

A Strategy for Regional Economic Resurgence

*Recommendations
of the Northern Forest*

Sustainable Economy Initiative

Initiative jointly managed by the
North Country Council and the Northern Forest Center

Joe Short, SEI Project Manager and Editor



**Northern
Forest
Center**



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A Strategy for Economic Resurgence in the Northern Forest

*Recommendations of
The Northern Forest Sustainable Economy Initiative*

Executive Summary	6
1. Regional Context & Vision	8
1.1 The Northern Forest: Land of Industry, Retreat, Stewardship, & Change	8
1.2 The Sustainable Economy Initiative	9
1.3 A Shared Vision	10
2. Northern Forest Trends: Challenge and Opportunity	12
2.1 Trend #1: Economic Change	12
2.2 Trend #2: Community Impact	16
2.3 Trend #3: Landscape Change	18
2.4 Implications for a Regional Vision & Strategy	20
3. Long Term Goals for the Northern Forest	22
4. A Northern Forest Action Agenda: Ten Recommendations	29
Telecommunications	31
Creativity and Entrepreneurship	32
Transportation Infrastructure	35
Regional Marketing	37
Local Purchasing and Ownership	39
Renewable Energy	40
Regional Assets	43
Forested Landscape	45
Federal Investment	47
Public-private Regional Coordination and Advocacy	50
Endnotes	52

EXECUTIVE SUMMARY

The Northern Forest Sustainable Economy Initiative (SEI) began in 2006 with the goal of developing “community and economic development strategies across the region to reinvigorate the rural economies of the Northern Forest.” The initiative was created by the governors of Maine, New Hampshire, Vermont, and New York in partnership with the Northern Forest Center and the North Country Council of New Hampshire.

I. The Case for Northern Forest Regional Action

URGENT CHALLENGES: The Northern Forest is at a unique and important point of transition. The aging of the region’s industrial and tourism infrastructure and population, the opening of new areas of forest economy around the world, the dawn of the information era, soaring energy costs, climate change, and new demands on the region’s natural resources are all combining to create new and challenging realities for the people, communities, economies, and landscape of the region.

NEW OPPORTUNITIES: The global trends that bring challenge are also creating great economic opportunities tied to the region’s character and ecosystem. Landscape, quality of life, and culture are the new comparative advantage for rural communities, and the Northern Forest is rich with these assets. Potential new products and services from the landscape and the region’s proximity to major markets hold great promise for business development. A high concentration of colleges and universities can serve to generate new ideas and train new workers for these opportunities.

NEW APPROACHES: These new realities require new approaches. Unlike an earlier era, when large corporations provided financial capital to take advantage of the region’s natural capital to build business, wealth, and employment in the Northern Forest, a next generation of economic development in the Northern Forest will be led by smaller businesses and civic organizations. In an increasingly global marketplace, however, the region’s leaders must invest extra effort to inform, connect, and provide financial support and infrastructure to enable these ventures to thrive. This capacity building is the key to rebuilding the economic future of the Northern Forest.

REGIONAL ADVANTAGES: The region’s governors, its congressional delegation, and numerous business, civic, and non-profit leaders have recognized the value of acting together to create a critical mass of leadership, ideas, and resources for the betterment of all. A key role for regional action is to provide critical capacity to make it easier and more rewarding for enterprises and initiatives of all sorts to thrive, while safeguarding and enhancing the shared resources – human and natural— that support and enrich the people and communities of the region.

II. Shared Vision and Strategy

For the past two years, leaders from across the Northern Forest region have come together to understand the common challenges and opportunities facing the region and develop a shared vision and strategy for revitalizing the Northern Forest economy and sustaining the long term health of its people and lands. Together, they have developed a strategy to secure a future in which:

The Northern Forest region is globally recognized for its vital regional economies and communities and the unique culture and ecosystem that support them.

To reach this vision, the SEI participants have agreed to a long-term, integrated strategy that calls for action in three areas:

- **Protect and enhance the region’s assets:** Invest in the people, communities, infrastructure,

and natural resource base that are the foundation of the Northern Forest's distinct regional character and competitive economic advantage.

- **Expand Enterprise:** Create a fertile environment for workforce, entrepreneurial, and business development and increase the region's ability to develop and commercialize new products and services that capitalize on the assets of the Northern Forest.
- **Coordinate and Advocate as a Region:** Increase the capacity of the region's individuals and institutions to anticipate and adapt to change, and implement new initiatives by working and coordinating as a region to understand and advocate for regional interests and priorities.

III. A Northern Forest Action Agenda: Ten Recommendations

To begin implementation of the shared strategy, the SEI committee recommends the following ten actions as immediate priorities. In keeping with the model of the SEI, the committee recommends that these actions be coordinated regionally and include public, private, and non-profit sector leadership. The members of the committee stand ready to work with the Governors to take these ideas to action.

