



The Federation of Vermont Lakes and Ponds, Inc.
P.O. Box 766
Montpelier, VT 05601
www.vermontlakes.org

**Testimony submitted to the House Committee on Natural Resources, Fish, and Wildlife
April 27, 2022**

Pat Suozzi, President

The Federation of Vermont Lakes and Ponds is a volunteer coalition of lake associations and individuals. From its inception in 1972 as an organization of lake associations in northern VT to its evolution into a statewide organization in 2001, the Federation has been dedicated to fostering water quality standards and preserving Vermont lakes, ponds, watersheds, and aquatic ecosystems.

Our members come from all walks of life and backgrounds. Some of us have some training or professional backgrounds in natural resource management and related fields, but most of us do not. Some, but not all of us, live on a lake or pond in Vermont - some full-time, some part-time. All of us are dedicated to the common goal of improving and protecting the lakes and ponds of Vermont.

Since the passage of the Clean Water Act and the Federation's beginnings 50 years ago, we have seen progress - the resurgence of the loon population on our lakes being a notable success story – but we are also seeing a number of developments that pose threats to our lakes and ponds. I would like to discuss some of these with you today.

Aquatic Invasive Species (AIS)

A major concern for our lakes is the spread of invasive species. Lake Champlain has many, as Oliver mentioned at least 51 and counting, and we are very concerned at seeing the spread of some of these invasive species to inland lakes. Right now, Eurasian Watermilfoil (EWM) is the most widespread invasive in our lakes, with approximately 70 inland lakes and ponds reporting some infestation of EWM and 100 lakes reporting some type of AIS infestation

That's the bad news.

The good news is that we still have many lakes and ponds that are not yet affected by aquatic invasives. I say “yet” because the fear is that these invasives will continue to spread.

Once a waterbody is infested with an invasive, it is extremely difficult, time consuming, and very expensive to control and eradicate it – if eradication is even possible.

So, prevention is the first and best line of defense against aquatic invasives. The greeter programs which are run by many of our volunteer lake associations are that first line of defense.

*To preserve and protect Vermont's lakes, ponds, and their watersheds
for the benefit of this and future generations.*

Greeters inspect boats entering and leaving a waterbody, and those with boat wash stations clean the boats, to ensure that they are not transporting any type of invasive.

However, we have only about 32 greeter programs, and only 4 of those with boat washers, while we have over 800 lakes and ponds, at least 91 of these larger than 100 acres – and the larger the lake, the more boats entering and leaving.

You may well ask: since prevention is vital, why don't we have more greeter programs? These programs are usually created and run by volunteer lake associations, often in collaboration with a local municipality. This requires considerable time and organization on the part of volunteers and these programs require funding. The greeters are usually paid staff, so although the programs are managed by volunteers, funding is necessary.

These programs do receive some funds from the Department of Environmental Conservation's (DEC) Aquatic Nuisance Control Grant-in-Aid program. This program funds, not only greeter programs, but also invasive control programs. The funds come mostly from the portion of motorboat registration fees that is allocated to DEC. Part of DEC's allocation is used for staff salaries and the rest is put into the Grant in Aid program. For a number of years, that amount has been plateaued at \$450,000.

Last year the request for grant-in-aid funds for these programs was over \$1.8 million so no program is fully funded, leaving volunteer associations to make up the difference by fundraising, and this also means that many of these programs are unable to run the number of days and hours needed to provide full protection to their lakes.

That's problematic, for sure, but we are facing a worse scenario. For 2023, these funds are expected to be cut down to \$350,000 to be spread across both prevention and invasive control programs. That is worrisome – even as we need more greeter programs and more hours and days covered and more invasive control programs, we are facing a serious funding cut.

There are some solutions and I want to thank Rep. Kari Dolan on behalf of the Federation and all of our members for sponsoring H.554, the AIS decal bill that was introduced during this session. This bill would institute an Aquatic Invasive Species Decal fee for motorboats with the funds raised going to the Aquatic Nuisance Control Program. This would help to defray the expected reductions. This is a user based fee program. By paying this fee, boats that use our public waters -whether from in state or from out of state – would directly contribute to helping to protect those public waters. Unfortunately, the bill did not advance this session but we very much appreciate Rep Dolan's work for bringing it forward and we're hopeful to see progress on this idea in the near future.

Thus far, I have talked mostly about prevention, but control and mitigation of aquatic invasive species is of great concern. Invasives, particularly Eurasian Watermilfoil, are easily spread, most often they are spread by boats moving from waterbody to waterbody. This makes it very important that those lakes with invasives do all that they can to reduce, control, possibly eradicate their infestations to ensure that these invasives are not spread to other lakes. The tools available to do so are few and the cost very high.

