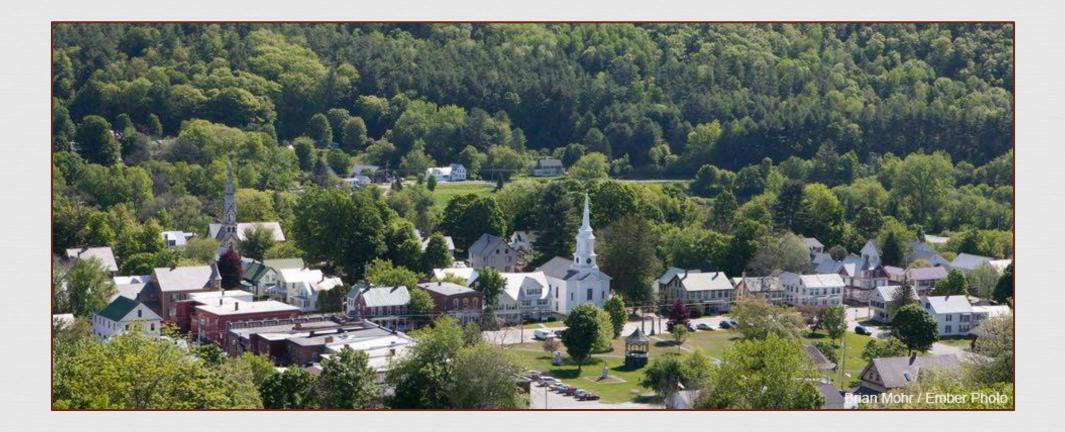
## Maintaining Sustainable Forests

Jamey Fidel General Counsel, Forest & Wildlife Program Director

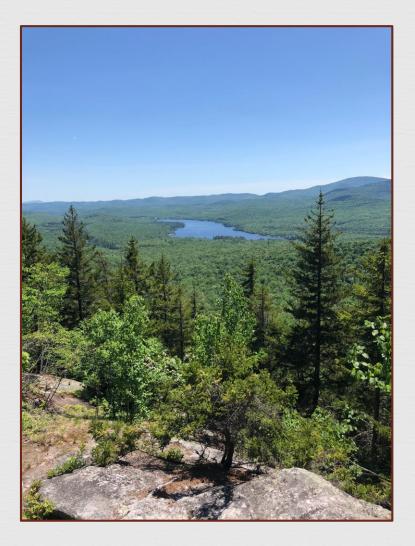














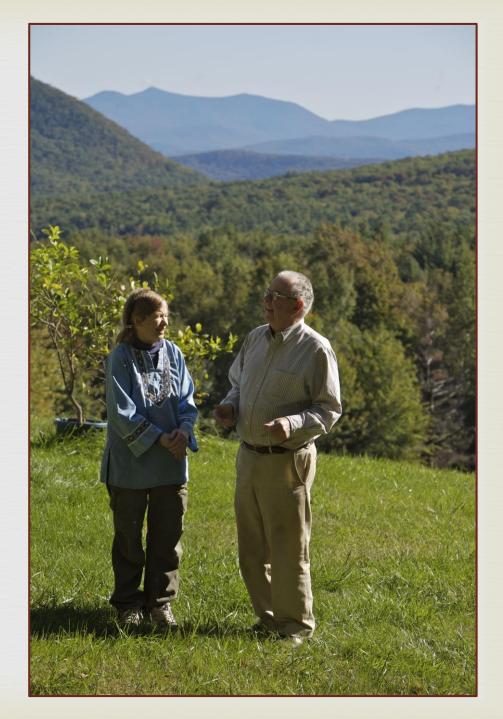












## Forest Loss

- While 74% of the state is covered by forests, a closer look reveals that our forests are being converted and fragmented by rural sprawl
- According to the Forest Service, 14,207 acres of forest land are converted on average to nonforest every year.\*
- This means there is an average net loss of approximately 11,000 acres of forests a year since roughly 3,000 acres of nonforest revert back to forest on an annual basis.\*

\* Source: USDA Forest Service. 2019. Forests of Vermont, 2018. Resource Update FS-212. Madison, WI: U.S. Department of Agriculture, Forest Service. https://doi.org/10.2737/FS-RU-212



A. Blake Gardner

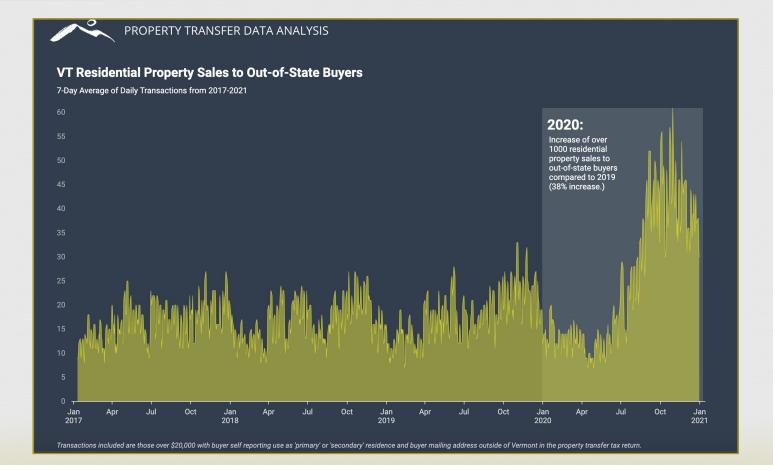
## Forest Loss

- In 2007, a Commission on Climate Change convened by Governor Douglas made the priority recommendation of keeping forests as forests and reducing the rate of forestland conversion. Since that time, forest cover in the state has decreased by 6%, going from 80% to 74%.
- In order to minimize forest fragmentation and forest loss, it is necessary to understand where and land sales, parcelization and subdivision are occurring, and how to address the ensuing impacts on forests.



