Kanasatka Water Matters

News & Updates

April 2025, Issue # 17

Ongoing Stormwater Remediation Projects

Several stormwater remediation projects are underway around Lake Kanasatka, as part of our ongoing Watershed-Based Management Plan to help maintain a healthy lake for now and for generations to come.

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The 319 Grant team has been working over the winter months to prepare for the implementation of a major engineering project to address stormwater runoff issues on Burton Road and Foster Drive. Following a competitive bidding process, the Horsley Witten Group (HWG), was hired and a Site Specific Project Plan was submitted to NHDES for approval.

On April 18, the team conducted an initial site visit with four engineers from HWG and twelve landowners. Each affected landowner property, as well as the roads and backlands were toured to evaluate stormwater runoff concerns and ideas for improvements. It was a very positive experience with all parties learning about the various issues facing the site and possible solutions. HWG provided many examples of possible road improvements including: culvert replacements, drainage ditching, dry wells, and infiltration areas. They also discussed smaller improvements that could be made to individual properties. HWG will prepare initial recommendations for our review with sketches in 4-6 weeks.

The major emphasis for the 319 team in the coming months will be to complete data collection and then develop preliminary engineering designs. HWG will visit again for survey purposes in May. The Grant team will keep landowners and LKWA members informed as the project proceeds from initial ideas to preliminary engineering design plans by July.

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A Congressionally Directed Spending (CDS) grant, awarded to the Lake Winnipesaukee Alliance (LWA) and earmarked for implementing Stormwater Control Measures (SCMs) at locations identified in the 2022 Lake Kanasatka Watershed-Based Management Plan is also underway. Note: Lake Kanasatka is within the borders of the Winnipesaukee Watershed and has an impact on water that flows over the dam at Rte 25 and into the Mill Brook before reaching Lake Winnipesaukee. LKWA is grateful to LWA for this mutually beneficial assistance.

The locations selected for these grant funds are Sandy Cove Road/Nettie Way and Deer Crossing. These areas were selected based on previous and ongoing commitment by residents to implement and maintain SCMs through Boots on the Ground volunteer work.

LWA and LKWA met with prospective engineering firms at these two sites on April 14, 2025. Preliminary designs and cost estimates will be produced over the summer. Property owners will be involved and updated, every step of the way. The anticipated project(s) completion date is October 1, 2025.

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Last but not least, there have been numerous discussions regarding the impact of the streams

that flow into Lake Kanasatka with regard to total phosphorus contributions (loading). To help in this evaluation, LKWA has entered into a contract with Field Geology Services, a certified fluvial geomorphology firm which will work with LKWA to determine if any of these streams pose a threat to the lake as a result of stormwater runoff.

The field work will begin on May 6th. Property owners adjacent to the streams being evaluated have been contacted and each owner has consented to allow the team access for the field work.

The main focus of ongoing assessments throughout the watershed, is to identify areas of potential harmful runoff, stemming from many different sources, including from streams that eventually find their way into Lake Kanasatka. Project scope and details will be shared when they are available.

The three projects listed above are just a few of the many efforts that LKWA is initiating, based on recommendations from the Lake Kanasatka Watershed-Based Management Plan. More information on these projects will be shared when it becomes available.

Would you like to-

- **Better understand and prevent future cyanobacteria blooms on our lake?**
- **Know what you can do to maintain our lake's water quality?**
- **Protect Lake Kanasatka for future generations to enjoy?**

Working towards earning "LakeSmart" certification is a good place to start. The very popular LakeSmart program, administered by NH Lakes, is shifting to a community-based model starting this spring. Each LakeSmart Community will have a volunteer coordinator, or "LakeSmart Ambassador", who will work with NH LAKES to foster participation, schedule site visits, and share lake-friendly practices with their community. These Ambassadors will serve as a local contact, helping to promote the simple steps and benefits of lake-friendly living.

Using an online portal to sign up and complete an online self-assessment, participants will be sent initial suggestions on how best to get started, ranging from

• adding plantings to form a vegetated buffer at the water's edge to prevent stormwater runoff from entering the lake,
• to adding water razors or berms to redirect stormwater flow,
• to limiting non-porous surfaces for driveways and patios,
• to having your septic system and leach field professionally evaluated.

The Kanasatka LakeSmart Ambassador will provide you with suggestions specific to your situation, assist you in tracking your progress on the portal, and guide you through the process of achieving the LakeSmart award** (** to be determined on a final site visit by a member of the NH Lakes team.)

