

Legislative Study Committee on Wetlands

Public Comments

23 octobre, 2019

*Comments were spoken from handwritten notes and have been edited and referenced for clarity

“Thank you for inviting us here today and thank you for your service to the people and wetlands of Vermont.

I am Dave Thompson and live in Lincoln, Vermont where my homestead is, and I steward the land. I am an Environmental Studies (Natural Resources) degree student at Community College of Vermont. I am Certified in Wetland Delineation, ARC-Gis Mapping & Data Management, and along with my wife am a citizen scientist with the VT Vernal Pool Monitoring Project.

I had thought of just reading passages from Sidney Lanier’s “The Marshes of Glynn” but perhaps will look at the Wetland Rules you folks have been studying.

The ANR has proposed moving delineation of wetlands to the ACE (Army Corps of Engineers) Wetlands Delineation Manual. (Specifically, to include: ERDC/EL TR-12-1, Regional Supplement to the Corp of Engineers Wetland Delineation Manual: Northcentral and Northeast Region. Version 2.0, January 2012). This manual was originally created for agricultural use with the purpose of optimizing the economic potential of land. It has been adapted for use in determining what wetlands are for environmental health, wildlife habitat and recreational purposes. To do so there are three characteristics that are examined:

- **Hydrology:** Wetlands... they are ‘wetter land’ Water is the *dominant force* in the creation and maintenances of marshes, swamps, bogs seeps, fens and vernal pools.
- **Substrate:** Soils are the *definitive characteristic* of a wetland – what the water does to the soil – how long it saturates it – how much oxygen it allows it to hold, how it leaches minerals away. All these leave evidences that can be read and tell us “AH! This is a special place! Not of the terrestrial, not aquatic...it is a wetland”

Both of these Delineators take time to create or observe and thus would be expensive and labour intensive to implement definitively. The Army Corps of Engineers acknowledges this and so it uses

- **HydrophyticVegetation** as an *Administrative tool* to quickly delineate and evaluate an area for wetlands. This offers some challenges. Plants differ by parts of the country. This is why there are the Regional Supplements. Plant communities are affected by elevation, latitude, and length of growing season. This is why each section in the manual has caution subsections and one entire section: “Difficult Wetland Situations...” In one sampling method, a line (transect) is laid and one counts the hydrophytic vegetation on each side of this line, moving the line until you reach the point where facultive wetland vegetation is < 50%. (ERDC/EL TR-12-1 pp142-144). Hardy advanced science. (See also: USDI, Bureau of Land Management. 1996. *Sampling vegetation attributes*. BLM/RS/ST-96-002+1730. Denver, CO. also; Tiner, R.W. 1999 *Wetland indicators: A guide to wetland delineation, classification, and mapping*. Boca Raton, FL: CRC Press.). There is also the “Communal Concept” This states that: ‘*species can venture beyond their realized niche.*’ Or in bureaucratic language: “*Things happen outside of what the rules say*”

they're allowed to". Or perhaps: *'A single date does not a marriage make.'* There's an idea: perhaps if you can get this Wetland Rule thing figured out, your Committee can move on to "What Makes a Marriage Work?"

This is the challenge:

Statutes and rules are rigid.

Wetland are not.

They are dynamic and changing and living.

Wetlands are transitional.

Think of this process as a three-legged stool. You have a deliberative Legislative process that has created this Act and these statutes. There is a very enthusiastic Administrative Arm in the ANR and DEC that are recommending rule changes. What is missing is Justice, a method of fair adjudication when a rigid system goes off the rails. As it is the regulators are the process of appeals.

Let's build a history here:

Each of you may be familiar with the Carbon Sequestration Credit Scheme? Vermont's Government has entered into an agreement with several other entities whereby she sells our ability to absorb more CO₂ than we emit to those states and entities that introduce more CO₂ into the atmosphere than their biomass is able to sequester. The Vermont State government makes a profit from this Carbon Credit Exchange.

Where does this ability to sequester CO₂ come from?.....

I will guess that like the majority of land in Vermont that is owned by individuals, this ability to sequester CO₂ that VT Government sells and makes a profit from, comes from land owned by individuals, not the State or Federal Government. You see, The Legislature took this resource, this ability to absorb CO₂ that my land has, from me and every other piece of land, and has turned this to its own use. The State is not asking for a sacrifice from every citizen toward this revenue stream, only land holders.

In a similar way this Wetland Act is a law exerting control over a resource that exists primarily on privately owned lands. It is requiring the property tax land holder to seek permission from the State, pay fees and perhaps fines to realize a benefit from this resource.