A. Blake Gardner

## Property Sales & Covid-19 Migration



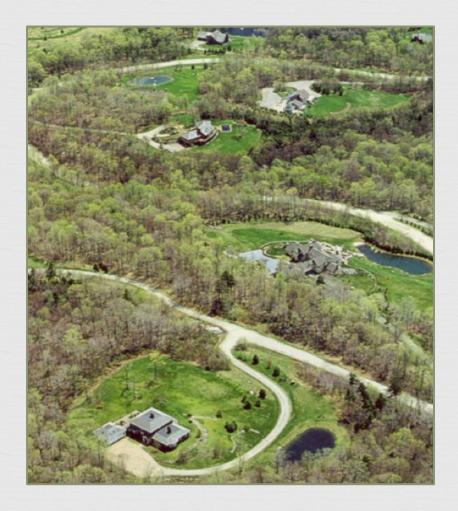
## Property Sales & Covid-19 Migration

VT Residential Property Sales to Out-of-State Buyers						Residential Property Sold to Out-of-State Buyers in 2020 # of transactions where buyer listed out of state mailing address	
	Town	Sales	2017	2018	2019	2020	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
1	Stowe	156 176	84.7M	104.2M	66.8M	132.1M	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
2	Ludlow	142 - 219	44.7M	65.4M	75M	97.9M	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
3	Dover	126 - 230	38M	37M	32.6M	72.7M	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
4	Stratton	63 104	31.4M	29.9M	31.5M	65.4M	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
5	Wilmington	96 🗸 137	37.6M	19.4M	21.3M	53.8M	
6	Woodstock	48 🗸 71	37.9M	21.8M	28.7M	53M	3 1 2 142 9 1 3 3 13 3 1 2 142 2 8 5
7	Warren	104 142	23.2M	25M	29M	49.3M	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
8	Winhall	48 - 110	20.1M	23.8M	24.8M	49.2M	<b>3 4 7 7 10 7 10 17</b>
9	Manchester	39 - 92	16.1M	22.9M	25.3M	46M	7 6 3 29 2 1 8 17 158 10 11 29 2 1 22 17 158 10 71
10	Killington	140 158	27.5M	31.8M	43.5M	43.9M	19 6 11 55 11 23 3
11	Hartford	85 - 137	20.1M	27.7M	29.5M	41.8M	18 1 13 26 219 29 13   14 14 18 13 14 14 14 14 16 13 13 13 13 13 13 13 14 16 13 13 14 14 16 13 13 13 13 13 13 13 13 14 16 13 13 13 13 13 13 13 13 14 16 13 13 13 14 14 16 13 13 13 13 13 13 13 14 14 16 13 14 14 16 14 16 13 13 13 13 13 13 13 13 13 13 13 13 14 14 16 14 16 14 16 14 16 14 16 15 14 16 15 15 15 </td
12	Dorset	20 - 51	9.2M	11.8M	15.7M	37M	5 51 43 6 21 36 21 6 92 110 48 17 18 8
13	Plymouth	25 - 55	5.7M	11M	11M	20.4M	20 5 104 31 17 11
14	Burlington	32 🔨 37	12.4M	10.4M	6.7M	17.6M	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
15	Pomfret	5 🖍 19	2.1M	7M	1.6M	17.4M	19 7 137 4 80   10 5 13 21 11 9 3

# Parcelization

The breaking up of land into smaller and smaller parcels, usually through subdivision.

- Increased, potentially disjointed ownership of parent parcel;
- Step toward new development, housing and infrastructure that may fragment natural resources and intact forests depending on how it occurs;
- Less viable tracts for forestry; and
- Potential negative ecological impacts.



A. Blake Gardner

## Strategies to Address Parcelization & Fragmentation -Forest Roundtable

- An ongoing policy discussion on forest policy with a focus on parcelization and forest fragmentation.
- Bringing diverse interests together since 2006 to work on a common issue of concern (Over 200 interested members).
- Information sharing and networking.
- Testing new ideas.



### Forest Roundtable

#### **Consolidated List of Environmental Values**

Theme	Value	Importance	Vulnerability
Ecological processes	Long-term ecological functioning (including ecological processes that maintain water, air, and soil productivity and quality; forest health; and forest productivity)	19	19
Structure	Habitat connectivity (including the maintenance of gene flow)	13	17
Composition	Maintain plant, fish, wildlife, and natural heritage (diverse native species)	12	9
Other	Environmental amenities (aesthetics, recreation, etc.)	6	2
Ecological processes	Carbon storage (to affect global climate change)	4	3

#### **Consolidated List of Social Values**

Theme	Value	Importance	Vulnerability
Values held by individuals	Forest ethics and sense of stewardship for diverse forest values	11	7
Sense of place	Rural remote sense of Vermont (including diverse habitat for wildlife and large remote tracts)	10	10
Values held by individuals	Diverse and wholesome recreational opportunities	8	2
Values for society	Intergenerational connection to forests	6	8
Values for society	Forest-based economy supporting a community and diverse society	4	5
Values for society	Traditional uses (hunting, fishing, etc.)	4	5

#### **Consolidated List of Economic Values**

Theme	Value	Importance	Vulnerability
Jobs	Primary forest-based jobs (industrial - logging, manufacturing, etc.)	15	16
Forest materials	Water (e.g., clean water)	11	10
Jobs	Secondary forest-based jobs (e.g., tourism, recreation, etc.)	8	7
Economic opportunities	Economic opportunities supported by forested landscape (including amenity dependent jobs)	6	2
Forest materials	Energy source	6	3
Forest materials	Sustainable resource flow (long-term)	5	9
and the second			

### ROUNDTABLE ON PARCELIZATION AND FOREST FRAGMENTATION

#### FINAL REPORT



#### **MAY 2007**

Recommendations from a roundtable of diverse participants.

Primary Author: Jamey Fidel, Forest and Biodiversity Program Director, Vermont Natural Resources Council

# 2007 Forest Roundtable Report

### ROUNDTABLE ON PARCELIZATION AND FOREST FRAGMENTATION

### FINAL REPORT



MAY 2007

Recommendations from a roundtable of diverse participants.

Primary Author: Jamey Fidel, Forest and Biodiversity Program Director, Vermont Natural Resources Council Includes 27 strategies to address parcelization and fragmentation.

