

P. O. Box 512  
Montpelier, Vermont 05601  
September 2, 2020

Senate Committee on Finance  
meeting virtually out of the State House  
Montpelier (in theory) or who knows

Subject: H.926, an act relating to changes to Act 250

Dear Committee:

I am a civil engineer. My experience includes sewers, wastewater treatment plants, combined sewer overflows, runoff, flood studies, and permitting.

I provide some comments related to the testimony that your committee heard last Friday.

**Title insurance provision lacks accountability and is not comprehensive**

Last Friday Mr. Storrow testified about a section in H.926 that would require any combination of roads and driveways on a given parcel that add up to more than 2,000 feet within a period of 10 years to receive an Act 250 permit. His concern is that the title insurers need an easy way to determine whether a given property needs that permit and has received that permit. He asked you to add a requirement that applicants for a wastewater and water supply permit be required to include the length of a road or driveway serving the property.

I note two flaws with this proposal. The flaws are a lack of accountability and that the proposal is limited to roads and driveways associated with a lot.

The proposal seems to have no way to hold the applicant accountable if the length in the application is wrong. It was not clear from Friday's discussion what would happen to the applicant if the length given is wrong.

The proposal does not capture all roads and driveways associated with a parcel. The requirement in H.926 would require a permit if all roads and driveways on a parcel exceed 2,000 feet. However, the proposal does not capture all roads and driveways associated with the original parcel from which that lot is created.

- The original parcel might be subdivided, creating a new lot served by a road of 1,000 feet on the original parcel and a driveway of 600 feet. So the application would then state 1600 feet.
- A few years later, another subdivision occurs and a second driveway of 600 feet is built to serve that lot. The wastewater and water supply application would state it is served by a road and driveway totalling 1600 feet. The number that Act 250 and the title insurer are interested in is 2200 feet. Without an Act 250 permit, both lots are out of compliance with Act 250.

The proposal lacks a means to alter or amend the length on the WW&WS permit for the first lot to show the length of all associated roads and driveways.

I do not see that the proposed amendment will actually do what it intends to do: determine whether a given lot needs an Act 250 permit. It won't do that because all roads and driveways associated with the second lot are not known to the applicant for the wastewater and water supply permit. And there is no provision to amend the length on the first application.

An amendment for title insurance purposes needs to capture all roads and driveways within ten years that were created on the original parcel. I do not see that the proposed amendment does that.

### **Removing ANR oversight over sewer connections will increase adverse effects on water quality**

Last Friday, Senator Brock raised a question on a section of H.926 that will remove ANR oversight on connections to water mains and to sewers. This is one example in H.926 that will have adverse effects on our environment with little or no reduction in the cost of development. I acknowledge that this comment is not directly related to your jurisdiction. However, since it was raised in your committee, I feel that I must provide additional information.

Julie Moore's answer last Friday diverted Sen. Brock's question on overflows from sewer systems to a focus on wet weather overflows. She also said that combined sewer overflows are covered by 1272 orders. I've heard ANR glossing over the importance of dry weather overflows and diverting attention to 1272 orders and combined sewer overflows multiple times. Contrary to those assertions by ANR, dry weather overflows are significant.

My research shows that 1/4 of all overflows are dry weather overflows. There were 68 dry weather overflows from systems in 28 municipalities in 2019 with a total discharge of some 12,000,000 gallons. In comparison, there were 212 combined sewer overflows from all systems in 2019 with a total discharge of some 41,000,000 gallons. Dry weather overflows, which are violations of discharge permits, are a significant portion of all overflows. I have provided a table of these discharges as an attachment to this letter.

A 1272 order requires a municipality to develop a Long Range Control Plan. One element of that plan is "A strategy to ensure that new sources of stormwater and wastewater to the CSS [combined sewer system] do not increase the volume, frequency, or duration of CSO [combined sewer overflow] events through implementation of control measures, such as making reductions in existing sources of stormwater or wastewater to the CSS, creating or increasing storage capacity within the collection system, or other measures approved by the Secretary."

