



Kanasatka Water Matters

News & Updates

FEBRUARY 2026, Issue # 21

Historical Ice-in and Ice-out Dates

by Kevin Kelly and Chris Wallace

Being aware of ice-in and ice-out dates is not only of interest to those of us with plans for ice skating or ice fishing during the winter season, but it is also important information in understanding the changes NH lakes are experiencing and being able to respond accordingly.

Reporting ice-in isn't just a fun winter observation. From a scientific perspective, ice-in date is crucial for tracking climate change. Later freezes signal warming trends which affect lake ecology (algae, oxygen), water quality, as well as local recreation.

Key Scientific Importance

- **Climate Change Indicator:** Lake ice formation and melt dates are sensitive indicators of regional temperature shifts, showing lakes freezing later and thawing earlier, pointing to a warming climate.
- **Ecosystem Health:** Ice cover dictates summer water temperatures, mixing, and oxygen levels. Early ice-out can lead to harmful algal blooms (cyanobacteria) and impact fish habitats, affecting overall lake health.
- **Water Quality:** Changes in ice dynamics influence nutrient cycles and water quality, impacting everything from aquatic life to potential runoff issues
- **Historical Baseline:** Long-term data, some extending back to the 1880s, provides essential context for understanding natural variability versus accelerated modern climate change.

LKWA could use your help as a Lake Kanatka Citizen Scientist, in filling out any of the missing information from below that you might have recorded in past years. With your ongoing help, LKWA can effectively monitor trends on our lake that could help in predicting environmental impacts, informing lake responses to future warming, and developing well suited management strategies.

If you have any further information, please contact Kevin Kelly at kevinkelly700@yahoo.com

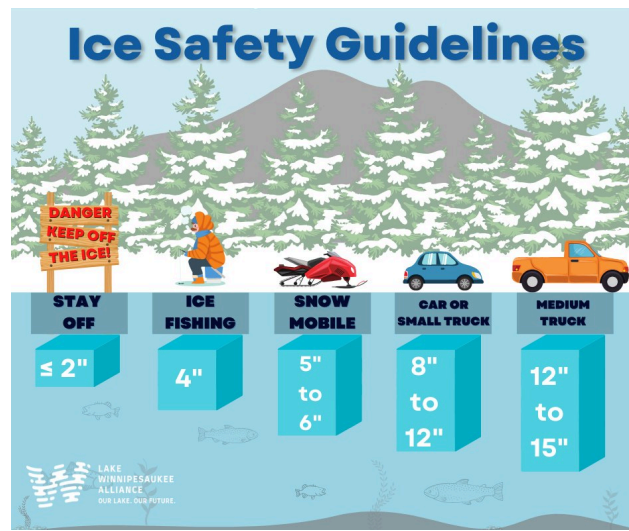


<u>Ice-in</u>	<u>Early Ice Depth</u>	<u>Ice-out</u>
2014 Unknown	-	4/20/15
2015 Unknown	-	3/17/2016
12/26/2016	8"-9"	4/16/2017
12/30/2017	8"	4/22/2018
12/11/2018	3"	2019 Unknown
12/23/2019	3"	4/3/2020
12/30/2020	3"-4"	4/1/2021
12/30/2021	3"	4/4/2022
12/28/2022	3"-4"	4/6/2023
1/20/2024	-	3/11/2024
12/24/2024	5"-6"	4/14/2025
12/24/2025	6"-8"	

Lakes In Winter

“Have You Ever Wondered Why the Ice Floats On Top of the Water?”

In late fall, the water at the surface of a lake begins to cool. When the surface layer of water cools to 39 degrees Fahrenheit, it reaches its maximum density. This is when water at the surface is at its heaviest, and it sinks to the bottom of the lake. Warmer less dense water replaces this layer at the lake surface. This process continues until all the water in the lake has cooled to 39 degrees.” Courtesy of NH Lakes



For more information on this fascinating phenomenon, go to <https://nhlakes.org/lakes-in-winter/>

LKWA RUNS ON VOLUNTEERS!

