

To: Senate Natural Resources and Energy Committee  
From: Jamey Fidel, General Counsel, Forest & Wildlife Program Director, Vermont  
Natural Resources Council  
Date: June 4, 2020

Thank you for the opportunity to testify today on forest blocks and potential modifications to Act 250 to address forest fragmentation. VNRC is part of the Vermont Forest Partnership, which consists of Audubon Vermont, The Trust for Public Land (TPL), Vermont Chapter of The Nature Conservancy (TNC), Vermont Land Trust (VLT), Vermont Natural Resources Council (VNRC) and Vermont Conservation Voters (VCV). Together we have been working with your committee and the Vermont Legislature to address forest fragmentation in Act 250 for the past six years.

**Act 250 should be improved in two ways:** (1) strengthen the criteria to avoid or minimize the fragmentation of intact forest blocks and connectivity areas, and require appropriate mitigation where this is not feasible; and (2) modify Act 250 jurisdiction to narrowly review projects that have a high probability of fragmenting forest blocks.

#### **Summary of key points:**

- Vermont's forests are invaluable assets to the state, providing a host of significant benefits for people and nature including jobs, revenue, forest products, clean air and water, flood attenuation, climate change mitigation, habitat for native plants and animals, outdoor recreation, health and well-being, and sense of place. The financial value of these benefits is well into the billions of dollars per year.
- For the first time in a century the area in Vermont covered by forests is declining, and our forests are becoming increasingly fragmented by parcelization and development.
- Act 250 has a critical role to play in helping maintain the integrity of Vermont's forests for all the benefits they provide. But the Act in its current form is not adequately addressing the challenges of forest fragmentation from parcelization and development, and improvements are needed to better protect forest integrity.

#### **Forest Fragmentation:**

Our organizations are concerned about fragmentation because our forests are vital to the well-being of our state. Our forests provide billions in direct revenue and other financial value to the state by supporting the forest products industry, outdoor recreation, air and water quality, flood attenuation, climate change mitigation, habitat for wildlife, and other benefits. For example, an economic analysis by The Trust for Public Land of the return on the State of Vermont's investment in land conservation over the past 30 years found that every state dollar invested in land conservation returned \$9 in natural goods and services (such as water quality protection, food production, flood control, wildlife habitat, and carbon sequestration and storage).

But as our forests become more fragmented, they lose their ability to provide this wide range of invaluable benefits.

In Act 171 passed in 2016, the General Assembly made the following legislative findings:

- Private and public forestlands constitute unique and irreplaceable resources, benefits, and values of statewide importance; contribute to the protection and conservation of wildlife habitat, air, water, and soil resources of the State; mitigate the effects of climate change; and benefit the general health and welfare of the people of the State;
- Forestry operations are adversely affected by the encroachment of urban, commercial, and residential land uses throughout the State that result in forest fragmentation and conversion and erode the health and sustainability of remaining forests; and
- As a result of encroachment on forests, conflicts have arisen between traditional forestry land uses, and urban, commercial, and residential land uses convert forestland permanently to other uses, resulting in an adverse impact to the economy and natural environment of the State.

The Vermont landscape has an appearance of densely forested lands; however, a closer look reveals that our forests are being fragmented by rural sprawl. The breaking up of large parcels of land into smaller and smaller parcels is a significant issue in Vermont and parcelization trends are noticeable.

While it is hard to pin down the exact amount of forest acreage that has been lost to development, for the first time in a century our forests are declining in extent. For example:

- A recent U.S. Forest Service report suggests that Vermont may have lost up to 102,000 acres of forestland from 2012 to 2017.<sup>1</sup>
- Another set of data from the Forest Service demonstrates that we lost five percent of forests over 100 acres in size between 2001 and 2006.<sup>2</sup>
- 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<sup>3</sup>.”
- A published by VNRC in late 2017 reveals that according to Grand List data, undeveloped woodland in Vermont decreased by about 147,670 acres from 2004 to 2016 while residential acreage increased by almost 162,670 acres. During the same study period, parcels less than 50 acres in size with dwellings increased by 20,747 parcels. This highlights an increasing trend in Vermont; undeveloped land is being converted to residential development with dwellings and associated infrastructure, and smaller parcels are being created through the fragmentation and parcelization of forestland from subdivision and development.<sup>4</sup>

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<sup>1</sup> Morin et al (2017). Forests of Vermont, 2016. Resource Update FS-119. Department of Agriculture, Forest Service, Northern Research Station. Available at [https://www.fs.fed.us/nrs/pubs/ru/ru\\_fs119.pdf](https://www.fs.fed.us/nrs/pubs/ru/ru_fs119.pdf)

<sup>2</sup> Email communication between Jamey Fidel and Forest Service.

