

2025 Spring/Summer



The MONITOR

The Newsletter of the Newfound Lake Region Association

In this edition:

The State of the Lake

A New Home for Conservation

Student Field Scientists Study Wildlife

And More!

OUR MISSION

The Newfound Lake Region Association's mission is to protect Newfound Lake and its watershed. The Association – through education, programs, and collaboration – promotes conservation and preservation of the region's natural, social, and economic resources.

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FROM THE EXECUTIVE DIRECTOR



NLRA is on the cusp of a truly exciting transition. By late spring we anticipate moving our operations to the Grey Rocks Conservation Center, the new building at our property in Hebron. And while this new space will be a game-changer for NLRA, it really represents opportunity and potential.

As Newfound faces real and growing threats from stormwater pollution and invasive aquatic species, the Grey Rocks Conservation Center provides resilience in the face of climate change and development pressure. The Center provides the critically-needed space to allow us to work to protect the lake and watershed.

With the physical space we need to move forward, it's now time to build our operational capacity. In the near-term, we're starting with a new staff member. Please join me in welcoming Isabella Giancola as our new Conservation Program Coordinator. A boost in staff means we have more capacity to address stormwater issues, the threat of invasive species, and we can more deeply connect with our community.

We're also looking further into the future. Under the direction of the Board of Trustees we're in the early stages of

building a new, comprehensive strategic plan, one that will guide us to a future where we can be adaptive to the changing needs of the watershed and the Newfound community.

We're thrilled to welcome you to the new conservation center this summer. I'm grateful for your support and enthusiasm on this journey to protect Newfound Lake and its watershed.

Gratefully,

Rebecca Hanson
Executive Director
Rebecca@NewfoundLake.org

2024 ANNUAL REPORT SUMMARY

2024 was an exceptional year for NLRA. NLRA's conservation efforts are made possible by the support of the Newfound community. With special thanks to our hardworking volunteers, enthusiastic supporters, dedicated organizational partners, and everyone who cares for Newfound's land and water, here are some of the highlights of the past year:



Newfound Lake's water quality remains excellent. Newfound Lake remains free of invasive aquatic plants and no harmful cyanobacteria blooms were recorded.



Education programs reached broader audiences. 700 residents and visitors joined us for educational programming to learn more about their role in protecting watershed health.



More property owners committed to protecting lake health. 29 property owners, including homeowner associations, worked with NLRA to identify and stop sources of stormwater pollution on their property.



Support for conservation grew. 1,000+ individuals, foundations, and businesses chose to support watershed protection efforts by making a donation or providing in-kind goods and services to NLRA.



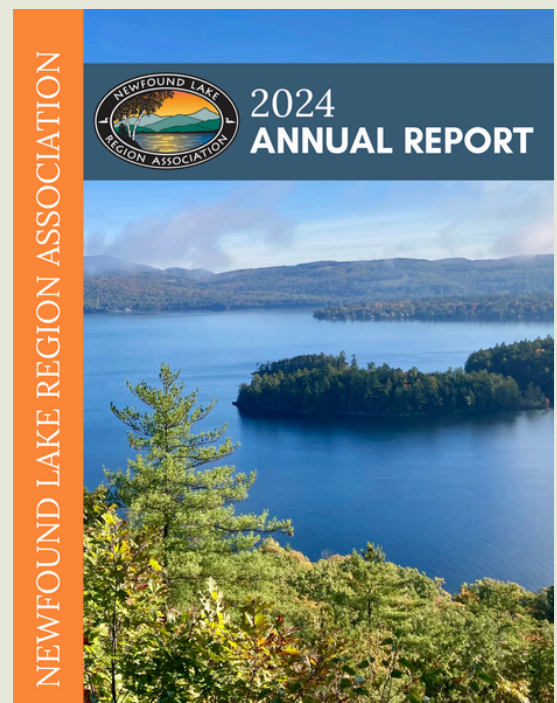
Construction began on the Grey Rocks Conservation Center, a space for community conservation efforts and the future home of the NLRA.

READ THE FULL REPORT

Our annual report summarizes our activities and accomplishments in 2024. It demonstrates the efficacy of our programs, strength of our leadership, and the community support of our mission to protect Newfound Lake and its watershed. Read about NLRA's programs, see special acknowledgements for supporters and volunteers, review NLRA's fiscal health, and more. The 2024 Annual Report can be found at: NewfoundLake.org/annual-report or use the QR code below. To request a print copy, please email Audrey@NewfoundLake.org.