Unlike some other states, Vermont does not have a statewide management plan for lakes and ponds. Rather it falls to individual, mostly volunteer, lake associations to deal with infestations of invasive species. The process for doing this can be complex, requiring study and research into the science of invasives and methods of control, creation of a management plan, often associations need to bring in professional consultants, which costs money to do surveys of the lake, and they must then work through the state's stringent permitting process. (As a side note, this is not a criticism of the permitting process. It is right that it should be careful and deliberative.) At the same time, these volunteer groups must do extensive fundraising in order to pay for this process and to actually implement control activities.

I'd like to reiterate that this burden falls mostly on the shoulders of volunteers who rely on guidance and scientific expertise from the DEC Lakes and Ponds staff. These volunteers are tireless: writing grants, creating fundraising campaigns, researching and creating lake management plans, working with local and state officials but they cannot do it without the expertise of DEC staff.

Managing invasive species benefits all users of our public waters and perhaps more importantly, it protects the lake ecosystem. Not only that but Vermont statute requires this (10 V.S.A. § 1451)

Invasive species, by definition, have no natural predators and therefore can and will outcompete native species. If allowed to proliferate they can easily damage and overwhelm an ecosystem. An invasive like Eurasian Watermilfoil can become the dominant aquatic plant in a lake, reducing the native plant species that provide habitat and food for native fish and other aquatic fauna. It can also reduce boating and other recreational opportunities and have a cascading effect on local and state economies by reducing revenues from property taxes and from tourism.

Yet as I noted, state funds for doing this vital work are being reduced. In addition, one of the two positions in the Aquatic Nuisance Control area in the DEC Lakes and Ponds program was recently disappeared. Hundreds of volunteers work hard but we rely on the expertise of DEC staff to provide the scientific basis for our work. Volunteers willingly work to raise money to help our public waters but we still need a basic level of funding from the state to support foundational programs.

We are concerned that at a time when we are seeing greater pressure on our lakes from increased use and when the state is encouraging more tourism and more people to move here, funding would be reduced and a key position would be lost in an area vital to ensuring that our pristine lakes are protected and that those with infestations are improved.

Phosphorus

Another concern that I would like to raise with you is the increase in phosphorus loading we are seeing in some of our lakes. While phosphorus loading has long been recognized as a problem in Lake Champlain, phosphorus concentrations are on the rise in many inland lakes.

Shoreline development is certainly part of the problem. Runoff from developed properties bring nutrient laden sediment into the lakes. This sediment flowing into our lakes can contribute to algae blooms, reduce water clarity, and bring other pollutants into the lake.

The Federation of Vermont Lakes and Ponds, Inc. | P.O. Box 766 | Montpelier, VT 05601 | www.vermontlakes.org

One of our most important tools in working with property owners to mitigate this runoff from their properties has been the Lake Wise program, developed by Amy Picotte in DEC Lakes and Ponds.

This program is ideal, because it provides positive incentives for lake shore owners to change the way they manage their property and adopt more lake friendly practices, reducing runoff, and creating naturally vegetated lake shores that reduce shoreline erosion and provide habitat for native insects and pollinators and help to shade the water which is beneficial to fish.

Amy Picotte has led that program and has been amazing in the work she has done around the state with property owners, with creating training for contractors on lake friendly construction practices, creating a bioengineering manual showing property owners how to improve their shorelines, creating educational materials, including lists of native vegetation, meeting in person with property owners to give them guidance on what to do, and doing presentations, leading tours of lake friendly properties, overseeing remediation projects.

Amy is amazing!

Yet since her retirement in December, this position has been held open for accrual of “vacancy savings”. At a time when we are seeing rising levels of phosphorus and greater concern about algae blooms in our lakes, why would a position specifically aimed at working with property owners, contractors, and lake associations to help solve this problem be left open?

Increases in phosphorus are of especial concern for our most pristine lakes, such as Willoughby or Maidstone. It is vitally important to protect these lakes and to preserve them in as pristine a condition as we possibly can. To that end, petitions have been submitted to reclassify these lakes to A(1) status, conferring greater statutory protection on the lakes and their watersheds. However, a barrier to this reclassification is a nearly 50 year old rule regarding septic systems. This rule was based on the conventional systems of that time and does not reflect new technology that is far more efficient and cleaner than those old systems. This possibly needs a legislative fix (to 10 VSA 1259 (d)). We are hopeful that such a fix can be done soon as we worry that continued long delays may result in further degradation of our cleanest lakes.

Finally, the Shoreline Protection act which went into effect in 2015 has been a great help to address the kinds of activities that add runoff to our lakes, and it has helped to educate the general public about best practices. We thank the legislature for passing that legislation. but we need better enforcement, and we need stricter municipal zoning and permitting along with continued educational outreach.

