From: ANR - WSMD Lakes
To: Jensen, Kimberly

Subject: FW: CORRECTION—Act 57 ANC Study Committee
Date: Tuesday, November 14, 2023 4:49:06 PM

Thank you,

Kelcie Bean (she/her)

You may now submit permit applications, compliance reports and fee payments through our online form to expedite its receipt and review: <u>ANR Online Intake Form</u>



Kelcie Bean (she/her), Environmental Technician

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The Agency of Natural Resources supports telework, and I work primarily remotely. I am available to connect by phone and email.

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From:

Sent: Tuesday, November 14, 2023 7:09 AM

To: ANR - WSMD Lakes <ANR.WSMDLakes@vermont.gov>
Subject: CORRECTION--Act 57 ANC Study Committee

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Please use this corrected version instead. I made a small change to Comment 9, as I had inadvertently left the contributions of Fish & Wildlife out when I sent this before. Apologies to Eric Palmer and his department. Thank you!

Dear Act 57 Study Committee Members:

I appreciate all that you have done to understand the challenging nuances of the permitting process. I have the following comments about the statue and process as it currently stands:

1. Lakes belong to the people of Vermont. Decisions about their management should be made in such a way that the voices of the public are listened to and respected. While a lake association might initiate an herbicide permit application, there should be a requirement that the local municipalities are involved and act as co-signers on the application. Prior to signing, the municipalities should be required to hold a public meeting to understand the wider community's feelings about treatment.

In many cases, lake associations do not represent the voice of the people of Vermont. Many lake associations have high membership costs or property ownership requirements, making membership impossible for many Vermonters. Some associations have no membership. Many lake association board members do not live in Vermont full time or at all. **The permitting process needs to be more equitable and inclusive.** 

- 2. One of the requirements of an herbicide permit is showing that "there is a public benefit to be achieved from the application of a pesticide." The idea of "public benefit" needs to be defined more precisely. **Economics should not be considered in deciding whether there is a public benefit.** The permission to treat with an herbicide is made by the Department of Environmental Conservation, and should therefore be granted based on environmental conservation considerations. Arguments about property values from property owners in lake associations should not be permitted as evidence. A non-profit asking to alter the environment to improve the values of its board members' personal properties borders on being a conflict of interest. This is especially true when milfoil was established in a lake decades before the properties were purchased.
- 3. Potential impacts on tourism should be considered only as they apply to using the lake as a natural resource. For example, if a state park experiences a significant loss of tourism due to the swimming / boating area becoming unusable, this is relevant. Potential loss of tourism dollars is irrelevant. The fact that treating a lake will result in a loss of value to anglers and others concerned about chemicals should be weighed as well. It is hard to prove that milfoil reduces tourism.
- 4. One of the arguments for not changing the permitting process is that a more rigorous permitting process will make it impossible for lakes to use herbicides to halt an emergent infestation. A simple solution: differentiate between lakes that have never had milfoil but discover a small patch that needs "emergency" treatment and lakes that have had established milfoil beds for years or decades. Treatment of the latter should require a much more rigorous approval process. Lakes with no history of chemical treatment should be required to explain unequivocally why treatment is now necessary.

The official mission statements of many Vermont lake associations include the word "preserve" or "maintain." Mitigating an emergent problem would be considered *maintaining* a lake's health. Trying to eradicate a species that has been present in the environment for 40+ years would be *altering*, not *maintaining* a lake.

5. Treatment of lakes with ProcellaCOR is not without risk. For example, there is known damage to some native plants (e.g. coontail). It's unknown what other acute or chronic effects ProcellaCOR might have on the environment and human health. There's no long-term data to refer to. (ProcellaCOR was developed in 2010 and not tested in the natural environment until about five years later. Eight years of data is not "long term.")

[Example: In December of 2022, the EPA announced the removal of 12 chemicals identified to be PFAS from the list of approved inert ingredients allowed in pesticides. This means that prior to December, PFAS were potentially being used in herbicides that we put in our lakes. This list could be added to as more PFAS are identified. PFAS are poorly understood. Further, some pesticide storage containers have leeched PFAS into the pesticide. The EPA "allowed" this because PFAS is an evolving science. Our state agencies rely on the EPA risk assessments to determine the safety of the pesticide, but the EPA's knowledge is inherently incomplete, as chemicals are constantly being engineered and used with little long-term data. How can we be sure we aren't unintentionally

creating a bigger environmental issue or human health problem when we use relatively new chemicals?]

