

# Landscape Scale Planning

## Landscape-scale Conservation Planning in New England

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We are blessed to live in a region in which forests cover nearly 80% of the landscape. This is remarkable when you consider that these forests recovered from intensive cutting for a variety of forest products and extensive clearing for agriculture that left many areas with only 30 to 40% forest cover by the mid-1800s. Our current wealth of forests across New England however, faces a variety of threats that create challenges for foresters, land

managers and owners of private woodlands. Modern threats include pests and pathogens, parcelization and rapid turnover of land ownership, and adverse forests practices, all under the backdrop of a changing climate. In addition, the biggest threat to our forests is the permanent loss of these lands to deforestation and development. For the first

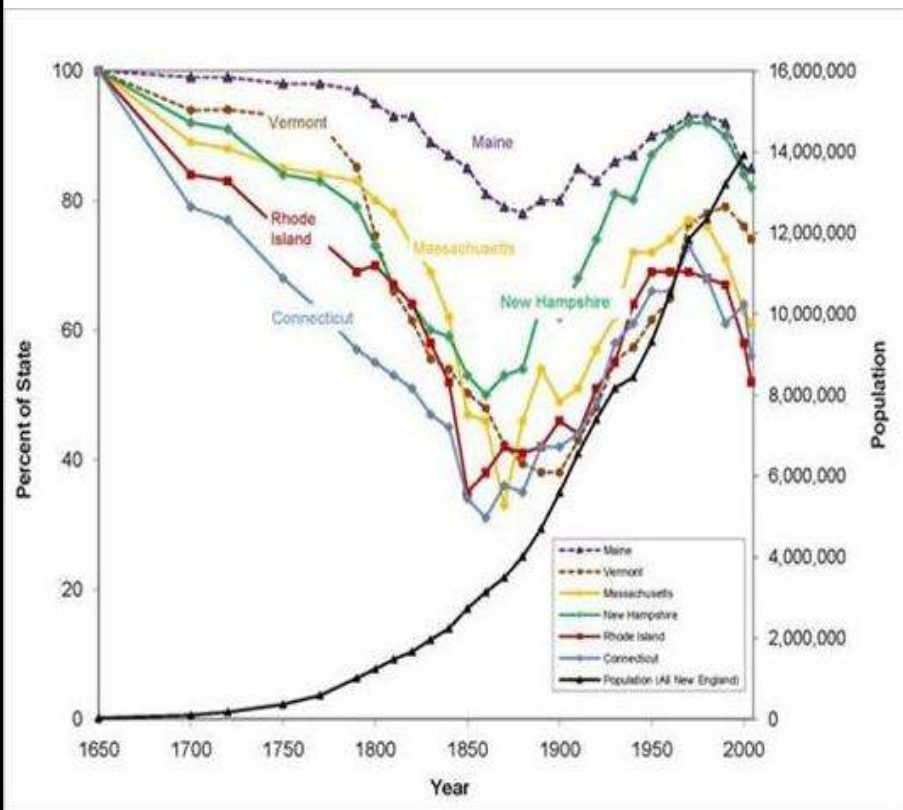
time since widespread agricultural abandonment in the mid-1800s, all six New England states are currently experiencing a decline in forest cover (Fig. 1). Although development pressure is greatest in Southern New England, considerable pressure exists in parts of Northern New England for vacation homes and remote lakefront or ocean front properties. Current estimates project that future development of private forests may reach up to 63% in

some parts of the region by 2030, if development proceeds at the current rate. We clearly are at a turning point. History has provided New England a unique opportunity to determine the fate of its 33 million acres of forests and their balance with farmland and development. Now is the time to think broadly about large-scale planning efforts to protect the majority of our vital forest resources for future generations to enjoy.

Recently, a Harvard Forest report entitled *Wildlands and Woodlands: A vision for the New England Landscape*, outlined an unparalleled, long-term conservation effort to retain at least 70 per-

cent of the region in forestland, permanently free from development. This bold vision, developed by 20 scientists across New England, would lead to a tripling in the amount of conserved land in New England while still leaving room for economic growth and development. It calls for conserving

Figure 1. Historical changes in forest cover associated with land clearing, cutting, agriculture and eventual abandonment and reforestation in all New



90% of protected forests as working **“Woodlands”** that are voluntarily protected from development and managed for a dependable supply of local forest products, clean air and water, carbon sequestration, extensive, connected wildlife habitat and recreation areas, aesthetics, and other objectives. Meanwhile 10% of forestland would be conserved as **“Wildlands”** that are established by landowners

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as large landscape reserves subject to minimal human impact and shaped by natural processes. Wildlands support complex, aging forests, store large quantities of carbon, provide rare habitats for a diverse array of plants and animals, and serve as unique scientific reference points to evaluate all types of Woodland management. The proportions of conserved land in these categories would vary across the region, depending on current conditions, development pressures, and conservation opportunities.

