

# CONFIRMING OUR DIRECTION - PARTNERSHIP WITH NHDES

By Tim Baker

To help in setting our future direction and priorities, LKWA requested an in-person meeting with representatives from NHDES along with other critical partners (UNH, Forrest Bell Assoc, expert consultants) to discuss our cyanobacteria issues and come to a consensus on the best management option(s) and depending on the option(s) determine what additional data or analyses might be required for LKWA to move forward with any permitting process specifically as it relates to an inlake (alum) treatment. This meeting was held on May 22, 2023.

# President's Message 2023 by Kirk Meloney

As I look at what our association has become, I realize what the power of volunteers can accomplish. Several years back, before our cyanobacteria blooms occurred, a small group of volunteers kept things moving forward. There wasn't much urgency to the work that was being done; the lake water was sampled regularly by a few volunteers, an Annual Meeting, a picnic, and a July 4<sup>th</sup> boat parade were all that was needed to keep LKWA humming along.

Fast forward to 2023, and the increased amount of work and volunteer dedication L have seen is remarkable. Your association is now fully compliant with the State of NH rules and regulations for non-profits as well as conforming to the IRS 501-c3 designation for non-profits. Many more volunteers have come forward to help in various ways. Regular newsletters full of informative material have been published by the new communications committee and sent to the membership. Our website (Kanasatka.org) is now updated and regularly administered. The Board holds regular monthly meetings that address the business of the association. This work has been time consuming with an attention to detail required, done by volunteers who understand this must happen as we grow. We don't have the luxury of a paid Executive Director, nor can we support

First and foremost, it was very clear throughout the meeting that there is a strong desire from NHDES to "partner" with LKWA to bring our lake back to its historic healthy state. They are committed to help find a solution to this issue and are allocating the necessary resources. They demonstrated that they clearly understand our situation and the need for a sense of urgency to continue to move forward.

Our data continues to suggest that blooms will likely persist in the future if the internal phosphorus load is left unchecked, regardless of any external phosphorus load reduction. After reviewing the data, the group concluded that successful restoration of Lake Kanasatka will require addressing BOTH internal and external phosphorus loads. NHDES concluded that there was enough existing data to show that an in-lake treatment is needed for Lake Kanasatka and that the modeling estimates are sufficient as is and can be updated as remediation work continues. This conclusion by the NHDES is very important, and now allows us to focus on implementation of our plan instead of justification.

In addition to any in-lake plan, the state will also want to see corrections made to the external sources that were identified in the WMP and have stated that the "best opportunity is a combination of watershed fixes and in-lake treatment". We need to continue to focus on reducing the watershed and septic system loads to reduce the external nutrient load to the lake in addition to an in-lake treatment to prevent the lake from blooming. We also need to effectively track these reductions to provide information on where we are against BMPs in the plan. We are working toward a best-case scenario of spring 2025 or spring 2026 for the delivery of an in-lake treatment, based upon the permitting process, financial support, the external load reduction and the optimum time frame for an in-lake treatment (spring).

NHDES also noted that there is synergy with ongoing efforts at the state level:

- 1) creation of a state cyanobacteria plan (due to the legislature by October 2023); and
- 2) creation of a cyanobacteria mitigation fund (\$25 million) pending passage by the state legislature (currently on hold).

Overall, the meeting was very positive and productive. We look forward to working closely with property owners, NHDES and

one. The Board of Directors and other volunteers have made this possible by dedication and hard work. I can't thank them enough for what has been accomplished. But we are far from being done...

As we focus on implementing the Watershed Management Plan to correct the deficiencies outlined, more work continues. It is up to each property owner to take interest in and have the desire to do the best they can for the long-term health of the lake. Every property has unique features that can be addressed and improved by best management practices. Preventing direct runoff is key to bringing the lake back to a healthy state. Maintaining and updating septic systems is also key. And addressing the larger problems of road runoff and drainage repairs on both town and private roads is equally important. LKWA is forming a new Kanasatka Community Outreach team. If you don't know where to start to improve your property, these volunteers are willing to visit with you, help you get started, provide resources and next steps. We could use more help here by people who have done this work on their lakefront. Also, as you do make improvements to your property, please document it, both time and money. The Data Team has formed to report on our progress. They will track work that has been done around the lake which can help offset our portion of any grant funds we receive that may require a match of some type. These efforts will take time and energy, but we must get it done if we are to see Lake K free from the toxic cyanobacteria blooms that threaten everyone who enjoys the lake.