- **TELECOMMUNICATIONS-** Deliver reliable, affordable and cutting-edge high-speed telecommunications to all Northern Forest communities through increased public-private investment.
- **CREATIVITY AND ENTREPRENEURSHIP-** Develop programs to support creative and entrepreneurial people in building businesses that are based on and enhance the natural and cultural resources of the Northern Forest.
- **TRANSPORTATION INFRASTRUCTURE-** Develop globally competitive energy efficient, multi modal public/private transportation systems to interconnect the region and its communities and support regional, national, and international trade.
- **REGIONAL MARKETING-** Develop coordinated marketing of Northern Forest products, businesses, tourism services, amenities and attractions, while maintaining individual state branding efforts.
- **LOCAL PURCHASING & OWNERSHIP-** Support activities that encourage Northern Forest residents, visitors, institutions and government to "buy local."
- **RENEWABLE ENERGY-** Launch a four-state, Renewable Energy Initiative that encourages energy efficiency, increases public and private investment in a diversity of energy systems, maximizes community wealth and complements stewardship of the region's natural resources.
- **REGIONAL ASSETS-** Invest in research, tracking, and forecasting of natural, social, and economic assets in order to make informed decisions to understand anticipate and adapt to changes in the region.
- **FORESTED LANDSCAPE-** Maintain forests to protect and enhance the essential economic and ecological services derived from the landscape and to capture value from emerging markets.
- **FEDERAL INVESTMENT-** Maintain and grow funding for new and existing federal programs that serve the long term strategies outlined in this report; analyze and identify opportunities to more explicitly align existing federal programs with the strategies outlined in this report.
- **PUBLIC-PRIVATE REGIONAL COORDINATION & ADVOCACY-** Establish a coordinating body of the Northern Forest states to support implementation of the recommendations outlined in this report, continue regional coordination, and address future challenges and opportunities.

REGIONAL CONTEXT & VISION

The Northern Forest: Land of Industry, Retreat, Stewardship, & Change

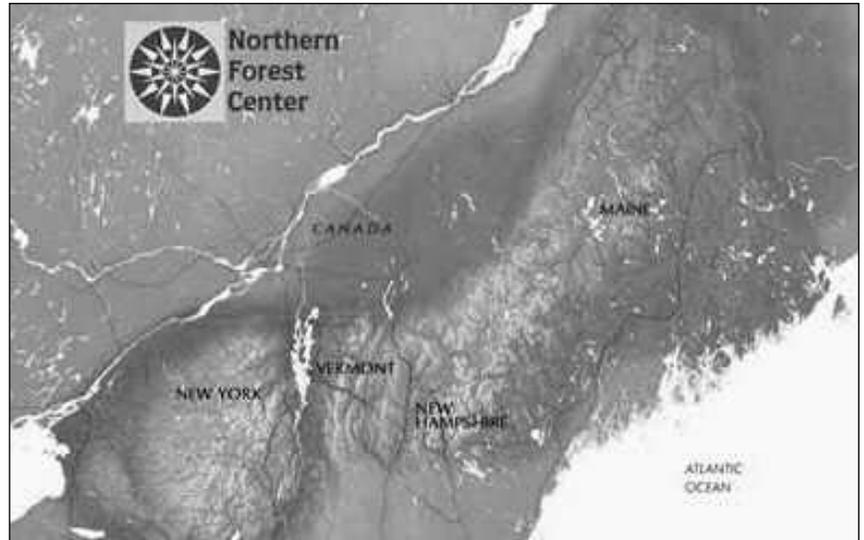
The Northern Forest region is home to the people, communities, and ecosystems of the largest intact forest in the eastern United States. Its story is one of people continually adapting to the challenges and opportunities presented by the natural world and by the local, national and global forces that have led to dramatic economic, environmental, and cultural transformations.

Home to over 2 million people, this nationally significant region stretches nearly 400 miles from New York's Tug Hill Plateau and Adirondack Mountains, across Lake Champlain and Vermont's Northeast

Kingdom and northern Green Mountains, New Hampshire's North Country and White Mountains, and Maine's Western Mountains, Highlands, St. John Valley and Downeast Lakes to the border with Canada. It is a region tied together by boreal and northern hardwood forests, wetlands, lakes, rolling hills, and rugged mountains.

The human cultures, economies, and communities

of the Northern Forest are tied inextricably to the character of the land. For centuries, the forest has underpinned the region's economy, served as the source of its people's identity and lore, and provided recreation, retreat, and renewal for residents and visitors alike. In regional, national, and even international history, the Northern Forest region has served as both an experiment and a model for sustaining land and people, together, as a land of industry, retreat, stewardship, and change.



A LAND OF INDUSTRY: Innovation has been a constant in the Northern Forest economy. One hundred years ago Berlin, New Hampshire—the “City That Trees Built” was a worldwide center of research and development in papermaking. Millinocket, Maine—“the Magic City”—sprang up out of the wilderness in 1899, an enormous and prosperous industrial city in one of the most remote corners of the country. Bangor, Maine and Burlington, Vermont competed for the title of lumber capital of the world. International Paper—now the largest pulp and paper company in the world—was formed in New York's Northern Forest in 1898 with the merger of 17 pulp and paper companies. An entire economy of countless jobs, great wealth and hundreds of communities were created and sustained by the forest.