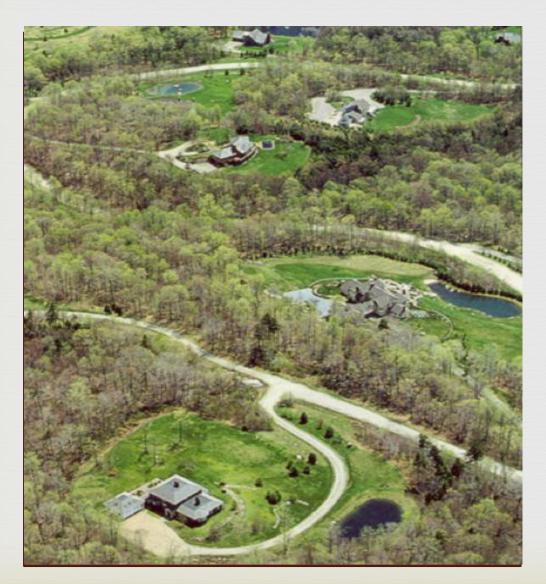
Tax Policy

Land Use and Conservation Planning

Valuation of Ecosystem Services

Long-term Sustainability of the Forest Products Industry

# Examples of Forest Roundtable Recs.



Rec. # 9: Track annual rates of parcelization in Vermont.

Rec. #10: Utilize existing data and develop maps to identify and prioritize forest blocks for conservation.

Rec. #11: Track and analyze rates and degree of forest fragmentation in Vermont.

Rec. #12: Integrate existing planning efforts at the local, regional and state level to better address fragmentation.

Rec. #13: Identify and correct gaps in Act 250 and other land use regulations to attenuate the rate of parcelization and forest fragmentation in Vermont.

### Prioritize Blocks and Track Fragmentation

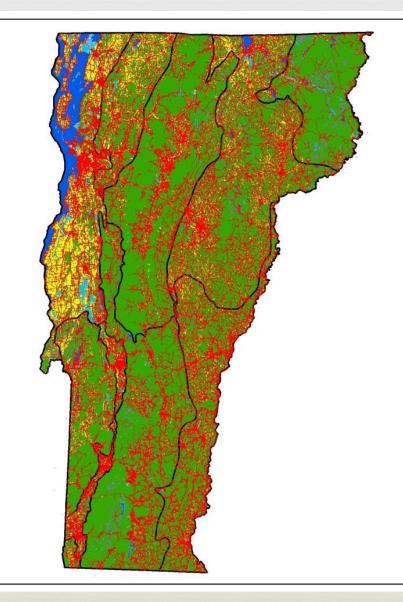
Vermont Habitat Blocks and Habitat Connectivity: An Analysis using Geographic Information Systems



Vermont Fish and Wildlife Department April 2014

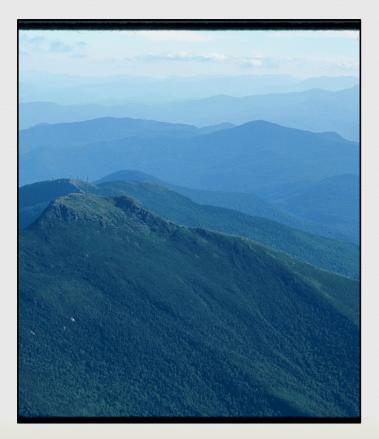
Eric Sorenson, Vermont Fish and Wildlife Department Jon Osborne, Vermont Land Trust





## Planning – Act 171 (Effective in 2018)

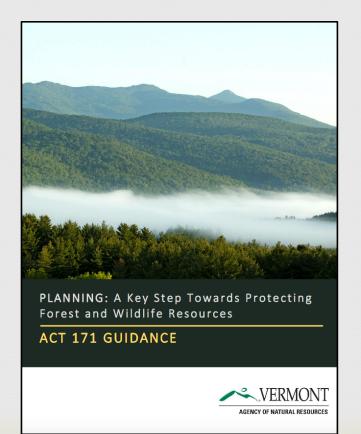
- New state land use planning goal to manage Vermont's forestlands so as to maintain and improve forest blocks and habitat connectors.
- Requires town and regional plans to indicate those areas that each town or region deems to be important or require special consideration as forest blocks and habitat connectors.
- Plan for land development in those areas to minimize forest fragmentation and promote the health, viability, and ecological function of forests.



### Act 171 ANR Guidance Document

When Act 171 was signed into law in June of 2016, Governor Shumlin directed the Agency of Natural Resources to publish guidance to help communities.

https://anr.vermont.gov/sites/anr/files /co/planning/documents/guidance/Act 171Guidance.pdf



# Background on VNRC Research

Phase 1 (2010)Statewide parcelization trends,<br/>2003-2009.

*Phase* 2 (2014) Subdivisions in 22 case study towns.

Phase 3 (2018) Parcelization trends, 2004-2016 (state, regional planning commission, county, & town levels)

<text><image><image><caption><section-header><section-header><section-header><section-header>

Informing Land Use Planning and Forestland Conservation Through Subdivision and Parcelization Trend Information



Authors: Deb Brighton, Vermont Family Forests Jamey Fidel, Forest and Biodiversity Program Director, Vermont Natural Resources Council Brian Shupe, Sustainable Communities Program Director, Vermont Natural Resources Council

> In Collaboration With: Steve Sinclair, Vermont Department of Forests, Parks and Recreation John Austin, Vermont Fish and Wildlife Department

> > Northeastern States Research Cooperative Vermont Natural Resources Council September 2010

Funded by Northeastern States Research Cooperative (NSRC), a partnership of Northern Forest states (New Hampshire, Vermont, Maine, and New York) in coordination with the USDA Forest Service

# VNRC Subdivision Study – Phase 2

- Reviewed records of subdivisions in 22 case study towns
- Total subdivision activity, by zoning district, from 2002 through 2009
- When land is subdivided...
  - How <u>many</u> lots are created?
  - What <u>size</u> are the lots created?
- 2,749 lots were created from 925 subdivisions.





Authors: Deb Brighton, Vermont Family Forests Jamey Fidel, Forest and Biodiversity Program Director, Vermont Natural Resources Council Brian Shupe, Sustainable Communiões Program Director, Vermont Natural Resources Council

> In Collabora/ on With: Steve Sinclair, Vermont Department of Forests, Parks and Recrea6on John Aus6n, Vermont Fish and Wildlife Department

> > Funded By: Northeastern States Research Coopera6ve Vermont Natural Resources Council

> > > eptember 2010

# How many lots are created?

### Finding:

On average, each subdivision resulted in 2-4 lots.

