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ANNUAL MEETING

SATURDAY JULY 13th, 1:30 – 3:30 pm

Town Office, 19 Danforth St.

(Behind Norway Savings Bank)

Join us to learn what we're doing to protect our lakes and what you can do.

SUMMER 2019 Newsletter

LAON is dedicated to protecting our lakes now to preserve them for the future. This newsletter highlights the challenges confronting us and the responsive programs we've developed. Our strength is based on our multifaceted approach, our success is based on lakeshore property owner involvement. Join us!

A MESSAGE AND APPEAL FROM LAON'S PRESIDENT

Five years ago, LAON recruited an active Board which enabled us to go beyond monitoring by water quality testing and invasive plant surveys. We became proactive to prevent costly problems. Our first step was to fund a Courtesy Boat Inspection Program. We then recognized that watershed management is critical to keeping harmful pollutants out of our lakes.

We've accomplished a lot but there is much we still need to do. All 459 lakeshore property owners benefit from LAON's efforts, yet only 201 paid dues last year, and far fewer volunteer any time. We simply can't do all that must be done to protect our lakes without more volunteer support. Please consider joining our Board or working on a specific project with us. We need you! Sal Girifalco laon@norwaylakes.org 207-743-1808

We had some success, but we'll always have challenges...

Invasive Species from boats: The fifth season of our Courtesy Boat Inspection (CBI) program has begun. It has proven itself many times over with several "saves" that prevented invasive milfoil and the zebra mussel from entering Lake Pennesseewassee. **But** we cannot inspect all boats, and three lakes do not have a CBI program. Other lines of defense can work on any lake, but only where there are volunteers. See the IPP section on Page 5.

Yellow Iris: A squad of volunteers and the Maine Department of Environmental Protection (DEP) spent many hours testing techniques to stop this invader. **But** eradication will require our attention for the next few years.

Pollution: We were awarded a federal grant for remediation work based on our successful North Pond watershed survey. That enabled us to make progress in reducing erosion-based pollution over the last three years. We have also completed a survey of Lake Pennesseewassee's watershed. **But** troubling quality indicators related to erosion still exist for all our lakes. Conditions change and two lakes have not yet been surveyed.

Some Numbers to Think About

4: Invasive species found on boats going into Lake Pennesseewassee to date.

4 out of 4: Norway's lakes with water quality concerns.

20: Tons of sediment per year we prevented from entering North Pond.

\$1,000: The daily cost of removing an invasive plant like milfoil. (It can take years.)

7,902: Inspections performed by LAON's Courtesy Boat Inspectors from 2015 -2018.

2018 Season Monitoring Results Summary (Full report is at www.norwaylakes.org)

Water quality analysis shows that our lake quality is generally in the middle range. In most cases it is the bottom water that is of concern. Whole lake phosphorus concentrations declined or remained the same as historic average values, except in Lake Pennesseewassee where they worsened. Water clarity results were consistent with phosphorus data.

- Higher phosphorus levels in Pennesseewassee, and bottom water concentrations remain 2-3 times higher than surface in the three deeper lakes. (Phosphorus feeds algae)
- Lower water clarity in Pennesseewassee (indicates increased algal growth)
- Much lower levels of dissolved oxygen at the bottom of our deep lakes than is
 desirable. By August our three deep lakes have virtually no oxygen in the near
 bottom waters. This indicates that organic matter, such as algae, is sinking and
 decomposing. Not only is low oxygen a concern for aquatic life, but it also allows
 phosphorus locked in the sediment to become unlocked. Lake bottom phosphorus
 levels are already high, so addressing erosion to reduce algae growth is a high
 priority.
- Long term averages can hide what is currently happening. Recent spikes are
 possibly related to an increase in extreme weather events which exacerbate
 existing problems.

Watershed Management

Undeveloped land filters runoff naturally, but development removes that protection, leading to erosion. Erosion brings excess phosphorus into lakes, causing algae blooms and changes in water quality that can be prohibitively expensive to restore. Fortunately, simple steps can prevent such damage, but first problem areas need to be identified by watershed surveys.