To achieve the Wildlands and Woodlands vision, a doubling in the rate of land protection is necessary over the next 50 years (Fig. 2). Is this scale and rate of conservation really possible across a landscape of millions of acres of forests and hundreds of thousands of intermingled ownerships? As

landowners; *innovative finance tools* that expand incentives for private landowners; and *conservation strategies* that address parcelization, fragmentation, and sprawl. The full report offers examples of specific actions that landowners, non-governmental organizations, and local, state, and federal government can take to help make the Wildlands and Woodlands vision a reality.

One existing mechanism that is complementary to the Wildlands and Woodlands vision is the New England-New York Forestry Initiative (formerly the Keeping Forests as Forests initiative). All the New England states and New York are participating in this United States Department of Agriculture (USDA) initiative, the goals of which are to protect the region's forest land-base, ensure the sustainability of these lands, and help strengthen rural, forest-based economies. This initiative, led by

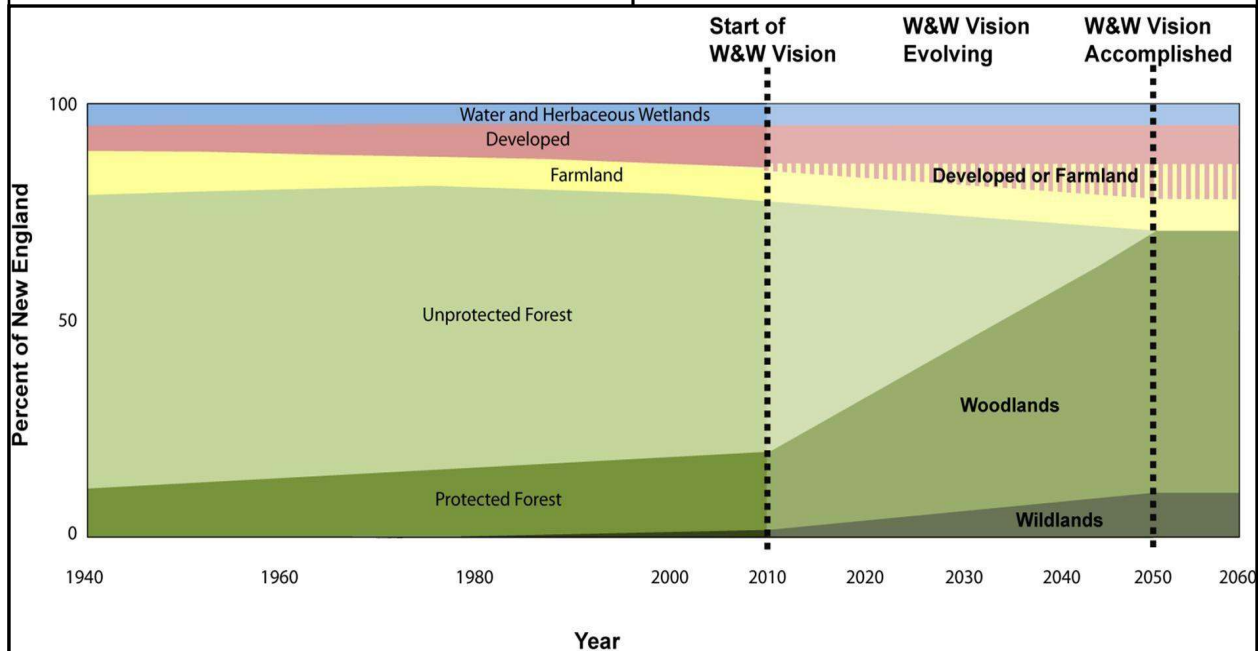


Figure 2. Projections for the implementation of Wildlands and Woodlands. Note: roughly a doubling in the rate of forest conservation over current levels is needed to achieve the vision within 50 years.

