To: VT Senate Committee on Natural Resources and Energy

From: Jan Jones Date: April 27, 2023 Subject: H.31 Testimony

I'm sorry to not be there in person, and I thank you for allowing me to speak this way in support of H.31. My name is Jan Jones. I've lived in Hubbardton for about 40 years. I am a retired public elementary teacher where my passion was environmental education, and I've also worked as a Park Naturalist at Bomoseen State Park, a nature columnist, an amphibian field research assistant, and a public librarian.

Because time is very short to say what I'd like to say, I'm going to talk quickly and start by addressing a few misconceptions and questions that I heard in yesterday's testimony. Like many people, I assumed that the EPA approved chemicals like pesticides after rigorous testing. I assumed that, as Senator McCormack alluded to, they looked through all the lenses – long-term ecology, human health, and efficacy - before registering products. But when I became alarmed upon hearing about a year ago that, yet another lake partly in my town, was being considered for herbicide treatment, I read the 247 pages of EPA's 2017 risk assessment of ProcellaCor, and I learned this:

- "Neither reptiles nor amphibians are tested." EPA p.74
- "Only a few surrogate species forbirds are used to represent all bird (680+) species in the U.S." EPA p.74
- Benthic invertebrates (the base of aquatic food web prey) displayed chronic toxicity effects in sediment studies at all concentrations. EPA p.11
- "Chronic honeybee studies using florpyrauxifen-benzyl (or transformation products) were not submitted." EPA p..85
- Shrews and star-nosed moles were identified as being at risk because their diet is predominantly invertebrates.
- The EPA assessment includes no long-range data because there is none yet. It doesn't address potential interactions, or cascading effects in the ecosystem as a whole, or field studies.

Please think about this. Our DEC relies on EPA toxicity studies that never included amphibians. Frogs chorusing now from our lakes and wetlands, are not studied at all. VT herpetologist Jim Andrews supports H.31 and commented, "I think in reality, most biocides undergo only limited lab tests before they are made public, leaving it up to local residents and biologists to see if there are any negative impacts in living systems after they are used."

To represent the birds now returning to nest, the EPA experimented on a few mallards and bobwhites, determining the chemical "practically non-toxic" to them. What about the piscivorous loons, ospreys, and eagles? What about the omnivores who eat aquatic plants, snails, and other benthic invertebrates

in the muck? And the creeping nymphs of flying insects that will provide food for swallows? Every bit of the tiny life swimming and creeping through the littoral zone, the very area targeted for herbicides, is potential food for something else.

The EPA risk assessment, the majority of which is calculated via computer modeling, leaves us with many uncertainties. But this is the answer to yesterday's question to Commissioner Beling about whether Vermont scientists weigh in on potential risks before an herbicide is used here: in March 2022 Rick Levey, wrote a 2-page review of the EPA document concluding that the findings, "support the conclusion that the proposed use of ProcellaCor EC ...applications pose an acceptable risk to the non-target biota and environment."

That is the sentence that satisfies an herbicide applicant's requirement (d2) to get a permit, according to the statute. It doesn't include a requirement to look at the whole system, including the unique attributes of each setting, before resorting to herbicides; it doesn't ask for historical data or an inventory of species.

In terms of public health requirement (d3), the EPA final registration decision is also disconcerting. ProcellaCor's active ingredient was granted Reduced Risk status for aquatic use when compared to registered alternatives, concluding that this "will not generally cause unreasonable adverse effects on human health," even though it uses an entirely new mode of action (EPA, p.17).

Pesticides have a place in emergency situations – e.g., severe cyanobacteria blooms, dangerous to human health, or new outbreaks of hydrilla. But I am very concerned that the precautionary principle is being ignored in the management of E. milfoil. It is not a health risk, nor has it been proven to be always detrimental to ecosystems. After 40 years of growth in Bomoseen, our largest "inland" lake, it has not taken over nor crowded out native plants. In the lake's 2021 Submersed Plant Survey of the littoral zone, at 87% of the survey points, EWM was growing with native plants, and at 50% of the points, a native plant had greater density. This suggests to me that that we should revisit our assumptions that EWM, and Lake Bomoseen could serve as an ideal study site for strategic management WITHOUT herbicides.

Now another issue: equity in the existing statute. \$500 and an application opens the DEC gate – the permit application gets reviewed utilizing ANR resources and expertise for months without any input, alternative ideas, or opportunity to ask questions on the part of other public stakeholders. Meanwhile, if another person (or group) wants to treat ZERO acres of the same lake with chemicals, managing it instead as an herbicide-free "control" environment, they cannot pay to open the gate and be part of a conversation. Herbicide applications are often initiated quietly by people with privilege

and knowledge of how the system works, most often by paid homeowner members of Lake Associations, while the public remains unaware, possibly until it's too late. Yes, there is a public comment window and notices on the Environmental Notice Bulletin. But being "invited" to comment at the end of a process is certainly not the same as being at the table from the beginning, and it is rare for a decision to be overturned. This needs to change.

I recently talked with a fisherman who strongly opposed herbicides based on his extensive time fishing our lakes and observing the real-life changes after chemical treatments. He said he was reluctant to voice his experience and opinions because he felt he wasn't good at that sort of thing. It frustrates me to no end that his anecdotal data is not taken into account – not as valid as computer modeling by someone who perhaps has never set foot in VT. He represents a huge set of stakeholders who are left out of the process for a myriad of reasons – no internet, limited comfort with letter-writing or computers, different social circles, etc.

Eurasian watermilfoil is considered an aquatic nuisance, which the DEC defines as "undesirable or excessive substances that interfere with recreational potential." Whose recreation? Are kayaks not as important as big motorboats? Anglers not as important as water-skiers? Why should big boats that use the open water also control the edges where I feel safest paddling – where weeds cut the boat wakes and help prevent shore erosion; where kids dip nets to discover hidden wonders. Do ecotourism and quiet sports have a place in the economic picture? What about those thousands of us who believe that a "nuisance" should never trigger actions that gamble with the future, and pesticides are meant only for emergencies? Black flies are also a nuisance. We wear head nets.

I trust Vermont legislators to protect our natural communities, but my confidence has been shaken. I had believed that DEC actions were always based on both long-range and current studies, site-specific data collection, deep understanding of ecology, and equity in terms of human stakeholders. The realization that even here in my beloved state, many of the decisions are based on chemical company promises and EPA claims has made me very worried about our future. I understand that budgets limit fieldwork, but a study group with a wider lens could make this process better. Please pass H.31 to ensure that our public freshwater remains wild for future generations.