Scan to read now!





The State of the Lake

A Water Quality Update

Newfound Lake is known for having exceptional water quality. Data collected by NLRA volunteers over four decades show that, while Newfound's water quality is affected by watershed development and intense storm events, overall water quality remains high. In partnership with state experts and volunteers, NLRA has set special water quality targets with the goal of maintaining and even improving Newfound's water quality. With growing threats to water quality expected in the future, preserving and improving Newfound's water quality is only possible with strong community support for conservation.

Long-range climate forecasts for central New Hampshire predict increasingly warmer, wetter winters, hotter summers with more frequent intense rainfall, and drier springs and falls. Over the last two years we've experienced all of the above, each impacting water quality in different ways.

In 2023, New Hampshire experienced one of its wettest years on record. Fourteen major storms dropped over 24 inches of rain on the Newfound Watershed. Washed out roads and erosion from these big storms brought large quantities of sediment and stormwater pollution to the lake. As a result, 2023 was one of the worst years for water quality since monitoring began in 1986.

Water quality data from 2024 show lingering impacts from 2023's storms and improving water quality over the 2024

WATER QUALITY AT A GLANCE

- Newfound Lake's overall water quality remains excellent.
- The effect of stormwater pollution from large storms in 2023 can still be seen, but Newfound Lake is recovering.
- Newfound Lake remains free of aquatic invasive plants.
- No harmful cyanobacteria blooms have been reported on Newfound Lake.
- Expanded protection efforts are critical to maintain Newfound Lake's high water quality into the future.

sampling season (May–October). Drier years like 2024 typically improve water quality by reducing stormwater runoff. Less runoff means improving water clarity and decreasing nutrient concentrations lake wide—good signs marking Newfound's recovery. However, drought and extreme heat like we saw in 2024 negatively impact water quality by warming surface temperatures and lowering the amount of dissolved oxygen in the lake. These conditions boost the growth of algae and bacteria. Elevated levels of algae and bacteria were recorded throughout 2024, though concentrations generally decreased over the course of the summer. No harmful cyanobacteria blooms were observed, despite increased reports in other water bodies statewide.

Large, deep lakes like Newfound can recover naturally from extreme weather over time. And with its largely intact aquatic ecosystem and highly forested watershed, Newfound is positioned to adapt to a changing climate better than most. Newfound's 39-year monitoring record allows us to better understand how the lake responds to extreme weather events. By tracking long-term changes in lake health we can proactively manage this treasured resource.

Building Watershed Resilience

It's tempting to focus on the recovery seen in 2024 and put years like 2023 behind us, but major storm events offer important lessons on how to safeguard the watershed moving forward. How much sediment and stormwater pollution reach the lake and how quickly Newfound recovers largely depends on watershed development and land use. This relationship can be witnessed in Newfound following large-scale development in the early part of Newfound's water quality record. As storms intensify in the future, responsible watershed planning and stormwater management will be critical in minimizing harm to Newfound Lake.

Addressing stormwater issues and protecting water quality requires an understanding of where water is coming from. By way of our roofs, driveways, and lawns, the average house in the Newfound Watershed produces over 38,000 gallons of concentrated stormwater each year. Washouts and gullies often mark where improvements can be made. Dealing with residential stormwater with simple, cost-effective practices can prevent erosion, improve water quality, and protect property and infrastructure. Learn more about NLRA's resources for property owners and steps you can take to protect Newfound at home by visiting: NewfoundLake.org/small-scale-stormwater.

Newfound's water quality is linked to the health of the broader watershed as a whole. Large-scale watershed development and changing land use alter how water interacts with the land. Increased impervious surfaces, compacted soils, and altered stream networks result in more stormwater runoff, erosion, and pollution reaching the lake. Guided by the Newfound Watershed Management Plan, NLRA implements lasting change by partnering with municipalities to address major sources of stormwater pollution and works with landowners to advance land conservation initiatives.



Top: NLRA relies on volunteers to collect water quality samples. In 2024 nine volunteer lake monitors supported the most comprehensive sampling of Newfound to date.

Bottom: Washouts, like this extreme example on West Shore Rd, are a visible sign of potential stormwater management issues that negatively impact water quality.

A new home for CONSERVATION



Since Grey Rocks Conservation Area was donated to NLRA in 2011, we have envisioned creating a space that serves the growing conservation needs of the Newfound community. Last fall we broke ground on a once-in-a-generation project that will unify the Newfound community behind our shared vision of a healthy watershed. The Grey Rocks Conservation Center will serve the growing needs of the watershed, the community, and NLRA. It will promote environmental awareness and stewardship, enhance conservation work, and ultimately secure a brighter future for Newfound.