LKWA will be coming to you with a "Capital Campaign" in August to raise funds to do more of the work needed. And as we grow and focus on non-profit requirements and effective operations, our overhead comes into play; we will need to raise the dues this year again if we are going to fund the budget. Again, this is all being done with volunteer energy, and the more people volunteering the better. There are other tasks that need to be started if we had more people willing to help. I know the Board wants to turn the lake in the right direction as quickly as possible and together I believe we can. It will take funding, time, and effort; but if we all pitch in, we can do it.

On another note, our long-time treasurer Rob Baker has resigned from the Board. I want to thank Rob for keeping our books our partners to restore Lake Kanasatka for all of us to enjoy!



Photos contributed by Collette Cooke

straight and helping in the many ways he has. We will be welcoming a new volunteer to take over the treasurer duties and fill the remainder of Rob's term. The Board will be interviewing candidates and I thank the candidates for stepping up to be considered for this important task.

As the association grows and becomes a much more invested organization, please remember all of us working together can make a difference. Some opinions may differ as to the ways and means of our methods, but a group effort is what we need. We currently have the most dedicated group I have ever been a part of. I am very proud to be associated with LKWA. I truly believe we can turn our lake around and bring it back to its pristine quality we once enjoyed. I look forward to seeing that day.



#### **LKWA Elections 2023**

By Colette Cooke

#### What do the Bylaws require?

The membership of LKWA approved new Bylaws in July 2022. One provision that was preserved from the old bylaws and has not changed from previous years is the election of directors by "slate" voting. "A slate is a list of candidates, typically for political office or a company's board of directors. The list usually includes the same number of candidates as there are positions available for election".(<a href="https://www.lsd.law/define/slate">https://www.lsd.law/define/slate</a>) With slate voting, the membership votes to elect a group of nominees based upon the number of open positions, not individual candidates.

The Bylaws also provide that a "staggered board" would be implemented. This arrangement attempts to ensure some continuity within a board, so a percentage of the board is elected every other year. "Elections for the directors of staggered boards occur as terms expire. At each election, shareholders are asked to vote to fill whatever positions of the board that are vacant or up for reelection."

(https://www.investopedia.com/ask/answers/05/staggeredboard.asp)

As required, at the first Board meeting after the 2022 Annual Meeting, the Officers were elected and hold a two year term. As a result, for this first year only to achieve a staggered board, the remaining four directors hold a one year term until July 2023. Once the Nominating Committee polls these directors as to their intention to stand for reelection, in addition to interviewing any additional candidates that may be interested in a position, the Nominating Committee will recommend a slate for approval by the Board and election by the membership at the Annual Meeting. The membership will vote upon the slate of nominees as a group proposed for the available director positions.

The slate for the 2023 election does not include the current Officers, who are serving the remainder of a two year term. The Bylaws also specify that, in the event that an Officer resigns, that position will be filled by the vote of a majority of the Directors then in office at any Board meeting... and the Officer elected shall perform the duties of the office pro-tempore for the remainder of the (two year) term. Since there is currently also an officer position open due to resignation, this position will be filled by the Board as required and will not be subject to election until 2024.

#### What does the Nominating Committee do?

According to the Nominating Committee Charter, the Committee sets the number of candidates to be put on the slate (subject to Board approval) and proposes a slate of candidates equal to the number of openings on the Board. Selection criteria may include current Board requirements and individual qualifications necessary for each position. The Committee interviews the candidates identified as being best qualified for current needs and verify that the proposed candidate is willing to stand for election. Additional criteria evaluated for each candidate includes:

- > Knowledge of LKWA and issues affecting LKWA.
- > Ability to apply sound, objective, independent judgment, and to assume broad fiduciary responsibility.
- > Willingness to commit the time necessary to fulfill the duties of Board membership.
- > Any prohibitive relationships or conflicts of interest.
- > Ability to develop good working relationships with other Board members and advance the Board's working relationships with LKWA members.

