The North Pond Association (NPA) is grateful to partner with Smithfield residents and town officials to help protect the watershed which in turn helps protect the water quality in North and Little Ponds. As many of you are aware, the North Pond Association is an all-volunteer organization that includes 150 plus members. It is run by a board of 12 volunteers from Mercer, Rome and Smithfield. The NPA is very thankful to the town of Smithfield for your continued support. The monetary funding, we receive each year is earmarked to help pay for the annual cost of the Courtesy Boat Inspector (CBI) Program.

In 2022 the town of Smithfield voted to support the CBI program for $3,500. This is the same amount that the NPA is requesting for 2023.

**CBI Program & Statistics:**

Paid employees are hired and trained by 7 Lakes Alliance as the first line of defense in our quest to keep aquatic invasives from entering our lake. Additionally, they help educate boaters on the importance of always checking their watercraft when entering and exiting a body of water. If an aquatic invasive gets into our lake, North Pond’s ecosystem would be forever altered because of the rapidly growing plants’ impact on our native aquatic plants, fish and animals. The cost of eradication is exponentially more than the cost of prevention, so thank you again for your continued support!

The CBI program sponsored by the 7 Lakes Alliance is paid for by the NPA to provide coverage 7 days a week at a fully-funded cost of $14,700 in 2022. In the past, each town has donated funds to help reduce the cost and NPA makes up the difference with our bottle redemption monies and donor support. The NPA funded just over $3,700 for Courtesy Boat Inspector coverage through dues, member donations, and bottle redemption. The Courtesy Boat Inspections at our boat landing run from Memorial Weekend through Labor Day Weekend. During the 2022 season, there were 837 boats inspected with 57 plant fragments found. Thankfully, none of those fragments that were caught and removed were invasive!

**Curly Leaf Pondweed Update:**

There was a plant paddle in 2022 that surveyed the entire shore of North and Little Ponds and thankfully no additional infestations of Curly Leaf Pondweed were found. This spring 17 volunteers signed up for the Adopt-a-Shoreline program, which will mean that those areas that are assigned will be surveyed by canoe, kayak, paddleboard, etc. at least once a season to look for invasives. We have a few areas that are in need of volunteers, so if you are interested, please contact Sharon Mann, 7 Lakes Invasive Aquatics Manager, as Sharon.mann@7lakesalliance.org.

The previously identified infestations between the junction in East Pond’s Serpentine and the foot bridge in North Pond’s Old Mill Stream, which passes through Sunset Camps, had divers from 7 Lakes Alliance working almost 5 days a week over the summer. Over the summer, the amount of curly-leaf pondweed removed during each dive decreased, meaning the regrowth slowed. As of October, the survey teams had found no invasive curly-leaf pondweed outside of the known infestation area.

NPA, East Pond Association (EPA), DEP and 7 Lakes Alliance all worked together to get the word out to local property owners by installing education signage in the streams, at local businesses, and developing informational pamphlets. Together we also put a call out for donations to help support the increased cost of the CLP removal over the summer. We are so grateful for the many donations that came in to both of our associations to support this crucial work.

**Water Quality:**

This year, North Pond experienced a sustained algal bloom which kicked up in earnest by mid-July 2022. The bloom continued into the fall months, with our last *Secchi Depth Transparency* reading at only 6.1 feet (1.9 meters) on December 2nd. Typically, the algae on North Pond clears up by the end of September, but this year it persisted well beyond that. While deep lakes often have algae at this time of year due to lake turnover, this is not the reason that North Pond remains green, as it is too shallow. One of the main drivers of algal productivity is the amount of phosphorus available in the water column.

Water samples were collected between April – October 2022 by 7 Lakes Alliance to assess in-lake conditions over the course of the season. This included weekly water clarity, dissolved oxygen, temperature, chlorophyll-a and turbidity measurements and bi-weekly plankton samples. Late summer and fall lab results are still pending. This data will be an integral part in the creation of the Water Based Management Plan (WBMP).

**LakeSmart Program:**

Phosphorus is one of the major contributors to algae blooms on the lake. Phosphorus is everywhere. It is on our lawns and in our fertilizers, it’s on our roads and gets directly into the lake due to runoff from our properties and roads. Taking steps to help prevent erosion on your property is an integral part of trying to keep phosphorus out of the lake.

We have 3 evaluators on the lake who can come and look for opportunities to improve your property and reduce phosphorus runoff into the lake. We look for drip lines around your buildings and structures. We look at how the water can flow from your property by looking at the topography of your property. We look at your shorefront and ways to improve the buffer to get the water into the ground before it reaches the lake. Contact Ed Galsheen at edglashe@yahoo.com if you are interested in a LakeSmart evaluation.

The LakeSmart program will be a focus for NPA as only 7% of the shore front residences are considered to be LakeSmart out of an estimated 350 residential properties on the lake. 90% of those homes are within 100 feet of the lake. More LakeSmart properties will result in less phosphorus entering the lake and will allow us to acquire more funding assistance for whatever remediation is recommended to help improve water quality.

**319 Grant Projects:** These grants are administered in Maine by the Maine Department of Environmental Protection (DEP), the program funds projects in watersheds that have a US EPA-approved management or protection plan.

Since 2018, 7 Lakes Alliance has received three Clean Water Act 319 grants totaling $304,114 in funding for North Pond erosion control projects. With the required landowner match of $384,964, this funding has generated a total of $689,078 for erosion control projects.

If you are interested in having your driveway or road inspected to see if it qualifies for a 319 grant to help prevent erosion, please email Charlie Baeder at Charlie.baeder@7lakesalliance.org or call [(207) 495-6039](https://www.google.com/search?gs_ssp=eJzj4tVP1zc0TDKvNLc0Kc81YLRSNagwSU4yTDMyNrRMNjIwTrI0tjKoSElOTjQwTE4zMTK3MLYwNvMSMFfIScxOLVZIzMnJTMxLTgUAymUUkA&q=7+lakes+alliance&rlz=1C1CHBF_enUS937US937&oq=7+lakes+&aqs=chrome.1.69i57j46i175i199i512l2j0i512j46i175i199i512l3j46i512j0i512j69i59.3631j0j7&sourceid=chrome&ie=UTF-8).

**Watershed Based Management Plan (WBMP):**

2022 was a busy first year for the two-year Planning Project to develop a North Pond Watershed Based Management Plan (WBMP). The first year focused on collecting scientific data that will be used for the watershed model and water quality analysis, and ultimately the recommendations for restoring the water quality in North Pond over the next 10 years.

2023 is the final year of the project and will involve putting all of the pieces of information together that were collected in 2022 to develop scientifically-sound recommendations for the North Pond WBMP. A public meeting to present the results of this work is expected in August 2023.

Major project accomplishments include: Bathymetric Mapping, Lake Sediments, Water Quality Analysis, Septic Database, Septic Survey, Land Cover Update & Watershed Modeling, Watershed NPS Assessment, Watershed Ag & Forestry Survey, Municipal Ordinance Review, and Outreach.

We are most grateful for all of the support we have received from the residents of Smithfield. Your continued support through using LakeSmart practices on your property, placing bottles in the bottle boat at Tri-pond Variety, making donations for CLP removal, participating in the Adopt-a-Shoreline program and other activities do make a difference. All residents of Smithfield can play an important role in the restoration efforts of North Pond. For more information, please see our website at northpondmaine.org.

Respectfully submitted,

Kelly Marshall

NPA President