Thank you,

Kelcie Bean (she/her)

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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: Thursday, October 26, 2023 6:11 AM To: ANR - WSMD Lakes <ANR.WSMDLakes@vermont.gov> Subject: Act 57 ANC Study Committee

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My name is in Lake Bomoseen Vermont. I, along with many others worked very hard to get H.31 passed in order to get a new look at the way we have been using chemicals in our lakes in Vermont. I have spent the past year and a half digging into this topic and was fortunate enough to be on the DEC stakeholder group they put together, that ended when H.31 passed. I sat through the first meeting of the study committee and have a few comments and concerns I'd like to share with you.

I am not a chemist. I cannot say that ProcellaCor is harmless and it's fine to use. In

my opinion, all the chemicals we have used throughout the past have been marketed as safe when they first came out. I believe Olin Reed even said during one of the meetings that we used to use 2-4-D in public waters. We now know that 2-4-D is super bad. ProcellaCor is just the next generation of chemical that has been marketed once we learned SONAR and Renovate and others didn't do what we first expected them to do. We have been told that ProcellaCor is selective on milfoil. The truth is it is selective, but it does kill many species depending on on application rate. The DEC claims that Coontail, a native plant is only managed at a 4 pdu application rate. I would argue this fact as in the Lily Pond on Lake Saint Catherine, the pretreatment study shows Coontail was frequently occurring. After what was supposed to be a 2 PDU treatment, the next survey showed it eliminated completely from that area of the lake. So clearly the 2PDU treatment has effects on Coontail, or a stronger treatment was used. Which leads me to my next concern.

Some questions were brought up during meetings and it sounded to me like the DEC said that the Department of Agriculture regulates the chemicals and that they have nothing to do with it. I talked about a year ago to David Huber at the Department of Agriculture regarding this. At that time, his comments to me were that all the AG department does is ensure that the contractor who is applying the chemicals is following the product label. He said basically they can check to make sure the person is wearing the appropriate safety gear and that the chemical is being transported in the appropriate fashion. I asked him who was monitoring the actual application of the product to ensure that they are using the correct amount and in the correct location and was told that is not their responsibility. When I asked if the DEC was there to monitor, he would not answer yes or no. I have also talked to several people who have been at the boat launch while the company was heading out to apply the chemical, and they saw nobody from the state around monitoring. It is my opinion that nobody is monitoring the application of these chemicals. I strongly believe that they are letting a for profit company that is hired to kill weeds use chemicals without being there to ensure things are done properly and at the correct application rates. That being said, we also can't be 100% positive that the water testing being done is accurate. There is no chain of command. The way it works is a homeowner takes a water sample, gives it to the company that applied the chemical, who then sends it to the chemical manufacturer for testing. The DEC is not involved in this process at all. And the fact that only the chemical manufacturer can test the water for ProcellaCor is also a major red flag to me. My in-laws had to do water testing at their business, and the samples had to be in Burlington at the lab within 24 hours. Do we really think that the water samples from the treated lakes are changing hands that many times and making to North Carolina to be tested in a reasonable time frame?

Another thing I'd like to bring up is the "Statistically Significant Increases" in native plants that the DEC always brings up. This entire thing is based off a study the DEC did with the plant survey results last year. The problem with this is the study they refer to cannot be accurate. They grouped every lake and pond that has been treated with ProcellaCor together to get their results. The problem with this is that not all of these lakes had the same acreage treated, many of them were different application rates, many have varying depths, flow rates, etc. I'm not a scientist, but I am uncertain how you can compare how a product reacts with so many variables. And, if

you look at the study, there were declines in native species of plants also. They just were off of a few of the increases by a fraction of a percent. Information can be used to provide a narrative, and I believe this is what has happened.

Someone asked during the meeting if we were studying anything in the lakes being treated. I believe Kim or Olin directed the answer to a study New York did. I am sure other states may be studying things, but we are not. There are no studies being done in Vermont on the impacts of using chemicals in our lakes other than lampricide to the best of my knowledge. Vermont Fish and Wildlife studies bass population in our lakes, but frogs, etc have not been studied. The DEC always refers to the chemical company studies that claim it's practically harmless. While it may be practically harmless in direct contact, the indirect impacts of habitat loss or constantly changing habitat are not being addressed. Fish and Wildlife has reported that repeated chemical use in Saint Catherine has led to the decline in the Largemouth Bass population over the past 20 years. Nobody is looking at impacts on the other species that share habitat with the Largemouth Bass. Anecdotally, all warm water fish species are suffering. But we don't know the true impacts because nobody is looking at anything.

