



Website: www.norwaylakes.org
Email: laon@norwaylakes.org
P.O. Box 505, Norway, ME 04268

ANNUAL MEETING
SATURDAY JULY 8th, 1:30-3pm
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 2017 Newsletter

We've been monitoring water quality for decades. Now we're intensifying our efforts to prevent damage from our two biggest threats, invasive plants and water pollution. Over the past year, we began the process of finding the sources of pollution flowing into our lakes by conducting our first full watershed survey on North Pond. We intend to stop, minimize, or redirect that flow by addressing the many erosion sites that were found. Pages 3 and 4 highlight our ten year plan and what we've already done. The newsletter also includes an invasive plant alert on one of our lakes and an update on our other work to protect the health of Norway's lakes and the related value of our properties. Join us!

A MESSAGE AND APPEAL FROM LAON'S PRESIDENT

There are some troubling indicators reported for all our lakes in the 2016 water quality monitoring results. (The results are summarized on Page 2.) These indicators tell us that LAON's mission to protect our water must extend to our watersheds, since they would be the primary source of pollution.

I live on North pond. When the watershed survey team walked down my footpath, I was surprised to see how compacted and bare it was, and that it became one of the erosion sites (I fixed it last year). I think most readers will be surprised when they read the full report - but they'll also get ideas about what to do. If you have any questions, we'd be happy to consult with you on your land and share BMPs or "best management practices."

During the survey, I also saw that many properties do not have house numbers visible from the road. How would emergency services find your house?

Of 449 lakeshore property owners, only a few are active LAON members, and only 40% pay dues. **We can't do all that needs to be done to protect our lakes without more support.** Please pay your annual dues and contact me to discuss volunteer work that would fit your interests and availability. Help us help you.

Also, if you haven't gotten an email from me in the past year, we don't have your correct email address, so please enter it on our website under "Support," email me, or provide it on the return envelope.

I hope to see you at our annual meeting.

Sal Girifalco, laon@norwaylakes.org 207-743-1808

Last year, members asked us to offer LAON shirts. We're doing that.
Order your LAON Shirt on our website or at the annual meeting.
Be publicly proud to be a member!



2016 Season Monitoring Results Summary

(Full report is at www.norwaylakes.org)

We're maintaining our schedule of taking regular readings at each lake. The water quality analysis shows a mixed bag. Secchi depth (water clarity), Total phosphorus, and chlorophyll levels were close to our 40 year historic average values, with notable exceptions:

- **Higher phosphorus levels** at Hobbs and North Ponds. (*Phosphorus feeds algae*)
- **Higher chlorophyll levels** in North Pond (*indicates presence of algae*)
- **Much lower levels of dissolved oxygen in our deep water** than is desirable in all 3 deep lakes (not North Pond). An indication that organic matter, such as algae, produced at the surface is sinking and decomposing in the deep layer. PH values are consistent with this decomposition. (*Low oxygen levels harm fish.*)
- **Conductivity** indicates road salt is entering Penn and Hobbs. (*Not at a level to do "real damage," but should be monitored*).

We are starting to look at recent trends since long term averages can sometimes hide what is currently happening. For example, the range of phosphorus levels in North Pond over the past 30 years is relatively high, ranging between 10 and 30 ppb, but values above 25 ppb have only been recorded in the last decade. These recent spikes are possibly related to an increase in extreme weather events which have likely exacerbated existing soil erosion problems, and could cause new problems in all of our developed watersheds. Our data indicates that our attention to watershed erosion is very much needed to help prevent further water quality deterioration.

Invasive Plant Screening Survey; A New Concern

Fortunately, the annual examination of our lakes found no invasive aquatic plants. Lake Penneesseewassee, however, has at least 4 sites where **the invasive Yellow Iris has taken root**. Because it grows along the shore, it is not considered aquatic. It is a tall plant.

The Yellow Iris spreads via its root structure (rhizomes), or by seed pods. If you have any iris plants near your shore, confirm that the flowers are yellow, and mark the locations. Any removal needs to be done carefully since rhizome bits can float away and take root elsewhere. We need to learn more about how to control it and will also need volunteers from Lake Penneesseewassee. Please contact us if you want to help protect the big lake. Our website has a link to the State DEP for more on it. Stay tuned for more information by email.



The Yellow Iris is a tall plant.
Person next to leaf is 5'5"



Yellow Iris Flower



Courtesy Boat Inspections

Our first line of defense against *Invasive Plants*

We hired three Courtesy Boat Inspectors (CBIs) who covered the Lake Pennesseewassee boat launch approximately 54 hours a week during the 2016 season. They found numerous plants while performing around 2,400 inspections. Almost 600 of those boats last visited out of town lakes, each a potential carrier of invasive plants. CBI will continue in 2017.

