

Testimony before the House Committee on Natural Resources, Fish and Wildlife

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February 2, 2022

Introduction

Good morning, Chair Sheldon and Committee members. My name is Brenda Gail Bergman. I am the Director of Science and Freshwater at The Nature Conservancy in Vermont. I have been asked in today following testimony by my colleagues Lauren Oates and Gus Goodwin.

First, I'd like to start off with an expression of thanks. Here we are on the fourth testimony on just one of many important issues you grapple with. Thank you for all the time and energy you dedicate in service to the people and ecosystems our state.

I have come to discuss three considerations:

- the importance of an explicit **commitment and approach** to conserving Vermont's **water**, distinct from a commitment and approach to land conservation
- an overview of the **Aquatic 30x30 working group** in Vermont
- Recognizing that the Committee is doing mark-ups on this bill tomorrow, I would like to offer some discrete recommendations for addressing aquatic conservation in the bill.

I know we are pressed for time. I will highlight key points, and would be come back for further testimony.

With respect, I am not here to represent the positions of the Aquatic 30x30 group. Any recommendations on the bill are offered on behalf of The Nature Conservancy.

Feel free to ask questions at any time as I proceed.

Our commitment and approach to conserving Vermont's water

The *America the Beautiful Act* indicates a commitment to conserving our lands **and waters** by 2030.

It is critical to take seriously "conserving our waters" here in Vermont, regardless of what happens with evolution of the federal Act.

This includes establishing an explicit **commitment and approach** for conserving water.

Reasons this is imperative include:

1. As we all know, this is essential the wellbeing of all Vermonters. Our health depends on stewardship of our aquatic systems to ensure available, clean water. Also, under a changing climate, the most important action we can take to reduce vulnerability to flooding is to conserve and restore our rivers and floodplains.
2. Aquatic systems are particularly threatened:
 - One in three freshwater species are threatened with extinction.

- Freshwater vertebrate populations have **declined by 84% globally in just over 50 years** . This is twice the rate of decline of terrestrial biodiversity.
 - In Vermont 75% of our assessed river miles are disconnected from their floodplains
 - The Vermont Climate Assessment found that climate change further threatens water availability, quality, and flows in our state.
3. A third reason that we need an explicit **commitment and approach to conserving our waters is that we** will not sufficiently conserve our aquatic systems by simply including the word “water” in our 2030 and 2050 commitments. We must articulate HOW we will conserve our water in a meaningful way.
 - a. Approaches of defining ‘what is conserved’ in the initial draft of H606 are area-based measures, as with most approaches in the United States and globally. We draw a line around an area of land and confer some degree of protection to the water and land that lies within that area.
 - b. Area based approaches do not work for water. Rivers flow beyond the boundaries of the area we protect. The aquatic system is impacted by what happens upstream and downstream of the protected area, and by what happens in the system’s watershed. Also, the connectivity of aquatic systems is essential to their resilience. Most protected areas do not sufficiently address connectivity along the length of the river.
 - c. Until we have commitments to metrics that conserve aquatic systems in meaningful ways, our aquatic systems are under a degree of threat.

An overview of the Aquatic 30x30 working group in Vermont:

1. TNC has been honored to coordinate an ad-hoc working group on aquatic 30x30 for Vermont since August 2021.

Participants in this discussion have included representatives from DEC wetlands, lakes and ponds, rivers, and watershed investment, VT Department of Fish and Wildlife, USFW, VT Agency of Ag, LCBP, Trout Unlimited, UVM, NRCS, VNRC, VHCB, VT River Conservancy, Friends of the Mad River, TNC.

- a. The group has agreed upon our goals, the first of which is to propose the criteria for an aquatic system to be “under conservation” in Vermont
- b. To this end, we have been refining a draft proposal regarding:
 - i. What is the unit of a freshwater system that makes sense to target for conservation?¹
 - ii. What criteria should be met for that unit to be considered under conservation?
- c. We also identified a need to review VCD aquatic priorities if they are to be used as a guide for Vermont’s aquatic commitments under 30x30.

Recommendations

1. Madam chair, The Nature Conservancy would like to offer specific recommendations to the bill to ensure that Vermont effectively conserves our aquatic systems for the wellbeing of our

¹ The unit of freshwater system can be a watershed at HUC 10 or 12 level, inclusive of upstream catchment areas.

communities into the future. Considering our time, I will highlight some of the key recommendations:

- In definitions, it is suggested to define what is an **aquatic system under conservation**. We are suggesting that we consider this at a watershed scale. These can be small watersheds, referred to HUC 12 within USGS terminology, or larger, so long as they meet all criteria. These systems meet criteria indicating that **conservation efforts are established and functional** for “essential aquatic attributes”.
- “**Essential aquatic attributes**” are necessary for maintaining the resilience of freshwater systems and the ecosystem services they provide. They include: community engagement, water quality, native species representation, river connectivity, river flow, wetlands, and lakes and ponds.

Conservation goals:

- For waters, reaching 30 percent by 2030 and 50 percent by 2050 shall involve designating watersheds as “aquatic systems under conservation” based on criteria indicating that conservation efforts are established and functional for “essential aquatic attributes”.
2. Though TNC is supportive of using VCD as a guide for land-based conservation, VCD is currently insufficient to serve as a **guide** for attaining our goals of conserving 30% of Vermont’s aquatic systems by 2030.
 1. One reason is that aquatic VCD was not designed to consider aquatic connectivity, which is essential for the long-term health of our aquatic ecosystems.
 2. Generally stating that we will conserve water *everywhere* is a lofty goal, but history has shown that this generally results in sufficient conservation of aquatic systems almost *nowhere*. To take water conservation seriously, we must apply clear guidelines to each watershed that we consider conserved. If we can ultimately do that throughout the state, this will be fantastic. But achieving this will take intentional commitments, planning, and coordinated action that follows clear guidelines to conserve key attributes of freshwater resilience.
 3. Accordingly, we propose a few minor edits acknowledging this throughout H.606.
 3. In several places, the bill references land conservation. In these places, we recommend additions of “water” or “aquatic” to explicitly address aquatic priorities.

I have shared these with my testimony and would be happy to return to discuss this further.

Closing

- Investing in conservation this decade is critical to protecting the health and safety of our communities, reducing suffering from climate change impacts, and ensuring the viability of threatened species.
- TNC Vermont supports that H.606 incorporate explicit goals and approaches for conserving water and land.
- Thank you, again, for your time today. I’m happy to answer questions. For any I’m unable to answer today, I will certainly follow-up with the Committee.