NLRA is grateful to the donors and volunteers that have come together to stand with NLRA to make this project possible. Thank you Newfound! We look forward to welcoming you to the new conservation center in June of 2025.

CURRENT PROGRESS (AS OF APRIL 1, 2025)



RENDERING OF COMPLETION



We're building...

WATERSHED RESILIENCE

The Newfound Watershed faces threats from stormwater, harmful cyanobacteria, and invasive aquatic species. With a dedicated water quality lab and work space for staff and volunteers, the conservation center will enable NLRA to build Newfound's resilience to new and existing conservation threats and increase scientific capabilities.

COMMUNITY ENGAGEMENT

Visitors to Grey Rocks will have access to NLRA as a resource and hands-on opportunities for involvement in conservation work in all four seasons and in any weather.

EDUCATIONAL RESOURCES

Understanding the environment is the first step to building a culture of conservation. Through interactive exhibits and on-site programming, schools, summer campers, residents, and visitors will be able to build connections with the natural environment.

OPPORTUNITIES FOR VOLUNTEERISM

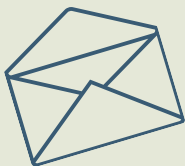
From monitoring water quality to leading educational programs, the conservation center will provide more opportunities for volunteerism and broaden the volunteer base critical for conservation work.

A FUNCTIONING ECOSYSTEM

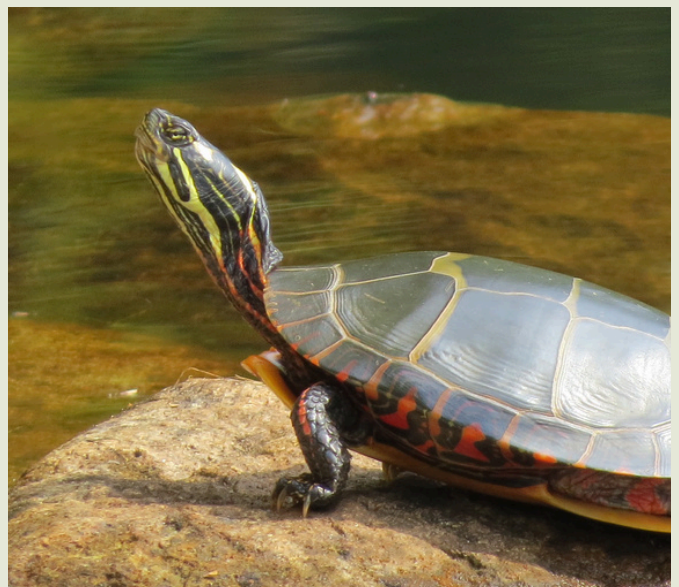
Plans for the conservation center include stormwater management practices and native plantings that will improve ecological function at Grey Rocks Conservation Area and support species diversity in the Newfound Watershed.

Join us for the

GRAND OPENING!



We're planning an exciting Grand Opening celebration! Watch for more information and your invitation coming later this spring!





Youth Field Scientists Document Watershed Wildlife

The future of conservation depends on an engaged and educated community. NLRA fosters the next generation of stewards by connecting children with their environment through classroom visits, working with summer camps, and collaborating with local organizations. This work with area youth illustrates connections between science concepts and the Newfound Watershed and helps teachers take science lessons outside. Our latest project goes beyond these benefits by also making students active participants in research.

