To: Senate Committee on Natural Resources and Energy

From: Jamey Fidel, General Counsel and Forest and Wildlife Program Director, Vermont Natural Resources Council

Date: April 13, 2023

Re: H.126

Thank you for the opportunity to testify on H.126 - an Act relating to community resilience and biodiversity protection. Today I am testifying in support of H.126 with some suggested modifications on behalf of Vermont Natural Resources Council, and the following groups that make up Forest Partnership: Audubon Vermont, the Vermont Land Trust, the Vermont Chapter of the Nature Conservancy, Trust for Public Land, and Vermont Conservation Voters.

Background in Support of H.126:

Healthy and connected forests are vitally important in Vermont and support:

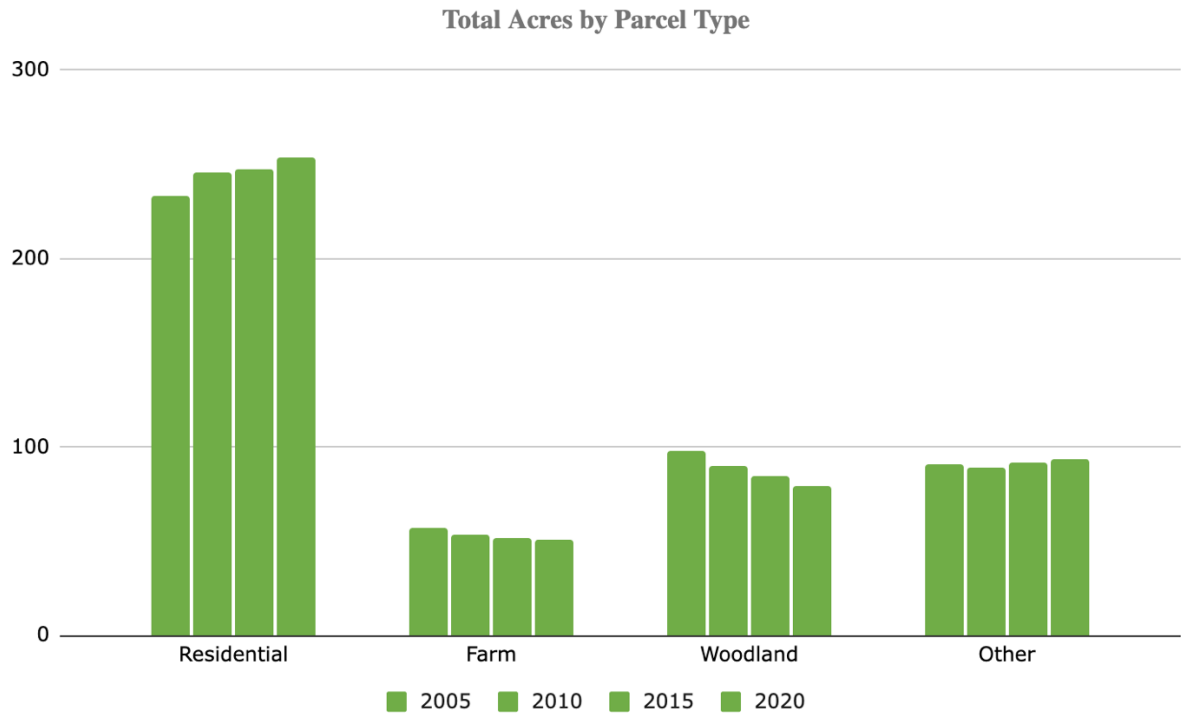
- Climate Protection. Forests sequester and store carbon
- Disaster Mitigation. Forests serve as headwater storage to reduce downstream flooding in our communities
- Clean Water Protection. Forests provide critical ecosystem functions and clean drinking water
- Habitat Protection. Forests host diverse habitat for wildlife and plant species that are under duress from climate-related impacts
- Health. Forests maintain our physical health and mental well-being

Healthy forests are also an economic engine in Vermont. Forest-based manufacturing, outdoor recreation, and tourism employ approximately 13,000 Vermonters and contribute about $1.5 billion in revenue *every year*.

