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**Testimony to House Committee on Natural Resources, Fish, and Wildlife
RE: Draft Changes to Vermont's Use Value Appraisal Program**

Chairwoman Sheldon and Members of the Committee,

Thank you for this opportunity to visit with you this morning on a proposed, common-sense change to the Use Value Appraisal Program that will benefit all Vermonters. I applaud this committee's methodical investigation over the last two months of the ways that healthy, functioning ecosystems can contribute to a better future for Vermont.

My name is Zack Porter and I serve as the Lake Champlain Lakekeeper for Conservation Law Foundation's Vermont office in Montpelier. Since 1966, Conservation Law Foundation has endeavored to create a healthy, thriving New England for generations to come. CLF forges lasting solutions for the region's most critical environmental challenges, including – perhaps most notably here in Vermont – the restoration of Lake Champlain and its magnificent watershed.

I've worked in various capacities in public and private land management for fifteen years, including with the US Forest Service, land trusts, and public land conservation organizations. For ten years I was the lead organizer for a Congressional legislative campaign that sought to protect critical wildlands *and* support jobs in the wood products industry in rural Montana. I was awarded the Regional Forester's award in 2014 for my work in Montana and served on a panel making recommendations to the Chief of the US Forest Service. I share this to indicate to you all my dedication to balanced land management and reputation for working across ideologies and across the aisle.

The draft language that is before this committee to improve Use Value Appraisal is a common-sense update to a critical Vermont program that keeps forests as forests. A variation on a "wildlands" category of Current Use is already successfully employed at scale in all New England states *but Vermont*. In my mind, the question quickly becomes why we haven't embraced this tool already; not whether or why we should adopt it today.

As Lake Champlain Lakekeeper, I work day in and day out to ensure a healthier and more resilient future for all Vermonters. If there's one thing we should all be able to agree on, it's

that we need all of the tools in the toolbox to address our water quality, climate, and biodiversity crises. This is an all-hands-on-deck moment, and the state has recognized this fact. Vermont is *already* committed to expanding its conservation toolbox and increasing balanced management with such plans and mandates as Vermont Conservation Design, the Vermont State Hazard Mitigation Plan, the Global Warming Solutions Act, and – critical to my work – the Lake Champlain TMDL, or clean water restoration plan. It only makes sense to modernize UVA so that it reflects the goals of these other recent, visionary documents that highlight the unique contributions of healthy, fully functioning natural ecosystems.

Vermont’s forests are perhaps our greatest natural asset. At relatively low cost and with high reliability compared to technological fixes involving expensive infrastructure investments, forests sequester and store carbon, purify water, keep rivers flowing through summer droughts, reduce flooding during extreme precipitation events, and support biodiversity. In addition, forests provide local, renewable wood products, from sawlogs to maple syrup, supporting rural economies.

Tree cover extends over 80% of Vermont’s landscape, with the vast majority of that forestland open to active management. Today, just 3% of Vermont’s forests are simply allowed to be forests, permanently;¹ to reach their full ecological potential for the benefit of Vermont’s fish and wildlife, and for the wealth of ecosystem services that a thriving Vermont forest naturally provides.

And what a forest it was. Earlier this session, you heard moving testimony by my friend and colleague, Rich Holschuh, a leader within Vermont’s Abenaki community. As he described to you, the forest known by Vermont’s original people is not the one we know today. Yes, the Abenaki made use of forest resources and cleared around their settlements for agriculture and hunting, and along travel routes. But by and large, New England’s natural landscape was what we would call today an “old-growth forest,” meaning – of course – a forest full of both old and young trees, punctuated by natural openings created by wind, ice and the handiwork of beavers. This pre-colonial landscape was in relative equilibrium compared to the one we inhabit in 2021. Today, that naturally occurring landscape is “functionally absent” from Vermont, to quote Vermont Conservation Design, comprising less than 1/10 of 1% of our state.² Is it any surprise, then, that our clean water, climate, and biodiversity are similarly out of balance?

All forests provide public benefits to Vermont, including those that are managed for raw wood products. The conservation community here in Vermont has built a remarkable legacy for future Vermonters with easements across hundreds of thousands of acres of

¹ “Keep New England Forested: Assessing the Current Conservation Status of New England’s Forests,” a New England Forestry Foundation Technical Report (Bley 2014)

² “Vermont Conservation Design, Part 2: Natural Communities and Habitats Technical Report” (Zaino et al 2018).

actively managed private forestland that is forever protected from non-forest development. This is all good.

In recent years, science has made clear what many of us long understood intuitively: wildlands have an exceptional ability to provision natural goods and services and to support the full suite of biodiversity native to our region. Wild forests and wetlands are unequalled in their ability to naturally remove and store phosphorus that would otherwise enter our ponds and lakes, causing costly and destructive algal blooms, an increasing threat to public health across Vermont.³ Wild forests and wetlands are also unequalled in their ability to remove and store carbon for the long term.⁴ And in the face of hotter, drier summers and more frequent extreme weather events, wild forests and wetlands are an insurance policy against the natural disasters we are sure to face,⁵ as they naturally excel at storing water through dry periods, and mitigating the impacts of floods.⁶

Although we derive benefits from Vermont's forests, today, they produce relatively low levels of ecosystem services compared to the forests of pre-colonial Vermont. As you've heard in testimony from a variety of other experts, the ecosystem service outputs of our forests increase relative to their age. And yet most forests, when managed primarily for their silvicultural rather than their ecological value, will never be allowed to grow beyond the equivalent of their teenage years. This limits our forests' broader contributions to Vermont's public good.

