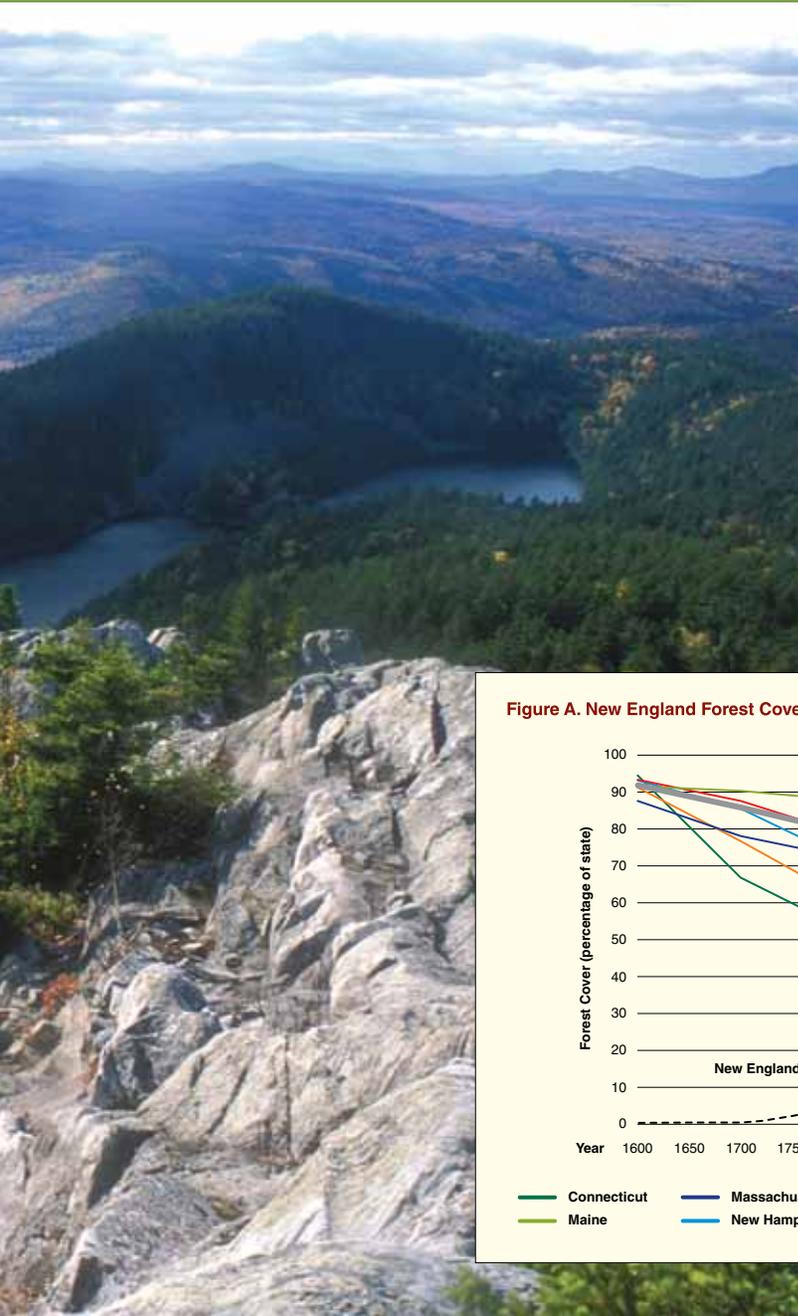


Wildlands and Woodlands

A Vision for the New England Landscape



History has provided New England with a unique opportunity: a second chance to determine the fate of its forests and their balance with farmland and development. Following an early history of forest clearing and intensive logging, much of the region has reforested since the nineteenth century. But over the past 20 years, development and parcelization have fragmented forests and farms across the region. Today, for the first time in 200 years, forest cover is declining in every New England state (Figure A).

The current wave of deforestation poses far greater ecological challenges than the episode in colonial times. The hard deforestation today, often involving the land's development to asphalt, concrete, and steel, is much more difficult to reverse than the historical clearing of land for farms and pasture. Current estimates project that development levels, if continued at the current rate, may reach 63% in some parts of the region by 2030 (Figure B).