photo below courtesy of iStock Getty Images

# LKWA ANNUAL MEETING July 8th 9:30 AM MOULTONBOROUGH ACADEMY



# Save a Loon—Turn in Your Lead Fishing Tackle!

By Logan Kahn, Loon Preservation Committee Intern

Lead poisoning resulting from the ingestion of lead fishing tackle is by far the largest known killer of adult loons in the state and has been responsible for over 40% of documented adult loon mortalities in New Hampshire since 1989. Lead sinkers and lead-headed jigs weighing one ounce or less (the sizes most often ingested by loons) have been illegal for sale and freshwater use in New Hampshire since 2016.



Help us protect the loons on Lake Kanasatka by cleaning out your tackle box and bringing any lead tackle that you have to our annual meeting on July 8<sup>th</sup> at 9:30 AM. The tackle will be transferred to the Loon Preservation Committee for proper disposal. If you'd prefer to get cash for your old lead, you can participate in the Loon Preservation Committee's Lead Tackle Buyback program. As part of this program, you can turn in lead tackle at participating retail locations, where you will receive a \$10 merchandise voucher to that location. LPC will award \$100 to the person who submits the largest amount of tackle at each participating shop and \$50 to the runner-up. Visit Loon.org/loonsafe for program details.

Editor's Note: "Current state law prohibits the use of lead sinkers and jigs with a total weight of one ounce or less in all fresh water in New Hampshire, including lakes, ponds, rivers and streams"

For more information on lead-free fishing as well as additional articles of interest related to fishing in NH go to: <a href="https://www.wildlife.state.nh.us/fishing/get-the-lead-out.html#:~:text=Read%20the%20Lead%20Laws&text=Common%20Loons%20and%20other%20waterbirds,%2C%20ponds%2C%20rivers%20and%20streams.">https://www.wildlife.state.nh.us/fishing/get-the-lead-out.html#:~:text=Read%20the%20Lead%20Laws&text=Common%20Loons%20and%20and%20streams.</a>

# FROM NHDES: CYANOBACTERIA HARMFUL ALGAL BLOOM (HAB) UPDATES

When you head to the water this summer, always perform your personal risk-assessment prior to swimming or letting your pets in. Look for any discoloration or unusual growth, and if you see something suspicious stay out of the water and report it! Please report through our <a href="NEW bloom report form">NEW bloom report form</a>. This survey will get all the information we need from you in one round of communication, allowing us to more quickly respond to your reports. You can also find this form by searching "NHDES HAB" on the internet, navigating to our page, and scrolling down to "See a bloom?" section.

Our <u>Healthy Swimming Mapper</u> also has new features, including more information about each warning, pictures of the bloom, and alerts posted directly on the map. We are working on adding links to the cyanobacteria history for each waterbody, but that will be coming soon! There is also a link to the bloom report form on this website.

We will also be issuing a weekly <u>statewide cyanobacteria update</u>. Sign up by selecting the "Healthy Swimming Updates" email list.

Thank you all for being our "eyes on the water," I look forward to working with you to help your communities swim safely this season!

Kate Hastings NHDES Cyanobacteria HAB Program Coordinator



# **UPCOMING DATES Mark Your Calendar!**

# July 4th Human Powered Boat Parade

- > Contact Michele Devanney or Melanie Parker for details
- > Time and route TBD- watch Facebook for details!

