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

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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.

I would like 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, including our aims and progress
- 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.

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, aquatic systems are essential for the wellbeing of Vermonters
    a. The availability of clean, non-polluted water is foundational to our health
    b. Climate assessments suggest that Vermont is likely to experience more intensive rain events. The most important action we can take to reduce vulnerability to flooding impacts 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 since 1970. This is twice the rate of decline of terrestrial biodiversity.
    - In Vermont 75% of our assessed river miles are disconnected from their floodplains
    - The University of Vermont Climate Assessment found that climate change further threatens water availability, quality, and flows in Vermont.

3. 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. Traditional approaches of defining 'what is conserved' in the United States and globally use area-based measures. 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.
    c. Until we have commitments to metrics that conserve aquatic systems in meaningful ways, our aquatic systems are under continued threat.

<u>An overview of the Aquatic 30x30 working group in Vermont:</u>

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

2. Participants in this discussion have included representatives from the following institutions/organizations.

    VT Department of Fish and Wildlife
    VT Department of Environmental Conservation
    - Watershed Investment,
    - Rivers,
    - Wetlands,
    - Lakes and Ponds

    Vermont Natural Resources Council
    Vermont Housing and Conservation Board
    Vermont Agency of Agriculture, Food and Markets
    Lake Champlain Basin Program
    Fluvial Matters, LLC
    Trout Unlimited
    University of Vermont
    Vermont River Conservancy
    Friends of the Mad River
    The Nature Conservancy
    Natural Resources Conservation Service
    US Fish and Wildlife Service

3. The group has agreed upon our goals, which are to:
    a. Propose the criteria for an aquatic system to be "under conservation" in Vermont
    b. Recommend whether and how we approach targeting 30% of our aquatic resources, including common tools to document progress.
    c. Advise on how to address needs to realize freshwater conservation at a scale (staffing, partnership, and capacity)
    d. Bring in additional partners, including communities and tribes

e. Advise on the institutional mechanisms and integration of this work with existing programs.

4. To-date, our primary focus has been the first goal. Specifically, we have been refining a draft proposal regarding:
    a. What is the unit of a freshwater system that makes sense to target for conservation?[1]
    b. What criteria should be met for that unit to be considered under conservation?

5. 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.[2]

Recommendations

1. As mentioned previously, I offer these recommendations on behalf of The Nature Conservancy.

2. I will first highlight the most critical recommendations if we are to conserve our aquatic systems. These are in the sections on "definitions" and "conservation goals". I have shared the full set of recommendations as an addendum to my testimony.

3. Definitions:
    - "Aquatic system under conservation" means a watershed sized 12 or larger within the USGS Hydrologic Unit Code system which meets criteria indicating that conservation efforts are established and functional for "essential aquatic attributes".
    - "Essential aquatic attributes" are attributes essential to maintaining the resilience of freshwater systems and the ecosystem services they provide, including: community engagement, water quality, native species representation, river connectivity, river flow, wetlands, and lakes and ponds. Specific criteria will be established through the conservation plan (section 2803).

    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".

4. 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. Accordingly, we propose a few minor edits acknowledging this throughout H.606

5. In several places, the bill references land conservation. In these places, we recommend additions of "water" or "aquatic" to explicitly address aquatic priorities.

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

[2] One reason is that VCD was not designed to consider aquatic connectivity, which is essential for the long-term health of our aquatic ecosystems. Also, the aquatic component of VCD covers much of the state.

6. Should you have any questions, I am happy to discuss any of this further with you.

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 land and water.
- 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.