Join the Board of Directors or become a Committee Member



contact LKWA at lkwamail@gmail.com



Are you interested in becoming a member of the LKWA Board or helping with the election process?

by Bruce Hart

Each year, the LKWA Board of Directors proposes a “slate” (list) of individuals standing for election & re-election. This ‘slate’ of individuals is voted on by the membership each July at the Annual Meeting, which this year (2026) is Saturday July 11th.

Currently, the Board consists of 9 Directors with staggered 2-year terms. This year the LKWA membership will elect 4 directors (3 expiring terms and 1 open spot). The committee consists of at least 2 directors who are not up for election and a non-board community volunteer to help review qualifications & interview the candidates interested in joining the LKWA board.

If you have an interest in becoming a Board member for fiscal years 2026-2028 which begins July 1, 2026, please contact the Nominating Committee at lkwamail@gmail.com no later than April 1, 2026. 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. For more information about candidate guidelines and nomination procedures, go to Kanasatka.org

If you'd like to volunteer for a short-term position to help the Nominating Committee, please contact us at the email above.

Winter Tips for Lake-Friendly Living

Your Lake-Friendly projects don't need to stop just because of a snowy landscape!

Find tips from NH Lakes on keeping our lakes clean and healthy this winter by going to:

<https://nhlakes.org/wp-content/uploads/Winter-Tips-Fact-Sheet-1.pdf>



Membership News!



LKWA membership numbers are on the rise, thanks to you! As of December 31, 2025 we now have 189 members, representing 119 watershed properties.

Thank you to those of you who made donations to LKWA above and beyond the annual membership in 2025!

Your generosity and support provided an additional \$3,700.00+ for ongoing and future projects to maintain the health of Lake Kanasatka.

Burton/Foster 319 Grant Update

by Scott Wallace

The project to reduce stormwater runoff at the Burton/Foster intersection has passed a significant milestone. In January, New Hampshire Department of Environmental Services (NHDES) approved our Permit By Notification (PBN) based on the 75% Design by Horsley Witten (HW). This follows a positive review by NHDES Watershed Assistance Section (WAS) in December. NHDES did not request any changes to the design plans.

The next step is to have HW complete a 100% Final Design plan in February. The Final Design will have a high level of detail and specify all of the required materials and dimensions that a contractor would need for construction. The Final Design will be the basis for our bid document.

We are currently preparing our bid documentation which will be issued in March after the Final Design is completed. The bid documents will specify certain criteria that we will use to rate bidding contractors. These criteria will include the contractor's capabilities, experience with similar projects, and ability to meet the project schedule, among other factors. The final choice among qualified contractors will be determined by their fixed price bid.

Our project timeline for construction is in May/early June to avoid roadwork during the busy summer months. We are also exploring a backup plan with NHDES which would slot construction in the fall, if we are unable to find a qualified contractor who can complete the job this spring.

LAKE ADVOCACY

Protecting and Managing NH's Lakes through Science, Policy and Community Action

Thank you to everyone who responded to LKWA's request to support recent NH House Lake-Friendly bills. Our thanks also to NH Lakes who provided the information and process for weighing in with our opinions and support.

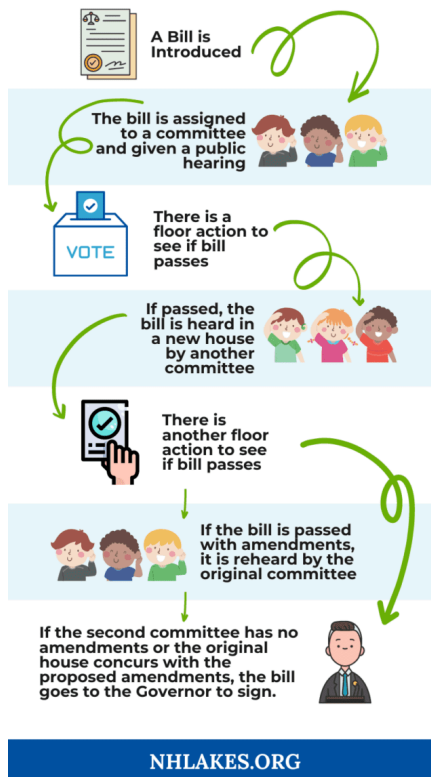
Ongoing tracking of these important bills through the legislative process can be found at <https://nhlakes.org/state-government/>