The decision to treat with ProcellaCOR should not be made lightly. The environmental and natural resource benefits should vastly outweigh the known and unknown risks in each individual case. Treatment areas should be kept small to minimize risk to the non-target environment. **Herbicides** should be saved for special situations—for brand new infestations or targeted dense areas in which other management techniques have been tried and failed. Large-scale treatment with the aim of eradicating milfoil on a lake in which it is well-established should be categorically banned.

6. Prior to seeking a permit, associations and municipalities should be required to conduct both a non-biased lake-wide survey and a more in-depth in-water survey to characterize the specific area of concern on a more granular level.

The currently approved survey methodology involves a surveyor tossing a rake off the side of a boat and recording the identity and density of what they pull up. The density measurement is subjective ("fingerful" vs "handful"), and smaller species of vegetation that don't get entangled in a rake easily are potentially undercounted. The surveyor then drives the boat 100 meters and repeats the rake toss. While this methodology is acceptable for getting a big picture of the aquatic vegetation present and how milfoil and other species might be distributed around the lake, it shouldn't be solely used to make herbicide treatment decisions. Further, this technique should not be used to estimate milfoil acreage. How do we know what is going on between survey points? More than 2 acres of area is contained in a 100 m x 100 m square. How would an herbicide applicator know the amounts of herbicide to use and where to apply it without visualizing the milfoil in the water?

If there is a particular area of concern—for example, an area that is too dense or has poor topography, making DASH unsafe—then underwater techniques (e.g. SCUBA-based transects) and/or technologies (e.g. photography) should be required to map the milfoil beds more accurately. If a lake association has previously tried non-chemical management techniques, this additional requirement should not be an overwhelming burden. The association should already understand the scope of the problem and how to map it accurately.

- 7. Many of the claims about milfoil (that it provides a poor habitat for fish, outcompetes and suppresses native plants, etc.) are based on old, incomplete, or biased research or situations that don't apply to some of our Vermont lakes. **Instead of stating that milfoil is categorically "bad" and needs to be eradicated, we need to do more research and take a nuanced approach.** For example:
- --Why do many anglers love fishing in milfoil-infested lakes if milfoil provides a poor habitat for fish?
- --Why does Lake Bomoseen's aquatic vegetation survey show that at half the survey points, another plant had a higher density than milfoil? Why was species richness nearly the same at every point, regardless of the density of milfoil present? If milfoil has been present in this lake for 40 years, shouldn't it have outcompeted the native plants at this point? Was the survey not done correctly, or is there more to milfoil biology that we have yet to understand?

People pointing out potential issues, data gaps, data inconsistencies, and concerns does not equate to the spreading of misinformation.

8. My understanding is that the DEC can impose specific stipulations such as the need for pre-and post-treatment surveys. However, I don't think there is any requirement that lake associations show that they have the funds (or a solid fundraising plan) for carrying out the treatment plan as approved by the DEC. For example, the recent Lake Bomoseen permit application anticipated it would cost nearly \$1 million to carry out their proposed plan. An annual vegetation survey alone costs at least \$10,000. The LBA/LBPT did not explain to the public how they would get this money. (On the contrary, they repeatedly stated that they didn't have enough money to run the harvester in 2023.) Do they plan to use a private donor to fund the entirety of the project? Should private donors be allowed to privately fund unpopular herbicide projects on lakes? What happens if the money runs out before the association can complete the project as approved or do the required surveys to

monitor success? A transparent financial plan should be a requirement of a permit to treat a public body of water.

9. The ultimate decision as to whether a public lake is treated with herbicides is made by ANR scientists, as it should be. **The scientists at the DEC and Fish & Wildlife should evaluate each specific proposal individually through a scientific lens.** Does a small-scale chemical treatment to reverse an emergent problem or target an unusually challenging or dense area make sense for that particular lake? Will such a treatment preserve the environment and natural resources of that particular lake? The DEC should not simply "rubber stamp" any permit application based on persuasive arguments made by non-scientists representing a small population of lake users.

There are too many unanswered questions about the safety of the chemicals, their effects on the ecosystem, and the true relationship that milfoil has with native species. There's inequity and vagueness in terms of who can apply for a permit to treat a public body of water, what steps they need to take, and what they need to prove. While the study committee might not agree with all my points, I hope you consider them as you study this important statute.

Thank you for your time and for all the work you've done to protect Vermont's environment and natural resources.

Respectfully,