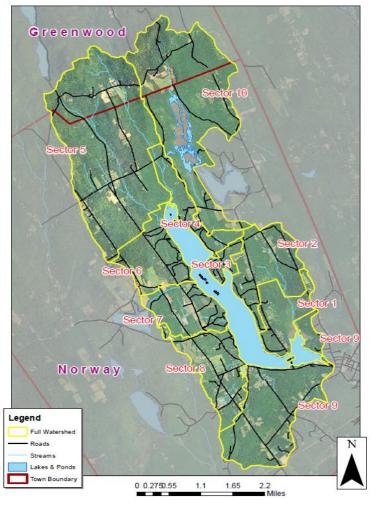
North Pond

We completed a watershed survey of North Pond, a water source for Pennesseewassee, in 2016. A grant from the US EPA under Section 319 of the Clean Water Act pays 50% of remediation costs. Over half of the grant money was spent on our worst sites, involving roads (Jackson Lane, Beaver Way, and Crockett Ridge Road), and some residential sites. Drainage ditches were dug and "armored" with stone and culverts were placed or

reinforced. Roads were graded so that water runs off before becoming destructive. "Rubber razors" were placed on driveways to divert runoff. By reconstructing these sites, we are preventing over 20 tons of phosphorus laden sediment from entering the pond each year. The Town of Norway is now halfway through fixing a high impact site on Crockett Ridge Road. Thanks to Lou Chiocchio, Sal Girifalco, Brian Morris, Paul Shook, and Tom Webster for volunteering so many hours and doing the heavy lifting on these projects. They moved rip-rap by hand; cut trees; placed culverts and road fabric; and raked roadways.

There are still many sites eligible for grant funding, but the money is only available through 2019. Eligible property owners are being contacted.

Watershed Overview



Lake Pennesseewassee

The DEP considers our biggest lake to be threatened by erosion and grant eligible. A steering committee, organized in the fall of 2018, planned and conducted a watershed survey to identify erosion sites and work with property owners on remediation.

The watershed was divided into ten sectors, and volunteers were recruited for survey teams. The DEP provided several specialists to lead the teams but we needed to hire more (your dues at work). LAON received a \$1,000 grant from Lake Stewards of Maine to defray some costs. The University of Southern New England enabled us to use a mobile application, Survey 123, to collect data on smart devices and make data analysis easier. Analysis will be done this fall, with the report and grant application to follow.

We all owe many thanks to the steering committee members who worked hard over the last few months (Steve Zeeman, Tom Webster, Paul Shook, Jon Jacobson, and Sal Girifalco, led by Jim O'Brien and Tom Brown), and survey volunteers.

Watershed survey findings will be discussed at our July 13th meeting

What You Can Do

You don't have to wait until we have the capacity to conduct a watershed survey near you. A lot can be done right away. Why not get your neighbors together to evaluate the condition of your camp road? Or invite LAON to a neighbors' meeting? We've reprinted some simple steps to reduce harmful runoff in the **How to Minimize Erosion on Your Property**.

How to Minimize Erosion on Your Property

Conditions continually change, so addressing problems that allow the flow of unfiltered runoff into our lakes is an ongoing process. We all have a role in preserving the quality of our lakes and the value of our properties. Our website offers suggestions on how to fix problems. We'd be happy to consult with you on BMPs or "best management practices." We're eager to hold workshops for groups of neighbors or road associations.

Question to ask about your property: Does erosion allow sediment to reach the lake? Some things to look for that indicate harmful erosion:

• Bare soil

- Exposed tree roots
- Worn/compacted paths

- Gullies/Ruts/Channels
- Steep slopes
- Sediment in lake

Harmful effects of runoff can be greatly reduced by simple solutions:

- Leave pine needles in place
- Reseed bare soil
- Crown/bank driveways
- Add mulch or stone to paths or erosion areas
- Plant a shoreline buffer of native plants
- Fix or reposition downspouts
- Remove berms from roads/driveways
 Install diverters on driveways (ex, rubber razors)

Next time it rains, check to see if runoff flows through your yard or camp road into your lake.