Since 2019, twenty-nine properties on Lake Kanasatka have earned the Lake Smart Award. At least eleven additional property owners are in the process of making lake-friendly improvements. Why not add your property to the list!

Please consider visiting **https://nhlakes.org/lakesmart/** and signing up to get started on becoming LakeSmart. The LKWA Ambassador will be there to help you along your journey with support and guidance. Your individual efforts will go a long way in helping to protect the water quality of Lake Kanasatka for future generations to enjoy.

NH Lakes maintains a list of recommended service providers that are available for hire, if needed, to assist you in meeting you LakeSmart goals. NH Lakes also offers a Lake-Friendly

Living Webinar Series and a video library covering topics such as “Shoreline Tree and Vegetation Management, Rules For Waterfront Properties” and “Spring and your Septic System,” in addition to many other relevant topics for our lake community.

Getting Ready for Spring Planting

After an unusually cold winter, compared to recent years, with up to 18” of ice on the lake, it is finally time to start thinking about choosing plants that will be appropriate for your location and preferences. NH Lakes has provided a practical guide to help you incorporate native plants as part of a landscape plan for your lake property. Find the article on their website by going to **https://nhlakes.org/plant-your-property-for-healthier-lakes/**

In addition, LKWA member Judy Stoessel has created a very interesting and useful section which can be found on the LKWA website. If you know Judy, you know she is passionate about using native plants. New Hampshire native plants provide many benefits and are well adapted to central NH’s climate and soil, leading to less maintenance. Further, using native plants in your landscape provides food and habitat for local fauna and also protects the lake from stormwater runoff when used as part of a vegetated border lakeside.

The menu below shows the topics to be found on the Native Plants section of the website. Read more at **https://kanasatka.org/all-about-native-plants/**

Using Native Plants

Using Native Plants in your lakeside landscape is an important step to ensuring a healthy ecosystem, good water quality and abundant wildlife habitats. Native plantings also provide an aesthetic value by creating a beautiful and natural-looking landscape that complements the surrounding environment.

Consider the following aspects of using native plants on your property:

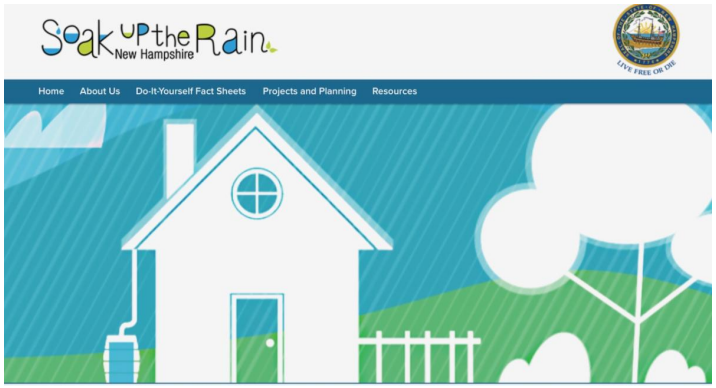
- **Habitat Creation:**
  Native plants are vital for local ecosystems once the plants are established. They provide food, shelter, and breeding grounds for a variety of wildlife, including birds, butterflies, bees, and other insects.
- **Biodiversity and Pollinator Support Pollinator Support:**

When using native plants that are adapted to local conditions, you help ensure the continuation of natural pollination processes while supporting the local plant and animal communities. This contributes to a more diverse and resilient ecosystem. An added benefit is that native plants require less water, fertilizer, and pesticides compared to non-native species.

- **Stormwater Management and Erosion Control:**
  The deep-rooted systems of many native plants help to prevent soil erosion along the shoreline and protect the waterbody by filtering harmful pollutants from stormwater runoff from entering the lake. Native vegetation can also help absorb excess water, reducing the risk of flooding and erosion during heavy rainfall events.

Learn more about **Native Plants** by going to [All About Native Plants]

Learn More About Managing Stormwater Runoff



Soak up the rain NH

Use this link to access Soak Up The Rain!

Throughout New Hampshire, neighbors are creating rain gardens, setting up rain barrels, and building trenches and other simple projects to prevent water pollution. Whether you live on the water or up the road, explore this site to learn how you can make a difference!