### What does this mean?

- Subdivision is happening in small increments.
- The majority of subdivision is not triggering Act 250.
  - Only 1% 2% of subdivisions in the case study towns were large enough to trigger Act 250.
- Local regulations, if they exist, are the only backstop to guiding subdivision patterns. Only half of municipalities have subdivision regulations. Act 171 is very helpful to address fragmentation, but it addresses planning, and not necessarily development review.

# Where are lots being created?

### Finding:

Most land subdivision is taking place in rural areas, though conservation districts provide some protection.

	In Rural Res. districts	In Natural Resource districts
% of total subdivisions	79%	15%
% of total acres	84%	22%

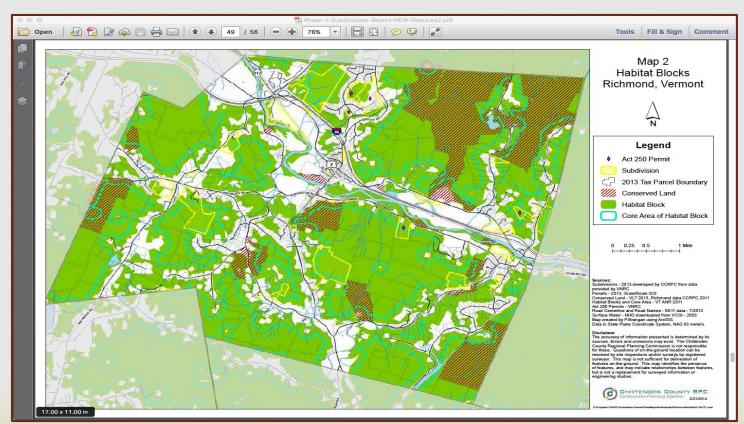
### What does this mean?

- Natural resources in "default" districts where most subdivision is happening – may be more vulnerable unless these districts include thoughtful approaches to development.
- Opportunity for improved site design and subdivision review in these areas

# Where are lots being created?

Forest/habitat blocks are being parcelized by subdivision.

• Based on spatial analysis in four communities, between 50% and 68.8% of the subdivided acres were located within forest/habitat blocks mapped by the Agency of Natural Resources.



# Goals for Phase 3 Research

- Quantify the degree to which subdivision is affecting the **viability of large parcels** for resource management and conservation;
- Quantify the extent to which **residential development** is occurring;
- Quantify the extent to which **large undeveloped woodland parcels** are declining; and
- Document trends that may be relevant for **policies and progr**ams that support resource management and/or minimize the fragmentation of land.

# Methods

- Vermont Department of Taxes Grand List
  - Tax Years 2004 to 2016
- Use Value Appraisal (Current Use) Data
- Designed Metrics to look at various trends within the data:
  - Number of parcels
  - Acreage
  - Parcel Sizes
  - Parcel types
  - Dwellings
  - Land Values
  - UVA

# Steering Committee & Partners

### **DATABASE DEVELOPER**

- Brian Voigt, Fellow, Gund Institute for Ecological Economics (UVM Rubenstein School of Environment and Natural Resources) WEBSITE DEVELOPER:
- Steve Sharp, GIS Operations Manager (Vermont Center for Geographic Information)

### **COLLABORATORS**

- John Adams, Director (Vermont Center for Geographic Information)
- John Austin, Lands and Habitat Program Director (Vermont Department of Fish and Wildlife)
- Pam Brangan, GIS Data & IT Manager (Chittenden County Regional Planning Commission)
- Deb Brighton, Research Associate (Vermont Family Forests)
- Jim Duncan, Director (Forest Ecosystem Monitoring Cooperative)
- Erik Engstrom, GIS Project Supervisor (Vermont Agency of Natural Resources)
- Doug Farnham, Policy Director and Economist (Vermont Department of Taxes)
- Danielle Fitzko, Urban & Community Forestry Program Manager (Vermont Department of Forests, Parks, and Recreation)
- Jens Hilke, Community Wildlife Program (Vermont Department of Fish and Wildlife)
- Elizabeth Hunt, Current Use Program Chief (Vermont Department of Taxes)
- Jon Osborne, GIS Director (Vermont Land Trust)
- Jennifer Pontius, Research Assistant Professor (UVM Rubenstein School of Environment and Natural Resources)
- Jill Remick, Director (Property Valuation and Review Division, Vermont Department of Taxes)
- Kim Royar, Wildlife Biologist (Vermont Department of Fish and Wildlife)
- Steve Sinclair, Director of Forests (Vermont Department of Forests, Parks, and Recreation)
- Keith Thompson, Private Lands Program Manager (Vermont Department of Forests, Parks, and Recreation)

# **Private Land Trends**

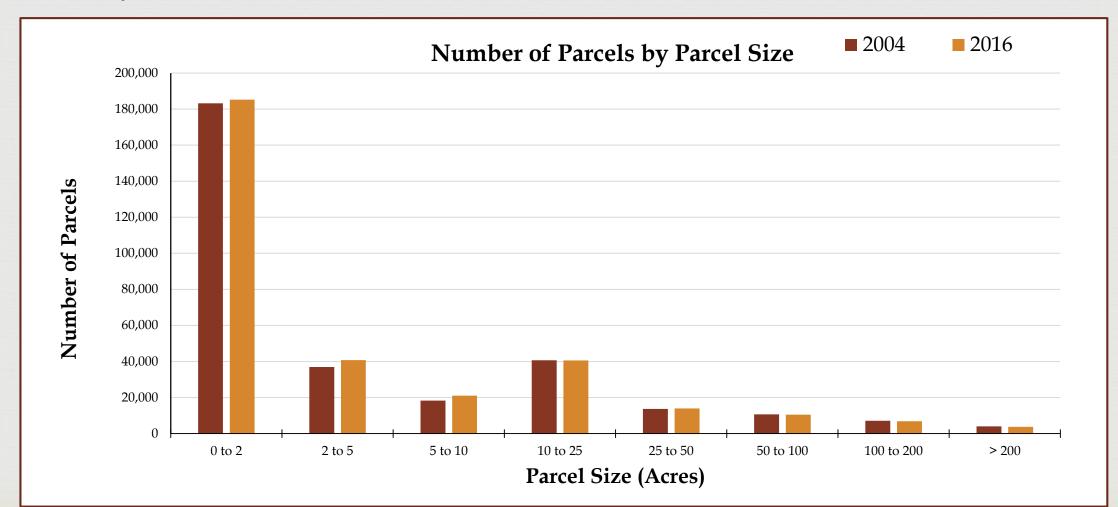
In 2016, roughly 3,350,000 acres (70.4% of the land) were in parcels 50 acres or larger.\*