Even a small improvement reduces phosphorus and sediment loading. For many more suggestions, check out the "Keep Lakes Healthy" section of our website for the "Property Owner's Toolkit" and the Lake Smart Brochure. You can even get your property certified as "LakeSmart" by the Maine Lakes Society.

Invasive Species Update

Zebra Mussel

Zebra mussels are native to Russia, but have invaded many U.S. rivers and lakes since 1988 when it was found in the great lakes. Since it outcompetes native species, its spread has been dramatic. While a potential threat, the risks seem low because the calcium needed for their shell growth is in low concentration here. We remain vigilant because of Zebra Mussel's adaptability to new environments.

Yellow Iris

Fortunately, the 2018 annual Invasive Plant Screening did not find evidence of invasive aquatic plants, other than the Yellow Iris on Lake Pennesseewassee's shoreline. LAON is the first group in Maine combating it but there are not yet any preferred tactics. Last year we worked with the DEP to remove seed pods, cut plants to the waterline, and cover plants with light blocking materials. We must revisit all the sites and volunteers are always welcomed. Our thanks to Lise Dietrich for her continuing leadership and the current volunteer team, including. Jack Armstrong, Tom Brown, Pat Dugan, Jim Gibson, Sal Girifalco, Bill Kelton, Dawn LaDuke, Mark McGovern, Arlene Morse, Jim O'Brien, Paul Shook, Lill Van Order, and Brad Weller.

Caution! Yellow Iris plants should not be pulled or dug out. Fragments can break loose and spread the plant!

Courtesy Boat Inspection Program CBI: Our first line of defense against *Invasive Plants*

The "Courtesy Boat Inspection" (CBI) program is highly effective, measured by what it prevented from entering Lake Pennesseewassee. Our first milfoil "save" at the end of 2017 was followed by two more saves early in 2018. One save also involved a zebra mussel. This year we are increasing our inspection hours on Friday in response to more weekend boat launches. We are very grateful to Phil Lamoureaux for all the time and energy he devoted to making the program work so well over the past two seasons. Our loss is Florence, Arizona's gain. Fortunately, Tish Carr, who was an volunteer CBI last year, has volunteered to manage the program this year (along with some help from Norm Baker and Sal Girifalco).

What about when there is no CBI???

What if no one was on duty when the invasive hitchhikers arrived? What about our other 3 lakes? If you visit other lakes or have boating visitors, it is critical that all plants and slime are removed from boats, trailers, fishing lines (milfoil and a zebra mussel were found on a fishing line), anchors, and whatever else goes into the water. Wells must be drained away from lakes. What else can you do? The next section describes how we can protect all of our lakes.

Invasive Plant Patrols (IPP): A second line of defense

Since we do not have boat inspectors on duty all the time, or at all the lakes, we are still vulnerable to invasive species. We need more "Eyes on the Lakes," looking for possible invasive plants in an early detection program. Over the past few years, we held several four hour training sessions called "Plant Paddles" to get us looking at plants while boating, fishing, or swimming and to do basic identification for possible threats. The ideal program

would have Invasive Plant Patrols (IPPs) established on each lake with participants regularly monitoring just a section or two. We could all routinely participate simply by remembering to look.

Outreach

We'd like to get everyone in our watershed to help protect our lakes. We need volunteers to staff LAON's table for an hour or two at the Art Show on July 13th or at the Foothills Food Festival on August 10th. We have compelling materials for effective outreach.

Contact Susan Jacoby at 617/833-0646 or skjacoby@comcast.net to sign up.

We Heard You!

In response to member suggestions we do intend to: address wake issues, install fishing line receptacles; get the large hole at the boat launch fixed, and work with snow mobilers to clean up after ice fisherman. Our good relationships with the Town of Norway and our other community partners may help us to resolve these issues collaboratively... stay tuned!