### LKWA Annual Meeting

- > July 8th 9:30 AM
- > Moultonborough Academy Auditorium
- > Don't forget a check or cash to pay your association dues
  - Dues for FY 2023 ending 6/30/23 are \$35
  - Dues for FY 2024 starting 7/1/23 are TBD

#### **Annual Association Picnic**

- > Organizer(s) needed!
- > Date TBD

#### Concert in the Cove

> TBD

#### Annual Appeal

- > August
- > Details coming soon

Photo from Chris Wallace (top) and Pikisuperstar on Freepik (bottom)



### 150-FOOT LAW —WHAT'S THAT!!!

By Jane Nash

The 150-foot law is one of those that many do not know about and others ignore. The purpose of the law is to provide "safe passage" or conditions that prevent collisions, and provide for a speed where a boat's wake will not endanger a nearby boat or its occupants. The 150- law provides for full visibility and control to prevent a boat's wake from being thrown into or causing excessive rocking to other boats, barges, water skiers, aquaplanes, or other boats' rafts or tubes. All vessels shall maintain headway speed when within 150 feet from:

- 1. Rafts, floats, swimmers
- 2. Permitted swimming areas
- 3. Shore
- 4. Docks
- 5. Mooring fields
- 6. Other vessels

It is illegal to operate a boat at greater than headway speed (6 MPH or the slowest speed to travel and still maintain steerage) when the boater is within 150 of any of the obstacles listed above. Boat operators are responsible for checking their wakes as some hulls can plow at low speeds and cause large wakes. **Just sticking to 6 mph may not always be good enough.** 

# Number 3 listed above, can have a significant impact on reducing or eliminating Cyanobacteria Blooms.

When the wake from a motorboat hits the shore, it can do so with strength enough to undercut the shoreline. This can cause large amounts of soil to drop into the water. This soil contains phosphorous, nitrogen, and other elements that can feed and enable Cyanobacteria blooms

One personal example of a wake almost causing personal injury. My husband John had recently turned 89 and was in the water cleaning out some large branches. Our property goes out straight about 3-4 feet in depth and then drops off to 8 to 10 feet. John looked up and saw a small boat very close to where the 3 or 4 level begins. The boat was moving slowly but plowing, meaning the bow of the boat is out of the water. The wave from the wake hit John so hard that it knocked him down. This boat was well within the 6 mph limit and still knocked an old man off his feet and into the water. See the following article for more information on minimizing boat wake.

Taken from the j2015 New Hampshire Revised Statues Title XXII Chapter 270D BOATING AND WATER SAFETY ON NEW HAMPSHIRE PUBLIC WATERS Section 270-D:2 General Rules for Vessels Operating on Water

Universal Citation: NH Rev Stat. 270-D (2015)

#### **Fireworks Reminders**

The summer season is upon us and with it comes perennial displays of fireworks. If planning a fireworks display from your property this year, please be aware that fireworks are made up of a long list of chemicals used to create colors, noise, and propulsion into the sky that may ultimately lead to detritus and residual chemicals entering the lake water.

For best management practices recommendations, please read the following:

https://nhlakes.org/wpcontent/uploads/Fireworks-and-Lakes.pdf

https://www.des.nh.gov/sites/g/files/ehb emt341/files/documents/2020-01/bb-60.pdf

# WMP Implementation Framework

By Lisa Hutchinson

The Implementation Committee on the Board has been working over the winter to study the plan and determine how best to approach all the pieces that need to be addressed to successfully implement it. We have put together a functional roadmap, which is informed by the WMP and consists of a number of clearly focused teams. We need many volunteers and significant effort from the community to make this happen.

Our Grants Team and Fundraising Team are already under way and are working on opportunities they have identified. The Kanasatka Community Outreach and Data Teams are being started. Thank you to everyone who has answered LKWA's calls for volunteers in our newsletters and social media posts!!

Communications and Water Quality continue with their strong focus on working on actions identified in the WMP. Look for other teams and efforts to be launching shortly:



# **CANADA GEESE**

by Jane Nash

Branta Canadians aka Canada Geese are back on Lake K. The magnificent migrator has become a residential pest.

Canada geese are recent arrivals to our lake but we have learned quickly why Geese and the health of Lake K are not compatible. A hungry goose can consume up to 4 pounds of grass each day, this leads to the elimination of 2 pounds of poop per goose as much as every 12 minutes day. This poop is dangerous to the lake and to its human and animal inhabitants. It contains Nitrogen and Phosphorus that feed the Cyanobacteria and bacteria such as e-coli and listeria that are dangerous to humans and animals.

At the end of last year, I counted in my small cove off Coe Point Road 36 geese, which included 3 sets of parents and about 24 goslings. You can do the math as to how much poop is being eliminated into Lake K by those numbers.