<sup>3</sup> [http://fpr.vermont.gov/sites/fpr/files/Forest\\_and\\_Forestry/The\\_Forest\\_Ecosystem/Library/Forest%20Carbon%20Inventory%20Mar%202017\\_final.pdf](http://fpr.vermont.gov/sites/fpr/files/Forest_and_Forestry/The_Forest_Ecosystem/Library/Forest%20Carbon%20Inventory%20Mar%202017_final.pdf)

<sup>4</sup> Contact VNRC for copy of full report.

It is clear based on our research and collaborative work with many land use experts in the state that the existing Act 250 criterion related to forests, Criterion 9(C), does not adequately address impacts to forests from subdivision, nor does it address the issue of forest fragmentation. It only examines project impacts to forest soils for commercial forestry. It does not consider the overall integrity of forests and the full suite of ecological and economic benefits that forests provide. Criterion 8(A), necessary wildlife habitat, does not serve this function either.

Furthermore, compounding these limitations is the fact that very little subdivision activity appears to trigger Act 250. VNRC examined subdivision activity in 22 case study towns between 2003 and 2009 and found that out of 925 subdivisions creating 2,749 lots and affecting a total of 70,827 acres, only 1-2% of the subdivisions triggered Act 250 (the exception was land already under Act 250 jurisdiction, which boosted the overall Act 250 review to 10% of the subdivisions).<sup>5</sup>

A natural question is why doesn't Act 250 require review of more subdivisions? One of the reasons according to VNRC's research is the average subdivision reviewed in the 22 case study towns was between 2-4 lots; therefore, many subdivisions do not trigger Act 250 jurisdiction (Act 250 reviews proposes subdivisions of 6 or more lots in a town without zoning, or 10 or more lots in a town that has zoning and subdivision regulations).

In addition, a former provision in Act 250 that used to require review of fragmenting types of development was rescinded – the “road rule.” When the road rule was rescinded, Act 250 lost the ability to review the impacts of incremental development with long roads that penetrate intact forest blocks.

To address these issues, collectively, we have spent the last decade researching and examining forest fragmentation. We have consulted many professionals in the forest policy, planning, and forestry community about the adequacy and shortcoming of Vermont's land use regulations to address forest fragmentation.

For example, in 2007, VNRC convened the Forest Roundtable to address forest fragmentation with approximately 100 participants including consulting foresters, professional planners, government officials, landowners, representatives from the forest products industry, conservation groups, rural economic development, and researchers at academic institutions. Together, the Roundtable published a Report on Parcelization and Forest Fragmentation. The report included 27 priority recommendations. One of those was to “identify and correct gaps in Act 250 and other land use regulations to attenuate the rate of parcelization and forest fragmentation in Vermont.”<sup>6</sup>

In 2014, Vermont's land use planning community developed a Forest Fragmentation Action Plan with input from 100 local planning and conservation commissions members, selectboards, regional planning commissions, the VT Dept. of Forests, Parks and Recreation, the VT Fish and Wildlife Department, the VT Dept. of Housing and Community Development, the VT Planners Association and UVM Extension. As part of the process, twenty-eight strategies were identified and ranked. The top nine were selected to highlight in the action plan. One of the top identified strategies was to

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<sup>5</sup> See pp. 8-10 at <http://vnrc.org/wp-content/uploads/2014/05/Phase-II-Subdivisions-Report-NEW-Reduced2.pdf>

<sup>6</sup> See p. 13 at <http://vnrc.org/wp-content/uploads/2012/08/Forest-Roundtable-Report.pdf>

pursue legislative changes at the state level to modify Act 250 to address forest fragmentation and add new criteria to review and mitigate forest fragmentation.<sup>7</sup>

In addition, the Vermont Legislature has commissioned three reports over the last decade requesting strategies to address forest fragmentation, including land use strategies.