Please continue to advocate for our lakes by signing up at [Email List Sign-Up | NH LAKES](#) to receive the Advocacy Alerts and continue to speak up for bills that will benefit NH lakes.

For an even greater impact, join the legislative session. Andrea LaMoreaux, NH Lakes President and Policy Advocate, shares that you don't need to testify in person—simply showing up in numbers makes a powerful statement. If you would like to testify, please contact Andrea LaMoreaux at alamoreaux@nhlakes.org in advance so you both can coordinate talking points.

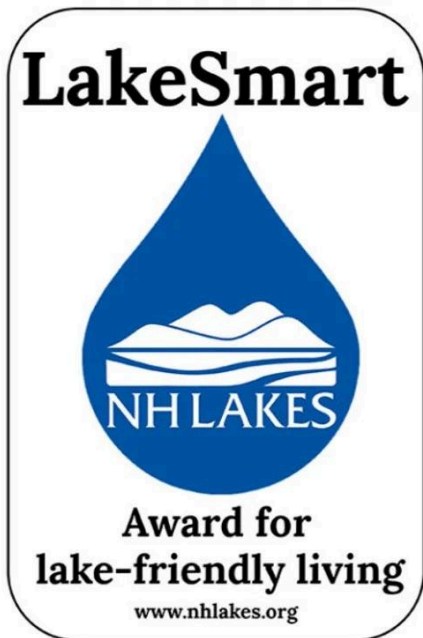


HOW A BILL BECOMES A LAW IN NEW HAMPSHIRE



Is Your Property LakeSmart? Start the Process Now and Be Ready For Summer 2026! by Larry Pizer

Despite the snow and ice on Lake Kanawatka, we are already planning for a spring and summer filled with successful LakeSmart* applications. We are sending reminders to all who have applied in the past, but have not been successful, to remind them that they can make the suggested corrections and move forward with an updated application.



Also, we have arranged with both Lamprey and Septic Check for discounts for Kanasatka residents for septic inspections. If you are interested, you should email Larry Pizer at lapizer@gmail.com.

In addition, whether or not you are in the LakeSmart process, the Watershed Association continues to offer reimbursements to LKWA members 50%, or up to \$200, of the cost of a septic inspection. High quality septic systems are a direct way to protect the Lake.

Kevin Kelly and his crew are measuring the water of our Lake because we all benefit from a clean environment. LakeSmart is one means toward that end.

*More information about Lake Smart, a program of NH Lakes is available at <https://nhlakes.org/lakesmart/>

NH LAKES is the only statewide, publicly-supported nonprofit organization working to ensure our lakes remain clean and healthy, now and in the future. For more information, visit nhlakes.org, email info@nhlakes.org, or call 603.226.0299.



A Look Under the Lake Ice

by NH Lakes

As a companion read to NH Lakes **Lakes in Winter**, available elsewhere in this newsletter, learn “what happens to the fish, plants, and algae under the ice? Do the streams still flow into the lake or freeze solid? Wonder no more, and read on!” (courtesy of NH Lakes)