Canada geese choose Lake K because from the sky they see a welcome mat—large swashes of lush green grass, their favorite food.

Now is the time for all of us to become good stewards of our lake and take back the welcome mat which will make Lake K less desirable to geese.

NH Lakes lists the following to aid homeowners in making our lake less desirable to geese.

- ➤ Septic Team continue education and outreach to property owners, assess status on State database, follow State and Local ordinances, explore funding mechanisms to help with replacement of outdated or failing systems
- > Roads Team provide best management practices to private road groups and for driveway maintenance, coordinate information sharing and project updates, liaise with Moultonborough DPW as appropriate
- ➤ Town Liaison Team work with Moultonborough on improvements needed to town-owned Watershed Survey sites and to town-owned roadways impacting runoff. Attend town board and committee meetings and work with the planning board, conservation commission, zoning board, and other groups to listen, provide input, and influence lake-friendly local regulations and enforcement
- > DOT Liaison Team work with NHDOT and NHDES to address improvements needed to state-owned Watershed Survey sites

Together, the Board, volunteers, and the community can ensure the success of bringing our lake back to health.

Photo from Pikisuperstar on Freepik (bottom).



# **JOIN US!**

- Discontinue feeding. Wild birds can find their own food.
- Modify landscaping. Allow grass to grow longer. Along water edges, leave native vegetation or replant areas with less attractive vegetation such as pachysandra and periwinkle.
- > Install barriers along the shoreline. Barriers such as fences and hedgerows have been known to work.
- > Use scaring devices and move them around the property periodically. Try large helium-filled balloons, strobe lights, scarecrows with moveable parts, and Mylar flags.
- > Utilize dogs. Most effective are freeranging dogs trained to chase birds as soon as they land. Hunting may help. For information on the Canada Geese hunting season in New Hampshire, visit: <a href="https://wildlife.state.nh.us/hunting/water-fowl-season.html">https://wildlife.state.nh.us/hunting/water-fowl-season.html</a>.
- ➤ Prevent nesting by manipulating the nests. Since waterfowl are protected by law, a property owner must first register with the US Fish and Wildlife Service at <a href="https://epermits.fws.gov/eRCGR/geSI.aspx">https://epermits.fws.gov/eRCGR/geSI.aspx</a>.
- > Obtain a depredation permit. A Federal Migratory Bird Depredation Permit is required to capture or kill migratory birds for depredation control purposes. After applying some of the listed techniques above over an extended period of time with little to no success, a depredation permit can be requested. Land owners should apply for a depredation permit only after they have involved their local community in the decision process. If a permit is issued, landowners are expected to continue to integrate non-lethal techniques when implementing any lethal measures. Since capture and removal will result in a reduced population size, other management methods should become more effective in the future.

For more information contact 1-866-4USDAWS (1-866-487-3297). *Photo by Jane Nash* 

#### WHAT DOES YOUR BOARD DO?

Secretary's Report,
Colette Cooke (LKWAmail@gmail.com)

As you all probably know by now, LKWA membership approved new Bylaws at the 2022 Annual Meeting. The Board has also approved a Nomination Committee Charter. Both documents are available for review on the LKWA website at <a href="https://kanasatka.org/about-lkwa/">https://kanasatka.org/about-lkwa/</a>. You will also find LKWA



listed as a registered charitable organization in good standing as of November 2022 on the website of the NH Dept. of Justice at https://www.doj.nh.gov/charitable-trusts/registered-charities.htm.

Why does all this "formality" and "paperwork" matter? The short answer is that it enables LKWA to raise the funds necessary to meet its goals and fulfill its obligations. The days of a budget comprised of membership dues sufficient to pay for a summer picnic, a hardcopy newsletter, and minor operating expenses like a mailbox are gone. Now we are faced with the daunting task of raising sufficient funds to meet our new goals as outlined in the Watershed Management Plan, the ultimate one being the preservation of the pristine waters of our beautiful lake for our children and grandchildren. It is our collective call-to-action against the ravages of climate change that we don't want to leave as the legacy of our generation to those who follow.

