Christine Cano April 4, 2017 S.75

Good afternoon, Mr. Chair and members of the Committee, I commend you for working on this very important bill and thank you for this opportunity.

My name is Christine Cano. I am a Director of the Shadow Lake Association in Glover NEK and Chair of our Milfoil Committee. Shadow is a small lake of 210 acres and 140 feet deep. Shadow is a founding member of the Federation of VT Lakes and Ponds, a statewide network dedicated to conservation, and environmental quality of our lakes and ponds. I am also a Director of that organization but I am here representing myself, as a clean water advocate and boat washing proponent who strongly supports this bill.

Most of us have a memorable connection to the water. I was born in VT, my family has summered beside a northern VT lake for over 85 years. I grew up knowing pristine water, enjoyed resplendent swimming in crystal clear lakes and fishing with my Grandfather. His & my father's mounted trophy trouts are treasured reminders of the importance of preserving healthy lake habitat. Invasive species are a leading factor in freshwater fish extinctions and endangerments. We all here understand the function of water ecosystems are significantly altered as AIS destroys water quality. We need to strengthen our laws so future generations can know and appreciate clean water as I have and then continue the mission to protect it.

At Shadow Lake, we have achieved the very rare occurrence of successfully controlling a Milfoil infestation. Our Lake Association partners with our town and works under the guidance of VTDEC. The Agency has recognized Shadow as one of the only places in the State with a truly successful mitigation plan.

We confirmed a Milfoil invasion in 2011. A dense stand of about 10K square feet was spreading in a Cove of the lake. Upon discovery, we quickly filed for a permit to install benthic mats, that process took 2 months. Currently, the DEC permitting authorization can take 75 days. We understand the need for rules and regulations but finding Milfoil is a crisis and an **Emergency**! Every moment bogged down in unnecessarily long procedure only contributes to the infestations ability to aggressively spread to other areas of a waterbody, as it did at Shadow.

VTDEC Ann Bove, informed this committee there are only 2 DEC officials working on AIS spread prevention, she with plants & Josh Mulhollem with animals. It is for this very reason of understaffing that DEC relies on lake associations to take the lead and do the work!

Invasive species are an important threat to biological diversity, second only to habitat losses. Eurasian watermilfoil has major implications on aquatic food webs. It's rampant spread has been shown to displace native species in a span of 2 to 3 years. Likewise, the extremely aggressive Variable-leafed milfoil is spreading in Lake Champlain (it's Milfoil on steroids) and one of the world's worst, Hydrilla "the Godzilla", is in NH. & "coming soon to a theatre near you!"

I emphatically support this bill requiring ANR to build a general permit for rapid response and allowing lake associations to immediately mat & quarantine Milfoil to stop it dead in its tracks! These mats are essential and by nature of their smaller size, will minimize impacts to non-target species. There is collateral damage on small aquatic life forms inherent with all mats that can't be avoided. Plants and animals do quickly move back in to repopulate but Milfoil will smother & destroy vast habitat. These mats are absolutely imperative and life saving to our lakes!

From my experience, we have to move rapidly, hit Milfoil fast and hard, and stay on top of it, for any chance of control. When invasive species are detected soon after introduction, before they have had a chance to become well established, they can often be managed more effectively and, in some cases, even be eradicated.

Over the past 5 years, I have spearheaded the battle to control the Milfoil at Shadow, both in the 'war room' planning our the best management practices and as infantry with 'boots to the ground', snorkeling and hand pulling out bags full of Milfoil from around the lake. As an ANR trained VT Invasive Patroller, I have snorkeled the entire lake shore zone in search of Milfoil and other AIS, mapping the Milfoil spread as sites were found. The lake map before you was created by Ann Bove and I working from my lake surveys. At Shadow, we are all incredibly thankful for Ann's expertise and guidance. She is an invaluable asset to this State!

Throughout each summer I supervise a 'strike team' conducting 2 back to back, lake-wide diver-assisted surveys to scour the lake for emerging Milfoil and other AIS. To date, we have mapped 22 sites of Milfoil trying to take over the lake. All sites have been carefully monitored and successfully controlled. Last year, we were down to only 3 sites and a total of only 18 small plants pulled from the entire lake! It's daring to say, but we actually could eradicate this summer. To finally accomplish that mission, I need to be armed with small bottom barriers and for you to please pass §1455 (n).

Our lake surveillance to detect invasions is labor intensive and expensive, paid for by our lake membership because early detection and persistence of effort is the key. Our integrated lake management project costs for this year alone will exceed \$30K for our small lake. The million dollar Milfoil battle at Lake Dunmore is staggering!

Reflecting back on our control efforts, several of our Milfoil sites were very troublesome with problematic substrates conducive for Milfoil regrowth. If we had the ability back then to immediately lay down a mat, we would of definitely achieved control faster and I firmly believe Shadow would be free of Milfoil today.