Where development prevails, the envelope of human influence surrounding each new building and paralleling every road undermines ecosystems, threatens wildlife, and hinders many productive forest uses. Across the far north of the region, forests face parcelization and perforation due to a region-wide transition from traditional family and industrial ownership to investment ownership coupled with leisure development along lakes and ridgelines. This legal fragmentation hinders management, sets the stage for deforestation, and threatens the long tradition of public access to forests.

Figure A. New England Forest Cover and Human Population

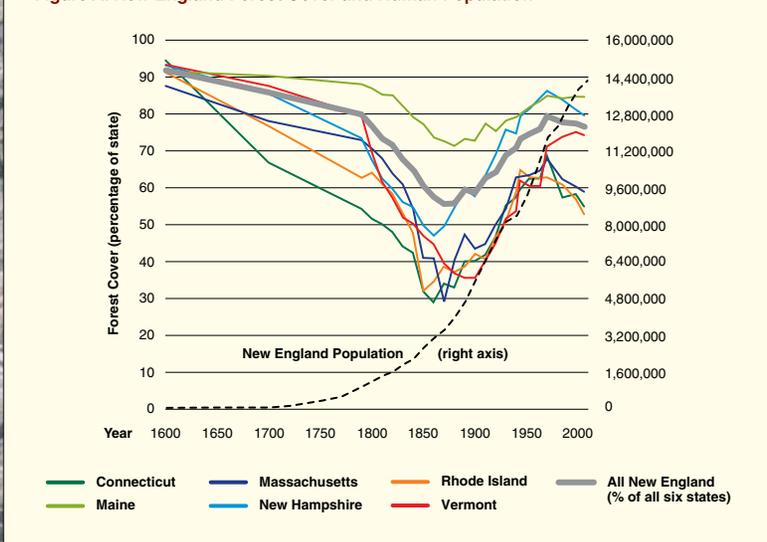
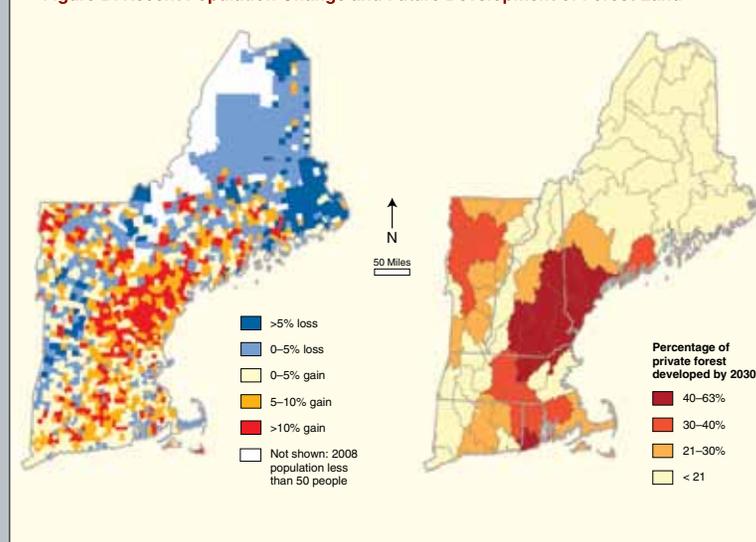


Figure B. Recent Population Change and Future Development of Forest Land



ACHIEVING THE VISION

The *Wildlands and Woodlands* vision builds on decades of planning and leaves room for continued growth and development—as much as a doubling in the amount of developed land. Though bold, the vision is achievable and financially prudent. It ensures that New England will retain the natural qualities and resources that shape its identity and support local economies, communities, and quality of life. In conserving its natural infrastructure, New England can maximize resilience to changes in climate, land use, and the economy. In so doing, the region will provide national leadership in the integration of economic prosperity, natural resource conservation, and energy and resource efficiency. Conservation today will pay lasting dividends that will only increase in value.