A LAND OF RETREAT: For centuries the forest has served as the foundation of a rich cultural heritage and as a source of recreation, inspiration, and renewal for millions of residents and visitors. The Northern Forest's mountains were sacred places for native peoples. Later, European-American artists, poets, and philosophers found inspiration here. Their creative works encouraged tourism and helped shape American attitudes toward nature. By the late nineteenth century and early twen-

tieth century, a new industry emerged in the Northern Forest as people flocked to the region for fresh air and a healthy lifestyle, escaping the smog and congestion of newly-industrial cities.

A LAND OF STEWARDSHIP: Caring for the land has long been part of life in the Northern Forest. In the late 1800s, interest in forest-based tourism and concern over clearcutting planted the seeds for some of America's earliest and most innovative land protection efforts. At the same time, a desire to sustain soil productivity, watersheds, and timber supply made the Northern Forest the site of early experiments with scientific forestry and conservation. Vermont native George Perkins Marsh was among the first to point out the long-term impacts of human activity on the natural world, and his writings outlined many of the ideas of the modern conservation movement. Many of the ideas Gifford Pinchot brought to his job as first head of the U.S. Forest Service were learned through his work as a forester in the Adirondacks. Concern about impacts on downstream water quality from timbering in New Hampshire's White Mountains led to the creation of the Weeks Act in 1911—a landmark public policy in recognizing the value and importance of ecosystem services provided by forests. In recent times, public-private partnerships have resulted in significant conservation efforts in the region.

A LAND OF CHANGE: Change has been a constant in the history of the Northern Forest and is especially present today. Challenges and opportunities scarcely imagined 100 years ago now face the region. World-wide trends of globalization, climate change, energy security, new communication and information technologies, and a growing and shifting population are challenging the economies, communities, and landscapes of the Northern Forest. Yet this time of global transition presents opportunities as well. As they have in the past—in the eras of settlement, industrialization, grand hotels and conservation—the people of the Northern Forest face new challenges in learning how to sustain community, economy, and land. And once again, the region has an opportunity to be a leader for the rest of the world—this time in modeling how forests and forest communities can thrive together in this new era.

The Sustainable Economy Initiative

The people and communities of the Northern Forest are known for their independence and self reliance. Yet as the recent waves of transition have washed over the region, people from all four states have come together to understand complex issues and work together for solutions.

The “Northern Forest” region first joined together in the late 1980s in response to the large-scale sales of paper company lands across the northernmost parts of Maine, New Hampshire, Vermont, and New York. Land conservation efforts spurred by the four-state Northern Forest Lands Council (1990-1994) and other regional efforts have since resulted in the conservation of over 3 million forest acres in the region, representing over \$500 million in public and private investment.

Now a new four-state collaboration is working to bring a similar degree of coordination and resources to economic revitalization in the Northern Forest. The Sustainable Economy Initiative was created in 2006 by the governors of the four states in partnership with the Northern Forest Center and the North Country Council. The project is implementing the first recommendation of the Northern Forest Lands Council 10th Anniversary Forum sponsored by the North East State Foresters Association, which called for the development of “community and economic development strategies across the region to reinvigorate the rural economies of the Northern Forest.”

10 REGIONAL CONTEXT

A Shared Vision

The Sustainable Economy Initiative has been led by a four-state Steering Committee appointed jointly by the four governors and the project managers, and funded by the federal Economic Development Administration and private contributions. The committee is made up of more than 50 government, community and business leaders representing diverse sectors—arts, tourism, forest products, education, the environment, utilities, banking, and community and economic development. For over two years, the group has come together to understand the shared challenges facing Northern Forest communities, identify the region’s assets and opportunities, and agree on a shared vision and strategy for revitalizing the Northern Forest economy and sustaining the long term health of its people and lands. *The Strategy for Economic Resurgence* represents the product of that the Steering Committee’s work.

“...Since the release of Finding Common Ground by the Council in 1994, general economic issues in the region have moved front and center. We must now focus our efforts to sustain and enhance the economic base of local communities and the forest products industry. While the NFLC identified many factors to strengthen the health of private landownership and the forest products industry, it gave inadequate focus to the economic health of communities. We recognize the need to make an effort to solve these issues equivalent to that dedicated to the conservation challenges of the 1990s. The interests that were represented around the table in the NFLC are part of the solutions, but other parties and expertise are needed in the dialogue going forward.” (*Northern Forest Lands Council 10th Anniversary Forum Final Report*, April 25, 2005)

A Shared Vision

The Northern Forest Sustainable Economy Initiative is grounded in the belief that the natural and cultural assets of the Northern Forest can once again be the basis for a vibrant rural economy. Building on the pedigree of the regional initiatives that have preceded it, the SEI offers the following vision for the region:

The Northern Forest region will be globally recognized for its unique character and ecosystem that support vital regional economies and communities.

Three guiding principles have been identified to support the vision for the Northern Forest:

BUILD SUSTAINABLE WEALTH: Identify economic revitalization strategies that build not only the economic wealth of the Northern Forest, but social and environmental wealth as well.

WORK THROUGH NETWORKS: Create a critical mass for action by working together across boundaries and building on good work already in place.

THINK AND ACT AS A REGION: Distinguish the region globally and solve problems locally by increasing the region’s collective financial, political, and institutional capacity.

