the spotters. A partnership with the Weed Watchers program makes sense too, and is being discussed. Those volunteers are already monitoring the various waterbodies in town, so it makes sense for them to be on the lookout for possible blooms.

The Committee will be taking a proactive approach, in order to assess the true scope of the problem in town. Cyanobacteria Committee member, Bree Rossiter, has testing equipment at LWA that will allow us to prioritize suspected samples before submitting them to NH DES. Hopefully, this will lighten the DES testing workload. Committee Chair Kevin Kelly has gained a lot of experience from Lake Kanasatka's road to recovery, and hopes to share this information with a wide range of individuals and organizations impacted by Cyanobacteria blooms.

Are you interested in becoming a member of the LKWA Board?

The LKWA Board will propose the "slate", a list of individuals standing for election, to be voted on by the membership at the Annual Meeting in July of 2024. Currently, the Board consists of 10 Directors with staggered 2-year terms. The LKWA membership will elect 4 Directors at the July meeting.

If you have an interest in becoming a Board member in fiscal year 2025 which begins July 1, 2024, please contact the nominating committee at <code>lkwamail@gmail.com</code> no later than April 1, 2024. Please provide your contact information, your qualifications and what you would bring to the organization in terms of your interest, experience and time commitment. A member of the nominating team will contact you soon thereafter.

Responsible Boating

Spring is on the horizon! As we contemplate a new season on Lake Kanasatka, NH Lakes and the NH Department of Environmental Services remind us that while recreational boating provides a great opportunity to enjoy our lake, with it comes the responsibility to mindfully protect our waters from any further erosion of shorelines where stormwater runoff can enter the lake, thereby degrading water quality.

Making the right choices in how you operate and maintain your power boat will significantly affect the long-term environmental health of NH lakes.

See specific steps you can take to insure that your actions as a boater protect our precious resource:



LKWA Website Update!

Many readers are familiar with Judy Stoessel's passion and expertise on the topics of native plantings and well designed, natural landscapes, especially those close to the waters of Lake Kanasatka. Judy is a regular contributor to the Lake Kanasatka Water Matters

https://www.des.nh.gov/blog/july-2021lake-etiquette-its-not-whatever-floatsyour-boat

Image: Venteezy



newsletter and Facebook.

Judy has graciously penned a very comprehensive collection of articles on native plants, gardening and landscaping near the shoreline, best management practices for maintaining your property in a lake-friendly manner and the importance of and methods for attracting birds and pollinators to your garden.

Please look for this fascinating and useful section on https://kanasatka.org/ in the coming few weeks.





Add Layers, Mulch and "Soft Landings"

by Judy Stoessel

As spring approaches, now is a good time to take stock of the plantings in your yard and plan for the next gardening season.

Many yards have large trees, but the terrain under them is almost devoid of smaller plants. It is important to include as many vegetative layers as possible throughout your property: overstory and understory trees, understory shrubs and vines, herbaceous (non-woody) plants including perennials, grasses, and both woody and herbaceous groundcovers, ferns and mosses, and a diverse soil layer that includes leaf litter, germinating seedlings, and soil organic material. No matter how much your property is covered in vegetation, there are probably areas where the understory plants could be beefed up.

Bare ground is the enemy, as it is the most likely area to allow runoff and erosion. Make your property into a giant sponge. Native plantings are the best at doing this, but if you have bare areas, make sure they are at least mulched. You can purchase bagged mulch from local nurseries or have bulk mulch delivered, but it can be expensive. Arborist wood chips can usually be found for free and they make great mulch. The Moultonborough Public Works Department (68 Highway Garage Drive off Moultonborough Neck Road) usually has a large pile of wood chips just outside the gate that are free for the taking. And arborists doing tree work on your property or in your neighborhood will gladly dump wood chips in your yard to save

themselves a trip to the dump.

"Soft landings" is simply a concept to help you position where to create your spongy areas. The spots beneath large trees, out to their drip edges, are particularly important for providing areas with understory plants, leaves left in place, and mulch. This environment provides the soft areas where insects can burrow, overwinter, and pupate. Encouraging this activity fuels the bio-cycle of supporting insects, pollinators, birds and other wildlife.