If an individual here were to approach any one of you and demand that you hand over your 401, your savings accounts, your retirement plan, stating they can manage them better. How might you respond?

Perhaps I am bringing Socialism a little too close to you, or at least your back pocket. Let's go back to Wetlands for a minute.

Wetlands are valuable! At their meeting last week, the State Technical Committee of the NRCS agreed to follow the recommended appraisal amount of wetlands reimbursement of \$1.300/acre. (In Mitsch & Gosselink's Wetlands), 1 hectare has a value of \$22,181 [willingness to pay] and \$42,000-70,000 [energy analysis]. This would give a best guess for 1 acre at a 3% discount rate (2015) \$8,639.68 - \$16,493.93. (pp 550-59). This would mean that for a base line of '1' for prime agricultural land, wetlands would have a rating of 1.38.

Reading through the ANR proposal for changes, I would like to mention three items and a fourth noted:

- The agency is seeking to move several of the Legislative Statutory prerogatives into Administrative Rules. Without an established and separate and accessible appeals process, this will be cumbersome, perhaps worse for landholders.
- ANR is seeking to remove agriculture and timber harvesting exemptions.
- ANR is discouraging the use of maps with 'hard' boundaries and would like to use guideline for folks to follow. This has the potential for conflicts of interpretation. And ill will...
- At a NRCS/USDA funding announcement two weeks back a USDA official told me farmers are now being expected to remove phosphorus from their soils that was put down 70 years ago.

Wetlands are magical;

They are Land

But they are Water too

There are Species that can only live Terrestrial

And Some that can only exist Aquatic,

But there are Those that can do both the TWO!

Remember that three-legged stool?

Vermont is Amazing!

A beautiful, resource- filled Land,

Innovative, caring Neighbors – All

& Government that Tries to Balance

much to be thankfyl for
dave thompson

Addendum:

These are my answers to some of the questions the Committee Members raised among themselves. I hope they add clarity. I also had opportunity to gain some insight from the two employees of ANR that attended and will include this information as it may also be of assistance.

- 1) Vermont waterways and water rights are a function of US navigation law. Some jurisdiction may have been ceded over to State authority but all navigable waters and those tributary to them are under the jurisdiction and authority of the Federal Government. Lord knows how they're going to get a Cutter up Isham Brook to my place, but it's theirs.
- 2) Senator Smith: when delineating we look for 'redox'. Iron that has gone from Fe³ to Fe² as a result of varying water table coming to within 10" (formerly 12") of the surface. This mottling or staining is secondary evidence of an aerobic soil condition.
- 3) Terminology: Wetlands are functioning systems that must have 3 parts. Water, Soil, Living Stuff (hydrophytic plants). They must have these three or they are not a wetland. Lots of different and unique types but they share these three characteristics. Within the Plants there are two types that may helpful: Facultative and Obligate. Facultative Plants can occur in both Wetland and Upland soils. Obligate Plants ONLY occur in Wetlands (with the possibility of the 'Communal Concept' considered!)

- 4) ? for ANR: Does ANR do Delineation for its sites? A: “depends” (I asked this in response to her saying a regulator went to a site in question – the solar one – “looked and said, ‘yes it was a wetland’.” Perhaps just a casual, but ‘looking’ does not a delineation make).
- 5) ? for ANR: Does ANR recognize that a wet area may have been caused by human actions off site? A: “A wetland is a wetland” This demonstrated an unfamiliarity with ERDC/EL TR-12-1 Chapter 5 p 115.
- 6) ? for ANR: Of the wetlands lost in VT since 1980, were any of them from projects that required and received permits from ANR? A: “Yes, otherwise how would we know how to census them?”

Afterword:

I came in with no agenda other than to encourage a Stewardship model for governing the Wetland Resources of VT. My 17 years of elected service have taught me administrative functions do like to amass rules to themselves at the expense of Statute oversight, and that clean independent appeals are difficult.

In my previous career I had Jurisdictional Inspection responsibilities for LP/Nat Gas accounts. This was because the State didn’t want it and the Insurance Companies for Gas Systems didn’t want it either. So, a few individuals were trained and given the task of ensuring that most buildings with 3 or more accounts were safe (the State exempted itself and schools and hospitals from this ☺). Think the CO leak at the ER a couple weeks back) So, unlike wetland regulators I went to sleep each night with the lives of every single person that my company had an account with as my responsibility. And I had to

prove my work to State Inspectors. I understand rules, and I understand regulators. I more than understand that working together toward a shared goal is best.

This is the first time I have spoken in public since the TBI that left me disabled and on this new path. Thank you for being part of the adventure. If I can be of further assistance or can clarify anything, please contact me.

dave