Something for Everyone

- 3rd Annual Super Informal Boat Parade is Thursday, July 4th. Meet at the boat launch at 3pm
- Enid Dullea Length of the Lake Swim is Sunday, August 18. We need swimmers, kayakers, party boat owners & dock side cheering sections! (email skjacoby@comcast.net or call 617/833-0646 to sign up.)
- A plea to boaters: Relentless shoreline pounding by wakes causes erosion and harms nesting birds. State law prohibits wakes within 200' of any shoreline, including islands. To reduce damage, boats generating large wakes should be 500' away.
- A free and easy way to donate to LAON: Whenever you buy on Amazon, use AmazonSmile (it is Amazon). It does not cost you anything. Amazon will then donate .5% of any purchase to LAON. The next time you shop Amazon, just use this link: https://smile.amazon.com/ch/30-0034585. This is also explained on our website. Good news Smile participants and donations are inching up, but many more Amazon users have not yet used it. If you use Amazon, please give it a try.
- LAON will host trainings on what property owners can do to prevent erosion. If we have your email address, we will contact you.

Our Allies

We're very appreciative of the partnerships we've forged. **The Town of Norway** recognizes the critical nature of our work by providing financial and administrative support. **The Maine DEP** awarded CBI grants to us and is a key player in our watershed efforts. We continue to learn more about watersheds from the Oxford County Soil and Water Conservation District and to evaluate different strategies collaboratively with other groups who attend the annual Maine Milfoil Summit.

Our Sponsors

Our Sponsors are generous to LAON because they are committed to our community and the health of our lakes. *Be sure to thank and support them!*

- Ari's Pizza & Subs
- Café Nomad
- Crooked River Heating and AC
- Dow's Law Office
- Edward Jones Investments
- Granite Ridge Estate & Barn

- Norway Lake Marina
- Norway Savings Bank
- Oxford Federal Credit Union
- The Lake Store
- TD Bank
- White's Marina
- 76 Pleasant Street

Please encourage your Road Association to support LAON, along with:

Cedar Brook Lane; Cove To Cove Lane; and Valhalla Shores

A closing message

Conditions affecting our lakes are not static; things we do are rarely a case of "fix and forget", so we need ongoing programs and projects to protect our waters. All require member support in the form of dues, and hopefully involvement. All of our projects would be more effective with more active member support. Have a great summer on your lake.

Member Dues and Support Information

LAON: Protecting Norway's Lakes Since 1971

Yes! I want to help protect Norway's Lakes by joining LAON or by renewing my membership at the following level.

Benefacto	r; \$1,000 or more*	Patron; \$500 or more
Steward;	\$250 or more	Friends of the Lakes; \$150 or more
Family;	\$50 or more	Individual member; \$30 or more
		We hope you can support
		us at least at this level

Checks can be mailed to:

Lakes Association of Norway P.O. Box 505 Norway, ME 04268

Please make checks payable to LAON

LAON is a 501(c)(3) organization. ALL donations are fully tax deductible.

Contributions can also be made on our website (<u>www.norwaylakes.org</u>) under "Membership and Support" using PayPal

Member/Sponsor Information (Please Print Clearly)

Name(s)	 	
Lake Address	 	
Mailing Address _		

Thank You For Your Support



LAON ANNUAL MEETING SATURDAY JULY 13th 1:30 – 3:30pm at the Norway Town Office, 19 Danforth St.

What is LAON?

LAON is a community based volunteer organization dedicated to preserving the health and beauty of Norway's four lakes: Sand Pond, Hobbs Pond, North Pond and Lake Pennesseewassee. We were incorporated in 1971 and are a tax exempt nonprofit for educational and scientific purposes.

LAON:

- works to protect the lakes from harmful invasive plants and pollutants
- monitors the lakes and reports on their condition
- supports a broad based awareness campaign to reach our entire watershed community

LAON sponsors are local businesses which recognize the connection between a healthy environment and the economic vitality of the entire Norway area.

Our members help protect our lakes. They also enjoy swimming, boating, fishing and other water sports during the summer and ice fishing, snowmobiling, cross country skiing and skating on the lakes all winter.