<https://nhlakes.org/a-look-under-the-ice-winter-lake-ecology-in-new-hampshire/>

Conservation Tip! Limit Use of De-icers

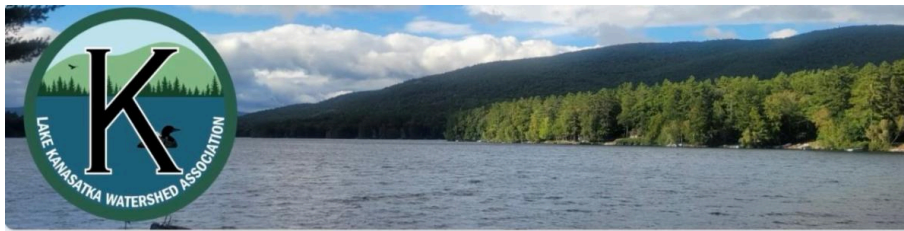
Tis the season for ice to form on driveways and sidewalks. Try to be judicious in the use of de-icers as many are harmful to the environment. Chloride-based de-icers, like rock salt, tend to have the largest environmental impact while acetate ones, like calcium magnesium acetate (CMA), are less toxic.

Let's Talk About Salt

Navigating the Road Salt Challenge at Home: Balancing Safety, Infrastructure, and Environmental Impact

“Winter in New Hampshire brings picturesque snowfall but also demands careful management of snow and ice on roads for the safety of residents. The primary tool in this battle is road salt, specifically sodium chloride (NaCl), though its widespread use poses environmental challenges. This blog post explores the impact of road salt, its alternatives, and best practices for managing winter conditions while minimizing environmental harm.” (courtesy of NH Lakes)

For more information on this important and timely topic, go to <https://nhlakes.org/lets-talk-about-salt/> and to <https://nhlakes.org/wp-content/uploads/wmb-4.pdf>



Lake Kanasatka Watershed Association Community Survey

The LKWA Board of Directors is seeking your input to guide our work in protecting and enhancing the Lake Kanasatka watershed. Your feedback is vital to help us better serve the community and lake we all care about.

Coming in March!

Yard & landscaping waste does not belong in the lake! **Please remind your landscapers and help preserve water quality** by NH Lakes



Why this matters for our lakes:

Yard waste isn't "natural" once it's dumped. When leaves and grass break down in water, they release nutrients that fuel harmful algae growth.

Too many nutrients mean less oxygen, which can harm fish and other aquatic life. Clean shorelines support healthy habitats, clear water, and safe recreation for everyone.

Prevention is easier than cleanup. Keeping yard waste out of lakes helps avoid costly and long-term environmental damage.

This law is about protecting water quality, supporting wildlife, and keeping New Hampshire's lakes clean and enjoyable—now and for future generations. Let's do our part: compost yard waste properly and keep it out of our lakes.

Interested in learning more about the bills coming up this legislative session and how you can get involved? Sign up for our Advocacy Alert emails <https://nhlakes.org/email-list-sign-up/>

LKWA 2025-2026 GOALS- Updates and Progress

The LKWA Board held a Planning Meeting in August 2025 to set goals and identify priorities for the new fiscal year. For starters, the board reviewed, discussed and adopted a revised mission statement as follows:

*The Lake Kanasatka Watershed Association **LKWA**, is dedicated to promoting the conservation and protection of the Lake Kanasatka watershed, including the natural resources and wildlife. LKWA's mission encompasses monitoring water quality, providing educational resources, using science-based lake management practices, collaborating with local and state partners and*

fostering active community participation to insure the health of the watershed now and for future generations.

Our 2025-2026 goals are broadly stated here, with examples of the on-going management practices and projects that we are working on throughout this fiscal year.

A- WATER QUALITY

- Met with experts from UNH, NH DES, FB Environmental and LWA on November 18, 2025- questions and answers, including meeting video, were shared with the LKWA community via newsletter and website, review and resubmission of specific questions is in progress
- Bathymetry study by TF Moran scheduled for the east end of the lake sometime after ice-out
- Water quality samples are currently being collected through the ice at various points around the lake
- UNH will be doing through the ice water testing this winter for the first time.
- Additional water quality testing team assigned to newly identified deep spot on the east end of the lake and will begin collecting samples after ice-out
- further research and study of dissolved oxygen and toxicity as it applies to recurring cyanobacteria blooms is underway.