The guiding principles support a vision of the Northern Forest that will be characterized by healthy communities, healthy economies, healthy ecosystems and a healthy region. The SEI has developed a blueprint to take the first steps in securing a future characterized by:

Healthy Communities

- Communities where people of all ages and backgrounds choose to live because they can enjoy economic opportunity, good health and health care, access to the land, connections to family and friends and a rich cultural life.
- Communities that value education; where a quality education reflects the character, assets and needs of local places and people, and raises levels of learning.
- High civic engagement, where citizens from all points of view participate in community affairs and planning, where voters turn out in high numbers and volunteerism is strong.
- Communities whose physical infrastructure provides sound and safe places to live and a modern foundation for economic revitalization.
- People and communities with the capacity to face the local, regional and global challenges presented to them.

Healthy Economies

- Strong, diverse place-based economies that provide living wage jobs, attract investment and enable people to create and buy local goods and services.
- An innovative and resilient economy, aware of its position in the global economy and quick to respond to new opportunities.
- A revitalized forest industry recognized worldwide for ecologically sound practices, innovative products and skilled craftsmanship.
- World-class tourism and recreation rooted in experiences of a spectacular natural landscape and the region's unique stories, history, cultures, arts and traditions.

Healthy Ecosystems

- A forest land ownership and conservation ethic that respects the contributions and complementary roles and varieties of private and public forests and values the full set of economic, aesthetic, and ecological values they provide.
- Concentrated human settlements that provide diverse human experiences in a forested landscape.
- Working landscapes and a mix of landownership patterns, sizes and uses that safeguard the land, water, air, plants and animals and all of nature's ecological processes.

Healthy Region

- New ways of working together across all sectors of the economy to build an environment of innovation.
- Pride in a distinct regional identity rooted in a shared landscape, history, culture and economy that transcends political boundaries.
- Regional infrastructure that provides communication and transportation systems, social networks and "green infrastructure" that can link places within the region to each other and to the world beyond.
- A commitment to working together across the social, economic and geographic barriers that so often divide people.

NORTHERN FOREST TRENDS: CHALLENGE AND OPPORTUNITY

The Northern Forest is at a unique and important point in its history. The dynamics of large scale global economic change and demographic shifts are creating tremendous challenges in many parts of the Northern Forest, while the same forces bring new opportunities to other communities. The following section presents a synthesis of the important trends, challenges, and opportunities facing the region and is a basis for understanding how the region might work together in this new era.

Few simple descriptions of social and economic circumstances in the Northern Forest adequately convey its diversity, and generalizations about the region as a whole can be deceptive. While the region is united by strong ties to the forest landscape and maintains many common ecological and cultural features, it is highly diverse with respect to social and economic trends and conditions, settlement patterns, and industrial structure. For example, nearly a third of the region's counties contain or are near large population centers, while a third are very remote. For every county that is losing population, there are two that are growing. For every county that depends on manufacturing for its economic well-being, there are two that either depend on services or do not rely on any one industrial sector.

Yet the region shares common challenges and opportunities despite its diversity. As a whole the region is faring better than many rural parts of the United States. When considered in this national context and in light of global trends as well, the Northern Forest region is united by three common trends:

#1: Economic Change

The economic foundations of the Northern Forest region are shifting, as historic industries transition and new ones emerge in response to globalization and new consumer demands.

#2: Community Impact

Northern Forest communities are facing new demographic, economic, and civic realities—some positive, some challenging—as they try to adapt in a changing world.

#3: Landscape Change

The character, use, and health of the Northern Forest landscape is changing in response to new ownership patterns, stewardship practices, conservation, climate change, and other factors.

The challenges and opportunities of each of these trends have been analyzed to establish a baseline understanding of changes occurring throughout the Northern Forest, and the potential for strategic interventions to support the region's economy, communities and environment

Trend #1: Economic Change

The economic foundations of the Northern Forest region are shifting, as historic industries transition and new ones emerge in response to globalization and new consumer demands.



1.1. Long-term industrial trends in the Northern Forest parallel those of the United States, with employment in the once-dominant manufacturing sector declining as employment in services (including health care) and retail trade continues to increase.

Challenges

MANUFACTURING DECLINE: Manufacturing employment ranked first in the region, accounting for about 33% of total employment, until the mid-1970s. By 2000, the manufacturing

sector had lost 35,000 jobs, leaving manufacturing third in terms of total employment and accounting for only 15% of total employment. This manufacturing employment decline has been significantly more pronounced in the Northern Forest than in the United States as a whole.

STAGNATING AND DECLINING WAGES: Declines in manufacturing employment in the region have been offset by increases in service and retail jobs, but real earnings per job in these industries either declined slightly (retail) or stagnated (service) from the 1970s to 2000.

LIMITED HIGH TECH POTENTIAL: The region has relatively low presence and employment concentration in high technology industries. In the Northern Forest 2% of total employment is in high technology industries compared to the national average of 5.3%.