one of the report's authors, I say the answer is unequivocally, yes- with a lot of hard work and innovative approaches! The vision's success relies on thousands of willing private individuals, organizations, and communities that depend on the land and are invested in shaping its future. Fortunately, a number of successful conservation initiatives and funding programs already exist in the region. Activities that can help foster large-scale conservation include: *regional partnerships* that enhance existing networks of conservation and forestry professionals and increase engagement with private

each of the eight State Foresters, will be accomplished by landscape-scale planning efforts that emphasize connectivity among forest lands. The intent is to create partnerships across agencies and borders, spur job creation and maintenance by improving forest-based economies, and enlist additional financial support from private and philanthropic sectors. The initiative will begin by establishing a series of pilot projects across the NY-NE region, evaluating their effectiveness, and then extending their application across the region.

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A New England region that retains 70% of its forests is an attainable vision that resonates with the Northeast's history of bold conservation thinking. The Wildlands and Woodlands vision and the New England-New York Forestry Initiative are important examples of landscape-scale conservation efforts necessary for the protection of our natural infrastructure that is vitally important for a whole range of ecological, economic, and social benefits now and in the future.

To view the full Wildlands and Woodlands report: [www.wildlandsandwoodlands.org](http://www.wildlandsandwoodlands.org)

### **Forest Stewardship Project – A Landscape-Scale Approach to Forest Stewardship** **Mike Huneke and Roger Monthey, US Forest Service, State and Private Forestry**

The U.S. Forest Service, Northeastern Area (NA), has been working with State forestry agencies over the past two years to dramatically increase the impact and influence in the stewardship of privately owned forests in the 20-state region which comprises the NA. Mike Huneke, Forest Stewardship Program Manager for the U.S. Forest Service in Newtown Square, PA is currently the leader of this effort which has been dubbed the "Stewardship Project". The "Stewardship Project" is focused on "Keeping Forests as Forests" using landscape-scale planning and working to improve our connections with interested agencies, non-profit organizations and forest landowners to help achieve this goal. Some salient facts include: 1) by 2050 the population of the Northeast and Midwest states will increase roughly by 10% and urbanized area will more than double resulting in 10 million acres of privately-owned forestland being converted to other uses; 2) the capacity of state forestry agencies to respond to that pressure is not encouraging, with a growing demand for services at the same time that they have lost about 40% of their program delivery capacity across the region; 3) according to the National Woodland Owner Survey estimates as few as 4% of family woodland owners have a management plan, and only 14% consult a forester; and ownerships change hands every 26 years, adding up to a downward spiral of ownership sizes and an overall erosion and permanent loss of private forestland.

So what can we do about this? The NA formed a Stewardship Project steering committee to head up the effort. A variety of workgroups were formed included: Landscape-scale planning – developing guidance and recommendations on how successful implementation of landscape-scale stewardship

might be achieved; Communications and Marketing – improving the effectiveness of our outreach with landowners and the public; Engaging Communities – developing tools and strategies to more successfully connect landowners and the communities in which they live; Measures and Metrics – developing more encompassing, impact-based measures for Stewardship accomplishments, beyond just the number of Stewardship Plans and the acreage of those plans; and Financial Viability – developing tools and policies to reduce costs, increase revenue and enhance the perceived value of sustainably managed privately owned forests. Fourteen of 20 NA states have provided technical assistance to the overall effort.

A major accomplishment of the Stewardship Project to this point is the development of the "Landscape Scale Stewardship Guidance Document" which was written by Lindberg Ekola of the State of Minnesota and Paul Wright, retired U.S. Forest Service, Chattanooga, TN with collaboration from several members of the Steering Committee. This document addresses the following questions: 1) Why landscape stewardship?; 2) What is landscape stewardship?; 3) What are the elements of a landscape project? and 4) What are the results of landscape stewardship. Secondly, a brochure has been developed "Your Landscape Stewardship Project – A Quick-Start Guide" which outlines six steps for a successful landscape scale stewardship project. The guidance and brochure documents can be obtained from Mike Huneke at [mhuneke@fs.fed.us](mailto:mhuneke@fs.fed.us), or by visiting [www.landscapestewardship.org](http://www.landscapestewardship.org). Thirdly, In June 2010, eight "Stewardship Project" proposals were selected for over \$800,000 of funding. These projects will give States direct experience in the "how tos" of successful landscape-scale planning. More information on these grants can also be obtained from Mike Huneke. Four of these projects are in New England states – Connecticut (1), Maine (2), and Vermont (1) and include: 1) University of Connecticut Cooperative Extension – "Private Forest Landowner Reactions to Community Engagement and Landscape-level Approaches to Forest Stewardship"; 2) Maine Forest Service – "Development of New Partnerships to Support and Expand the Maine Forest Stewardship Program" and "Determining Effectiveness of Landscape-level Planning"; and 3) State of Vermont: Lamoille County Planning Commission – "Landscape-based Forest Stewardship Planning – A Regional Approach".