Here are some links to more information about layers, mulch, and soft landings:

- ➤ Erosion Control Mix Fact Sheet—NH Lakes https://nhlakes.org/wp-content/uploads/Erosion-Control-Mix-Fact-Sheet.pdf
- > Using Arborist Wood Chips as a Landscape Mulch—Washington State University Extension https://pubs.extension.wsu.edu/using-arborist-wood-chips-as-a-landscape-mulch home-garden-series
- > Grounded and surrounded--How you can help wild animals come in for a soft landing—The Humane Society of the United States

https://www.humanesociety.org/news/grounded-and-surrounded

- ➤ Soft Landings—Heather Holm https://www.pollinatorsnativeplants.com/softlandings.html
- > Sponge Landscapes--Absorbing rain water back into the earth with native vegetation— Maine Organic Farmers and Gardeners https://www.mofga.org/resources/land-use/sponge-landscapes/

Gardening with climate-smart native plants in the Northeast

a quick colorful reference guide

https://nhlakes.org/wp-content/uploads/Regional-Invasive-Species-Climate-Change-anagement-Challenge .pdf



by Judy Stoessel

In the last newsletter I wrote about how to identify the plants in your yard using reference books, online resources, and several apps for your smart phones. One important aspect of using the phone apps is deciding whether the ID that pops up makes sense. If you get an ID for a plant typically from Australia, it's probably not correct! Sometimes the app just can't read the photo you have provided. But if you start to get a consistent answer using several apps and sources, then you can zero in with further research, either by using a field guide or by going online to find more details about the plant, looking at photos, and checking your ID. One tip--try to learn and use the scientific names for the plants. Common names differ regionally and can create confusion when you go to look up further information.

I hope by now you have played around with plant ID and have made progress on identifying the plants in your yard. Now comes part two. Once you know what a plant is, **how do you know if it is native?**

When you are fairly sure of your ID, the authoritative source for what is native to our area is the Native Plant Trust's tool called Go-Botany. https://gobotany.nativeplanttrust.org/. This site is the preeminent resource for identifying any vascular plant found in New England. The searchable database includes comprehensive plant keys for identifying a species based on a variety of features, from growth form to flower shape to fruit type, with photos that document all of these features. Species pages include New England-centric distribution maps (some maps even zero in to the county level) and valuable notes on common look-a-likes. There is an 'Ask the Botanist' portal for expert insight into your plant ID queries.

You can use this tool to "key out", or identify a plant, and compare different plants from the same genus. But I find the most useful thing is the confirmation as to whether a plant is native to our area, and what its native range is. If you think you have identified a plant but it is nowhere near us in the range map, it may not be the correct ID. Or you may not have a native plant. Or it may be native somewhere else and imported here. Hopefully you will discover that you already have many native plants in your yard!

Good Sources of Further Information about Native Plants *Online Reference Sites:*

https://bplant.org/
This is a rich, interactive database with lots of photos and good information about native plants and ecoregions. You can look up plants by common or scientific name.

Lady Bird Johnson Wildflower Center has a plant database where you can look up plants by common or scientific name. They also have a recommended native plant list for Massachusetts. https://www.wildflower.org/plants-main plant lookup by common or scientific name

https://www.wildflower.org/collections/collection.php?collection=NH

The National Wildlife Federation has an interactive web page where you can search for native plants by zip code: https://www.nwf.org/NativePlantFinder/

If you use Facebook, there are two groups you might find useful:

Native Plants of New England - this group restricts discussion to only plants native to New England. I have learned a lot just by reading the posts. There can be interesting discussions about native vs. nativar vs. cultivar vs. hybrid. Members will help if you have ID questions and post a photo but it is best to try to ID on your own and then ask when you're stuck. You'll need to use scientific names.

Plant Identification - this is a huge international group with voluminous posting from around the world. You can post a photo and ask for help with an ID and usually get a quick response. It can be interesting to look at plants from around the world, but I ended up turning off notifications because of the volume and only turn it on if I am looking for help on an ID.



Image: Courtney Hedger

As we continue to pursue our fundraising goals, we would like to sincerely thank the following donors who have generously contributed and/or pledged so far to the LKWA Capital Campaign.

With sincere gratitude from the LKWA Board of Directors.

Robert & Ann Marie Abbott

Jill & Carl Anderson

Scott & Lorraine Apgar

Robert & Candice Baker

Tim & Tamera Baker

Jillian & Andrew Belliveau

Nick & Alice Bentley

Deedee & Bill Bergan

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Waukewan

Shavna Worby

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If you wish to provide permission to be included in our ongoing expression of thanks, you may check the box on the pledge sheet or send a message to LKWAmail@gmail.com. Online donations can "optout" to be anonymous.

Thank you.



* DUES * DUES * DUES * DUES * DUES * DUES *

We are continuing to collect dues for the 2023-2024 fiscal year which began July 1, 2023 as per our bylaws, voted on by the membership in 2022. Please note that dues are \$50 per voting member. Additional votes within a family require additional memberships. Dues for fiscal year 2024-2025 are payable as of July 1, 2024 and will be voted on at the annual meeting.