As these challenges have developed, the Board has also undergone its own evaluation in order to strengthen its capabilities to meet future needs. It's not glamorous and sometimes seems like dull work, but achieving a vision requires strategic planning. The Board had an off-site 5 hour strategic planning meeting in March (meeting space courteously provided by The Loon Center). The Board delved into a variety of topics, such as assessment of Board qualifications and responsibilities, compliance filing requirements, operational and financial issues and policy requirements.

We are striving to implement best practices for Board and Association operations much like implementing best practices in lake management. Deriving in part from the "Guidebook For New Hampshire Charitable Organizations" (Fifth Edition 2022Office of the Attorney General Charitable Trusts Unit) <a href="https://www.doj.nh.gov/charitable-trusts/documents/guidebook-non-profit-organizations.pdf">https://www.doj.nh.gov/charitable-trusts/documents/guidebook-non-profit-organizations.pdf</a>, among the basic responsibilities of Nonprofit Boards are to:

- > Articulate the organization's goals, means, and primary constituents served.
- > Actively participate in an overall effective planning process and in implementing and monitoring the plan's goals.
- > Determine which programs are consistent with the organization's mission and monitor their effectiveness.
- > Ensure adequate financial resources for the organization to fulfill its mission.
- > Protect assets and provide financial oversight: develop an annual budget and ensure proper financial controls are in place.
- > Build and sustain a competent Board: articulate prerequisites for candidates, orient new members, periodically evaluate their own performance.
- > Adhere to legal standards and ethical requirements.
- ➤ Enhance the organization's public standing: clearly articulate the organization's goals and accomplishments to garner support from the community and for its membership.

This type of compliance preparation needs to be demonstrated just to qualify for grant funding. We are hopeful that in doing this work we are preparing for a time when we need to fulfill grant requirements and record keeping. We are focused on becoming a more robust organization, with the skills and processes needed to receive the assistance we seek and to accomplish our ultimate goal – preservation of a pristine Lake Kanasatka.

Board meeting summaries are regularly published in newsletters and are available at <a href="https://kanasatka.org/newsletters/">https://kanasatka.org/newsletters/</a>.

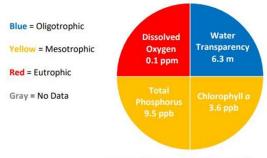


Figure 1. Lake Kanasatka Water Quality

#### LKWA WATER QUALITY REPORT

#### By Lisa Hutchinson

The **Annual Sampling Report** from the University of New Hampshire for 2022 summarizes conditions on Lake Kanasatka based on testing by our 3 monitoring teams and the UNH team from May through October. Lake Kanasatka has historically been oligotrophic with clearer water and less nutrients, but is trending toward mesotrophic with more nutrients and plants and algae. This can be turned around by all of us taking steps, including reducing runoff on our properties, lake-friendly boating practices, and continued focus on implementing the Watershed Management Plan. The more technical details of the report are available at the end of this article.

FB Environmental performed a **thorough analysis of our additional testing efforts and data collection** as part of WMP implementation. The findings are very informative and have greatly assisted our conversations with NHDES and prioritization of next steps. FB and UNH collaborated on the analysis. Additional testing and data included UNH's 4 in-depth assessments and monthly biological (phytoplankton and zooplankton) surveys, as well as LKWA WQ team and UNH profiles throughout the water column at the deep spot every other week to assess dissolved oxygen, temperature, phosphorus, conductivity, and other important parameters.

FB updated the WMP Lake Loading Model with the new data, and overall % of phosphorus from internal loading decreased from 24% to 20%. However, we are now able to closely correlate phosphorous numbers in the water column and at the bottom of the lake with the timing of last year's blooms. Based on the August data, the Lake Loading Model reflects 46% of phosphorus from internal loading. The timing of blooms late last summer was during a period of less rainfall (less watershed load) but increased oxygen depletion throughout the water column (higher internal load).

The two blooms coincided with "crashes" in zooplankton populations. Zooplankton can control phytoplankton, but the data showed insufficient zooplankton grazing capacity to prevent cyanobacteria and other algae blooms. Other concerns are the competitive advantage of dominant species of cyanobacteria in the lake, which are able to live deeper and/or self-regulate their depth to get nutrients, and sufficient nutrients to feed blooms into the winter.