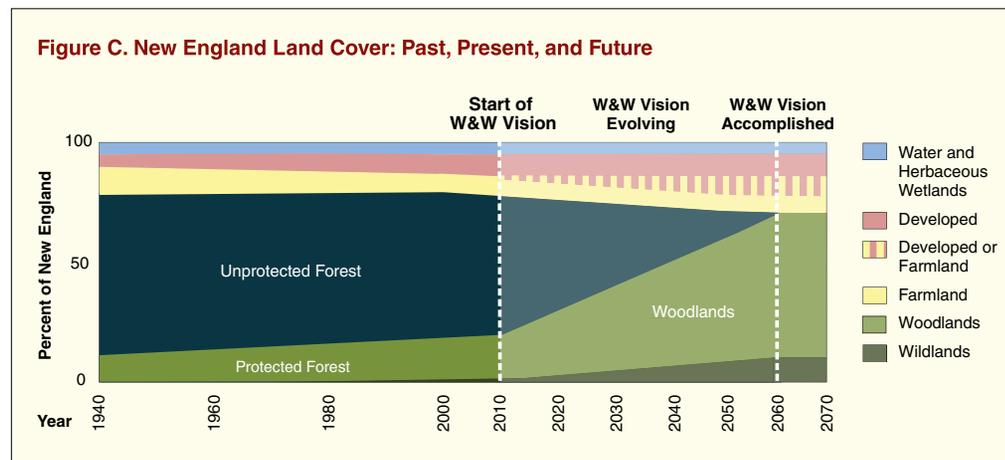
The Wildlands and Woodlands vision calls for a long-term conservation effort to retain at least 70 percent of New England in forestland, permanently free from development.

This vision would conserve 30 million acres of New England's existing 33 million acres of trees, waters, and wetlands for current and future generations (Figure C) and support:

- resilient watersheds for clean and abundant water,
- areas for recreation, hunting, and other traditional uses,
- a local source of wood and other forest products,
- a continental-scale habitat corridor for wildlife and plants, and
- a globally important source of renewable energy and carbon storage that helps slow the rate of climate change.

Together with farms and preserved open space, the natural infrastructure conserved by *Wildlands and Woodlands* would support thriving and sustainable communities with a balance of well-managed forests and protected special places.

Seldom does history provide us with second chances. Seldom does an investment in the infrastructure that supports both nature and human activity offer the promise to yield so much.



Data Sources for Figures **Figure A:** Modified and updated from Foster and Aber (2004). **Figure B:** Population map is based on data from the U.S. Census Bureau, Population Division, Washington, D.C. To represent meaningful changes, only sub-county areas with a 2008 population of 50 people or more are shown. Projected forest development map is reprinted from the *Forests on the Edge* research project, courtesy of S.M. Stein and the U.S. Forest Service. **Figure C:** Data from Foster and Aber (2004), Irland (1999), Redman and Foster (2008), NRCS NRI (1982), NLCD (1992, 2001), Wilkinson et al. (2008). **Figure D:** Map information from Highstead Regional Conservation Program.



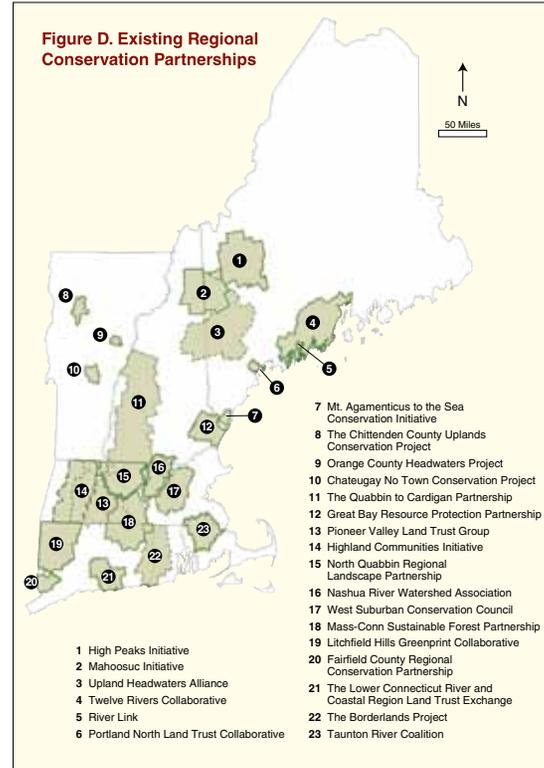
In the face of all current and future threats, the single most important action that we can take is to maintain forested landscapes on a scale that allows natural and human communities to flourish.