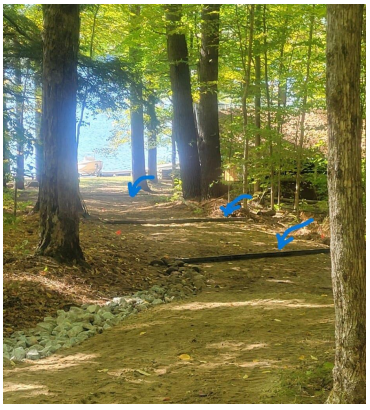

Getting Started >


Explore Rain Gardens >


See Projects >


Check Out Our Partners >

Water Razors: Manage Stormwater Runoff



Interested in learning more about the use of water razors to address stormwater runoff on your property? Contact LKWA Board member Scott Parker at carott_parker@msn.com

For the past two years, Scott has been volunteering his time to custom build water razors and deliver them to property owners. LKWA charges $5/foot for each water razor to cover the cost of lumber, screws, and rubber.

Learning From Our Neighbors on Squam Lake

Free Native Plant Giveaway!

In the summer of 2024, “The Shore Up Squam” program provided a total of 30 native plants to Squam Lakes Association members to help reinforce their lakefront shorelines. It has previously been established in these pages that a healthy plant buffer stabilizes the soil and filters runoff.

In 2025, it’s all about the water’s edge- the Lake Kanasatka Watershed Association is kicking off a “tougher buffer” program to help address stormwater runoff from reaching our lake. Adding a robust plant buffer along the shoreline not only stabilizes the soil and filters runoff and the detritus it carries (dirt, leaves, pine needles, pine cones, acorns, sticks etc.) from reaching the lake, it also aids in preventing erosion.

This summer, LKWA is offering small native plant and shrub seedlings from the NH State Forest Nursery to its current and future members to help create a dense buffer along the shoreline to prevent runoff.

The native shrubs on offer are well suited to the climate and environment around the lake where they will thrive and provide a touch of color to attract pollinators to your property. It’s a win-win proposition. Great for the lake and great for you!

A limited number of plants and shrubs will be available on a first come, first served basis to those who join LKWA or who renew their membership for 2025-2026 no later than July 12, the date of the Annual Meeting. Pick-up date for plants and shrubs will be July 12, following the Annual Meeting. If you are a paid member for 2025-2026 by July 12 but cannot be at the meeting, provisions will be made.

To learn more about healthy shorelines and Native Plants, go to
https://kanasatka.org/shoreland-protection/ and
https://kanasatka.org/all-about-native-plants/

Capturing runoff is essential in preventing excess nutrients from entering the water, preventing erosion and reducing the risk of future cyanobacteria blooms.

Please join us in creating a "tougher buffer” on your property by taking advantage of this free, native plant give-away.

LKWA is now offering high quality, snuggly soft, 60/40 cotton/poly blend T-shirts supplied by Matt Rosenfield’s Lake Life Brand from right here on Lake Kanasatka!

All T-shirts feature a prominent, updated LKWA logo with a small Lake Life Brand circle logo in sizes SM-XL. Color choices are Navy or Turquoise. Price is $25.00 for all styles, sizes and colors. If required, shipping is $7.00.

T-shirt styles are as follows:

1. Unisex short sleeve (printed front center, LLB circle at back of neck)
2. Women’s V-neck short sleeve (printed front center, LLB circle at back of neck)
3. Women’s racerback tank (printed back

center, LLB circle at front left chest)

Place orders now by contacting Kevin Kelly at **kevinkelly700@yahoo.com** and arranging for a pick up or shipping.

Upcoming LKWA Calendar

July 4th Human Powered Boat Parade- July 4
LKWA Annual Meeting- July 12 @ Moultonborough Academy
LKWA (Potluck) Annual Picnic- August 9th at Camp Quinebarge
Concert in the Cove- August TBD

Lake Kanasatka's Journey Back to Health is featured in Lakefront Living- Lake Life Blog!

Our thanks to Moultonborough realtors Angela and Glen Smith -Lakefront Living Realty – The Smith Group for telling the story of how the support of a small community can accomplish big things when it comes to something they care about deeply.

The Smiths are featuring Lake Kanasatka in their blog series on the lake's declining water quality, and what it took for the Lake Kanasatka community, working with NH Department of Environmental Services, University of New Hampshire and FB Environmental to find a solution to several years of unhealthy cyanobacteria blooms that impacted not only water quality for recreation but also for home use.