Watershed Survey Results and Protection Plan

(Complete Report and Plan is at www.norwaylakes.org)

During 2016, a team of 16 trained LAON volunteers, with technical leaders from four state and local environmental agencies, conducted a survey of 124 properties in the North Pond watershed. The Pond is on the ME Department of Environmental Protection's Priority Watershed list because its water quality is particularly threatened by unfiltered runoff carrying harmful soil nutrients. Since the Pond is also a source of water for Lake Pennesseewassee, the effects of changes in its water quality goes beyond its borders.

On undeveloped land, runoff is filtered by plants, tree roots, and natural ground debris. Development brings cleared land, driveways, paths, and buildings, removing natural protections and possibly even creating channels for runoff. Runoff from roads, rooftops, and compacted soil speeds up into a destructive erosive force, multiplying the effect. When excess phosphorus drains into a lake, algae growth increases. That can cause choking blooms and small insidious changes in water quality that can, over time, become difficult and prohibitively expensive to restore.

With the permission of property owners, camp roads, driveways, and yards were surveyed. The teams found 37 sites where erosion was allowing unfiltered storm water to wash undesirable soil and nutrients into our lake. The sites were rated according to impact and cost of remediation. Phase one of remediation has already started on a town road, one of two high impact sites. The Survey report describes the range of problems at each site (without identifying information) and provides recommendations for improvement.

These sites don't mean that we've done anything wrong, the problems most likely just evolved as we used our property. Fortunately, most of our sites are low cost to fix. Whatever we can do now to stop or limit the flow of unfiltered runoff into our lakes helps us to protect them for the future.

Addressing the watershed issues will be a significant additional cost this year, so we hope you are able to show your support through your dues.

Questions to ask about your property:

1. Is there soil erosion?
2. Will sediment & phosphorus likely reach the lake? If it can get to a channel, ditch, or stream, it will get to the lake!



Some things to look for that indicate harmful erosion:

- Bare soil
- Exposed tree roots
- Worn/compacted paths
- Gullies/Ruts
- Steep slopes
- Sediment in lake, near shore

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

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

Even a small improvement reduces phosphorus and sediment loading. The complete report will, hopefully, move you to notice where run off flows through your own yard or down off your camp road.

The Protection Plan

The Protection Plan is detailed and specific, including an implementation schedule, action steps, and milestones to track success. We've already written to each of the owners of the 37 sites identified in the survey. We will:

- develop new campaigns to build watershed stewardship by providing information on best practices and on-site workshops;
- offer technical assistance to residents, road associations, and town officials;
- seek funding to remediate high-impact sites and to broaden our ongoing work;
- conduct formal watershed surveys around the other three lakes within LAON (as soon as resources permit).

Our aim is to get North Pond off the "Priority Watershed" list and to keep other lakes from ever becoming endangered.

On a related topic, last year we sent everyone a "LakeSmart" brochure that shows what to do on your property to protect your watershed. Please dig that out and use it as a reference. It is also on the LAON website under "Keep Lakes Healthy" in the "Property Owner's Toolkit". You can even get your property certified as "LakeSmart" by the Maine Lakes Society. Contact me for more information.

Outreach

Let's find ways to engage our whole community in protecting our lakes! Would you volunteer to table an hour or two at the Art Show on July 8th, at the Foothills Food Festival on August 12th, or at another public event? Do you have writing, editing, or graphic design skills? Please let us know soon.

Our Allies

Four of LAON's Board members joined over 40 other grassroots groups, the Department of Environmental Protection, Inland Fisheries and Wildlife, and others at the 2016 Milfoil Summit on the state of Maine's lakes. Topics included legislative action, looming threats of invasive plants and animals from nearby out of state waterways, and effective responses. These statewide connections are a main source for the up-to-date information and technical assistance we need to develop and sustain our work.

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 Department of Environmental Protection** awarded CBI grants to us in 2015, 2016 and 2017, and is a key player in our watershed efforts. We have also begun to learn more about protecting watersheds from the Oxford County Soil and Water Conservation District.

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
- Cudmore Curbscapes
- Dow's Law Office
- Edward Jones Investments
- Granite Ridge Estate & Barn
- Norway Lake Marina
- Norway Savings Bank
- Oxford Federal Credit Union
- Norway Laundry Services
- Paris Cape Realty
- The Lake Store
- White's Marina
- Woodman's Sporting Goods

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

Cove To Cove Lane and Valhalla Shores

A Free and easy way to donate to LAON

Whenever you buy on Amazon, use AmazonSmile. Amazon donates .5% of your purchase directly to LAON. *It does not cost you anything, has the same Amazon security* and works just the same. The next time you shop Amazon, just use this link: <https://smile.amazon.com/ch/30-0034585>. After that, AmazonSmile for LAON will remember you as a LAON supporter. Remember to use AmazonSmile every time. This is also explained on our website.

LAON
P.O. Box 505
Norway, ME 04268

**LAON ANNUAL MEETING SATURDAY JULY 8th, 1:30 -
3pm 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.

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.

____ Benefactor; \$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 (www.norwaylakes.org) under "Membership and Support" using PayPal

Member/Sponsor Information (Please Print Clearly)

Name(s) _____

Lake Address _____

Mailing Address _____

Thank You For Your Support