\*residential 40.0%\*woodland 25.7%



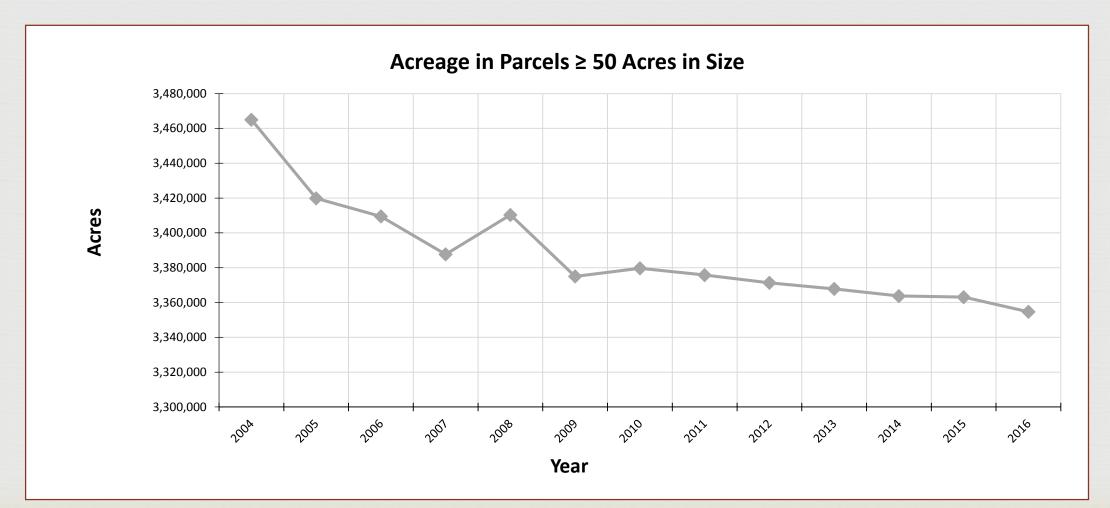
# Number of Parcels by Parcel Size

Small parcels are increasing, especially in the 2-5 and 5-10 acre categories, a size commonly used for "rural residential" house lots.



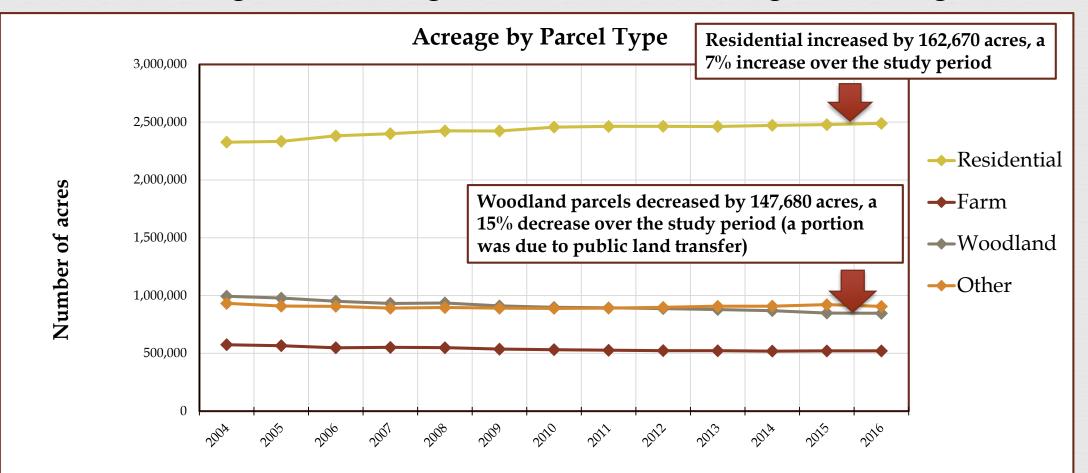
# Acreage in Parcels ≥ 50 Acres in Size

Between 2004 and 2016, the amount of land in parcels 50 acres or larger declined by about 110,300 acres, or roughly 8,485 acres per year.



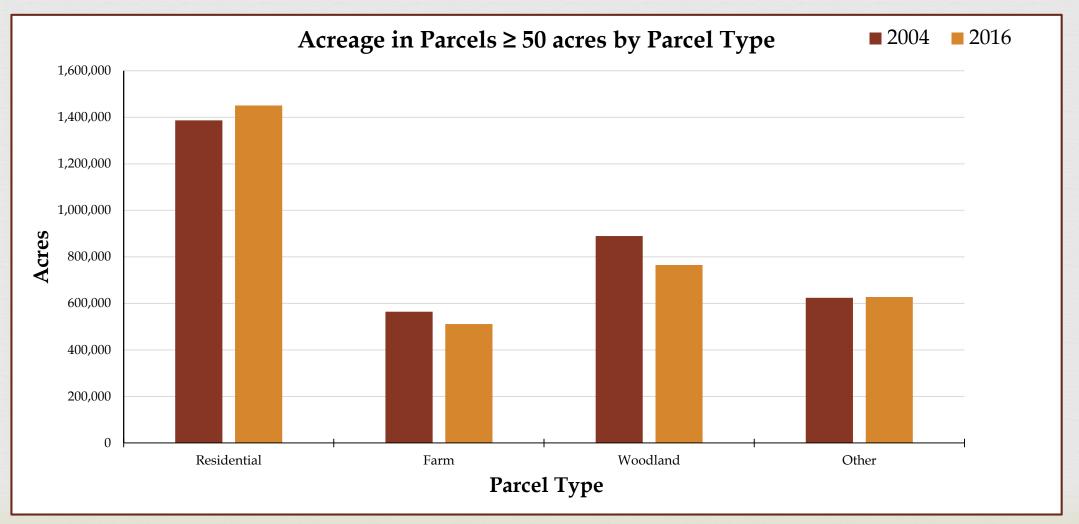
Acreage by Parcel Type

The number of acres in the "residential" category is increasing, while "farm" and "woodland" acreage is decreasing, with "woodland" acreage decreasing the fastest.