B- ENGAGEMENT WITH PROPERTY OWNERS- More than just Membership

- A LKWA Community Survey to gather input from our community will be sent out in March
- 189 members representing 119 properties have renewed their memberships as of 12/31/25
- 12 end of year donations not related to membership were received prior to 12/31/25
- Boots on the Ground participation includes- 66 volunteers, 24 projects from its inception in 2023.
- LakeSmart Participation includes- # of awards in 2025 was 11
- July 2025 Annual Meeting turnout was ~75 LKWA members
 - Plant Give-away program for members totaled 60+ in 2025
 - The 2026 Plant Give-away program for members in 2026 will be sponsored by Stephens Landscaping and Found Well Farm
- 2025 Annual Picnic turnout was 64 members
- Newsletter open rate average is 77% of 300+ subscribers, since August 2025 the LKWA website views totaled 4,536 times with all time views totaling 24,000
- 2025 LKWA Septic System Inspections reimbursement program included 4 LKWA members

C- INTERNAL & EXTERNAL COMMUNICATIONS

- LKWA Board Meetings are now scheduled 2 x per month, 12 months per year.
- Full transparency between all board members across all operations is a priority and has lead to improved dynamics within the board.
- Full transparency with LKWA community on all solid, factual agenda topics and projects with regular updates and final actions via the LKWA Newsletter and/or LKWA website and/or Facebook continues as a priority
- A LKWA Community Education Packet is in progress and will be mailed out to all homeowners in the near future, thanks to a generous donation

D- INCREASE LAKESMART PARTICIPATION

- LKWA welcomes the addition of a dedicated LakeSmart Ambassador
- Educational newsletter articles about the importance of LakeSmart will continue
- Personal one-on-one outreach to candidates in process to offer guidance and assistance moving forward is in the works
- Updated record keeping is underway
- *** names and photos when possible, will be made public with participants express permission

E- DETERMINE BALANCE BETWEEN WORK & RESPONSIBILITIES OF PROPERTY OWNERS vs ASSISTANCE (financial and task related), FROM LKWA

- This is a discussion in process
- LKWA continues to offer financial support for septic system inspections

- LKWA will continue to offer support to homeowners in making their properties more lake-friendly

Book Reviews: Two Perspectives

Let the Mountains Talk, Let the Rivers Run

by David Brower

As an environmentalist, Brower brought “a mountaineer’s determination and reverence of nature to his efforts to protect the earth and educate its human inhabitants.” He was a leading light in the environmental movement in the 60’s and 70’s and was the Executive Director of the Sierra Club, as well as several other environmental organizations of note.

Let the Mountains Talk, and the Rivers Run was published in 1995, when the author was in his 80’s, and is a road map for saving our planet. It is as prescient today as it was 30+ years ago. Credited with galvanizing an entire generation of environmentalists in the 60’s, David Brower, the highly respected “archdruid” of the modern environmental movement, recalls with wit and wisdom his 50 years of controversial activism and offers an inspired strategy for the next generation of “those who would save the Earth”.

Although Brower’s approach was controversial at times, his clarity of purpose, his humor and his optimism about a better future for the Earth earned him considerable praise and a dedicated following. His speaking engagements often featured meaningful catch phrases, making his messages memorable and attention getting- recalling a call to action. Some examples follow:

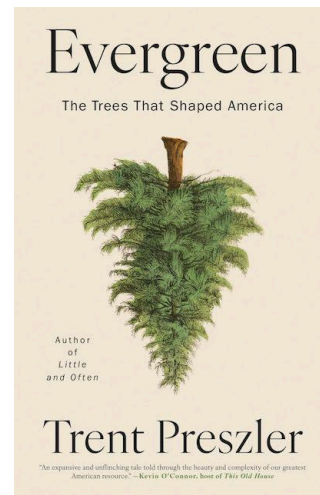
- “The earth is a living breathing organism. It needs **CPR, Conservation - Preservation - Restoration**”
- “**You have opportunities. Seize them.**”
- ******We do not inherit the Earth from our Fathers, we are borrowing it from our children***”... which he later decided, with one small change, could be his epitaph... “***We do not inherit the Earth from our Fathers, we are stealing it from our children.***”...
 -