FEW HIGH-END SERVICE JOBS: The region has a low concentration and base of professional and technological services and finance and insurance industries employment. The US average employment in the finance and insurance industry is 5.1% compared to 3.4% in the region. The region's employment concentration in professional and technical services is 3.3% percent compared to the national average of 6.1%.

Opportunities

NEW GROWTH: The rising tide from growth in service and retail has allowed counties where these industries dominate to lead the region in terms of population growth, household income growth, poverty reduction, and improvements in employment rates and educational attainment.

ECONOMIC DIVERSIFICATION: While difficult in the near term, the move away from a small number of large employers has created an opportunity for economic diversification in the region, which in the long term can lead to a more stable and resilient employment base.

A STRONG CREATIVE CLASS: The region has relatively strong potential and high concentration in Creative Class occupations, particularly education and training, health care and artists and writers. The creative class can contribute directly to regional economies, through their new ideas, products, services and businesses and also indirectly by their presence they can contribute to the quality of life of an area and thus help retain and attract other highly skilled workers.

HIGH CONCENTRATION OF COLLEGES AND UNIVERSITIES: The region has a relatively high concentration of bachelor's degree awarding institutions, with bachelor degree completions per capita above the national average, including in computer, engineering, math and physical sciences.



12 Despite changes in employment, products and services derived from the forest remain central pillars of the region's economy, yet both industries are changing.

Challenges

A FOREST INDUSTRY IN TRANSITION: Forests in other parts of the country and the world produce wood more quickly and more cheaply than this region. Overseas labor cost advantages as large as 20:1¹, coupled with cheap global transportation and the high cost of energy in the Northern Forest, are pulling investment in wood processing and manufacturing to other countries. The forest stewardship and forest products manufacturing workforce of

14 NORTHERN FOREST TRENDS: CHALLENGE AND OPPORTUNITY

Trend #1: Economic Change

the region is aging and declining in numbers. U.S. demand for wood is level. Taken together, these trends point to a long term and wholesale transition in the traditional forest products economy of the Northern Forest.

TOURISM JOB QUALITY: In 2004, the average annual wage per job was lowest (\$28,541) in recreation dependent counties in the Northern Forest region, a finding consistent with the lower-skill, lower-wage service jobs that make up much of the employment in recreation dependent places. The lack of health and other employment benefits is another challenge often faced by workers in the tourism industry.

TOURISM INDUSTRY SCALE: Despite the historic importance of tourism in the Northern Forest economy, the full potential of nature based recreation and heritage tourism in the region has not yet been realized. Putting the pieces in place to draw significant new visitor dollars in to the region is a massive endeavor. For example, David Vail, a Bowdoin College economist who has studied tourism in Maine extensively, has concluded that “A big supply-side task is to combine the rim counties’ [Maine’s forest counties] outstanding natural attractions more effectively with heritage, contemporary culture, and high quality dining and lodging. That is what it will take to draw sizable numbers of new first time visitors, particularly ‘experiential tourists’ and visitors from outside our traditional New England and Mid-Atlantic recruiting grounds.”² While many of the communities, organizations, and agencies working on tourism in the region agree on the types of services and experiences most appealing to visitors and see the opportunities that might result from collaboration, very few have the resources to coordinate and lead regional or even sub-regional efforts.

SEASONAL VARIATION & CLIMATE CHANGE: The forest and tourism industries are both subject to seasonal variation that may have greater impacts as climate changes. For the forest industry, a warming climate may mean a change in forest type to lower value species and shorter windows of time for harvest and stewardship activities each year, with potential economic impacts in the billions.³ Tourism and recreation opportunities will be affected in all seasons, with the most significant impacts in winter months as the depth and length of snow cover declines.

Opportunities

A WORLD CLASS RESOURCE: The forest itself is the region’s biggest asset, and products and experiences from the land are what bring people and business to the Northern Forest. A century ago the attractors were vast wood supplies, fertile valleys for farming, powerful rivers to power mills, and striking vistas. These assets remain today and contribute significantly to the regional economy. By realigning the products and experiences provided by the Northern Forest landscape with new global trends and demands, these assets can serve as the roots for significant economic revitalization.

NICHE MANUFACTURING: The sometimes grim employment realities in the forest industry are part of a necessary increase in overall productivity that can leave the industry in a healthier and more stable position. Niche manufacturers of forest products and those with new business models are finding some success.

NEW BUSINESS MODELS: Moving away from the prevalent mass production business model to a new approach characterized by mass customization, speed of delivery, and service is one way in which wood products manufacturers in the region are beginning to see potential to successfully differentiate themselves in the marketplace. With this business model, manufacturers can take advantage of advances in manufacturing and information technolo-

gy to provide customers with a customized, quickly delivered product and a buying experience that cannot readily be matched by overseas manufacturers.

NEW PRODUCTS: Advances in wood chemistry are opening up a wide range of possible new products from wood, including biofuels such as cellulosic ethanol and bioproducts. These products hold great potential to complement existing uses of wood.