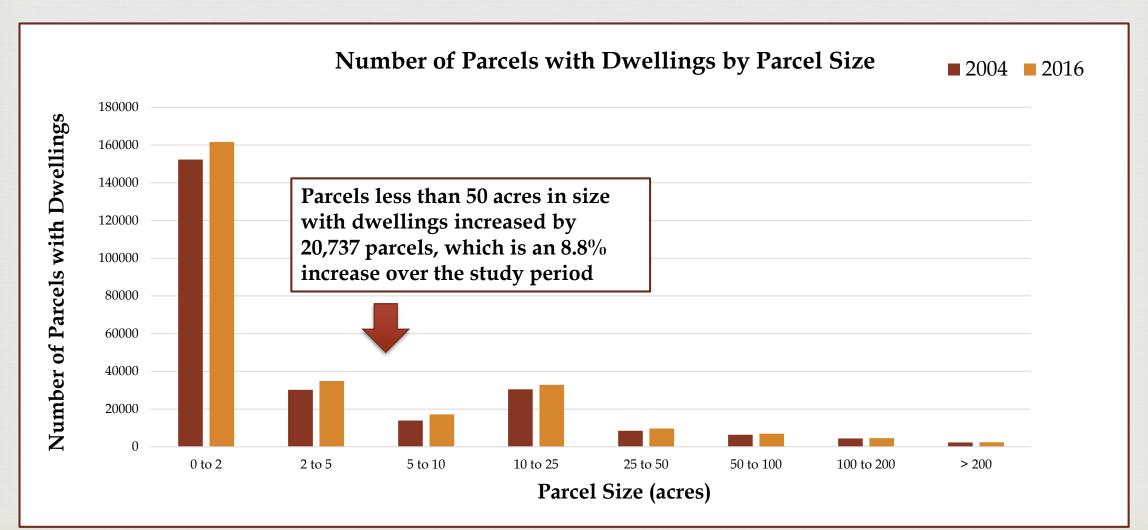
# Acreage in Parcels $\geq$ 50 Acres by Parcel Type

The loss of large (50+ acre) woodland parcels outpaced the loss of large parcels in general.



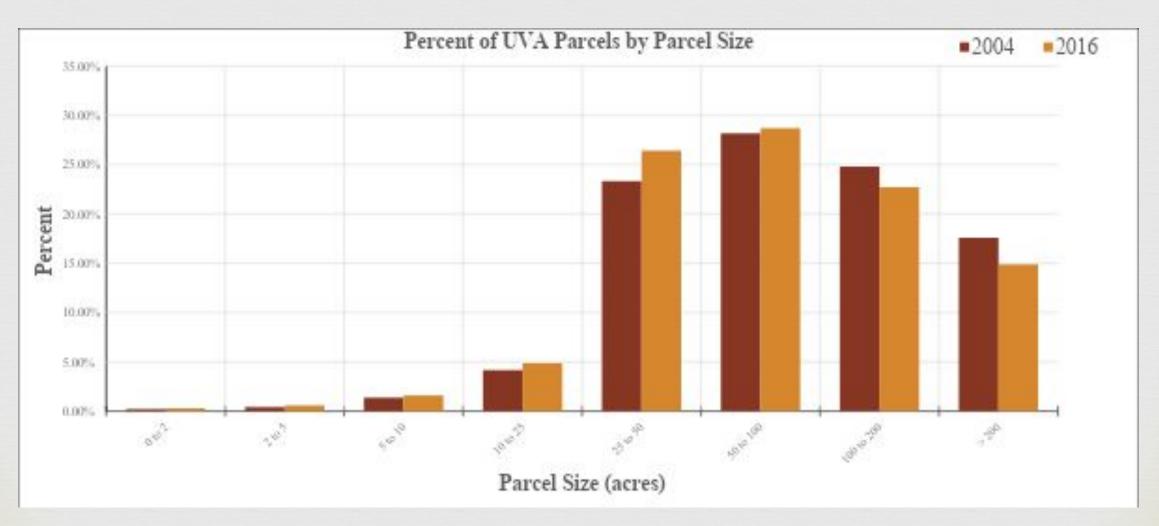
## Number of Parcels with Dwellings by Parcel Size

Most dwellings are built on smaller parcels compared to larger parcels.



# Percent of UVA Parcels by Parcel Size

Enrollment in UVA is increasing most in the 25-50 acre category, while enrollment of 100+ acre parcels is decreasing.



# UVA Helps Retain Woodland

UVA is playing a role in protecting large woodland parcels: Of the woodland in parcels over 50 acres, 84% of the woodland enrolled in UVA remained woodland by 2016; by contrast, only 73% of non-UVA woodland remained.

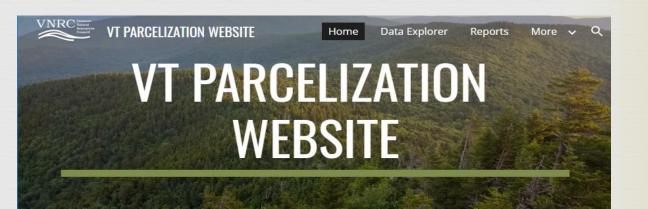
Woodland in parcels ≥ 50 acres	In UVA in 2004	Not in UVA in 2004
Remained as Woodland in (2016)	84.16%	73.15%
No Longer Woodland in (2016)	15.84%	26.85%

# **Parcelization Website**

- To make parcelization data more accessible
- To visualize change spatially.
- To generate geographicallyspecific reports

Available at:

www.vtforesttrends.vnrc.org



Recent trends illustrate the phenomenon of parcelization (the subdivision of land into smaller and smaller pieces and multiple ownerships) is gaining momentum in Vermont.

Vermont is the third most forested of the lower 48 states with approximately 4.6 million acres of forestland. Despite being so heavily forested, for the first time in over a century Vermont is actually losing forest cover due to parcelization, subdivision, and the subsequent development of land.

