From: ANR - WSMD Lakes
To: Jensen, Kimberly

Subject: FW: ACT 57 ANC STUDY COMMITTEE

Date: Tuesday, October 24, 2023 11:25:13 AM

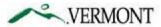
Attachments: F-36-R-23-Study-II-D2-Bass.pdf

Porter, Louis 4.pdf

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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802-490-6195 (o/c) | Kelcie.bean@vermont.gov

http://dec.vermont.gov/watershed

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: Monday, October 23, 2023 6:38 PM

To: ANR - WSMD Lakes < ANR. WSMDLakes@vermont.gov>

Cc: Jensen, Kimberly <Kimberly.Jensen@vermont.gov>; Palmer, Eric <Eric.Palmer@vermont.gov>; Owen, Sarah <Sarah.C.Owen@vermont.gov>; Reed, Olin <Olin.Reed@vermont.gov>; Amy Sheldon <asheldon@leg.state.vt.us>; Christopher Bray <cbray@leg.state.vt.us>; J. Marsden

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Subject: ACT 57 ANC STUDY COMMITTEE

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I would like to add comments and questions to the ACT 57 ANC Study Committee on some of 10 V.S.A. 1455.

(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;

How is it for some lakes that there is never any reasonable non-chemical alternative available? For example, Lake Saint Catherine has been treated with herbicides from 2004 through 2022, except no treatment in 2005. In that timeframe Lake Saint Catherine has been treated with Sonar AS, Renovate OTF, Renovate 3, and now ProcellaCor EC.

Examples of other lakes with multiple years of herbicide use are Lake Hortonia, Lake Beebe, and Burr Pond. Since the introduction of ProcellaCor EC in 2019 to Vermont we have had approximately 12 lakes using this herbicide when prior to 2019 it was just a handful of lakes at the most. So how is it that suddenly since 2019 none of these approximate 12 lakes have a reasonable non-chemical alternative?

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

Does the ACT 57 ANC Study Committee find it acceptable that chemical use has changed the habitat so drastically that a shift has been identified by the Vermont Fish and Wildlife Department from largemouth bass to smallmouth bass in Lake St. Catherine.

From study F36R23Study (attached)

However, this appears to have changed considerably in recent years, as the black bass community has shifted from Largemouth Bass to Smallmouth Bass. This is likely related to more aggressive aquatic plant control efforts in recent years that have suppressed complex aquatic plant communities more than earlier efforts. Following a 15-year study of the black bass population in Lake Morey, VT, Kirn (1996) concluded that the introduction and rapid expansion of Eurasian watermilfoil (Myriophyllum spicatum) (EWM) in the lake was a major factor that lead to the development of a high-quality Largemouth Bass fishery there. Similar observations have been made in other Vermont lakes with established EWM populations (Good 2019). Changes in available aquatic vegetation density and plant community structure can directly affect black bass populations.

Unfortunately, being that bass are the most popular species fished for in many lakes, other projects, and time, the Fish and Wildlife Department studies them rather than all warmwater and coldwater species. We are uncertain as to the damage being caused to other warmwater species, because Vermont does not study anything other than bass on these lakes. We do have anecdotal evidence from anglers reporting decreases in yellow perch, crappie, and sunfish on lakes that have had repeated herbicide use. All the past permits have been issued under the premise that there is an acceptable risk to the non-target environment. How can this be the case if we are not monitoring any of the non-target environment in our lakes here in Vermont that have herbicides used? The only thing being monitored is plant species. This monitoring is more often than not done by the chemical applicator, whose being paid a significant amount of money by the lake associations to get rid of weeds. In many of the reports from the applicator, we are told that conditions were poor when their plant

surveys were done, leaving the question of if we actually trust the surveys. We are not looking into what happens to other species when an ecosystem is altered. Many of these bodies of water have had Eurasian Milfoil for decades. Decades that the ecosystem has adapted. What happens when you start to rapidly alter that ecosystem with chemicals to remove large amounts of aquatic vegetation? These are questions that have not been answered adequately enough. Sure, the chemical company says chemicals like ProcellaCor EC are nontoxic to fish. What about the indirect impacts? The indirect impacts are as much a risk as the direct impacts, and yet we have continued not to even investigate any of it on our Vermont lakes. This is the flaw of this part of the statute. It is so vague that for years the DEC has just ignored everything but what the chemical manufacturer claims its product impacts directly.

(3) there is negligible risk to public health;

For almost two decades Vermont used Sonar AS in some of our lakes. It wasn't until 2018, during a denial to use Sonar AS in Lake Iroquois that public health became a concern.