In 2015, the Vermont Department of Forests, Parks, and Recreation submitted the Vermont Forest Fragmentation Report to the Vermont Legislature. That report stated that in order to provide the appropriate tools and clear authority for Act 250 to protect forest blocks there are a number of amendments to Act 250 to consider, including:

- Adding definitions for significant forest blocks and significant connecting habitat so that those features of forest integrity can be addressed specifically in Act 250.
- Criterion 8A could be enhanced to include explicit consideration of significant forest blocks and connecting habitat. Currently, Act 250 does not specifically consider these elements of forest integrity, and given the nexus between significant forest blocks and the Department of Fish and Wildlife's assessment of high-ranking forest blocks, criterion 8A appears the most appropriate place to add this consideration. This change would give the Act 250 district commissions the necessary tools to moderate the impacts from development on the most critical forest blocks across the state.<sup>8</sup>

As part of Act 171, signed into law in 2016, the Legislature developed a study committee to examine potential revisions to Act 250 to protect contiguous areas of forestland from fragmentation and promote habitat connectivity between forestlands.<sup>9</sup>

The resulting report included a matrix of policy options. The study committee cover letter explains that the group was unable to reach consensus agreement on specific recommendations, but the report also clarifies that at its last meeting, study committee members put forward recommendations for inclusion in the final report and members voted whether to support each recommendation. The December 18, 2016 meeting minutes reflect that all members present at the meeting expressed their support or possible support for enhancing Criterion 8 to include consideration of significant forest blocks and connecting habitat.<sup>10</sup>

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<sup>7</sup> See p. 13 at <http://vnrc.org/wp-content/uploads/2014/05/Final-Forest-Fragmentation-Action-Plan.pdf>

<sup>8</sup> See p. 51 at

[http://fpr.vermont.gov/sites/fpr/files/About the Department/News/Library/FOREST%20FRAGMENTATION\\_FINAL\\_rev06-03-15.pdf](http://fpr.vermont.gov/sites/fpr/files/About%20the%20Department/News/Library/FOREST%20FRAGMENTATION_FINAL_rev06-03-15.pdf)

<sup>9</sup>

[http://fpr.vermont.gov/sites/fpr/files/Forest and Forestry/Your Woods/Library/2017%2002%202009.b%20Act%2020171%20Forest%20Integrity%20Study%20Committee.pdf](http://fpr.vermont.gov/sites/fpr/files/Forest%20and%20Forestry/Your%20Woods/Library/2017%2002%202009.b%20Act%2020171%20Forest%20Integrity%20Study%20Committee.pdf)

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[http://fpr.vermont.gov/sites/fpr/files/Forest and Forestry/Vermont Forests/Library/2016%202013%20version%2020Act%2020171%20Forest%20Integrity%20Study%20Committee%20Meeting%20Minutes.pdf](http://fpr.vermont.gov/sites/fpr/files/Forest%20and%20Forestry/Vermont%20Forests/Library/2016%202013%20version%2020Act%2020171%20Forest%20Integrity%20Study%20Committee%20Meeting%20Minutes.pdf)

The report acknowledges that ultimately the short time frame and diversity of perspectives prevented the study committee from reaching consensus on its final recommendations, but the minutes reflect that improving criteria to address fragmentation had strong support as a concept.

The Vermont Legislature responded to these reports by passing H.233 out of the House, and then S.276 out of this Committee in 2018 to add forest block, habitat connectivity, and forest fragmentation criteria to Act 250. Unfortunately, those provisions did not become law that year and the Commission on Act 250 began its work for two years.

To conclude, the Vermont Legislature has vetted and studied how to address forest fragmentation in Act 250 for six straight years. With the passage of H.926 in the House, now is the time to (1) strengthen Act 250 criteria to avoid or minimize the fragmentation of intact forest blocks and connectivity areas, and require appropriate mitigation where this is not feasible; and (2) modify Act 250 jurisdiction to narrowly review projects that have a high probability of fragmenting forest blocks.

Thank you for your consideration of this input.

Sincerely,

Jamey Fidel, Vermont Natural Resources Council