When land is broken up into smaller parcels from parcelization and subdivision, the result is typically an increase in the number of parcels with housing and infrastructure such as roads, septic and utility lines. When this development occurs, it "fragments" the landscape and can affect plant and animal species, wildlife habitat, water quality and recreational access. It can also affect the contiguous ownership and management of forest parcels, and thus the viability of large tracts of forestland to contribute to Vermont's



A. Blake Gardner

### Action Planning

### <u>Forest</u> <u>Fragmentation</u> <u>Action Plan</u>

A roadmap for implementing nine priority strategies for reducing forest fragmentation and parcelization.

Outlines concrete action steps for planning and zoning, conservation, education and advocacy strategies at the local, regional and state level.



#### Why Vermont Needs a Forest Fragmentation Action Plan

While close to 80% of the state is forested, for the first time in over a century, forests are declining in Vermont. Development is responsible for this trend and forests are increasingly becoming fragmented across Vermont.

Fragmentation doesn't happen all at once – in fact, it's incremental, which is why it's so hard to notice on a day-today basis. It usually starts with subdivision, the division of a parcel into two or more smaller lots. The result is typically an increase in parcel owners, which leads to new housing and

#### **Planning Process**





Photo:Blake Gard

infrastructure development (roads, But septic, utility lines, etc.). When this dev development occurs, it "fragments" the landscape and diminishes the economic and ecological viability of forests. pla

Subdivision activity in Vermont does not look like that commonly seen in other parts of the country and usually portrayed by the media. Indeed, the term "subdivision" usually conjures up images of suburban neighborhoods with identical houses situated side-by-side. Because of the discrepancy between how the public collectively imagines subdivision and the reality, Vermonters are susceptible to thinking that subdivision is not a problem. But subdivision and other types of land development are cumulatively impacting the viability of Vermant's forests. This is why we need a coordinated land use plan to reduce forest fragmentation, and it needs to accur at the local, regional, and state levels.

Table of Contents	
Drivers of Forest Fragmentation	2
Top Strategies	2
Recommended Actions	5

This plan was developed by the Vermant Natural Resources Council (VNRC) with input from many partners including local planning and conservation commissions, selectboards, regional planning commissions, the VT Dept. of Forests, Parks and Recreation, the VT Fish and Wildlife Dept., the VT Dept. of Housing and Community Development, the VT Planners Association, and UVM Extension.

More than 36 individuals participated in a statewide workshop in Randolph, and more than 63 individuals participated in three regional workshops that took place in Croftsbury, Brandon, and Westminster. VNRC gathered feedback on different conservation strategies from the participants through discussion, ranking exercises, voling, and comment cards.



# **Priority Strategies**

1. Map and inventory natural resources related to forests and wildlife; use these to develop local plan maps and policies.

2. Improve the quality of existing zoning and subdivision regulations.

3. Incorporate specific standards into existing zoning and subdivision regulations to reduce forest fragmentation.

4. Increase the acreage of lands permanently protected from development through conservation easements.

5. Increase acres enrolled in the Use Value Appraisal program ("Current Use") or a local tax stabilization program.

6. Provide education and training for local board members.

7. Educate private landowners and the general public.

8. Promote estate planning.

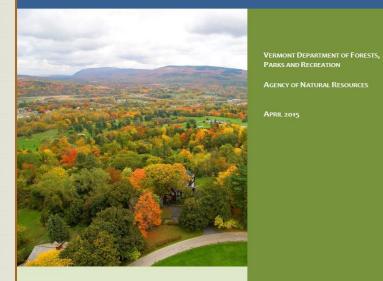
9. Pursue legislative changes at the state level.

# **ANR Forest Fragmentation Reports** for the Legislature

### 2015 Vermont Forest Fragmentation Report

AGENCY OF NATURAL RESOURCES

APRIL 2015



Submitted to House and Senate Committees on Natural Resources and Energy ittee on Fish, Wildlife, and Water

**Report to the Vermont Legislature** 

**Recommendations in support of** Forest Health and Integrity In response to Act 61 of 2015





#### SUBMITTED TO:

VERMONT **DEPARTMENT OF** 

FORESTS, PARKS AND RECREATION

AGENCY OF

NATURAL

RESOURCES

**MARCH 2016** 

THE SENATE AND HOUSE COMMITTEES ON **NATURAL RESOURCES AND ENERGY** 

AND

THE HOUSE COMMITTEE ON FISH, WILDLIFE, AND WATER RESOURCES

Report to the Vermont Legislature from the Act 171 Forest Integrity Study Committee

### Evaluation of potential changes to statewide and local forestland planning and regulation to support forest integrity

February 3, 2017

#### Submitted to:

The House Committee on Natural Resources. Fish and Wildlife The House Committee on Agriculture and Forestry The Senate Committee on Natural Resources and Energy

#### Designated participants:

1) Commissioner of Forests, Parks and Recreation -- Michael Snyder 2) Commissioner of Housing and Community Development -- Lucy Leriche, Secretary, Agency of Commerce & Community Development 3) Chair of the Natural Resources Board -- Diane Shelling 4) A current officer of a municipality, appointed by the Vermont League of Cities and Towns-Karen Horn 5) Vermont Association of Planning & Development Agencies -- Bonnie Waninger 6) Vermont Natural Resources Council and Forest Roundtable -- Jamey Fidel 7) Vermont Working Lands Enterprise Board -- Joe Nelson 8) Vermont Forest Products Association -- Sam Lincoln

9) Vermont Woodlands Association -- Put Blodgett

## ANR Intergenerational Transfer Report for the Legislature

Intergenerational Transfer of Forestland Working Group Recommendations In response to Act 171 of 2016

February 6, 2017

Developed by: Intergenerational Transfer of Forestland Working Group

Submitted by: Vermont Department of Forests, Parks and Recreation Michael C. Snyder, Commissioner

- Today, more than 2.9 million acres or 62% of Vermont's forestland is owned by families and individuals.
- Males over the age of 55 comprise over 65% of the population of forestland owners.
- Fifteen percent of Vermont's forestland is owned by people over the age of 75 (Butler et al 2015). As landowners age, the way that they transfer their land to younger generations will, at least in part, determine the future of Vermont's forests.
- According to surveys conducted by the Sustaining Family Forests Initiative, more than 17% of Vermont landowners (owning more than 10 acres) plan to transfer or sell their land in the next 5 years.