As reported in the November newsletter, oxygen profiles show the lake experiences anoxia at 7.5 to 8.0 meters and deeper during the summer. This means we will need to treat a more significant portion of our lake bottom with a potential in-lake (alum) treatment.

**Impaired Waters status** under 303(d) is a major factor of consideration for 319 and other federal and state grants. UNH has ensured all required data was provided to NHDES for its biennial determination, now underway and due out in 2024. While impaired status is certainly not what we wish for our lake, understanding of the categories of impairment on Lake Kanasatka and reflection of its accurate condition will help us secure government funding.

Weather affects water quality and the incidence of **cyanobacteria blooms**. Blooms are more likely with a hotter summer, earlier lake layering allowing less mixing, and a longer growing season. Monthly precipitation totals for 2022 were overall below average, especially in January, June, July, and October. Average air temperatures were higher in 2022. It was our third consecutive year of earlier spring ice-out and warmer and drier summers. Weather patterns indicate we must all do more to protect the lake.

In 2022, Lake Kanasatka again experienced 2 cyanobacteria blooms. The first NHDES Advisory lasted 13 days from late July to early August, a similar duration to the 2020 and 2021 blooms. The second Advisory, beginning late August, persisted for 79 days, into mid-November. The unusually warm and extended autumns in both 2022 and 2021 led to extended bloom conditions around the State, and this bloom was more sustained than our prior fall activity. Kanasatka has a high diversity of cyanobacteria species in dominant amounts compared to most lakes. According to the FB Environmental report, "This is troubling from a public health perspective because the high diversity increases the probability that toxins are produced."

The **LKWA Rapid Response Team** will again be available to respond quickly to any potential cyanobacteria sightings and concerns. NHDES has a new on-line system for reporting any blooms, accessible here: <a href="https://survey123.arcgis.com/share/151c9fc3c8214c2e93325f77e0f1d578">https://survey123.arcgis.com/share/151c9fc3c8214c2e93325f77e0f1d578</a>
Even if you use the new NHDES link, the Rapid Response Team (members listed on our website) can assist with collecting samples before a bloom dissipates and properly handling and getting them to the lab for analysis. We will continue to provide up-to-date information on Kanasatka conditions on our social media platforms.

#### **Details of the UNH Annual Sampling Report** are:

Year-over-year and long-term trends:

- > Total phosphorus levels are higher and continue to be of greatest concern
- > Dissolved oxygen remains concerningly low or absent at depths in the lake, leading to anoxic conditions where phosphorus is released from the bottom sediments
- > Water transparency is excellent, improving to 6.3 meters over the past two years, the best clarity since 2018
- ➤ Chlorophyll *a* levels increased/worsened, consistent with increased algae and cyanobacteria levels. During the season, water transparency decreases with an increase in chlorophyll *a*.

Other observations related to lake health and aesthetics:

- > Conductivity continues to increase slightly each year, from 100.6 uS/cm in 2018 to 109.7 uS/cm in 2022. Near the lake bottom, we are seeing a trend of decreasing dissolved oxygen and increasing conductivity. Conductivity is an indicator of the effects of human disturbance and development
- > pH levels remain in the optimal range for fish growth and reproduction, varying slightly year-to-year. Likewise, alkalinity levels remain within a healthy range
- > 'Tea-color' of the water is similar to that of 5 years ago, with some higher coloring in the interim years
- > Wakondah Pond was also sampled on 4 visits. Wakondah data suggests susceptibility to conditions which could lead to cyanobacteria growth.

# NH Gives – Success! THANK YOU

We are pleased to report that YOU, our loyal community, have helped us raise \$8,720.00 through our NH Gives campaign, to help protect Lake Kanasatka, our hidden gem in the Lakes Region.

For the first time this year, LKWA participated in NH Gives – Day of Giving – on June 6-7, 2023. "NH Gives, an initiative of the NH Center for Nonprofits, is a powerful, statewide 24-hour online fundraising event that is designed to build community...and... connect donors to local nonprofits...".