Changes in boating technology

Another concern that has arisen around our lakes in recent years is changes in boating technology. The concern right now specifically regards wake boats, which can create very large waves, using ballast tanks. These large waves have the potential to cause shoreline erosion, and because they use downward thrusts in their operation they can cause bottom scouring, potentially releasing legacy phosphorus into the water column.

The ballast tanks also cannot be completely drained when leaving a lake and so have the possibility of spreading invasives to other lakes. The Federation has expressed our concerns about the potential harm to lakes and have urged the Agency of Natural Resources to proceed expeditiously with examining the issue and making appropriate rules.

Our concern goes further than this specific instance, however -that is to ensuring the ability of the Agency to act quickly to develop appropriate rules as technology changes, possibly bringing other types of problems to our lakes, including safety issues, spread of invasives, or harm to shorelines, or lake bottoms.

As mentioned above, we are seeing greater pressure on our lakes from an increase in usage. More people are getting outside and enjoying this wonderful resource, which is great, but it also adds to the pressure on all of us to ensure that the right rules are in place, and that we have the right resources to protect the health of our public waters.

Staffing

I have mentioned – more than once - the work our volunteers do. We are fortunate to have a very active and aware citizenry in Vermont who are willing to devote a great deal of time to working to protect Vermont’s natural resources. Hundreds of lake association volunteers around the state devote thousands of hours to protecting and enhancing the health of our public waters. They run greeter programs, work on aquatic invasive control, participate in the lay monitoring program that provides data on water quality, participate as invasive patrollers for early detection of invasives, sample tributaries, write grants to fund runoff and invasive mitigation projects, develop educational materials for lake users, do many public presentations, and often deal with difficult and controversial issues, sometimes having to weather public attacks and combat the spread of misinformation.

These volunteers rely on a small DEC staff, to provide advice, scientific expertise, and training. Yet even as the need for this work continues to expand, the staff in DEC’s Lakes and Ponds program has been cut. As I mentioned above, there currently is only one person running the entire Aquatic Nuisance Control program and now, the Lake Wise Coordinator position, is being held open to “accrue vacancy savings”. These two positions are key positions that work directly with our lake associations. It might not seem like a lot in the bigger picture but consider that the training and advice that these two positions provide to volunteer lake associations is amplified a hundredfold or many hundredfolds by the work all of these volunteers are able to do when trained and empowered by staff experts.

The Federation of Vermont Lakes and Ponds represents these volunteer associations who are dedicated to helping to improve and protect the health of our state’s public waters. We are absolutely willing to continue to do this work, to shoulder this burden, and we continue to reach out and bring more people on board to do the work BUT, we do need some help. We need a reasonable level of funding for prevention and mitigation of aquatic invasives - and thanks to Rep Dolan, H. 554 has shown a way to raise at least some of the needed funds. And we need the restoration of the staff positions mentioned to provide technical advice, expertise, and training.

Our lakes and ponds are the jewels of Vermont, hosting innumerable forms of wildlife, providing recreation as well as peace and solace, attracting tourists, helping to make Vermont such a wonderful place to live. As Oliver noted, we are rare in this country in having more pristine lakes than nearly anywhere else. But these lakes are not this way by mere chance - it doesn't just happen. Our lakes are special due to the work of a dedicated and talented, albeit small, DEC staff and with their support due to the work of hundreds of volunteers. Through this collaboration, we not only have been able to prevent degradation of many of our waters, but we are seeing improvements in some. My own home lake – Lake Iroquois is an example. Due to the work of our volunteer lake association, we have seen significant decreases in phosphorus loading over the last several years.

But we cannot continue to preserve what is already excellent and to improve those lakes that need it, while suffering cuts to an already small staff and reductions in already meager funds. We urge the Committee and the legislature to consider the health of our lakes now and in the future when allocating public resources.

In closing, we, all of us, are only stewards of these lands and waters. Climate change is upon us and we can see that the concerns and problems I have raised are only some of the difficulties we are facing. Warming waters, development, greater usage are all putting pressure on our public waters. Our lakes and ponds are more than just areas for recreation. They are the lifeblood of our environment – nothing lives without clean water.

We owe it to future generations to be good stewards and to do the best we can to improve the health of our natural environment, to undo the damage that we humans have caused to the best of our ability, and to pass on to those who come after us a better place than we inherited. We have a lot of work yet to do and I ask you to consider this and remember that we are working not just for ourselves today but for future generations.