QUALITY EXPERIENCES: The Northern Forest is home to a high density of nature recreation and heritage-based activities in a time when consumers are looking increasingly for these types of experiences. “Experiential” tourism—encompassing ecotourism, nature, heritage, cultural, and soft adventure tourism, as well as sub-sectors such as rural and community tourism—is among the tourism sectors expected to grow most quickly over the next two decades.⁴ In 2004, ecotourism/nature tourism was growing globally three times faster than the tourism industry as a whole.⁵ In light of these trends, the natural and cultural amenities of the Northern Forest have the potential to draw significant revenue to the region, if they can be paired with the appropriate services, infrastructure, and marketing.

PROXIMITY TO MARKETS: One key advantage for companies in the region is physical proximity to large retail markets in the northeast United States and southeastern Canada. Over 70 million people live within a days drive of the Northern Forest.

✓ 1.3. New or modified forms of regional infrastructure are required to compete in a globalized economy.

Challenges

TELECOMMUNICATIONS: Major portions of the Northern Forest are without cell phone service and affordable and reliable high speed internet access. Of those areas that are served by DSL, the service is typically only available within a certain distance of phone company facilities. With cell phone and wireless internet, topography is an impediment. Satellite services remain relatively expensive and slow for those needing to upload data. Much of northern Maine is without any broadband service at all. Progress has been slow as state governments have been reluctant to get involved in an arena traditionally viewed as private, and private companies can not obtain adequate return on investments in sparsely populated areas.

TRANSPORTATION: Major highways in the Northern Forest run primarily north-south. East-west freight and passenger traffic is forced to travel around the region or on state highways and smaller federal highways such as US 2, US 4, and US 302. This leads to higher costs for business due to the added time; the region’s truck freight cost is on average 45% to 65% higher than the national averages. Relatively little freight is handled by rail in the region due to limited infrastructure and lack of an east-west connection across the whole region. Commercial air connections are limited to airports in population centers on the fringes of the region.

DEPENDENCE ON IMPORTED ENERGY: Fossil fuel purchases drain an immense amount of wealth from the Northern Forest region. In 2006 petroleum products purchases for fuel in the region caused an estimated outflow of about \$4.8 billion dollars, with the outflow for purchases of natural gas estimated at about \$1.1 billion—a total of \$5.9 billion dollars. To put this figure in scale, the contribution to Gross State Product from the entire agriculture, forestry, fishing and hunting sectors in the four states combined was \$5.75 billion dollars in 2004.

16 NORTHERN FOREST TRENDS: CHALLENGE AND OPPORTUNITY

Trend #1: Economic Change

Trend #2: Community Impact

HIGH ENERGY COSTS: Energy costs are frequently cited as a barrier to businesses locating or expanding in the region. Energy costs are rapidly rising everywhere, but the Northern Forest Region has some of the highest cost energy in the contiguous U.S.

Opportunities

RENEWABLE ENERGY: The Northern Forest region has several commercial scale, indigenous and renewable energy resources— wood, wind, water, and solar. Increasing both local production of renewable energy and efficiency will provide a much greater degree of economic return and energy security for the Northern Forest, and make a contribution to global mitigation of climate change. Furthermore, establishing the region as a hub of renewable energy R&D and use can be a major attractor for growth, as “green” practices, communities and vendors become more important to location and expansion decisions for businesses.



1.4. The rise of “green” branding presents the Northern Forest with an opportunity to distinguish itself in the marketplace and also a risk of being left behind.

Challenges

COMPETITION FOR THE GREEN GRAIL: There is no shortage of places and businesses seeking to distinguish themselves as green, and the Northern Forest region must move quickly to stay in the race. Already the potential effects of not keeping up are evident: in Maine LL Bean recently declined to renew its long-term contract with Verso Paper because the company wants paper made under certified sustainable forestry practices that contains more recycled fiber content.⁶ And to the north, the Canadian forest industry has pledged to go carbon neutral by 2015.⁷ The window of opportunity is small for the Northern Forest to capitalize on its potential advantages in a “greening” world.

Opportunities

NEW MARKETS: Consumers worldwide are looking for ecologically conscious, “green,” and sustainable products, and with the scale and quality of the Northern Forest’s natural resources the region would appear to have a great opportunity here. Already in Maine, Time Inc.’s partnership with the Master Logger Certification Program increased the share of wood Time buys from the state from 13% to 18% from 2002 to 2005.⁸ A forest industry positioned to take advantage of such demand stands to gain in a world growing increasingly aware of its consumption choices. Other industries in the region—notably energy, tourism, and agriculture—can realize similar benefit.

Trend #2: Community Impact

Communities are facing new demographic, economic, and civic realities—some positive, some challenging—as they try to adapt in a changing world.



2.1 People in places that have depended heavily on manufacturing are struggling, while places that depend on services and/or recreation are doing relatively well.

Challenges

PEOPLE AND PLACES LEFT BEHIND: In places where opportunities for living-wage jobs have declined, many Northern Forest communities are struggling to maintain their civic structure and community and social infrastructure (housing, water and sewer, education, health care, main streets, arts and culture). Many indicators of personal well-being—e.g. education and health—are stagnant or lag the southern tiers of the Northern Forest states. The

degraded social infrastructure is insufficient to support existing year-round residents, let alone attract new ones.