Read the Smith's accurate and well-crafted blog, designed to inform and educate their clients past, present, and future to the importance of coming together as a community to protect our lakes.

https://nhlakelife.wpengine.com/a-nh-lake-struggling-with-cyanobacteria/
https://nhlakelife.wpengine.com/tackle-cyanobacteria/

UNH Water Quality Update

The University of New Hampshire provides an Annual Water Quality Report in the spring of each year using data collected by the LKWA Water Quality Committee.

More information on the testing for Lake Kanasatka and for Wakondah Pond can be found on

the LKWA website at https://kanasatka.org/water-quality/

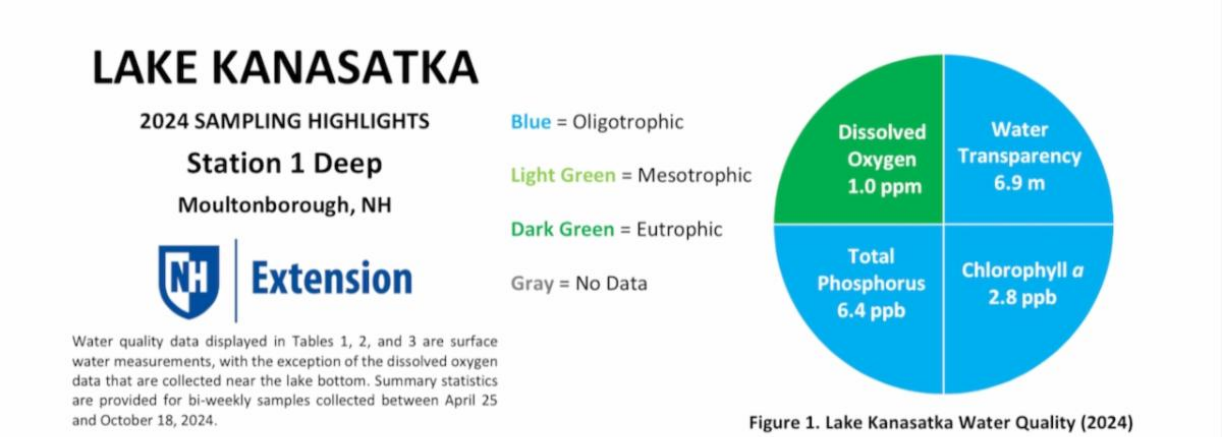
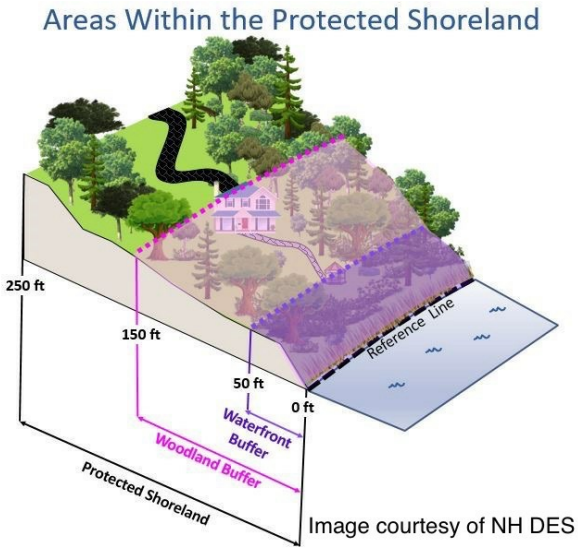


Figure 1. Lake Kanasatka Water Quality (2024)

Table 1. 2024 Lake Kanasatka Seasonal Averages and NH DES Aquatic Life Nutrient Criteria[1]

Parameter	Oligotrophic "Excellent"	Mesotrophic "Fair"	Eutrophic "Poor"	Lake Kanasatka Average (range)	Lake Kanasatka Classification
Water Clarity (meters)	> 4.0 – 7.0	2.5 - 4.0	< 2.5	6.9 meters (5.0– 9.4)	Oligotrophic
Chlorophyll *a* [1] (ppb)	< 3.3	3.3 – 5.0	> 5.0 – 11.0	2.8 ppb (1.6 – 4.4)	Oligotrophic
Total Phosphorus [1] (ppb)	< 8.0	8.0 – 12.0	> 12.0 – 28.0	6.4 ppb (4.7 – 9.4)	Oligotrophic
Dissolved Oxygen (ppm)	> 5.0 – 7.0	2.0 – 5.0	< 2.0	1.0 ppm (0.0 – 4.6) *	Eutrophic

* Dissolved oxygen concentrations were measured between 8.0 and 13.0 meters, in the middle and bottom water layers, on September 20, 2024.



