

To: Members of the House Committee on Environment and Energy
From: Elizabeth Thompson, Ecologist
Date: February 26, 2024

Introduction

I am Elizabeth Thompson, independent ecologist from Williston. I am recently retired from the Vermont Land Trust, where I served as the Director of Conservation Science from 2003-2022. Prior to that I served with The Nature Conservancy as an Ecologist and Director of Science, and as an independent ecologist conducting ecological inventory for Vermont Fish and Wildlife Department as well as other clients. I was a founding staff member of the Vermont Natural Heritage Program. I was a co-author of Wetland, Woodland, Wildland: A Guide to the Natural Communities of Vermont, and also of Vermont Conservation Design (VCD). I currently work with Wildlands, Woodlands, Farmlands and Communities, promoting an integrated conservation vision for New England.

Testimony

I was asked to comment on Critical Resource Areas as defined in the draft legislation, H.687.

From the bill:

“Critical resource area” means a river corridor, a significant wetland as defined under section 902 of this title, land at or above 2,000 feet, land characterized by slopes greater than 15 percent and shallow depth to bedrock, an area with any amount of prime agricultural soil, and a parcel containing all or part of a habitat connector.

Recommendations:

Please understand that these recommendations are aspirational, and the practicality of applying them is variable based on current data. Importantly, the gathering, analysis, and distribution of new data should be led by the Vermont Agency of Natural Resources.

Please also understand that my recommendations do not reflect a full or deep understanding of other related laws or practices, nor of the current application of Act 250.

Nevertheless, I would like to address the features listed as critical resource areas and suggest possible additions. It is understood that some of these features are protected in other manners through statute, and it is further recognized that some of these features may not be geographically identifiable at present. I will comment on this as I am able.

I also suggest replacing the term “Critical resource area” with “Critical natural resource area,” reflecting the recommendations in the report from the Natural Resources Board.

Existing categories:

- “river corridor:” As has been pointed out in previous testimony, the River Corridor does not necessarily include all of the floodplain, or all of the valley bottom associated with a river or stream. The entire valley bottom, along with its River Corridor and Riparian Area, as identified and mapped in Vermont Conservation Design as Highest Priority Surface Waters and Riparian Areas, should be considered for inclusion.
- “significant wetland as defined in Section 902 of this title” I would strike the word “significant” from this language, as it refers directly to the Vermont Significant Wetland Inventory. All wetlands should be included. Again, the practicality of this may limit its feasibility.
- “land at or above 2,000 feet” I suggest this be replaced with “land at or above 2,500 feet. Lower elevation lands could be addressed through the next category.
- “land characterized by slopes greater than 15 percent and shallow depth to bedrock” This is a useful concept, but might be split into two categories as follows:
 - land at or above 2,000 feet with slopes greater than 15%
 - land with slopes greater than 35%, or shallow-to-bedrock soils, very poorly drained soils, or hydric soils
- “an area with any amount of prime agricultural soil” The inclusion of this category in this section is the reason for suggesting the change to “Critical natural resource area.” Prime agricultural soils are critical and are an important resource, but if agricultural resources are to be included, they may require more categories than just prime agricultural soils. I am not qualified to comment further on this, but they do not seem to belong with the other resources addressed here. I would delete this phrase.
- “a parcel containing all or part of a habitat connector” This is an important concept to include but it will be difficult to implement with existing information. It needs to be made more specific, as almost all of Vermont could be considered “habitat connector,” but gaining that specificity will require more analysis. Vermont Conservation Design provides some guidance, but not all the answers. It may be that VCD’s Wildlife Road Crossings could be the basis for this category. Other analyses have narrowed the number of critical wildlife crossings, and we can point to a few key “pinch points” in the state, but I am not certain that these are refined well enough to serve as jurisdictional features.

Proposed additional categories to consider:

- S1-S4 state-significant natural communities, based on latest data as they are continuously refined by the Vermont Natural Heritage Inventory (VNHI), or data developed by other professionals and approved by VNHI. Note: these data are incomplete, as VNHI has not completed a wall-to-wall inventory of significant natural communities. Also, these features can change and move from time to time.
- Old forests as defined by Vermont Conservation Design and/or Vermont Forests, Parks, and Recreation. Again, the inventory of these is incomplete, so new data may become available as a project is evaluated by resource professionals.
- Forest that has existed continuously since prior to European settlement. This relates to a suggestion from a previous witness, who suggested something like “intact forest soils.” The intention here is to include areas that have been continuously forested, as these areas may harbor soil and understory biodiversity that is not found commonly elsewhere.

- Rare and uncommon species and their habitats. Again, data are incomplete, and species can come and go from a particular place.
- Rare geophysical settings with natural vegetation. This would cover some areas that likely have state-significant natural communities, but for which natural community inventory has not been completed. Vermont Conservation Design can provide guidance on which of these features to include.

Final considerations:

Given that the data are incomplete in many areas, implementation of this concept will require time and financial resources. The Agency of Natural Resources, specifically the Vermont Fish and Wildlife Department, should lead the data gathering, but they currently have limited capacity as they are also implementing Act 59, leading a revision of Vermont Conservation Design, conducting ecological inventory, reviewing Act 250 permit requests under the current law, and doing other essential work. Funding and time need to be allocated to make this law as successful as it can be.

Respectfully Submitted,

Elizabeth Thompson