

**From:** Vermont Vegetable and Berry Growers [<mailto:VTVEGANDBERRY@list.uvm.edu>] **On Behalf Of** Vern Grubinger  
**Sent:** Sunday, February 13, 2022 7:46 AM  
**To:** [VTVEGANDBERRY@LIST.UVM.EDU](mailto:VTVEGANDBERRY@LIST.UVM.EDU)  
**Subject:** Responses to draft surface water legislation

Hello all.

Here are responses to information about [H.466](#), an act relating to surface water withdrawals and interbasin transfers.

- Thanks for bringing this to our attention. 5,000 gal in a day is a comically small amount of water in a temperate rainforest climate like ours. For the little 160cc 2" Honda pumps found on many farms, watering 1 acre of vegetables using double-drip will use somewhere in the 4,000-5,000 gal of water in an hour. That's a very small pump watering a relatively small amount of ground, and it's triggering a reporting requirement? That seems excessive...I understand perhaps limiting water withdrawals during drought conditions so as to not suck the brooks dry, but it seems like this would be a lot of paper shuffling for questionable gain, given that excess water is often a bigger problem around here than drought.

- Frightening, indeed! It seems the VVBGA BOD should offer and more workable minimum, or suggest an exception that suits our needs.

- It may be too late as the bill seems like it is pretty far along but it would be in our interest to create some type of differentiation or ag allotment/exemption. To me, uses like: "industrial uses, snowmaking, water supply, or other off-stream uses" have different purposes, probably higher uses, and potentially more harmful consequences than agriculture in a given watershed.

- It's a bummer that it seems some of these regulations are exempt for snow making and not for making food.

- There is not an ag exemption in this bill. Farmer withdrawal from jurisdictional waters of the state for any farming – or non-farm – purpose would be required to register and report under H.466 (and potentially be permitted). Here is what is not considered a jurisdictional surface water: livestock drinking directly from streams; a manure pit; withdrawing from an on-farm irrigation pond that is not subject to Vermont Water Quality standards. A farm withdrawing from a river or pond for irrigation or watering livestock would be an activity that would be regulated under H.466.

- This would have an impact on my small farm. The 5,000 gal. threshold while it sounds big to those that are not informed is very small. During frost nights I use 5,000 gal. per hour for 12 hours! Also, my reservoir capacity is approximately 40,000,000 gals. I do not see where the storage and recharge capacity are factored in anywhere, not that I would

like to complicate matters. Thanks for keeping us informed. I will reach out to Senator Westman.

- Thank you for posting the information about the surface water bill. I am working with several other members of Vermont's aquaculture community to solidify our new Vermont Aquaculture Association. We are aware of this bill and will continue discussions on potential influences on the industry. I'll keep you in the loop...and the members of the Vermont agricultural community (we're agriculture too!).

- I would ask what is the problem that is being addressed? Seems like the 5,000 gal per day threshold (3.47GPM on a 24-hour basis) is miniscule compared to the 100,000 gal per day in MA. Thresholds that low will create a difficult program to administer. Location doesn't seem to be difficult except if there are multiple locations. How detailed is the requirement? Frequency and rate of each withdrawal seems like an onerous recordkeeping requirement. Modern irrigation systems can do multiple times per day at multiple rates. Description of the use doesn't seem difficult. For example, frost protection for strawberries or irrigation of vegetables. Capacity - why is this needed if you are asking for frequency and rate? More recordkeeping for already stressed farmers. A schedule for the withdrawal is impossible. Drought conditions are not scheduled. Are they really going to ask for monthly reporting? This seems foolish and onerous for most agriculture operations.

- Having dealt with this in all the states Vern listed below, the current regulation is basically being proposed to document and justify what you need for water requirements to sustain a crop. NY state is going a bit crazy with that now, but MA and NH are more forgiving when it comes to reporting or regulating. ONE MAJOR THING the regulators fail to meet is that a standard irrigation cycle for our most common grown crops on 6' row centers at 7160 row feet per acre requires 35.8 gpm of water using a Q/100 flow rate of 0.5 gpm. This typically is operated every other day for 4 hours or 2 hours per day. 4 hours = 8592 gallons of water per acre. 2 hours = 4296 gallons of water per acre. The reason for every-other day per acre is most farms set up on zones cannot operate every zone every day of irrigation. So, using that math above per acre the suggested calculated limit of 5,000-50,000 gallons barely covers 5 acres worth of produce. This can present problems for growers. Good news is if all growers are using pressure compensating orchard tubing or pressure regulated drip tape the flow rate x run time is all that is needed to calculate flow. That is how I report in NH without a meter by keeping track of run time, hence the 4-hour cycle is a full tank of gas in a 9 hp water pump. So this is easy data to gather and then justify where the water is going before they choose to regulate. Also points to getting flow meters to actually measure. As far as scheduling goes, it appears to me to be justifying why you irrigate groups of crops and how often, what is the pump set schedule. Anyway, VT welcome to water reporting like the rest of us, minus RI.