GROWTH IMPACTS: While many manufacturing dependent communities struggle, some service and recreation dependent places are growing at rates up to twice the national average. Development and sprawl threaten the historic character of some communities, and are often accompanied by rising housing costs and property taxes.

VICIOUS CIRCLES: Economic stagnation has created a vicious circle in some Northern Forest communities, decreasing the stocks of ideas, leaders and leadership, workforce, and investment capital needed to break the cycle of decline. Entrepreneurs can't find investors, or investors can't find entrepreneurs; employers can't find qualified workers, or workers can't find living wage jobs

LEADERSHIP CAPACITY: Community leadership faces enormous challenges with few resources. Volunteer leadership is often overwhelmed in attempting to understand and address challenges and trends much bigger than a single community.

SHRINKING MIDDLE CLASS: The decline in number of middle-class households was steeper in the 1990s for the Northern Forest than the southern tier of the Northern Forest states or US. This trend likely reflects both increasing economic hardship and an influx of affluence in the form of relatively advantaged residents, leading to a growing income disparity between rich and poor.

Opportunities

NEW COMPARATIVE ADVANTAGE: Across the nation, landscape, quality of life, and culture are the new comparative advantage for rural communities. Recreation and high amenity areas are booming, bringing new people, resources and jobs to previously more rural and remote areas. The Northern Forest region is rich with these quality of life assets, including a strong sense of community, access to recreation, low crime rates, and high levels of social capital.

SOCIAL & COMMUNITY WELL-BEING: The social resources inherent even in some of the region's economically disadvantaged places can play a role in new development strategies. Places such as Coos County, NH; Lewis County, NY; and Orange County, VT are facing distinct economic difficulties, but the attractiveness and benefits of these places marked by high levels of social interaction and low crime can be tapped to facilitate future development.



2.2 The region's population is relatively old and getting older, a dynamic that affects the composition of the labor force as well as planning and resource requirements for the future.

Challenges

LOSS OF YOUNG PEOPLE: Between 1990 and 2005, the percent of the population aged 20-34 declined by 22.2% in the Northern Forest region. In the overall US the share of the population 25-34 years old also declined, but at less than half the rate of the Northern Forest. Trends for this age group across the country reflect a general demographic shift as baby-boomers aged out of this cohort through the 1990s, but it is also apparent that the Northern Forest is having difficulties retaining young people.

18 NORTHERN FOREST TRENDS: CHALLENGE AND OPPORTUNITY

Trend #2: Community Impact

Trend #3: Landscape Change

Opportunities

NEW RESOURCES: Retirees drawn to the Northern Forest are often a socioeconomically advantaged population with potential to bring new human and financial capital.

THE DRAW OF AMENITIES: In parts of the Northern Forest, natural, recreation, and quality of life amenities are drawing young people in to the region.

Trend #3: Landscape Change

The character, use, and health of the Northern Forest landscape is changing in response to new ownership patterns, stewardship practices, conservation, climate change, and other factors.



3.1 The tremendous land and water assets of the Northern Forest are facing new human demands.

Challenges

ECOLOGICAL DEGRADATION: The ecological integrity of the Northern Forest's terrestrial and aquatic ecosystems is threatened by climate change, acid rain, mercury pollution, invasive species and diseases, salinization of waterways, and fragmentation of the landscape.

WOOD DEMAND: New interest in use of wood for energy is raising concerns about surges and fluctuation in demand and long term sustainability of supply.

SECOND HOMES: The number of second homes as a percentage of total housing units was much higher in 2000 in the Northern Forest than in the U.S. as a whole, but this figure is declining slightly in the Northern Forest, likely reflecting the conversion of units from seasonal use to full-time residences as retirees and others move into some parts of the region. While this development does create new economic opportunity, it also results in land fragmentation and loss of productive capacity from the land.

COMMUNITY AND CONSERVATION TENSION: After nearly two decades of work there are fewer large scale conservation opportunities remaining in the region. Conservation efforts are now more closely centered on where people are, which is creating tension in some places. Recent efforts to ensure community involvement in decision-making, often through community-based conservation, are intended to alleviate these potential tensions.

Opportunities

CONSERVED LANDS: Though the Northern Forest is more than 85% privately owned, public and conservation lands in the region are notable and unique. In the last 15 years, over 3 million acres of land have been conserved in the region through fee purchase or easements, including some of the largest projects of their kind in the world.⁹ These lands are an enormous asset, protecting working forest uses, recreational amenities, ecological values for long term benefit.

CARBON: Forests accumulate the majority of the world's terrestrial carbon, and—with wetlands—are one of two land cover types capable of long-term carbon sequestration.¹⁰ This fact is significant in a world concerned with carbon control. In addition to traditional uses, monetization of ecosystem services such as carbon sequestration may provide a new economic use for the region's forests.

WATER: Critical to life, water is already a barrier to development and growth in many parts of the world, and regions with water supply will hold a competitive edge. The ecological and economic values of the Northern Forest's water resources are an immense asset.