Something I have never seen brought up is the fact that there is a section on the DEC website that states pesticides and herbicides can't be used within so many feet (I believe it is 100) of a water well. Many of these lakes have homes that use lake water directly for everything from washing to drinking. How is it illegal to use chemicals with so many feet of a well on the ground, but we are granting permits for chemicals to be applied literally within inches of a homeowner's water inlet pipe?

I would also like to mention that the current statute requires no public notification of chemical treatments. While it does require the applicant to direct property owners to the ENB website, no notification to the public is required. Unless you happen upon the ENB website or happen to be a homeowner who received a notification, you have no idea anything is happening until it's too late. Is it fair to allow a system that creates a situation that makes it very hard for the public to have any input? This has made it very easy over the years for lakes to be treated without input from anyone other than the lake associations and a few homeowners. There needs to be a system that allows the public to be stakeholders in this. We cannot continue to let a select few hire a for-profit company to decide what is best for our public lakes and ponds. The notification part of this is the same requirements as the notification part if you should for example apply for a lake encroachment permit to build a sea wall or a set of stairs going to the lake. I think it's safe to say that using chemicals in a public body of water is significantly different than a lake encroachment and notifications should be in an entirely different league.

While the statute doesn't require public notification, the DEC has taken it upon themselves to create a special condition in the permit that requires signs placed at

various locations around the lake stating when and what will be happening with water advisories. While good in theory, the execution of this is terrible and nowhere near enough to notify anyone. These signs are only required to be the size of a piece of printer paper and are often stapled to trees or buried in the tall grass. There is nothing drawing any attention to these signs and most people don't even give them a second look. In some cases, the dates listed on the signs for treatment dates have been incorrect. Lake Beebe for example had signs posted (stapled to trees and a telephone pole) stating the lake would be treated on 6/16/22. The lake, however, was not treated on that date, it was treated 6/21/22. How many people do you think used the lake the day it was treated not knowing, possibly withing hours of treatment? How many times has this happened over the years and nobody noticed? Is it acceptable to treat the lake users this way, absolutely not. When I asked DEC about the repercussions from posting the wrong date, I was told although they violated special conditions of their permit, since the statute requires no public notification, there really was nothing that could happen to the applicant. This once again shows that the public notification aspect of the current regulations is flawed.

I could go on forever on this stuff, so I'll end this with one last thing. Throughout this entire process, we have heard that DEC works with Fish and Wildlife on this. They have an internal review procedure that works etc. I would like to note that this internal review procedure just got signed this spring. I have seen this process that was 4 years in the making, and I don't think it gives Fish and Wildlife anything. The fisheries department can only talk about fish. They are not allowed to comment on the amount of milfoil in a lake for example, as that is not allowed with the new internal review procedure. They cannot mention how they think a lake should be managed, not allowed per the internal review procedure. I think it is safe to say that our fishery scientists spend more time on these lakes in any given year than the DEC, and yet they are severely limited on what they can comment on. I know that Eric Palmer mentioned in the meeting that the DEC has misinterpreted the percent of littoral zone they accept to be treated with. I have heard this complaint for years from Fish and Wildlife and it still isn't resolved. The DEC boasts about how it only allows 40% of the littoral zone to be treated. This allows the fish to move elsewhere when the habitat is damaged. The thing with this that they don't really push is that it is 40% annually. So within 3 years the lake can have 100% of its littoral zone treated. That 3-year time frame isn't enough for vegetation to grow back to levels that support a healthy ecosystem.

I'd like to look at the 5 criteria of the current statute and give my opinion on its flaws.

(d) The Secretary shall issue a permit for the use of pesticides in waters of the State for the control of nuisance aquatic plants, insects, or other aquatic life, including lamprey, when the applicant demonstrates and the Secretary finds:

(1) there is no reasonable nonchemical alternative available;

I believe using words like reasonable leaves this entirely up to the discretion of the whoever is in the role of permit analysis at the time. What is reasonable to one, can certainly be unreasonable to another. This wording also leads the applicant to apply for a larger area to be treated, since using nonchemical alternatives on an area of say 2 acres would be more reasonable than on an area of 100 acres. Fish and Wildlife has mentioned several times that milfoil mitigation should be limited to areas like in front of homes and beaches, and non-developed shoreline and weeds in open water areas be left for fish habitat. If you followed this logic, then nonchemical methods would be very effective in maintaining the small areas in front of homeowner's docks, and in front of public swimming areas. I feel if we focused on dense areas of milfoil withing the confines of docks and swimming areas, non chemical alternatives would be reasonable for most if not all applications. However, currently allowing a broader scope allows for the applicant to increase the acreage, making nonchemical methods non reasonable.