From Lake Iroquois Sonar AS denial (attached)

There is a greater than negligible risk to public health. The active ingredient in the proposed

herbicide Sonar A.S. (fluridone) is known to break down into a chemical known as n-methyl

formamide (NMF) . NMF can be absorbed into the body by inhalation, through the skin, and by

ingestion. Potential impacts to human health include the potential to cause liver damage as well as

being teratogenic (disruption to the development of the embryo or fetus causing potential birth

defects) and embryotoxic (toxic to an embryo, which may result in death, growth retardation, or

abnormal development). Based on the molecular weight ratio of the active ingredient to NMF and

the analytical method to detect NMF is 2 ppb, it is unlikely that NMF will be detectable at the

proposed treatment concentrations . However, the Program believes that the analytical detection

limitation should not be the limiting factor to determine whether exposure to NMF will result in a

negligible risk to public health. Absent further information about potential health risks associated

with exposure to NMF, the Program believes that the proposed whole - lake treatment will result in a

greater - than - negligible risk to public health.

So, for two decades permits were granted for the use of Sonar AS under this statute

in our Vermont lakes. For two decades we found that there was a **LESS** than negligible risk for the use of Sonar AS. What changed in those two decades? The chemical didn't change, the effects of the chemical didn't change. What changed is we learned more about the health risks of a so-called safe chemical we were dumping in our public bodies of water in Vermont. We never know the harm chemicals can do right away. More often than not it takes years to see the potential risks. During one of the study group meetings on 9/29/2023, Olin mentioned that Vermont had used 2-4-D in our public bodies of water prior to the use of Sonar. Look up 2-4-D and you will find that we are now just learning how extremely dangerous it can be. In another two decades we have the potential to be looking at ProcellaCor EC or whatever the latest and greatest chemical that SePro or other chemical companies come up with next and determining that it has a greater than negligible health risk. At that point, it could be too late. We could have caused irreversible health problems. There is no such thing as a miracle chemical as I have heard ProcellaCor referred to by a local lake association board member. All chemicals have risks and are we willing to continue to accept those risks to kill a nuisance, as that is what these permits are, Aquatic **NUISANCE** permits.

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

Using the word minimization has also allowed some lakes to still be treated with herbicides year after year. Herbicides in our lakes should only be used as a last resort when non-chemical methods are failing and there is a threat to our fish and wildlife. Some of the permitted lakes are using chemicals as their primary weed management, and lakes like Saint Catherine, which are treating less area than the whole lake treatments they used in the past, that clearly show less acreage being done, are still treating the lake year after year with spot treatments. Just because we no longer allow whole lake treatments, doing spot treatments year after year is not chemical minimization. The lake is still seeing chemicals dumped into it. Water flows, nothing stays in one spot. To say that we are only doing a spot treatment of X amount of acreage isn't really telling the story because regardless of what we are being told, if you dump something in water it disperses, so we never truly know the total area we are doing.

"a long-range management plan has been developed which incorporates a schedule for the pesticide to be withdrawn after 3 years" would be more feasible.

(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.

Is benefiting the public what we should really be worrying about when it comes to dumping potentially harmful chemicals in our lakes and ponds? Shouldn't we be putting the health of the ecosystem and the plants, fish, animals, etc. that rely on it for survival first?

Using the phrase public benefit means you have to define the public. Who is the

public? Is the public the homeowner who doesn't want weeds around their dock? Is the public the boater who doesn't like having to stay in the middle of the lake and rather ski in the littoral zone of the lake? Is the public the fisherman who spends hour after hour, day after day fishing the weed beds catching fish and making memories with his grandkids? Is the public the family walking through the shallow water studying the various plants and animals they find? Is the public the people who plain don't want to swim in a lake treated with chemicals regardless of if they are told it's safe?

The only public that has been part of any of this is the lake associations/homeowners who don't want weeds around their docks. For decades lakes have been treated with various chemicals for weed control, and if you did a survey, you would find that many people don't know this is happening. Many of the public would be appalled at the fact that we are using chemicals in the lakes we all own to treat what a few consider a nuisance. The only way to remedy this is to get the public involved. Public hearings, public comment times etc are the only way to truly engage the public and perhaps come up with what is currently called public benefit. The ENB website is not an acceptable way to handle the public outreach of this. One in a 1000 might know about the ENB, and unless it is a project they are doing, that one person isn't checking it daily. Before a permit is applied for a notice of intent should include more than just property owners around the lake. The notice of intent should go to all municipalities surrounding the water body, any clubs that use the body of water on a regular basis, and local schools. Public meetings should take place before a permit is applied for. Not just after the draft decision has been made.

Thank you,