Shoreland Protection In New Hampshire

In New Hampshire, the 250-foot setback area from where the land meets the water is referred to as the shoreland.

Gently sloping "soft" shorelands, particularly those covered in a diverse range of native plants, are more effective in maintaining shoreland stability and erosion control than artificial, hardened or bare shorelands.

Vegetation in this area forms a protective barrier against the runoff from the land to the water. These natural buffer zones absorb a substantial amount of excess nutrients from leaky septic systems, the use of fertilizers, and pet and other animal deposits, for example, before they reach the lake. Without this protective barrier, the flow of nutrients, including phosphorous, can enter the lake unchecked, causing harmful algal blooms, impacting the lake's water quality, reducing the oxygen levels, and destroying ecosystems.

The woodland buffer is the area between 50 and 150 feet of the reference line. At least 25% of this area requires that it be managed as natural woodland, "as is" with existing groundcover, shrubs and trees.

The waterfront buffer is the area of the protected shoreland located within 50 feet of the "reference" line. The reference line is the edge of the water body at full lake level.
Avoid replacing native vegetation in this area with stone walls, retaining walls or other impervious materials when working to protect shoreland property. The force of the backwash from waves and boat wakes against hardened surfaces leads to the resuspension of sediments in the water and can redirect wave action to other areas creating further erosion. A gently sloping buffer zone containing natural vegetation with established root systems effectively decreases the negative effects of wave action and protects the lake from runoff and erosion at

the same time. Information courtesy of The Blue Lakes Project- blue lakes.ca

For more information see:
https://www.des.nh.gov/land/waterfront-development/protected-shoreland
https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/2020-01/sp-5.pdf

Did you know?
Natural vegetation including trees, shrubs and native plants throughout the 250-foot Shoreland Protection Zone supplies the following benefits:

- Protects the water quality of the lake from stormwater runoff and erosion
- Provides shade from the sun and relief from the wind
- Reduces noise and dust
- Helps prevent flooding
- Provides privacy and screening
- Reduces the amount of time and money spent on property maintenance
- The cutting of trees on shoreline properties is regulated by both the State of NH and even more stringently by the town of Moultonborough

Zoning Ordinance for Moultonborough New Hampshire Rev March 11, 2025

4.0 WATERFRONT PROPERTY page 22
4.7 COMPREHENSIVE SHORELAND PROTECTION page 23
4.7.1.7 In addition to the requirements of the SWQPA and not in limitation thereof: 4.7.1.7.1 No person shall commence cutting down trees or saplings, within the natural woodland buffer, without first filing with the Code Enforcement Office a diagram of the waterfront buffer as set forth in the SWQPA RSA 483-B:9, V.(a)(2)(D) and photographic documentation of the natural woodland buffer

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New Hampshire FISH AND GAME DEPARTMENT

Connecting Kids with Wildlife

Providing Resources and Opportunities to Get Kids into the Outside World

Connecting kids to wildlife and the outdoors offers many benefits and fosters lifelong memories and experiences. NH Fish and Game is happy to provide resources, facilities, and opportunities to help get your kids out into natural world we live in!

https://www.wildlife.nh.gov/hunting-nh/hunter-education/owl-brook-hunter-education-center

https://www.wildlife.nh.gov/fishing-new-hampshire/new-hampshire-fish-hatcheries

https://www.wildlife.nh.gov/sites/g/files/ehbemt746/files/inline-documents/sonh/wild-times-spring-2023-outlines-for-pdf-lo-res.pdf

https://www.discoverwater.org/

CLEAN. DRAIN. DRY.
NH LAKES
Protect Our Lakes from Aquatic Invasive Species

Clean. Drain. Dry.

Before leaving any boat launch area, be sure to clean and inspect your boat for invasive plants and animals. Take the time and make sure you are not inadvertently giving these hitchhikers a ride to their next location!

Go to https://nhlakes.org/clean-drain-dry/ for a detailed outline of the necessary steps that need to be taken to ensure your boat is clean of all invasive species. The health of our lakes depends on all of us taking these simple steps.