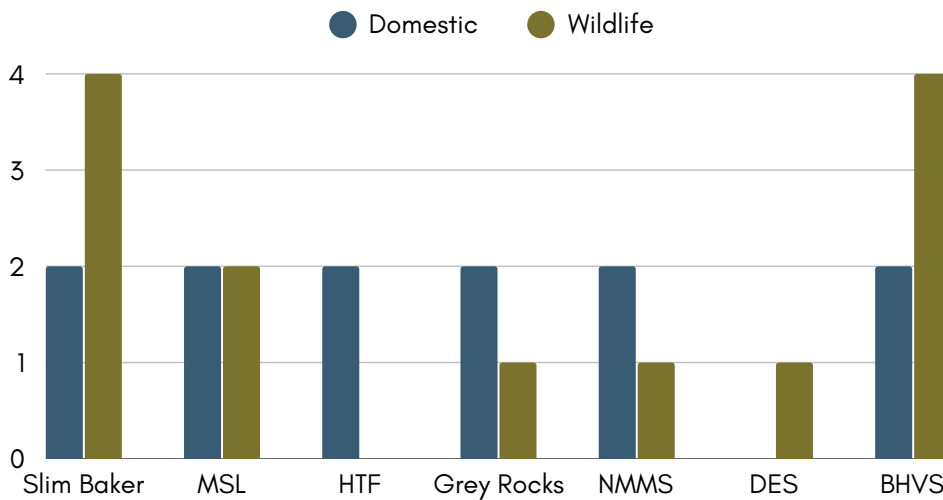
The overlap between NLRA's mission to protect the Newfound Watershed and science curriculum topics, like the properties of water, erosion, and weathering, create opportunities to partner with teachers. We work with educators to make sure that our influence in the classroom meets their goals for instruction and content. Supporting teachers is also an opportunity to expand science concepts beyond the classroom walls. Working with science that comes from the local environment makes concepts and patterns feel more relevant and helps develop a strong sense of place and connection.

Newfound area teachers agree that students need to improve skills in creating, reading, and interpreting graphs. With this in mind, NLRA partnered with local schools, the Minot-Sleeper Library, and other groups to transform students into field scientists. Working with our partners, we designed a project for students that uses wildlife cameras to document animal life at locations throughout and adjacent to the watershed, including the Hebron Town Forest, the Slim Baker Foundation, the library, several schools, and Grey Rocks Conservation Area. A grant from the Squam Lakes Connected Learning Ecosystem provided funding for all equipment.



Top and above: Students chose the locations and installed camera traps on school grounds in each season to document and learn more about local wildlife in and near the Newfound Watershed.

Number of Species by Location, Fall 2024



Top: Students created a graph to illustrate the prevalence of domestic and wildlife species documented by the camera traps set out in the fall.

Middle and bottom: Camera traps have captured a variety of species, including coyote and skunk.

Over the 2024-2025 school year, we've coordinated with classes at Danbury Elementary, Bridgewater-Hebron Village School, and Newfound Memorial Middle School, as well as students that visit the Minot-Sleeper Library in the afternoon to place camera pairs at each location for a two-week period in fall, winter, and spring. Once the cameras are brought back in, students are in charge of going through the pictures. They look for wildlife species, whether people have been by, and if any dogs make an appearance. The gathered information is then used to practice making and interpreting graphs. They have to figure out how to illustrate their data and also how to look at someone else's dataset and understand what it is saying.

Pictures and data from different locations are shared among different groups so that students can think about differences and similarities between locations and results. They look for patterns in the data and discuss how this research gives us a better understanding of Newfound's wildlife community. By taking on the role of researchers, students are developing skills in data literacy, getting first-hand experience with scientific research, and contributing to the community's knowledge of local ecosystems.

Not every image captured has provided the wildlife sightings that students were hoping for (there are a lot of pictures of branches blowing in the wind), but there have been some surprises, such as snowshoe hare and a flying squirrel. The project as a whole has pushed students to become more familiar with local wildlife and also more attuned to what that wildlife is doing. Developing this project with multiple collaborators promotes watershed-wide partnerships for environmental education and stewardship. Together, this supports a healthy lake and watershed into the future.

NLRA Welcomes New Conservation Program Coordinator Isabella Giancola



NLRA is expanding to meet the conservation needs of the Newfound community. During this period of critical growth, NLRA is thrilled to announce the addition of Isabella Giancola to our year-round staff. Isabella joined NLRA in April as our new Conservation Program Coordinator.

Isabella grew up in New Hampshire, where her love for nature and wildlife began at an early age. Raised on a small hobby farm, she spent most of her time outside exploring the world around her. After earning her bachelor's degree in Environmental Science from Wheaton College in Massachusetts, Isabella moved to Bristol where she quickly fell in love with the area's natural beauty and close-knit community.