SUPPLEMENTAL INFORMATION

APRIL 27, 2022

AQUATIC INVASIVE SPECIES

It is the policy of the State of Vermont to prevent the infestation and proliferation of invasive species in the State that result in negative environmental impacts, including habitat loss and a reduction in native biodiversity along with adverse social and economic impacts and impacts to the public health and safety. (10 V.S.A. § 1451)

Number of Lakes & Ponds: 800+

Number of Lakes greater than 100 acres: 91

Number of Lakes reporting Eurasian Watermilfoil: 70

Number of greeter programs: 32

Number with boat washers (recommended to ensure removal of all aquatic invasive species): 4

Number of boats inspected:

2012: approx. 18,000

2020: approx. 42,000

Sample Cost Estimates for Eurasian Watermilfoil (EWM) Control/Eradication

Mechanical Harvesting: \$1000-\$2000/acre plus another \$500-\$1000 for disposal (*problems: fragmentation of plants which aids spread; indiscriminate - cuts all plants*)

Mechanical Hydro-raking: \$8000-\$10,000/acre (*problems: fragmentation, indiscriminate, disturbs lake bottom potentially releasing legacy phosphorus*)

DASH: \$10,000/acre (*problems: fragmentation, bottom disturbance, difficult to only remove EWM and not non-target plants*)

Bottom barriers: \$10,000/acre (*problems: indiscriminate – kills everything underneath; can only be used for small areas*)

ProcellaCOR (herbicide): \$1000-\$2000/acre (*problems: may be controversial; can only treat 40% of littoral zone each year*)

THE FEDERATION OF VERMONT LAKES AND PONDS BOARD OF DIRECTORS STATEMENT ON REGULATION OF WAKE SPORTS APPROVED NOVEMBER 1, 2021

The Board of Directors of the Federation of Vermont Lakes and Ponds (FOVLAP) recognizes and is concerned about artificially enhanced large wakes and the powerful propeller wash produced during wakeboarding and wake surfing activities. The artificially enhanced large waves and powerful propeller wash produced to facilitate wakeboarding and wake surfing recreation may have many negative impacts if these activities occur in waterbody locations that are too shallow or too close to shore.

Because the extreme waves associated with these activities are larger and travel farther than those from other water sports, the current 200-foot ‘Shoreline Safety Zone’ appears to be inadequate to dissipate the energy and power of these waves and their damaging impacts. According to a data-driven 2021 study in Georgia, at a 200-foot distance from a shoreline, wake surfing waves can be more than twice the height and five times the energy of the waves of a typical ski boat. Among the concerns raised about these waves and the manner in which they are generated are that they have the potential to:

- pose safety hazards to other boaters, anglers, people in the water or near-shore, on docks or moored boats;
- significantly increase the risk of lake-to-lake aquatic invasive species spread due to large capacity ballasts that cannot be fully drained of water and are effectively impossible to inspect or decontaminate;
- erode shorelines, undercutting trees and other vegetation, resulting in nutrient and sediment influxes that degrade water quality;

- damage shoreline property, structures, and moored vessels;
- disrupt the underwater ecology in the littoral zone;
- inundate the nests of loons and other waterfowl; and,
- disrupt wildlife habitats and wetlands.

Interfering waves from multiple enhanced-wake vessels can amplify all the above impacts.

In shallow areas, enhanced wake propulsion systems deliver a powerful, downward-directed propeller jet wash that can scour the lakebed, uproot plants, and re-suspend sediments, re-activating otherwise trapped nutrients. These propeller thrusts can also disturb bottom ecosystems, including fish spawning habitat, and the deep-running propellers can fragment milfoil plants, contributing to their spread to further degrade water quality.

Because the popularity of enhanced wake activities is growing, there is an urgency to provide wise management and regulation. Such regulations should be evidence-based and supported by peer-reviewed scientific studies.

As our waterbody resource utilization changes over time, and when new uses threaten the long-term sustainability of those resources, best management stewardship must adapt to protect Vermont's lakes and ponds.

For these reasons and consistent with the Federation of Vermont Lakes and Ponds mission to preserve and protect Vermont's lakes, ponds, and their watersheds for the benefit of this and future generations, the *FOVLAP Board strongly supports and urges the Vermont Agency of Natural Resources to develop appropriate regulations for the activities associated with wake-enhanced recreation.*

LINKS

Federation of Vermont Lakes and Ponds Member Associations:

<https://vermontlakes.org/resources/vermont-lake-associations/>

Department of Environmental Conservation Lakes and Ponds Program:

<https://dec.vermont.gov/watershed/lakes-ponds>

Aquatic Invasive Species Map: <https://dec.vermont.gov/watershed/lakes-ponds/aquatic-invasives/ais-map>

Guide to Healthy Lakes Using Lakeshore Landscaping (a Federation of VT Lakes & Ponds publication): <https://vermontlakes.org/wp-content/uploads/VTLakescapingBooklet.9.9.15.pdf>

H.554 an act relating to an aquatic invasive species decal

<https://legislature.vermont.gov/Documents/2022/Docs/BILLS/H-0554/H-0554%20As%20Introduced.pdf>

See accompanying document: Why Should Vermont Institute Wan AIS Decal?