While Vermont is a heavily forested state with 3/4th of the state is covered by forests, this is not the whole story. A closer look reveals that our forests are being converted and fragmented by rural sprawl. Our forests are in active decline with an estimated 12,469 acres being converted on an annual basis to development according to the U.S. Forest Service through their Forest Inventory and Analysis Program.[1] At this rate, over 300,000 acres of forestland may be lost by 2050. And even though some data sources suggest the estimated

[1] USDA Forest Service. 20201 Forests of Vermont, 2020. Resource Update FS-227. Madison, WI: U.S. Department of Agriculture, Forest Service. 2p. https://doi.org/10.2737/FS-RU-337.

amount of forestland being lost to development on an annual basis may be less than 12,469 acres, all data sources highlight that we are losing forest versus gaining forest in Vermont.



Parcel Type	Acreage Change	2004 Acreage	2020 Acreage	Percent Change
Residential	209,178.60	2,326,959.34	2,536137.94	8.989353462
Farm	-64,318.30	575,030.57	510,712.27	-11.18519664
Woodland	-205,136.42	994,090.21	788,953.79	-20.63559403
Other	6,301.55	932,393.67	938,695.22	0.6758465016

Furthermore, the data above, compiled from the Grand List for property tax purposes, demonstrates that if we look at certain categories of land, the woodland category, which represents undeveloped forestland, is showing a demonstrable level of decline. This statistic does not mean that 20% of woodland outright vanished, but it does mean we are reducing undeveloped parcels and converting them to residential parcels with houses and infrastructure. And while on the positive side, some of the woodland decline is due to private woodland going into public ownership, the majority of the decline is from parcels shifting to the residential category. As more and more undeveloped forestland becomes developed in Vermont, depending on how this development happens, there can be a serious impact to our climate resilience, the maintenance of functioning natural ecosystems, biodiversity, and working and recreational lands.

Furthermore, forest loss and fragmentation threatens our ability to maintain a resilient landscape that supports wildlife and biodiversity, *especially* in a changing climate. **According to the 2021 VT Climate Assessment, 92 bird species in Vermont, including the hermit thrush and the common loon, are expected to disappear from Vermont within the next 25 years**.[2] If we do not plan for the future conservation of an adequate amount of land, the loss of biodiversity in the state will become only more compounded.

Importantly, forest loss is also resulting in decreased carbon sequestration and storage in our forests, and increased carbon emissions. For example:

- The 2017 Vermont Forest Carbon Inventory documented that "The total annual (carbon) uptake was less in 2015 [the end of the period of analysis] than in previous decades, in part due to decreasing acres of forest land."[3]
- A more recent forest carbon inventory confirmed that land-use change has resulted in net emissions in Vermont, which is concerning because forestland that is converted not only emits stored carbon, but it also reduces future forest carbon sequestration.[4]
- Furthermore, analysis conducted for the Vermont Climate Action Council indicates that forests provide the largest source of carbon sequestration and storage in the state, but we have seen a steady decline in sequestration. If that trend continues the state will find it challenging to meet the Global Warming Solutions Act's net zero target by 2050 even if the 2025 and 2030 emission reduction targets are achieved.[5]

Because of the benefits that forests provide, accelerating forestland conservation with willing landowners, and keeping Vermont's forests as forests, is one of the most important climate policies Vermont can employ. In addition, planning to maintain a resilient and connected landscape with large forest blocks with connected habitat is an established priority for land managers, state and federal agencies, legislators, and many non-governmental and forestry entities.

Specifically, the concept of conserving and restoring forests is not a new concept to mitigate the effect of Climate Change. In 2007, Governor Douglas's Commission on Climate Change prioritized keeping forests as forests, and reducing the rate of forestland conversion was ranked as the second most favorable action out of 38 policies to reduce greenhouse gas emissions in Vermont. As explained in the report:

> "Central to curbing the state's greenhouse gas emissions is the conservation of Vermont's significant existing "Green Bank" – our working landscape, our

[2]Vermont Climate Assessment 2021available at https://site.uvm.edu/vtclimateassessment/files/2021/11/excutive-summary-11-3-21.pdf

[3] Figure 2 at https://fpr.vermont.gov/sites/fpr/files/Forest_and_Forestry/The_Forest_Ecosystem/Library/Forest%20Carbon%20Inventory%20_Mar%202017_final.pdf

[4] Kosiba, AM. 2021. Vermont Forest Carbon Inventory. Vermont Department of Forests, Parks and Recreation.

[5] Vermont Climate Action Plan, page 203.

> abundant forests, our maintenance of open land. Indeed, Vermont's most precious and effective mechanism for countering climate change is our forested landscape, which represents nearly 80% of the state's land area and provides us all with a rich array of collateral services, such as clean water, stable and fertile soils, and a vibrant recreation and tourism industry, that benefits both the culture and economy of our state.