(2) there is acceptable risk to the nontarget environment;

Currently the only thing being looked at regarding acceptable risk to the non-target environment is direct impacts. We use the fact that ProcellaCor is practically nontoxic to fish to say its ok, fish won't be hurt. The problem is there are a lot of species that are not being studied, and not just fish. There are some data gaps in the ProcellaCor literature when it comes to this. Another very important thing that is being overlooked is the indirect impacts that the repeated use of chemicals for milfoil mitigation is having. What problems is the constantly changing vegetation having? Are we leaving adequate habitat in the littoral zone? Are any species suffering because of what we are doing? These are all questions that should be answered, but they are not. The fact is nothing is being studied regarding indirect impacts from chemical use. The only thing we do know is that through Fish and Wildlife's studies on Saint Catherine, repeated chemical use and milfoil mitigation has damaged the Largemouth Bass population. This cannot be denied, the numbers have been recorded and there have been reports written on it. The question is what else is being affected? We don't know because no studies have been done or are currently being done. Anecdotally, every species of warm water fish is decreasing. Fisherman across not only Vermont, but the country have reported significant decreases in all warm water fish species in lakes that are treated with chemicals for milfoil mitigation. Unfortunately, without more studies we may never know the full extent of the damage that has been done not only to fish, but to the other things that rely on that habitat.

(3) there is negligible risk to public health;

Over the years we have seen many chemicals that were safe turn out to be harmful. Chemicals like roundup have been marketed as safe but have now been shown to have terrible health risks. Using chemicals in our public bodies of water is very serious and needs to be taken that way. It should be the last course of action taken, if taken at all. The fact that in reality, chemicals marketed as safe in the past have proven to be horribly toxic in the present. Truth is we don't really know the full effects of any of these for years. Will we see a commercial on the TV 30 years from now saying if you swam in a lake that used Sonar, renovate, or ProcellaCor and now have lymphoma, you may have a case. I for one and not willing to take that chance for something that in most cases is nothing more than a nuisance.

(4) a long-range management plan has been developed which incorporates a schedule of pesticide minimization;

The issue with the long-range management plan is that nobody knows what is going to happen long range. We don't know what will happen tomorrow. The applicants don't know if they will be able to follow their long-range plan, but as long as they have one, that makes the permit pass this part of the statute. The applicant does not need to show that it has the funding or even the ability to follow through with the long-range plan. If we were going to continue to have this as a part of the statute, then it should require the applicant to prove they have funding to follow through with the plan, and actually have the funding, not say things like we will look for donations and grants to fund the long-term plan. They should have to provide a full outline of the plan that ensures it will happen, with harsh penalties should it not happen. Revocation of the permit is not enough when it comes to chemicals in our public lakes and ponds.

(5) there is a public benefit to be achieved from the application of a pesticide or, in the case of a pond located entirely on a landowner's property, no undue adverse effect upon the public good.

Public benefit is also in the eyes of whoever is in the permit analysis spot at the time. There will always be a way to argue public benefit in either direction. A simple analogy is speed limits. Increasing the speed limit to 100 on the interstate could be argued as a benefit to the public as people will get to work faster. It can also be argued that it is not a public benefit because there will be more accidents and injuries. Trying to use public benefit causes a host of problems as you will need to clearly define who the public is. How do you define who the public actually is? Is it the property owners, is it all Vermonters who actually own the lakes. Is it all the users of the lakes? That being said, are we worried about users of the lake or the actual health of the lake, its ecosystem, and the species that rely on the ecosystem.

In every permit I have read under Public Benefit you can find, "This temporary decrease is anticipated to result in a tangible benefit for both boating and swimming within the treatment locations. Regarding fishing as a public good use in relation to the proposed project, it remains undetermined as to whether the project will produce a tangible long or short-term benefit.". This continues to be used, even though Vermont Fish and Wildlife has proven and stated that it is having a negative effect. It also shows that we are currently holding boating and swimming at a higher level than any other lake usage. Who determines that swimming and boating are the most important things? Once again, what should we be most concerned about, lake health, fish health, ecosystem balance, or swimming and boating?

In closing, something needs to change. The current system does not work. It is designed to allow very little public input and keeps the public out of the loop until it is to late. Our lakes shouldn't be managed by lake associations who hire for profit companies to tell them what the best management would be. They should be managed by all of the lake users. They should be managed in a way that focuses on lake health and the health of the ecosystems, not property values or swimming. More time needs to be spent studying our lakes. Are lakes that have had milfoil for decades in crisis, or are we causing damage to ecosystems because of a nuisance?

Thank you,