Achieving the *Wildlands and Woodlands* vision will require:

- **Regional partnerships** that enhance existing networks and increase engagement with private landowners interested in conservation (Figure D);
- **Finance tools** that expand incentives for private landowners and build access to conservation capital; and
- **Conservation strategies** that provide innovative approaches to address parcelization, fragmentation, and sprawl.

Protecting and sustainably managing millions of acres of forest in hundreds of thousands of intermingled ownerships is a daunting proposition. It cannot be accomplished by sweeping public acquisition or regulatory fiat. It will require working with thousands of willing private landowners who are interested in securing the future of their land through conservation easements and other approaches. Fortunately, a number of successful conservation initiatives and funding programs already exist in the region. *Wildlands and Woodlands* seeks to honor and advance the efforts of the individuals, organizations, and agencies whose legacy defines our existing conservation landscape, and whose ongoing energy is crucial to conserving the natural infrastructure upon which our future and all human endeavors depend. 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.

A New England that remains four-fifths covered with forests, farms, and aquatic ecosystems is an attainable vision that resonates with the region's history of bold conservation thinking. Protecting our natural infrastructure is also consistent with an emerging regional, national, and global focus on renewable energy, clean air and water, and on the creative slowing of climate change. It is our hope that citizens, non-profit organizations, and government agencies across the region will band together to achieve the *Wildlands and Woodlands* vision.



The full Wildlands and Woodlands report, published in May 2010, is distributed by the Harvard University Press (Cambridge, MA). For copies, visit www.wildlandsandwoodlands.org or the Harvard University Press at www.hup.harvard.edu.

Wildlands and Woodlands Authors

John D. Aber, *University of New Hampshire*
 Charles V. Cogbill, *Sterling College*
 Elizabeth A. Colburn, *Harvard University*
 Anthony W. D'Amato, *University of Minnesota*
 Brian M. Donahue, *Brandeis University*
 Charles T. Driscoll, *Syracuse University*
 Aaron M. Ellison, *Harvard University*
 Timothy J. Fahey, *Cornell University*
 David R. Foster, *Harvard University*
 Brian R. Hall, *Harvard University*
 Clarisse M. Hart, *Harvard University*
 Malcolm L. Hunter, *University of Maine, Orono*
 Lloyd C. Irland, *Irland Group and Yale University*
 William S. Keeton, *University of Vermont*
 David B. Kittredge, *University of Massachusetts, Amherst*
 Kathleen F. Lambert, *Harvard University*
 James N. Levitt, *Harvard University*
 Robert J. Lillieholm, *University of Maine, Orono*
 David A. Orwig, *Harvard University*
 Jonathan R. Thompson, *Smithsonian Institution*

WILDLANDS AND WOODLANDS: AT A GLANCE

The *Wildlands and Woodlands* vision strikes a balance between active, long-term forest management and protected special places. Expansive “Woodlands” are voluntarily conserved and sustainably managed as working forests, and targeted “Wildlands” are established as large landscape reserves.

Managed Woodlands: 63% of New England (27 million acres)

Woodlands are working forests that vary in both ownership and management types and support five objectives:

- Bolster New England’s economy by providing a dependable local resource base for sustainable wood products and future ecosystem-service mitigation markets;
- Enhance the natural benefits that forests provide: clean water and air, flood and erosion control, and carbon sequestration to combat climate change;
- Maintain access to continuous landscapes for nature-based tourism, recreation, and enjoyment;
- Provide extensive connected forest habitats for plants and animals pressured by development, natural disturbance, and climate change; and
- Expand the cover of trees in and around town centers, suburbs, and cities.

Wildland reserves: 7% of New England (3 million acres)

Wildlands are large protected areas that are identified based on local considerations and support four objectives:

- Slow the pace of climate change by supporting complex, aging forests that can store twice as much carbon as young forests;
- Provide rare habitats for a diverse array of plants, animals, and micro-organisms;
- Safeguard lands of natural, cultural, and spiritual significance; and
- Serve as unique scientific reference points for evaluation and improvement of management practices elsewhere.

A New England mosaic of Wildlands, Woodlands, working farms, and sustainable development would support a greater array of human experience, wildlife habitat, and natural benefits than any one of these could alone.