Scientific evidence shows that Vermont's forests could store 2.3-4.2 times more carbon than current levels if simply allowed to grow old and complex.⁷ There is also growing consensus that significant changes in forest and wetland management could reduce a significant portion of the phosphorus loading in the Champlain Basin. The Lake Champlain TMDL requires Vermont to reduce phosphorus inputs from forest management activities by nearly 20% overall, with the highest level of reduction required in the Missisquoi Basin, where inputs must be reduced by 50%.⁸ Meanwhile, UVM studies show that protection and restoration of wetlands alone could decrease 15% of the basin's phosphorus load.⁹

³ "Forest-Stream Interactions in Eastern Old-Growth Forests," in *Ecology and Recovery of Eastern Old-Growth Forests* (Warren et al, 2018)

⁴ "Forest carbon storage in the northeastern United States: Net effects of harvesting frequency, post-harvest retention, and wood products." (Nunnery and Keeton, 2009).

⁵ "State Summaries: Vermont," (2019). NOAA National Centers for Environmental Information. <https://statesummaries.ncics.org/chapter/vt/>

⁶ Keri B. Watson et al., "Quantifying Flood Mitigation Services: The Economic Value of Otter Creek Wetlands and Floodplains to Middlebury, VT," *Ecological Economics* 130 (2016): 16-24.

⁷ "Late-Successional Biomass Development in Northern Hardwood-Conifer Forests of the Northeastern United States" (Keeton et al, 2011)

⁸ "Lake Champlain Phosphorus TMDL: A Commitment to Clean Water," US EPA <https://www.epa.gov/tmdl/lake-champlain-phosphorus-tmdl-commitment-clean-water> (last visited March 9, 2020).

⁹ N. Singh, J. Gourevitch et al., [Optimizing wetland restoration to improve water quality at a regional scale](#), *Environmental Research Letters* (2019); [Restore Wetlands to Cut Flood Costs, Phosphorus Pollution: TNC-Gund Study](#) (2019).

Wetlands offer critical habitat for 35% of Vermont's threatened and endangered plant species and 21% of imperiled animals.¹⁰ Even small-scale wildlands can have outsized impacts on water quality, flood mitigation, and biodiversity.

If we need an example of what Vermont's forests and wetlands are capable of, we're lucky to have the Adirondacks in view across Lake Champlain. Although largely cut over in prior centuries just like Vermont, New York's forever-wild forests and wetlands in the Adirondack Park have regained their ecosystem service capacity at a rate that surpasses our own forestland on this side of the lake. The proof is in the quality of the water that enters Lake Champlain from New York,¹¹ and the Park's exceptional levels of stored carbon.¹²

Fortunately, as Vermont Conservation Design indicates, and as the story of the Adirondack Park demonstrates, "In most forests, passive restoration will result in old forest conditions." The key ingredient for unlocking the full potential of Vermont's forests isn't expensive or unproven technology or infrastructure. What forests and wetlands need most is time.

Today, only 3% of Vermont's forests have been afforded the simple and humble gift of time to someday become old forests. Vermont Conservation Design calls for 9%, and many scientists suggest the number should actually be quite higher than that.¹³ Whatever the end goal, 3% could hardly be seen as "balanced." Modernizing UVA gives Vermont the tools it needs to get to balanced management.

A concern has been raised around the cost to taxpayers of the proposed changes. While this is an important consideration, it's equally important that we have a comprehensive and honest conversation about costs and benefits. Vermont loses money every year it fails to fully take advantage of the natural ability of our forests to store carbon, clean our water, and protect against natural disasters. Put another way, what is the cost of inaction?

Another concern has been raised about whether the proposed changes to UVA should only apply to Highest Priority lands as mapped by Vermont Conservation Design. I agree with Vermont Fish and Wildlife ecologist and Vermont Conservation Design co-author, Eric Sorenson, who testified on March 9th about his desire to see these new tools made available to all Vermonters who otherwise meet the criteria for enrollment in UVA. This is both equitable and wise given what we know about the value of wildlands at any scale and in

¹⁰ E. Thompson, E. Sorenson, and R. Zaino, *Wetland, Woodland, Wildland: A Guide to the Natural Communities of Vermont* (2d ed., 2019)

¹¹ "Lake Champlain Phosphorus TMDL: A Commitment to Clean Water," US EPA <https://www.epa.gov/tmdl/lake-champlain-phosphorus-tmdl-commitment-clean-water> (last visited March 9, 2020).

¹² "A Contemporary Carbon Balance for the Northeast Region of the United States." (Lu et al 2013)

¹³ "A Global Deal for Nature: Guiding principles, milestones, and targets." (Dinerstein et al 2019)

any location, from the fringes of Vermont's largest communities to the heart of its largest forest blocks.

Thanks again to this committee for its careful consideration and deliberation on these important matters. Vermont is missing an essential tool in its conservation toolbox as long as UVA remains exclusive of wildlands. In the face of clean water, climate, and biodiversity crises, it's clear that the time is now to broaden the scope of the Use Value Appraisal program for the benefit of future generations.

Thanks,

Zack

A handwritten signature in black ink, appearing to read "Zack" followed by a stylized surname.