Since this 2007, we have not reduced the rate of forestland conversion. In fact, we are consistently losing forest, and we have gone from 80% representation in the state back in 2007 to 74% today. With this in mind, the recently developed Initial Climate Action Plan (CAP) underscores the need for accelerated land conservation in Vermont. For example, the CAP specifically endorsed the following strategy:

Invest in strategic conservation in order to increase the pace of permanent conservation towards 30 by 30 targets (described in federal report "Conserving and Restoring America the Beautiful"), with Vermont Conservation Design acting as the guiding plan for prioritization of efforts.

<u>With this as background:</u>

- We support efforts in the bill to develop a plan to advance the CAP's goal of increasing the pace of land conservation in Vermont, in addition to supporting planning to employ diverse strategies to maintain a resilient landscape in Vermont.
- We agree that the value of our forests lies in their broad uses, supporting biodiversity, community and climate resilience, as well as our outdoor recreation economy and working lands enterprises. All of these uses are supported in the bill, and this bill will help maintain the durability of the lands that contribute to our rural economy, and our tourism and recreation economy. As was highlighted in testimony in the House, the majority of conserved land in Vermont are considered working lands. As more land is conserved in Vermont, the trend will be that more working lands will be maintained in Vermont. This bill also recognizes that there is significant value in planning for the conservation of areas that deserve heightened ecological and biodiversity protection.
- It is important to see the bill for what it is; a planning process to engage a large group of stakeholders to think about the best strategies for conservation, which to a large degree, focuses on working with <u>willing landowners</u> to conserve their land. We support helping willing landowners advance land conservation and promote sustainable stewardship, which together support biodiversity and community and climate resilience. Current demand for conservation projects with willing landowners far exceeds available funding in the state. This highlights the ongoing need to advance conservation efforts to meet the demand of landowners who want to conserve their land in the state. And when this conservation happens, there is a return on investment that benefits communities. Cost of community services analysis often demonstrates that conserved land requires less costs and services to a community than developed land, while providing many supportive services and contributions. For example, The Trust for Public Land

conducted an economic analysis and found that every $1 invested in land conservation in the state returns $9 in economic value in natural goods and services, such as water quality protection, flood mitigation, and food production, to the Vermont economy.

- This bill is complimentary to the Forest Future Strategic Roadmap process which is currently underway. I am currently an advisory member and participating in this planning process for the forest economy, which is taking a very serious look at strategies to benefit the forest products industry. The Forest Futures Roadmap process recognizes that there is value in planning. This bill is a necessary and complimentary component of planning to determine how best to maintain the actual land base that is so vital to maintaining our working lands, maintaining biodiversity, myriad ecosystem service functions, and the character and identity of our state. Like the Forest Future Roadmap, this bill would develop a plan with recommendations based on stakeholder input.
- We support the bill's attention to the advancement of permanent conservation of working lands and natural areas, while also creating a framework for maintaining a resilient landscape employing a suite of diverse tools using Agency of Natural Resources' Vermont Conservation Design as a guide. Using Vermont Conservation Design as a guide means the planning process will look for opportunities to conserve both early successional habitat, and old forests. We believe the vision articulated in the bill for maintaining an ecologically functional landscape that sustains biodiversity, maintains landscape connectivity, promotes climate resilience, supports working farms and forests, provides opportunities for recreation and appreciation of the natural world, and supports the historic settlement pattern of compact villages surrounded by rural lands and natural areas is very important. We have provided some suggested edits to the bill to further elevate the importance of recognizing this vision in the inventory and planning process.
- We believe the planning process should include a robust discussion about the best mix of tools, including those that ensure equitable outcomes, to advance land conservation in Vermont to maintain a resilient landscape for diverse values and uses. While the bill asks for recommendations regarding any modifications that should be made to the conservation categories, we are suggesting a modification to the definitions in Sections 2801(3) and (4) of the bill to recognize that natural resource management areas that are conserved could include forestlands, agricultural lands, grasslands, or other lands that support biodiversity to meet the targets. We believe this change would align with the national and international efforts around 30 by 30 planning that recognize diverse categories for sustainably managed land that contribute to biodiversity.
- Finally, we support the efforts in the bill to engage a diverse stakeholder group to build support and determine how best to achieve land conservation targets, and the VCD goals. We appreciate the work that state agencies and the Vermont Housing and Conservation Board will do to build a robust public outreach and stakeholder engagement process to implement the conservation plan.
- If the Forest Partnership can be helpful moving forward, we remain available to assist.