We appreciate your support. Your dues go directly to LKWA operating expenses such as insurance, postage, the newsletter and website, building rental for the annual meeting and the like and are

completely separate from the Capital Campaign. Please contact the Treasurer at **Ikwamail@gmail.com** with any questions or concerns.

When The Loons Return

Preparations are being made for the return of the loons to Lake Kanasatka. Mark Whary will be checking the nesting platform to make sure it is in good working order while Kevin Kelly works on re-assembling and testing the infrared camera system which will provide 24 hour streaming coverage of the platform and any nesting activity. The loons typically return in early April, but after such an early ice-out this year, they may arrive sooner. As soon as a loon arrives, all the equipment will be put in place.



Photo by Lloyd Berry

LKWA Board Meetings Summary

The Board of Directors held three meetings between January 16 and February 9, 2024 as follows:

January 16, 2024

Treasurer's Report and Capital Campaign

- > Checking balance is \$5,467; savings account is \$229,848, which includes Capital Campaign funds; Total assets equal \$235,315; Capital Campaign donations and pledges are \$199,862 and \$124,350 respectively, for a total to-date of \$324,212 from 167 donors. Demographics are: 160 from the LKWA mailing list (85 waterfront, 20 water access), 7 Winnipesaukee (Blackey Cove) residents; 38 not on mailing lists, including matching funds; 64 contributions are \$3,000 or more; average contribution is \$2,000.
- > LKWA received a grant in the amount of \$2,090.00 from the NH Charitable Foundation.
- > There is one open contract with FBE originally for \$33K with a balance currently remaining of \$26K, which should cover meetings with NHDES for treatment plans.

Fundraising and Funding Updates

- > Board members and consultants are working on the Cyanobacteria Mitigation Fund (CMF) application and the alum treatment permit.
- ➤ The barn sale date is planned for June 1-2 and the "boots on the ground" sites would be revisited in the spring for evaluation.
- > Board members had meetings with NHDES to finalize the 319 grant application, which was submitted for \$166,000 with a potential match requirement of \$66,000 in cash and in kind. If approved funds may be expected by Fall 2024 for flexible potential use for remediation projects or monitoring activities.

Alum Treatment Update

> LKWA will meet with SOLitude, the vendor that may provide the alum treatment, once NHDES responds on Feb. 9 regarding treatment plan. Treatment is estimated for at least \$453,000 (to be further determined.) Information is being gathered on monitoring requirements. Board members will follow up on contract with the vendor and on the permit. Board members acknowledged the requirement for LKWA to act in accordance with its 501(c)3 requirements.

Septic Ordinance

- ➤ The directors discussed pursuing a septic ordinance with the Town of Moultonborough. The Town is already discussing a potential septic plan on a broader basis and a state-wide septic plan is also in discussion by Lake Winnipesaukee Association. The Board agreed that the funding and water treatment issues LKWA was addressing over the next months are a priority for LKWA at this time over septic issues, considering the other parties already addressing those issues.
- > The response to the LKWA septic survey recently sent out received 21 responses.

Other Business

- > The Moultonborough Conservation Commission is forming a Cyanobacteria subcommittee (similar to the Milfoil committee) which could provide education and information. A board member may be involved in the committee and would report on further developments.
- ➤ The next Board meetings are scheduled for Tuesday, February 28 and Thursday, March 28, each at 4:30 PM via Zoom.

February 9, 2024

Two special meetings of the Board of Directors were held for the purpose of passing required resolutions to submit to the state along with the Cyanobacteria Mitigation Fund application.

Meeting #1

> The enabling resolutions related to the Lake Kanasatka Aluminum Treatment Project to submit the application for funds from the NHDES Cyanobacteria Mitigation Fund Program (and all related authority) were duly approved and adopted for Env-Wq 2304.04 Applicant's Authority to Borrow and Env-Wq 2304.05 Applicant's Authority to Accept Grant Funds.

Meeting #2

- > A second meeting was convened to approve for signature the minutes of the prior meeting to enable submission of executed minutes with the application.
- > Announcement of Public Meeting: NHDES had advised of the requirement for a public meeting regarding the potential approval of the alum treatment for Lake Kanasatka, planned for March 19, 2024, at Moultonborough Academy. Representatives of NHDES and LKWA Board of Directors would attend. NHDES would post the notice of the meeting in the newspaper and at Moultonborough Town Hall as required.

LKWA email contacts:

Watershed Management Plan LKWAWatershedPlan@gmail.com

General LKWA and Board: LKWAmail@gmail.com

LKWA Communications email: LKWACommunications@gmail.com

Link to Watershed Management Plan

This newsletter is brought to you by the LKWA Communications Committee:
Carol Hart, Janna Hoiberg, Scott Wallace, Larry Pizer,
Julia Marchand and Chris Wallace



