To: Vermont House Committee on Environment and Energy
 From: Elizabeth Thompson, Ecologist and Conservation Biologist, Wildlands, Woodlands, Farmlands, and Communities
 Date: July 15, 2024
 Subject: Act 59 Inventory Report Testimony
 Appendices:

 A Defining Biodiversity in Act 59: Memorandum to VSCI Science and

- A. Defining Biodiversity in Act 59: Memorandum to VSCI Science and Policy Group, March 6, 2024, Zaino, Thompson, Goodwin
- B. Wildlands in New England: Vermont Summary

Introduction:

For the Record, I am Elizabeth (Liz) Thompson, resident of Williston, ecologist and conservation biologist working in Vermont since 1984. I am currently affiliated with Wildlands, Woodlands, Farmlands, and Communities, and I serve on the board of Northeast Wilderness Trust, though I do not represent the Trust here today. I have a long-standing interest in landscape-scale conservation planning. I led the Vermont Biodiversity Project and authored its 2002 report, Vermont's Natural Heritage. I am a co-author of Vermont Conservation Design. I have supported Act 59, and I served on two of the working groups that informed the Inventory Report being discussed today: the Conservation Categories Group and the State Lands Group.

Summary of Comments:

I was thrilled to see the passage in 2023 of Act 59, setting the stage for a proactive plan to conserve the biological diversity of Vermont while also contributing to the resilience of its human communities.

Act 59 is a fitting tool for implementation of the broad vision of 30x30, using the specific strategies laid out in Vermont Conservation Design, a vision for an ecologically functional landscape.

The implementation work for Act 59 to date is summarized in the Inventory Report, and much greater detail and thinking is reflected in the reports of the working groups.

It should be noted that the Inventory Report, as it acknowledges, is not a consensus document. As it states, some of its recommendations do not have full support of all members of all working groups, nor of key stakeholders.

I support many of the recommendations of the Inventory Report, but as a conservation scientist I cannot endorse all of them.

Agricultural Lands

<u>I do not support the recommendation to include all currently conserved agricultural</u> <u>lands in the Natural Resources Management category</u>. This recommendation is at odds with the description of land in that category as "*an area having permanent protection from conversion for the majority of the area.*" Clearing for agriculture is, by definition, conversion, as we interpret it (see Conservation Categories Report).

Instead, I support the recommendation of the Conservation Categories Working Group to add two new conservation categories, one (I'll call it Category 4) to include permanently conserved agricultural lands that do contribute to biodiversity, and another (Category 5) to include all permanently conserved lands that provide important social functions but do not contribute to the biodiversity goals of Act 59.

A definition of biodiversity is helpful here. See the Memo to the Science and Policy Work Group, Appendix A: *Biodiversity, or Biological Diversity, is the variety of life in all its forms, and all the interactions between living things and their environment. It includes ecosystem diversity, landscape diversity, community diversity, species diversity, and genetic diversity...The best measure of Vermont's ability to conserve, support, and restore biological diversity is our progress in maintaining and restoring an ecologically functional landscape. The best measure of a particular place's role in supporting and restoring biodiversity is whether it contributes to maintaining the ecologically functional landscape envisioned in Vermont Conservation Design.*

The Agricultural Lands Working Group report cites the UN definition of biological diversity, which is good, and similar to many definitions you will hear, but definitions are not enough – they do not take into account the importance of the ecologically functional landscape.

Soil biodiversity and soil health are rightly emphasized – these are features of agricultural lands that absolutely should be supported and protected, and there is much excellent progress being made, which I fully support and actively encourage through my work with Wildlands, Woodlands, Farmlands, and Communities and its online journal, From the Ground Up.

Additionally, Vermont Conservation Design calls out agricultural lands that support grassland or shrubland birds.

Again, from our memo: "An ecologically functional landscape contains all the native species in Vermont and the full range of native habitats and natural communities known to occur in the state. It also contributes to regional conservation, by maintaining species and habitat conditions that may be in regional decline (such as grassland birds and their habitat). So, lands that support grassland or shrubland birds, agricultural lands where soil biodiversity is being fully supported through management practices, and lands that support native pollinators and insect communities, such as messy field edges and hedgerows, can certainly be counted toward biodiversity goals, but in our proposal, they would belong in Category 4, since Category 3 prohibits conversion from the natural state.

And I support the conservation of <u>all</u> agricultural lands for the many benefits they provide. This is consistent with the Wildlands, Woodlands, Farmlands & Communities initiative, which calls for at least 70 percent of New England to be protected forest; Wildlands to occupy at least 10 percent of the region; and *all existing farmland to be permanently conserved*. Agricultural lands that do not clearly contribute positively to biodiversity can be considered in our proposed Category 5.

Managed forests

It is important to note that although most conserved managed forests in Vermont would easily fall into Category 3, some will not, and may fit best in the new Category 5. These Category 5 lands should be separated out. Any land included in Category 3, Natural Resource Management Area, must be subject to *"long-term, sustainable management."* The Conservation Categories Workgroup, based on the definitions in the statute (10 VSA Chapter 89 Section 2801), offers the following interpretation of sustainable management: *"In practical terms, sustainable forest management means working in a manner that supports the natural communities that would be present without active management.*

Conservation Plan Process

Section 2804 cites Vermont Conservation Design as the guiding document to meet the goals of the law. The plan is to be developed by VHCB in consultation with the Secretary. <u>I would like to suggest that the Agency of Natural Resources lead this process</u>. Vermont Conservation Design was developed within ANR. It is a science-based plan. The staff at ANR are uniquely skilled in understanding the science behind the plan, and in understanding how best to implement it. Act 59 is about protection biological diversity and community resilience, and that is what ANR does best.

Respectfully Submitted,

Elizabeth Thompson Williston