- NH has been monitoring ag water for over 30 years (Live Free or Die State...my ass). It is overseen by DES and we are responsible to report quarterly reports of all water used for ag purposes....not just surface but well water as well. For many years the quarterly

reports needed peak daily usage, totals from each individually annotated site, and other specific pieces of information. Recently they have simplified the quarterly report to more realistically just monthly totals. I think they realized that figures on an excel spreadsheet don't represent much in terms of explaining anything when it is just numbers, without discussion of weather, seasonal demand, crop needs etc. etc. which can vary dramatically from year to year. So possibly farmers could advocate for simple totals without all the bureaucratic need for specificity, which we will likely just fudge figures for.

- Do you know, specifically, the problem this legislation is supposed to solve? There is a lot of text attached to the notice, but I'm not seeing the clear statement of a specific problem to be solved. Do you know if the Senate committee in question will be taking live testimony regarding this legislation?

- This stinks of a solution looking for a problem to solve.

- This legislation is part of a troubling direction chosen by a few members of the legislature that seems to go on unchecked.

- ...Regarding the "why" behind this I wanted to respond, having many years' experience with NH DES water usage regulation. 30 years ago the Live Free or Die state suffered a spate of riparian rights court cases. The largest or most challenging case was one that asked, "who actually has rights to the water in the Merrimac River"? The Lake Winnepesaukee Association folks were essentially withholding an inordinate amount of outflow to keep the lake level high (ostensibly for the folks whom own boats) due to drought like conditions. This impoundment on a dry year was noticeably affecting downstream flow and the city of Manchester was pissed because their boaters on Lake Plausaway weren't getting enough water to keep their boaters happy. Dragged into this melee was the huge Goldstar nursery along the Merrimac in Concord whom everybody watched taking water out of the river and shooting it out of huge travelers trying to deep nursery stock alive. I don't know the legal outcome. Perhaps we just started getting a bunch of rain, people quit fighting and decided to go out for a beer. But the whole process got DES attention, and they mandate that farmers are to report water use just like the municipalities. They don't actually send folks out to enforce this law. I asked a secretary years ago about reporting, and why should I do it when dairy and veg farmers I knew were not being bothered to make an effort. She cogently answered "Because water is the new fossil fuel. In the not so distant future there will be water allotments and controls, and that may well come with enforced usage. If you have a historical map of usage with the state you will be on a first come first served basis, especially if you can demonstrate you are using it for the purposes of producing food and not floating boats". So I fill out the quarterly reports so that we have a registered legacy of water usage for our farm, Like current riparian allotment rights in California, that water allotment that goes with the farm in California significantly affects the value of that farm property.

- I totally get the history on this subject in NH and how it is possibly background for this proposed legislation, and I appreciate the information dump. My curiosity is, is there any

current evidence, of any kind, over any significant period, that there is a problem in VT with surface water volume on a yearly basis, any specific data that, year on year, there is a problem, a shortage, an overuse tied specifically to agriculture or any other user? The last thing I have time for is more fun with the ANR over a non-issue. The vast majority of the water we use is captured snow melt in our own ponds. Here is an example of what I mean: From the US Dept of the Interior: Water use in the United States in 2015 was estimated to be about 322 billion gallons per day (Bgal/d), which was 9 percent less than in 2010. The 2015 estimates put total withdrawals at the lowest level since before 1970, following the same overall trend of decreasing total withdrawals observed from 2005 to 2010. Freshwater withdrawals were 281 Bgal/d, or 87 percent of total withdrawals, and saline-water withdrawals were 41.0 Bgal/d, or 13 percent of total withdrawals. Fresh surface-water withdrawals (198 Bgal/d) were 14 percent less than in 2010, and fresh groundwater withdrawals (82.3 Bgal/day) were about 8 percent greater than in 2010. Saline surface-water withdrawals were 38.6 Bgal/d, or 14 percent less than in 2010. Total saline groundwater withdrawals in 2015 were 2.34 Bgal/d, mostly for mining use.

- When we started farming at our place 30 years ago we contacted ANR about irrigating and they wondered about volumes and it was a non-issue for our 5 acres then. The big concern were ski areas that were using surface water for making snow and the low level effect on fish habitat in the winter. We wanted to register then but they didn't want to bother. Now irrigating 65 acres I sometimes wonder if I should re contact them but now looks like we will need to.

- My question to the ANR and the legislature: has there been an explosion of surface water usage since 2015? And even if there has, have we returned to water usage levels of 2010? Is this in any way an emergency, or even a problem, of any kind? And Vermont is zoned as one of the lowest water usage territories. I don't need more work, expense, and exposure to specious hassle from the state because of a problem that doesn't exist. It doesn't seem like there is really any "there" there.

- My feedback is that it sounds like a huge pain in the ass.