**most frequently attributed to environmental activist and author Wendell Berry

Evergreen by Trent Preszler

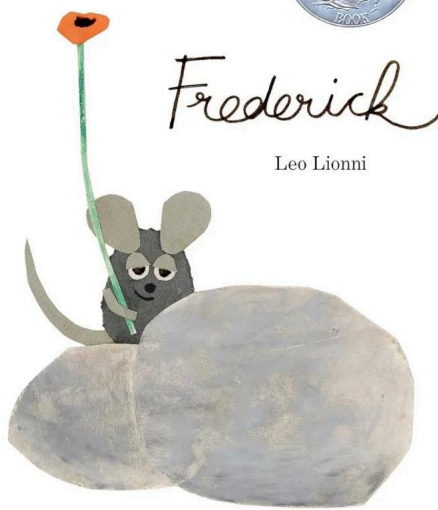
“A sweeping natural history of the humble trees that built nations, sparked wars, and became the world’s most cherished holiday tradition. Cornell University professor Trent Preszler weaves together a captivating story of humanity’s deeply rooted relationship with evergreens, revealing how the trees shaped economies, launched cultural movements, and propelled America’s rise to global prominence.”

(Book review from jacket flap)



Something for the Kids and Grandkids this Winter!

Frederick
A StoryWalk® at Chamberlin-Reynolds Memorial Forest



This winter's story is Frederick by Leo Lionni. Frederick won the Caldecott Honor in 1968 for its unique illustrations of the heart warming tale about a mouse who prepares for winter in a unique way.

Visit the StoryWalk® at Chamberlain-Reynolds Memorial Forest between December 15th and February 28th. After you're done enjoying the story, stop by the Holderness Free Library to check out Frederick and enjoy a craft based on the book!

The StoryWalk® Project was created by Anne Ferguson of Montpelier, VT and developed in collaboration with the VT Bicycle & Pedestrian Coalition and the Kellogg Hubbard Library.

For more information, go to <https://squamlakes.org/event/winter-2026-storywalk/>

Courtesy of: Squam Lakes Association, Innisfree Bookshop, Holderness Free Library, and Squam Lakes Natural Science Center

Glossary of Lake and Watershed Terms Recently Referenced in LKWA Water Matters Newsletters

Algal Bloom- An algal bloom is a rapid, excessive growth of algae or cyanobacteria in freshwater or marine environments, often triggered by excess nutrients (like nitrogen and phosphorus from runoff) and warm, calm conditions, leading to visible discoloration, surface scums, and potential harm to ecosystems by depleting oxygen or producing toxins.

Akinetes- thick-walled, dormant, spore-like cells produced by some filamentous cyanobacteria and some types of algae.

Anoxic- Water bodies with no or near zero dissolved oxygen, often due to stagnant conditions and/or overwhelming organic matter decomposition.

Bathymetry- the study of mapping and measuring the "beds" or "floors" of water bodies, including lakes, rivers, streams, and the ocean.

Benthic- anything related to the bottom of a body of water, like a lake or river.

Eutrophication- process when a body of water receives an excessive nutrient load, particularly phosphorus and nitrogen, often resulting in an overgrowth of algae. As the algae die and decompose, oxygen is depleted from the water, creating a lack of oxygen in the water which leads to the death of aquatic animals.

Ice-in & Ice-out- Ice-In occurs when a lake is mostly or fully covered with ice, usually in late fall or early winter. Ice-Out occurs in the spring when the ice breaks up and disappears, often defined as when a boat can travel unimpeded across the lake.

Internal and External Loading- Internal nutrient loading is the release of nutrients (like phosphorus and/or nitrogen) from a lake's own sediments back into the water column, creating a "legacy" effect from past pollution. External loading is the continuous input from the surrounding watershed via stormwater runoff, streams, erosion, fertilizers and atmospheric conditions.