Invasive species have become an enormous environmental, economic, and social issue. Milfoil infestations can reduce Vermont lakefront property by up 20 percent. Communities are deeply concerned.

At Shadow, several people expressed the ANR was not doing enough. I was approached by 2 anxious people saying they had chemicals to kill the Milfoil. Another person stated they could kill the Milfoil by imbedding salt blocks around the plants. Someone else planned to purchase pond liner if Milfoil spread in front of their camp. We must allow lake associations to install small mats properly or risk setting off restless natives!

I support higher penalties for AIS transport violators as a serious deterrent and including a provision for a steep penalty for a 2nd offense. The fine cap is \$1K, but the Senate Committee heard testimony from Warden, Maj. George Scribner, fines will be issued in the amount of "\$125. to a maximum of \$225.", essentially to "cover the court administration costs". These penalties amounts are so minor it's laughable, equivalent to nothing more than a speeding ticket, and hardly consequential when considering careless individuals can destroy our lakes aquatic ecosystems, causing millions of dollars of property value decline and those high tax revenues lost for our communities and the State! We need strong enforcement otherwise we are all fighting a losing battle & that's a recipe for burn out.

At Shadow, we established our boat wash station early, in 2003, recognizing trailered watercraft are the prime dispersal mechanisms most often cited for inter lake transport of AIS. Until last year, we remained the first and only hot water high-pressure wash in the State. In so doing, we strive to lead the way to help other Associations understand the priority for clean boats and equipment. We are proud many think of us as the 'gold standard' for boat washes in VT.

The decontamination of boats and their related equipment exposed to AIS infested water sources and the draining of water from motors, live wells, and bilges is crucial to preventing, reducing and stopping the spread to un-invaded waterbodies.

Our Greeter staff inspection is the necessary triage to determine the vessels and vehicles at high risk. With or without risk, we always encourage washing upon entering and again upon leaving. The entire process typically takes 5-10 minutes with little inconvenience. The majority of visitors express they're happy to wash to protect the water they enjoy.

We hope people practice 'Clean, Drain, & Dry' before transporting between waterbodies but we can't trust the public to have executed those protocols thoroughly. Drying times in particular, vary based on temperature, humidity, and material. Many recesses can remain moist enough to sustain microscopic AIS life stages. Inspecting and washing boats is a proactive prevention that works!

At the close of the 2016 season, our Greeters interacted with 468 watercraft. Boaters reported having previously come from 63 unique water bodies, 7 states and Quebec. That is a disperse mix of traffic and a lot of chances for AIS.

Only 1 motorboat refused inspection or to wash because they "didn't have the time", flipped us off, and entered the lake. That boat came from Lake Champlain, invaded with 50 different AIS. There is no known control for Zebra mussels or Spiny water flea. That one selfish action could of contaminated our lake with a host of AIS, to ruin our lake water quality forever and there was nothing we could do about it! After 13 years of our hard work and high expense dedicated to protecting Shadow, that is 1 boat too many! I support the entire Section 9, last pages of this bill relating to Lake Champlain. It's time to get real!

Currently, there are only 7 wash stations in operation. That leaves approx. 190 public accesses more vulnerable to AIS contamination and spread than if boat washing was in operation at those accesses. If we are to slow down AIS from

invading our waterbodies we need mandatory inspections and decontamination across this State.

At very least, lake associations that do maintain wash stations and robust Milfoil management should be firmly supported by State law. Yes, the State owns the water; the land underneath it; and is responsible for the quality of our lakes, but it is the entrusted lake associations statewide, who are most engaged in the battle to control Milfoil and other AIS infestations. The burden falls upon them to cover the high expense and do the majority of the work to serve the public good. Our waterbodies are first and foremost a public trust asset!

Contrary to the doom & gloom forecasted by VT Fish and Wildlife officials, when this becomes law the importance of our public Greeter program will be validated & reinforced. Eventually, more boat washes will open, thereby increasing the strength of the program and expanding the distribution of AIS education outreach.

Preventing the spread of AIS through education, boat washing along with vigilant lake monitoring for early detection and having a strong rapid response to infestations are the most environmentally sound and cost effective methods for battling aquatic hitchhikers.

Times have changed! As more and more State waterbodies fall victim, especially to the ever raging Milfoil and new introductions of AIS with more on the horizon, at this stage in the fight, taking No Action is Absolutely Unacceptable! Please pass this bill.

In conclusion, Vermont is a leader and known for its clean environment. We all appreciate our environment, the question is how do we preserve & protect it?...Together, we must build a culture of clean water, amplify and expand our voice. What we do here in VT sets an example that echoes to other regions.

Voting in favor of these important amendments will strengthen and advance the protection and preservation of our waterbodies. I implore this Committee to please send the strong message: Vermont cares about clean water!

Thank you for your consideration.

Respectfully, Christine Cano Christine Cano