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The next step for the “Stewardship Project” is to provide landscape stewardship training workshops to the States in the Fall of 2011. Federal and State planning specialists and other educational and resource specialists will be conducting this regional training (Mid-Atlantic, Mid West, New England and NY).

### **Landscape-based Forest Stewardship Planning – A Regional Approach in Vermont**

**Ginger Anderson, Vermont Dept of Forests, Parks, and Recreation (VT DPR), and Bonnie Waninger, Lamoille County Planning Commission, Vermont**

A consortium of 4 Vermont Regional Planning Commissions (RPCs) recently applied for and received a Forest Service “Stewardship Project” grant (awarded in 2010 to be completed by 2012) to develop a methodology for forest planning based on a landscape-scale analysis that will help “keep forests as forests” and to increase the scale and pace of sustainable management of private forest lands in Vermont. VT DPR is collaborating with the consortium, using GIS technology and a stakeholder engagement process to: 1) inventory and assess forest resources; 2) identify specific forest landscape types; and 3) produce strategies for each landscape type that will assist regions, municipalities, and forest landowners to identify priority forest landscapes and develop model forest plans. Large rural forest blocks, large and small lowland forest tracts, urban and community forests, and ecologically significant landscape types will form the basis for the analysis.

Thus far, three of the RPCs have digitized data on forest UVA parcels in their areas of responsibility and the fourth has partial data. Two RPCs have conducted informational meetings with stakeholders. All four RPCs have mapped forest resources and resource threats using data available through VT DPR and the Vermont Department of Fish and Wildlife (VT DFW). The original New England-generated threat data is being adapted to represent Vermont’s rural nature. The consortium has identified five common maps that will serve as the basis for stakeholder identification of priority forest landscapes: UVA parcels; wildlife habitat/forest blocks; forest stewardship potential; local/regional values/issues; and forest stewardship threats. Stakeholder meetings in April, 2011 will focus on map analysis and value/issue identification. While RPC GIS staff focus on map creation and analysis,

land use staff have begun researching best practice language for municipal and regional plans as well as tools and strategies that have been used effectively for local forest conservation. Tools developed from this grant will be available on-line for use by towns to address priority forest landscapes; and by consulting foresters to address these landscapes at the parcel level in plans and in applications for cost share programs. For further information on this grant please contact Ginger Anderson of VT DPR at [Ginger.Anderson@state.vt.us](mailto:Ginger.Anderson@state.vt.us).

Vermont has 11 RPCs that cover 251 towns in 14 counties. Each commission produces regional plans and assists the individual communities in the production of town plans. Among the services RPCs offer are access and maintenance of specific GIS data layers, and technical assistance for plan development.

In the 1990’s the RPCs cooperated with the VT DPR and the University of Vermont Cooperative Extension in the outreach for the project “Planning for the Future Forest.” This forest land evaluation and site assessment (FLESA) tool enabled municipalities to both outline forest values to citizens and implement evaluation of them directly to help inform planning. Some Vermont communities completed FLESA projects, but the scoring and updates were not embraced by many.

The VT DFW followed up in the early 2000’s with a community planning handbook (Conserving Vermont’s Natural Heritage – A Guide to Community-Based Planning for the Conservation of Vermont’s Fish, Wildlife, and Biological Diversity). This planning tool focused on formulating community strategies with a strong wildlife habitat and biodiversity focus.

While these tools encouraged consideration of forest habitat in local and regional planning documents, they lacked format and/or model language useful for planners. Meanwhile, VT’s RPCs recognized the impact that the State’s property tax program, or UVA, was having on retention of forest and agricultural landscapes, but incorporating this into strategies and direction for planning was difficult. Digitizing UVA parcels will greatly assist landscape-scale planning for forests in Vermont.