### **Recommendations for State Policy**

#### ROUNDTABLE RECOMMENDATIONS CHECKLIST

#### RECOMMENDATIONS REGARDING TAX POLICY

The following recommendations focus on tax policies that influence the way forestland is managed and conserved in Vermont.

- □ The Forest Roundtable strongly endorses Vermont's Use Value Appraisal Program (UVA) including continued funding.
- Educate municipal officials regarding the lack of impact of the UVA Program on municipal tax rates.
- Provide the UVA Program with adequate resources to administer the program. The Agency of Natural Resources, The Department of Taxes, and the Legislature should study ways to improve the overall efficiency and administration of the Program.
- □ Conduct an independent legislative study of the UVA Program which examines the statutory goals of the program and assesses the program's effectiveness with respect to the original goals. For example, is the goal of conserving natural ecological systems adequately addressed? This study should also assess ways to expand landowner enrollment in the program, and assess the effectiveness of the land use change tax.
- □ Assess property with perpetual conservation easements at a lower value.
- **D** Disburse property transfer tax revenue according to the formula set in statute.
- □ Strengthen the collection of the land gains tax on timber sales on land subject to the land gains tax, and develop better mechanisms to track timber sales and assess taxes from these sales.

#### RECOMMENDATIONS REGARDING CONSERVATION PLANNING

The following recommendations focus on conservation planning as a broad theme encompassing state, regional, municipal, and estate planning mechanisms to reduce the rate of parcelization and forest fragmentation in Vermont.

- Educate landowners about programs for keeping forestland intact across multiple generations.
- □ Track annual rates of parcelization in Vermont.

- Utilize existing data and develop maps to identify and prioritize forest blocks for conservation.
- **D** Track and analyze rates and degree of forest fragmentation in Vermont.
- Integrate existing planning efforts at the local, regional and state level to better address parcelization and forest fragmentation.
- □ Identify and correct gaps in Act 250 and other land use regulations to attenuate the rate of parcelization and forest fragmentation in Vermont.
- Implement planning efforts that reflect the public values of forests.

#### RECOMMENDATIONS REGARDING THE CONSERVATION, STEWARDSHIP, AND VALUATION OF ECOSYSTEM SERVICES

The following recommendations focus on conservation, stewardship, and in particular, the recognition of the value of healthy functioning forested ecosystems in Vermont.

- □ Develop a system to consistently quantify, recognize, and compensate landowners for the value of ecosystem services provided by forestland in Vermont.
- □ Communicate the value of forests to the public in everyday terms, including the ecological benefits that the public is receiving for free from healthy functioning forests.
- Convene a forum on how to manage for ecosystem services at the regional scale, paying attention to property rights, alternative models of ownership and management, and to required policies and distribution of costs and benefits.
- □ Create an annual award for ecosystem service stewardship to increase awareness and showcase forest ethics role models in the state.
- □ Fund the development of build-out models and case studies to show projected impacts on ecosystem services in order to assist planning, conservation, and stewardship activities.
- □ Create a model for <u>community based</u> Timberland Investment Management Organizations (TIMO's) that can buy and manage forestland collectively.
- □ Support the establishment of landowner cooperatives that foster conservation, forest stewardship, ecosystem services and forest product marketing efficiencies.

### **Recommendations for State Policy**

### **Recommendations for state policy and investments**

- Support diversified strategies to reduce the pressures on landowners to subdivide land.
- Provide full statutory funding for the Vermont Housing and Conservation Board (VHCB), and robust funding for the Working Lands Enterprise Initiative.
- Consider potential new state revenue sources to boost investment in land conservation and land use planning.
- Investigate potential new state tax incentives to promote voluntary forest conservation by private landowners, such as a JFO study of the feasibility of establishing a tax credit or deduction for donations of conservation easements or fee title on forestland.
- Support public policy to encourage the aggregation of land for conservation purposes.
- Support implementation of recommendations from the *Vermont Forest Carbon Sequestration Working Group*.
- Support technical assistance and outreach programs (such as VHCB's Viability Program, Vermont Woodlands Association and VT Coverts programs, etc.) that assist landowners with successional planning to promote maintaining large intact forestland parcels.
- Support the implementation of the Intergenerational Transfer of Forestland Working Group's Recommendations in response to Act 171 of 2016.
- Support the implementation of President Biden's 30 x 30 initiative to promote accelerated forestland conservation in Vermont to sustain native biodiversity and a range of co-benefits.

## **Recommendations for State Policy**

### Recommendations for state policy and investments

- Continue to support working forests, including funding the Current Use Program and the administration of new forestland enrollment. Explore how to expand enrollment opportunities for old forests/wild forests.
- Examine assessing property with perpetual conservation easements at a lower value, or determine how to better assist landowners with the carrying cost of permanently conserved land, especially if they can't enroll in the Current Use Program.
- Address the gaps in Act 250 and strengthen it to play a more meaningful role in reviewing the impacts of development on forestland. Add criteria to Act 250 to avoid or minimize the fragmentation of intact forest blocks and connectivity areas; and (2) modify Act 250 jurisdiction to review projects that have a high probability of fragmenting forests.
- Support and enhance technical assistance to municipalities to implement Act 171 planning to reduce the fragmentation of intact forest blocks, working forests, and habitat connectivity areas.
- Support greater implementation of zoning and subdivision strategies and standards to encourage proactive site design in forests to reduce forest fragmentation and conversion.
- Support policies that concentrate new development in settled areas and reduce development pressures on undeveloped forestland e.g., boost funding for water supply and wastewater infrastructure in downtowns and village centers.
- Support efforts to track the rate of forest fragmentation, parcelization, and conversion in Vermont through updates to LIDAR mapping, maintenance of the VT Parcelization website, etc.

### **Recommendations on Next Steps**

- Report back on results of new parcelization and subdivision data going through 2020.
- Report back on statewide assessment of Act 171 municipal planning to reduce the fragmentation of forest blocks and habitat connectors.
- Ask stakeholders to further refine priorities and policy recommendations for legislative action next year. The Forest Roundtable is one venue that is well suited to respond to this request. The Roundtable could update its 2007 Report and develop a status report on the recommendations to address fragmentation.