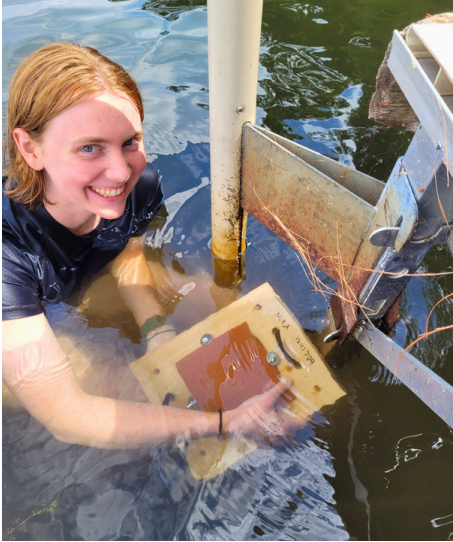
Isabella served as an AmeriCorps Watershed Steward with NLRA in 2023. She participated in stormwater management projects, ran educational programming, connected with Grey Rocks visitors, and monitored water quality, becoming familiar with NLRA's programs and initiatives. More recently, Isabella worked as an Education Assistant with New Hampshire Audubon, where she provided environmental education programming to students around the state.

The Conservation Program Coordinator position is a new one at NLRA, and reflects increasing demand for NLRA programs. We're expanding our small-scale stormwater program, which helps property owners stop stormwater pollution on their property, and furthering large-scale watershed management efforts to increase Newfound's resilience to climate change. Our educational programs are also growing. We're working with schools, afterschool programs, and summer camps to ensure that the next generations of Newfounders have a strong sense of place and caring for Newfound. As we move into our permanent home at the Grey Rocks Conservation Center, we will be better positioned to serve visitors and NLRA volunteers on site. Isabella will boost our capacity in all of these areas. She will play a lead role in managing volunteer participation in conservation work, protecting Newfound from invasive species, and maintaining Grey Rocks Conservation Area.

Join us in welcoming Isabella back to the NLRA at the Volunteer Kick Off on June 6, 4-5:30pm, at Grey Rocks Conservation Area, or check our events calendar for upcoming Weed Watcher Trainings and Volunteer Work Days led by Isabella.



Expanding Water Quality Monitoring to the Shoreline



Our new near-shore monitoring program measures algae and bacteria growth to determine potential pollution issues in the areas of Newfound Lake closest to the shore. In partnership with the Squam Lakes Association, this innovative program helps us understand a lesser-studied part of the lake ecosystem.

Clay tiles are mounted to docks or shallow moorings throughout the summer. In September, the tiles are removed and we measure algae growth, which can be a sign of water quality changes.

Do you have a dock or shallow mooring on Newfound Lake? Participate in this project by hosting a near-shore monitoring tile!

NLRA is looking for 24 locations in Pasquaney Bay and south of Mayhew Island to host monitoring tiles over the summer. We will attach a 6-inch clay tile and mounting plate near the lake bottom and collect it at the end of the study. Ideal monitoring locations are dock posts or shallow moorings that maintain at least three feet of water June through September. Contact Conservation Program Manager Paul Pellissier for more information: Paul@NewfoundLake.org.

Volunteer Spotlight: Tom McShane

Tom first brought his passion and expertise to NLRA in 2022, leading regular educational programming for the community and assisting NLRA with important conservation initiatives. An avid and knowledgeable birder, Tom leads NLRA's guided bird walks throughout the watershed. Find the next one at NewfoundLake.org/events.

My connection to Newfound Lake started when I was a kid and our parents took us to Wellington State Park every weekend throughout the summer. We brought our children and now we bring our grandchildren. The lake has been, and is still, a connection to family. When we moved to Plymouth, I was looking for a conservation organization that I could volunteer with. I was excited to find that NLRA had many volunteer opportunities. Volunteering for NLRA makes me feel like part of the team that has worked tirelessly since 1971 to protect the beautiful and valuable Newfound Watershed. As a volunteer I am able to learn from the staff and other volunteers. I am also able to share some of my knowledge to help educate other people who are interested in conserving our environment. Whether it is by leading a bird walk, a kayaking event in the wetlands, assisting with tree inventories or educational events for families, my hope is to instill a sense of excitement and appreciation of Newfound. I am looking forward to the future as NLRA continues to expand their work as the stewards of Newfound Lake and its watershed.

– Tom McShane, NLRA Volunteer



Learn new things, share your expertise, and join NLRA's vibrant volunteer community. Check out existing volunteer opportunities at NewfoundLake.org/volunteer or send an email to: info@NewfoundLake.org.



Newfound Lake Region Association
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NewfoundLake.org

MARK YOUR CALENDARS

For these key upcoming events!

- **Volunteer Kick Off**
June 6, 4-5:30pm
Grey Rocks Conservation Area
- **NLRA Annual Meeting**
June 28, 9-11am
Grey Rocks Conservation Area
- **Weed Stampede**
August 16 & 17, 8-11am
Lake wide!

Find details and more upcoming events at:
NewfoundLake.org/events