LKWA Membership News

Starting this year, LKWA memberships and renewals may be paid online from our website!

The Give Lively nonprofit donation platform and the Stripe payment processing partner, which LKWA used with great success during our Capital Campaign, is now set up for LKWA new memberships, membership renewals and other donations.

LKWA Membership online is easy, fast, timely and secure. Memberships for the 2025-2026 fiscal year will be accepted beginning July 1, 2025. Leave your checkbook at home, and avoid the payment lines at the LKWA Annual Meeting on July 12 by paying online! Go to **https://kanasatka.org/** then choose the “Membership” widget on the home page to complete your transaction.

Membership by mail will still be accepted by going to **https://kanasatka.org/join_or_renew_membership/** where you will find a membership registration form and a mailing address.

Thank you for your support!

Recent LKWA Board Activity Updates

The LKWA Annual Meeting will be held at the Moultonborough Academy on July 12, pending availability. The meeting will include a business portion and 2 presentations. The annual picnic will be held at Camp Quinebarge on August 9, in response to the camp’s offer to host the community event this year.

The Nominating Committee has advertised in the newsletter and on Facebook several times for LKWA members interested in a Board position to step forward. Please contact **lkwamail@gmail.com** with your interest and/or any questions. The Board may consider having one of the Directors assigned to a one-year term to balance the term lengths out to be 5/4 instead of 6/3. Bylaws will be reviewed to see if this is possible.

The watershed work timeline was discussed. The 319 Water Quality Grant is the main focus at this time. This grant provides major engineering work to take place on Burton Road and Foster Drive to address stormwater runoff from reaching the lake. The 319 team held a site visit on April 18/19 which was well attended by neighbors from Burton Road and Foster Drive. A future meeting will be held on site in May.

LKWA has an opportunity to involve Camp Winaukee volunteers with our Boots on the Ground efforts.

A new Cyanobacteria Watchers Committee has been formed in Moultonborough. They are looking for volunteers to cover Lake Kanasatka. Training will be available. Please contact **kevinkelly700@yahoo.com** if interested in volunteering. This committee will be in addition to the Moultonborough Weed Watchers Committee on Kanasatka.

Kanasatka has added a 4th official monitoring site on Wakondah Pond for 2025. A representative from the Moultoborough Cyanobacteria Committee, a representative from UNH and a LKWA board member will meet with several Wakondah residents in May to discuss water quality testing.

A volunteer member has stepped up to become the Lake Kanasatka ambassador for the NH LakeSmart program. The board unanimously agrees to move forward with this appointment, pending a written job description for the position from NH Lakes.

The board discussed the possibility of establishing a “Little Free Library”, similar to those seen in neighborhoods through several local communities. The library would contain lake-oriented

publications to borrow and return. The boat ramp might be a possible location. Discussion to continue in coming months.

A Give Lively page has been set up to allow members to join or renew LKWA memberships online. The payment option will go live soon.

Through the generosity of lake neighbor Judy Stoessel, LKWA will give away native plants from the NH State Forestry Nursery to individuals who join LKWA or who renew their membership for 2025-2026 no later than July 12, the date of the Annual Meeting. If you are a paid member for 2025-2026 by July 12 but cannot be at the meeting, provisions will be made.

The Congressionally Directed Spending Grant team has held a pre-Request for Qualifications "RFQ", visit for the purposes of meeting with potential contractors for Sandy Cove, Nettie Way and Deer Crossing/Sibling Roads. Deadlines are very tight, with no concerns at the moment.

An update on stream work includes a reminder that fluvial geomorphologist John Field will be on site May 6/7 to walk the streams and neighboring properties in preparation for a stream study to determine whether there are any potential impacts on the quality of the lake water from stream flow.

A Membership Committee member joined the April board meeting and shared the following update.

- Membership lists were updated where possible, with mailing address corrections and email addresses.
- 97 emails were sent out in November with a request for membership renewals. 16 renewals were attributed to this action.
- 72 additional letters were sent out via USPS to anyone that was not a current member or already contacted via email. 15 additional members are attributed to this action.
- The total number of members currently is 115.

LKWA will begin a cleanup of the LKWA Google Drive architecture and move docs to the Microsoft O365 platform in July.

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, Janna Hoiberg, Scott Wallace, Larry Pizer,
Julia Marchand, and Chris Wallace

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Lake Kanasatka Watershed Association | www.kanasatka.org