

Eric Sorenson, Ecologist  
East Calais, Vermont

Testimony on July 15, 2024

Vermont House Committee on Environment and Energy

Act 59 - An act relating to community resilience and biodiversity protection

### **Introduction**

Good morning. I am Eric Sorenson, an ecologist from East Calais. Before retiring in 2021, I was an ecologist with the Vermont Fish and Wildlife Department for about 25 years. I am one of the coauthors of Vermont Conservation Design. I have followed and participated as a private citizen in the Act 59 process led by the Vermont Housing and Conservation Board (VHCB) and Nature for Justice (N4J).

I am happy to be back before the Committee, and I congratulate you again on the passage of this important measure to protect biodiversity. I am very excited that the successful implementation of Act 59 will help to maintain an ecologically functional landscape in Vermont that also provides community resilience in all the ways that Nature benefits people and all organisms. I hope we can celebrate the conservation opportunity that Act 59 moves us toward.

My intent is to provide comments on the Inventory Report provided by VHCB and N4J, primarily on the decision to include all conserved agricultural lands under the natural resource management area category. I will also provide some general comments and some suggestions for the next phases of Act 59 implementation.

Although I have some serious concerns about the conclusions reached by VHCB and N4J in the Inventory report, I recognize that a lot of work has been accomplished in just a few months. The reports prepared by the four working groups are excellent and represent many hours of carefully considered issues by groups of highly dedicated professionals.

### **Agriculture and Biological Diversity**

I love Vermont agriculture – for the local produce, milk, cheese, hay, local meats, and the beauty and sense of place that Vermont farms contribute to our rural landscape. I select Vermont agricultural products for purchase whenever I have a choice.

We need a plan for the conservation of Vermont agricultural lands – a plan that identifies how much agricultural lands should be conserved, where they should be conserved based on soils and other factors, and for the long-term goals that are most important to Vermonters, possibly including food security, economics, social benefits, scenic values, and to some extent, biodiversity. But Act 59 is not the appropriate mechanism for a comprehensive agricultural conservation plan. Act 59 is designed to focus on conserving biological diversity. The forced inclusion of all conserved agricultural lands into the natural resource management area category is misplaced and has created unnecessary tension between two types of conservation need, both of which are very important in Vermont.

The Inventory Report is just the first reporting step in the Act 59 process, but it sets the stage for how the conservation plan will be developed and how the three categories of conservation (ecological reserve area, biodiversity conservation area, and natural resource management area) will be used in reaching goals set in the act and more clearly defined in Vermont Conservation Design.

*It is my opinion that all conserved agricultural lands should not be included in the natural resource management area category. Doing so compromises the biodiversity intent and specific language of Act 59.*

First, natural resource management area is defined as “an area having permanent protection from conversion for the majority of the area...” By any definition applied in conservation biology that I know, and how I would interpret the definition in Act 59, agricultural lands have been converted from their former state as natural ecosystems. This was also the conclusion of the conservation categories working group.

Second, sustainable land management is defined to include “the types of agricultural lands that support biodiversity...” Vermont Conservation Design identifies targets for permanently conserved agricultural lands specifically managed for grassland birds and shrub habitats. These habitats are converted from natural ecosystems but provide biodiversity functions for groups of species at risk, especially nesting migratory birds and pollinators. I recommend that a fourth conservation category be established for these conserved converted agricultural lands with specific biodiversity management practices. This was also the recommendation of the conservation categories working group, to create a new “category to reflect permanently conserved agricultural lands that directly contribute to biodiversity conservation.” In addition, many parcels of conserved agricultural lands include riparian areas, wetlands, and natural communities specifically identified and described in conservation easements and permanently protected from conversion. These areas surely provide biodiversity functions, have not been converted from natural ecosystem conditions, and should be assigned to the appropriate Act 59 conservation category based on allowed or needed management. The conservation categories working group recommended categorization of conserved lands at the scale of management protection instead of the parcel scale. By this approach, portions of agricultural parcels that contribute directly to conservation of biological diversity can be appropriately accounted for.