Any new connection to a combined sewer system will increase the volume, frequency, and duration of the combined sewer overflow. Overflow occurs when there is a certain amount of combined flow in the sewer pipe at the overflow location. Adding more sewage from buildings will mean more sewage in the pipe before the runoff enters the pipe. The result is that it will take less runoff to reach the amount when the overflow occurs. And the concentration of raw sewage in the runoff will be higher with the new connection. This means an increase in the adverse effect on water quality from the overflows.

A 1272 order places no time limit on eliminating the overflow. Instead, the time is determined by negotiation with ANR. The order requires the plan to include a financing plan for the CSO control projects and a proposed schedule to bring the municipality's CSOs into compliance with the Vermont Water Quality Standards. And it will be years before the 1272 order can be rescinded.

The 1272 process is not fast. For example, Montpelier has been working over 30 years to remove its combined sewer overflows. Montpelier still is not done. Because most of its sewage still goes through one of the overflow locations, almost any new connection to Montpelier's system (which includes much of the Barre-Montpelier Road) will increase the volume, frequency, and duration of overflows. (I am not picking on Montpelier. I am using it as an example because I live there and know about the system. I presume that situations are similar in other systems with combined flow.)

For these reasons, it is inappropriate to allow municipalities to authorize connections to sewers without oversight.

### **Billback would total 10% of the Act 250 fees**

The total amount of billback collected by Fish & Wildlife would be about 10% of the total Act 250 fee. You heard last Friday that Fish & Wildlife needs about \$250,000 to perform its duties relating to Act 250 permits. The 2019 annual report of the Natural Resources Board states that the Act 250 fee brought in \$2,135,000 in 2019.

Of course, this increase will be distributed unequally among projects. Projects with little potential for an adverse effect on the resources covered by Fish & Wildlife will see no fee increase. The billback will be borne by projects that have the potential for adverse effects on those resources. That seems reasonable to me.

**Summary:**

An amendment for title insurance purposes needs to capture all roads and driveways within ten years that were created on the original parcel. I do not see that the proposed amendment does that.

It is inappropriate to allow municipalities to authorize connections to sewers without oversight because of the increase in the adverse effect on water quality. Dry weather, unpermitted overflows account for 1/4 of all overflows in Vermont. Unless the provision in the 1272 order prohibiting increases in volume, frequency, and duration of overflows is enforced, the adverse effects on water quality of combined sewer overflows will increase.

Billback for Fish & Wildlife will increase the total amount paid by applicants for Act 250 fees and billback by 10%. Applicants whose projects will have little or no effect on the criteria covered by Fish & Wildlife will see no additional cost. The cost of billback would be borne by projects with the potential for large effects on those criteria.

Thank you for taking the time to read this testimony.

Sincerely,  
Thomas Weiss, P. E.

Dry weather overflows in 2019  
prepared by Thomas Weiss, September 2, 2020

Sources: ADDC list of designations; DEC list of dry weather overflows

Summary

A total of 28 municipalities reported 68 dry weather overflows in 2019. These overflows discharged untreated sewage, or partially treated sewage, or undisinfected sewage in 2019 in violation of their permits.

Wastewater systems at 4 of the 7 municipalities with neighborhood development areas had 17 dry weather overflows in 2019.

Wastewater systems at 11 of the 23 municipalities with downtown development districts had 25 dry weather overflows in 2019. (Burlington, which has both a neighborhood development area and a downtown development district is included in the totals for neighborhood development areas.)

Wastewater systems at 11 of the estimated 48 village centers served by water and sewer systems had 22 dry weather overflows in 2019. (Manchester, which has two neighborhood development areas and a village center is included in the totals for neighborhood development areas.)

Two other wastewater systems, not in municipalities with a designation, had 5 dry weather overflows.