We raised \$8,720.00 in donations, from 89 donors, including matching funds in the amount

of \$250.00 from the NH Charitable Foundation. LKWA was #7 of 54 participating organizations in the Lakes Region, #93 of 609 organizations throughout NH, and #1 AMONG ALL LAKE ASSOCIATIONS. That's a lot of love for our little lake and its watershed!

LKWA is dedicated to protecting the water quality and natural resources of Lake Kanasatka and Wakondah Pond, within the Lake Winnipesaukee watershed and the Red Hill Conservation area, in the towns of Moultonborough and Center Harbor. The watershed includes mixed forests and is home to a wide variety of fish, animals, and threatened and endangered species, including bald eagles and common loons.

The health and enjoyment of our beautiful lakes are being threatened by climate change, polluted runoff water, and invasive species. Our goal is to maintain the health and beauty of Lake Kanasatka watershed for the benefit of future generations.

LKWA relies on donations to carry out our mission. Your donation supports water quality monitoring, lake management, lake protection projects, and our lakeside learning activities throughout the year.

#### THANK YOU FOR YOUR SUPPORT!

# Treasurer's Message

By Rob Baker

Our membership numbers were again up this year exceeding all prior years with a total of 153 paid members. Our finances are in reasonable shape although we are incurring expenses not seen before. The Board this year has increased our visibility by updating our Web Site (kanasatka.org) along with the periodic newsletters. We also voted to suspend the annual hardcopy Board Newsletter mailing with an electronic only edition saving us over \$1000 in printing and mailing expenses. If you are not receiving the newsletters via Constant Contact notify us of your email address at <a href="mailto:lkwacommunications@gmail.com">lkwacommunications@gmail.com</a> and "Join Our Mailing List" on the kanasatka.org home page. Please also notify your neighbors of this targeted information used for the betterment of our lake.

Now in other news, I have submitted my letter of resignation of my position as Officer (Treasurer) and Director of LKWA Board. I have served LKWA for 10 years and am ready to hand the positions off to another capable individual who can provide a leadership role on the Board.

# LKWA Finances Spring Newsletter 2023

Current Finances 7/1/2022 to 3/30/2023	
Balance forward as of 7/1/2022	\$2,678.41
Incor	ne
Dues	4,385.00
Interest	\$0.35
Merchandise Sales	\$135.00
Total Income	\$7,198.76
Expen	ises
Loon Preservation Committee	\$250.00
Lakes Region Conservation Trust	\$250.00
New Hampshire Lakes Association	\$250.00
Web Hosting Expenses	\$260.87
Survey Mailing	\$65.10
Web Development	\$768.00
NH Center forNon-Profit	\$285.00
Constant Contact	\$83.88
PO Box	\$210.00

Petty Cash		\$100.00
KOTL S	avings	
Balance forward as of 7/1/2022	\$5,868.44	
In Memory Contributions	\$225.00	
Interest	\$3.34	
Keeps of the Lake Fund 3/30/2023		\$6,096.78

**Total Expenses** 

Bank Balance (Checking) 3/30/2023

WATERSHED MANAGE	MENT PLAN SAVINGS
Balance forward as of 7/1/2022	\$40,452.68
Donations	\$4,370.00
Interest	\$39.57
	\$44,862.25
FB Environmental Associates	
Watershed Management Plan (complete)	\$8,544.75
Total contract expense \$75,954.78	
319 Funding Application Effort (complete)	\$3,249.25
Total contract expense \$7,000.00	
Total Expenditures	\$11,794.00
WMP Savings Account Balance 3/30/2023	\$33,068.25

Total Assets LKWA \$44,040.94

\$2,422.85

\$4,775.91

# **LKWA Current Board of Directors**

Kirk Meloney, Director and President
Jane Nash, Director and Vice-President
Rob Baker, Director and Treasurer
Colette Cooke, Director and Secretary
Tim Baker, Director
Wendy Booker, Director
Lisa Hutchinson, Director
Chris Wallace, Director

# **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** 

Lake Kanasatka Watershed Association | www.kanasatka.org