The inclusion of all conserved agricultural lands in the natural resources management area category is not based on principles of conservation science or goals of Vermont Conservation Design. Cornfields, regularly cropped hayfields, and pastures may be beautiful and productive, but they do not provide significant biodiversity functions. Act 59 states that the conserved lands inventory shall provide a review of the three conservation categories, as well as “criteria shall be developed to determine the types of agricultural lands that will qualify as supporting and restoring biodiversity and therefore count towards the natural resource management area category.” No such criteria are not presented in the inventory report and the decision was simply made by VHCB to include all currently conserved agricultural lands in the natural

resources management area category. This is also contrary to the recommendations of the conservation categories working group.

Act 59 establishes conservation goals of 30 percent of Vermont land area by 2030 and 50 percent by 2050. These numeric land area goals are important milestones, but much more important is that we get the combination of conserved ecological features right in order to maintain an ecologically functional landscape into the future. Vermont Conservation Design is the vision and guide for this. In the short term (before 2030) we should be focusing conservation on those ecological features most at risk of loss or conversion and that provide a high level of support for the ecologically functional landscape, especially landscape connectivity (including wildlife road crossings), riparian areas, old forests, natural communities, and rare/responsibility geologic/physical landscape features. Including all conserved agricultural lands in the natural resource management area category sets the stage for reaching the 30 by 30 numeric goal by counting exiting and conserving more agricultural lands. Shockingly, this is specifically stated as a strategy to meet the numeric goals in the inventory report, a strategy that would clearly miss the biodiversity intent and focus of Act 59 and would compromise our diminishing opportunity to conserve the most important ecological features in our landscape. If we are going to be successful in conserving biological diversity, cornfields are not exchangeable for old forests and riparian areas.

### **General Comments and Suggestions for Going Forward**

The inventory of conserved lands section of the inventory report (question 2) is excellent. The current distribution of conserved lands across the three conservation categories provides a solid baseline for understanding the conservation action work needed. As an example, with only four percent of Vermont conserved in the ecological reserve area category, we know that there is a lot of work to be done to meet the minimum targets of old forests of nine percent identified in Vermont Conservation Design. These simple numeric comparisons do not take into account the ecosystem and biophysical representation necessary to meet old forest targets. In addition, natural community and some riparian area targets will also need permanent conservation within the ecological reserve areas category.

I am disappointed that in preparing the inventory report there has not been any attempt to categorize the functional elements of Vermont Conservation Design to match the three (or four) conservation categories. For example, most interior forest functions can be maintained and well conserved as natural resource management areas. However, old forest and natural community targets require ecological reserve areas to maintain their full set of ecological functions. This analysis can also occur during the conservation plan development, but it will be an important early step to inform what types of land and water features are best conserved within which conservation categories.

I strongly recommend that the Agency of Natural Resources take the lead in the next phases of Act 59, especially in developing the conservation plan. The Agency of Natural Resources (ANR)

has the appropriate staff, scientific expertise, knowledge, and background to conduct this work. ANR is charged with the oversight and management of Vermont's natural environment on behalf of the people of Vermont, a charge completely aligned with the goals of Act 59. VHCB is an amazing organization – a model for the rest of the country – but their broad mission of creating affordable housing and conserving agricultural land, forestland, historic properties, important natural areas, and recreational lands does not match with the focused task of conserving biological diversity required by Act 59.

I believe that establishing a network of ecological reserves in Vermont will be one of the most important outcomes of Act 59. We have good guidance on how and where ecological reserves should be established to provide maximum contribution to an ecologically functional landscape in the detailed targets of Vermont Conservation Design. But there is still a lot of planning work needed, and willing landowners in the case of new acquisitions, to reach the targets for old forests, natural communities, and others. This will be exciting, rewarding, and hard work and will in the end provide more wild places in Vermont for many ecological functions and for Vermonters to visit and enjoy. The state lands working group report provides an excellent summary of the status quo and what needs to be done to formalize an ecological reserve designation process on state lands. ANR will clearly need financial and staffing support to carry out new land acquisitions to meet the ecological reserve goals and I hope that the legislature can help with those needs. It is also very important that we support conservation organizations that specialize in and are the experts in conserving ecological reserves, especially The Nature Conservancy and Northeast Wilderness Trust, but others as well. Vermont should learn from these organizations' conservation successes and be open to and support the conservation approaches they use in establishing ecological reserves.

Again, I hope we can celebrate the conservation opportunity that Act 59 provides and work towards these goals as a unified way. This really matters for the future of Vermont and as an example well beyond our small state's borders.

Thank you. I would be happy to answer any questions you have for me.