In addition to the dry weather overflows, there were 212 combined sewer overflows in 2019.

Small discharges are often from a pump station to a small brook, having a large adverse effect.

Municipality	# of overflows	type of overflow	estimated volume (gallons)
<u>Municipalities with neighborhood development areas</u>			
Burlington	7	untreated	> 100 to 1,000
		untreated	> 1,000 to 10,000
		untreated	> 1,000 to 10,000
		partly disinfected	35,000 to 40,000
		untreated	> 10,000 to 100,000
		untreated	> 100 to 1,000
Essex Junction	4	untreated	< 500
		partly disinfected	> 100,000 to 500,000
		untreated	> 1,000 to 10,000
		untreated	> 100 to 1,000
Manchester	2	untreated	> 100 to 1,000
		untreated	no estimate; 9 hours
South Burlington	4	untreated	no estimate; 4 1/2 hrs.
		untreated	> 100 to 1,000
		untreated	> 1,000 to 10,000
		untreated	> 100 to 1,000
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4 municipalities	17		
<u>Municipalities with downtown development districts (and no nda)</u>			
Barre City	1	undisinfected	> 500,000 to 1,000,000
Bennington	3	untreated sewage	> 1,000 to 10,000
		partly disinfected	> 1,000,000
		partly treated, undisinfected	no estimate; 7 hours
Brandon	4	partly treated, disinfected	> 1,000,000
		partly treated, disinfected	> 1,000,000
		partly treated, disinfected	> 1,000,000

Middlebury	2	partly treated, disinfected	> 500,000 to 1,000,000
		other	> 100 to 1,000
		other	> 100 to 1,000
Montpelier	3	untreated	100
		partly treated, undisinfected	100
		untreated	100
Newport City	3	other	> 10,000 to 100,000
		untreated	> 10,000 to 100,000
		untreated	> 100 to 1,000
Rutland	3	untreated	100
		untreated	63,000
		untreated	100
St. Albans City	2	undisinfected	> 1,000,000
		undisinfected	> 1,000,000
St. Johnsbury	1	untreated	> 100 to 1,000
Stowe	2	other	> 10,000 to 100,000
		other	no estimate provided
Windsor	1	untreated	> 1,000 to 10,000
<u>11 municipalities</u>	<u>25</u>		

Municipalities with village centers (and no nda)

Bethel	1	untreated sewage	> 1,000 to 10,000
Cavendish	1	partially disinfected	> 1,000 to 10,000
Fair Haven	1	untreated	> 10,000 to 100,000
Hardwick	1	partially disinfected	> 10,000 to 100,000
Ludlow	2	undisinfected	> 100,000 to 500,000
		undisinfected	> 100,000 to 500,000
Northfield	1	other	other
Pittsford	1	partially disinfected	> 10,000 to 100,000
Proctor	5	untreated	> 1,000 to 10,000
		untreated	> 1,000 to 10,000
		untreated	> 1,000 to 10,000
		other	> 100 to 1,000
		other	> 10,000 to 100,000
Shelburne	4	untreated	> 100 to 1,000
		untreated	> 100 to 1,000
		untreated	> 1,000 to 10,000
		partly treated; undisinfected	> 10,000 to 100,000
Wallingford	3	untreated	> 10,000 to 100,000
		other	> 1,000 to 10,000
		other	> 10,000 to 100,000
West Rutland	1	partly disinfected	> 10,000 to 100,000
<u>11 municipalities</u>	<u>21</u>		

Total from downtown development districts, neighborhood development areas, and village centers  
26 municipalities 63

Systems not in the above designated areas

Gilman	4	untreated	> 100,000 to 500,000
		untreated	> 10,000 to 100,000
		untreated	> 10,000 to 100,000
		partly disinfected	> 10,000 to 100,000
Troy / Jay	1	untreated	> 1,000 to 10,000

Grand Total

28 municipalities 68