Legacy Phosphorus- Phosphorus that has accumulated in lake sediments from past human activities, like excessive fertilizer use, sedimentation and erosion.

Non-point source pollution- Pollution from widespread, diffuse sources, often carried by stormwater runoff.

Riparian- Transition zone between water (lakes, streams, rivers) and dry land, characterized by water-loving vegetation that stabilizes banks, filters pollutants, controls floods, and provides critical habitat and shade for fish and wildlife.

Secchi Disk- A secchi disk is a simple black-and-white or plain white circular plate used to measure water transparency (turbidity) in lakes, by lowering it into the water until it disappears and the depth is recorded.

Thermal Stratification- layering of a lake's water by temperature into distinct zones (epilimnion, thermocline, hypolimnion) due to temperature and density differences.

Thermocline- a steep temperature gradient in a body of water such as a lake, marked by a layer above and a layer below where the water is at different temperatures.

Turnover- seasonal process where the layers of lake water mix from top to bottom, usually in spring and fall, driven by temperature changes that equalize water density, replenishing oxygen and nutrients throughout the water column. This process can often cause the water to appear cloudy or murky.

Upwelling- process in which deep, cold water rises toward the surface.

Vegetated Buffer- purposefully created areas of plants (grasses, shrubs, trees) alongside waterways and other sensitive areas, designed to slow runoff, filter pollutants, and prevent erosion. Buffers work best when using native plants, are ideally 50+ feet wide, and are maintained as dense vegetation.

Watershed- area of land where all the water—whether from rain, snowmelt, or springs—drains into a common water body, such as a river, lake, or ocean.

Additional watershed and lake terms can be found at

<https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/glossary-lake-terms> also [Glossary — LSPA](#)

Recent LKWA Board Activity Updates

The Board unanimously agreed to move all meetings to 4:00 PM start time. This includes the 30 minute monthly “stand up” meetings and the regular 2 hour monthly board meeting. A review of the minutes from previous meetings and any financial discussion will take place only at a regular board meeting.

The Community wide survey will be sent out at the beginning of March. All survey responses be will be tallied by a third party and will remain anonymous, unless an individual wishes to share their name and contact information.

The Board reviewed the findings from the November 18, 2025 meeting with UNH, NH Department of Environmental Services and FB Environmental on the State of Lake Kanasatka. After some discussion, a limited number of questions has been resubmitted in order for LKWA to have a more in depth understanding of the issues and to help guide our future work.

Membership numbers for the 2025-2026 fiscal year are up, as are donations. As of December 31, 2025 LKWA membership stands at 189 individual members representing 119 properties.

The Board voted to continue subsidized Septic System Inspections for the 2026 season.

A Nominating Committee has been formed for the Board Director terms starting July 1, 2026. Please see an article with greater detail elsewhere in this newsletter.

A committee of the Board is working on updating and distributing a LKWA Community Information Packet which will include documents on a wide range of important lake related topics. The packet is being supported financially by Jill and Carl Anderson in honor of Jill and Trish Townsend's father, the late Roy Green, to ensure that all homeowners will have access to important information about lake friendly living and protecting Lake Kanasatka for the future.

Goals set at the LKWA Board of Director's annual planning meeting in August is currently undergoing a mid-year progress review. Additional information can be found elsewhere in this newsletter.

LKWA is working on a statement regarding the effect that large wakes of boats of all sizes and types have on our lake.

Discussion on the conditions of Glidden Road are currently on hold, pending engineering plan results which are in process as part of the Congressionally Directed Spending grant, which is being managed by the Lake Winnepesaukee Alliance on behalf of LKWA.

LKWA email contacts:

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, Scott Wallace, Larry Pizer,
Bruce Hart, Julia Marchand, and Chris Wallace*



Lake Kanasatka Watershed
Association | www.kanasatka.org



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