COMMUNITY-BASED CONSERVATION: Strategies such as community forests are expanding community ownership and management of forestland. These strategies are successfully marrying multiple objectives for the land including: access and rights to the forest resource at the community level for a range of traditional uses; community participation in management decisions; value and benefits from the land to support community priorities and economic development objectives; and permanent protection of the conservation values of the forestland.¹¹ Other initiatives are underway in several areas of the Northern Forest to ensure that communities have a strong voice in efforts that may result in conservation. These efforts are intended to alleviate past tensions and ensure the most appropriate conservation tools are utilized in places where the local communities support land conservation.

3.2 Economic and social dynamics are changing ownership trends away from historic patterns.

Challenges

ECONOMIC PRESSURES: The increasing value of the land for short-term timber exploitation and/or non-forest uses (e.g. real estate development) coupled with tax pressures (property, inheritance) is making it difficult for large non-industrial forest owners to retain and manage their lands for the long term. Land uses are changing, notably towards real estate development.

CHANGING FOREST OWNERSHIP: Since the late 1980s, there has been a significant shift in land ownership in the region, from large industrial ownerships to other owner types, particularly large, non-industrial owners (TIMOs—Timberland Investment Management Organizations). While trends are still emerging in the Northern Forest, they appear directed towards smaller forest ownerships and parcelization over time. These patterns are consistent with those nationally, where by 2020, the number of private timberland owners is predicted to grow from today's 9.9 million to 12 million.¹² If these predictions play out, the results will mean negative impacts on both the health of the forest ecosystem as well as the viability of long term sustainable management and ability to keep the forest as forest.

GENERATIONAL SHIFTS IN LAND ETHIC: A generational change in forest land ownership and land ethic is occurring as longtime family landowners begin to sell or transfer land to a new generation often not connected to the land.

Opportunities

MONETIZATION OF ECOSYSTEM SERVICES: Northern Forest residents have long appreciated the full spectrum of values provided by the forest—wood, clean air, water, wildlife, and rich soils. Now, in a world concerned with carbon control, water supplies, and renewable energy, these values and services are catching the attention of a much broader audience.

EDUCATION AND PLANNING: As forest land owner patterns in the region change, there is opportunity—and need—to reach a new generation of landowners with education and planning tools for maintaining and stewarding their lands.

Implications for a Regional Vision & Strategy

The Sustainable Economy Initiative presents strategies to move the Northern Forest toward a future in which:

The Northern Forest region is globally recognized for its unique character and ecosystem that support vital regional economies and communities.

The trends, challenges, and opportunities facing the region point to three conclusions about the region's ability to achieve the vision.

First, creating vital 21st century economies and communities for the Northern Forest will require quick and continuous adaptation to externally driven trends.

The people and communities of the Northern Forest region face a new world – one substantially different from the one in which the economic foundations of the region developed over 100 years ago. The aging of the region's industrial and tourism infrastructure and population, the opening of new areas of forest economy around the world, the dawn of the information era, the demand for new sources of energy, the rise of "green" markets, climate change, and new demands on the region's natural resources are all combining to create new and challenging realities for the people, communities, economies, and landscape of the region.

New realities require new approaches. Simply "staying the course" will not lead the region to economic success, nor will it maintain the quality of place so valued in the Northern Forest.

A successful economic strategy must focus on areas where the region has a comparative edge nationally and internationally, building on internal assets to adapt to externally driven change. Northern Forest communities must create an economic foundation not just for short term success, but for long term resilience in the face of constant change.

Second, the alignment of national and global trends with the assets of the Northern Forest region creates great economic opportunities tied to the region's character and ecosystem.

Landscape, quality of life, and culture are the new comparative advantage for rural communities, and the Northern Forest is rich with these assets. The region has a relatively high concentration in creative class occupations, an indicator of the attraction and quality of a place. Potential new products and services from the landscape—forest and agricultural products, renewable energy, tourism experiences and ecosystem services—coupled with growing demand for these products, and the region's proximity to major markets hold great promise for business development. A high concentration of colleges and universities can serve to generate new ideas and train new workers for these opportunities. While the region has many challenges, it also has many assets with which to work.

Third, capacity to capitalize on new opportunities is hampered by leadership development, information, infrastructure, and investment challenges.

At the core of successful adaptation must be healthy people and vibrant communities, equipped with the knowledge and tools they need in this rapidly changing world. Current realities in this regard portray a social and economic starting point in need of shoring up, and capacity to significantly change that is beyond reach of any single community or state working on its own. Yet in contrast to the external trends over which the region has little control, addressing these capacity gaps is well within the grasp of the people of the region.

Unlike an earlier era, when large corporations such as International Paper and Great Northern Paper provided financial capital to take advantage of the region's natural capital to build business, wealth, and employment in the Northern Forest, a next generation of economic development in the Northern Forest will be led by smaller, locally grown businesses and civic organizations. In an increasingly global marketplace, however, the region's leaders must invest extra effort to inform, connect, and provide financial support and infrastructure to enable these ventures to thrive. This capacity building is the key to rebuilding the economic future of the Northern Forest.

Small communities and small businesses—especially in a rural area like the Northern Forest—need assistance and support to provide these capacities. By collaborating regionally, Northern Forest communities and businesses can create a critical mass of leadership, ideas, and resources to advance significant economic change and achieve success in a global marketplace. The region finds three specific advantages in working together:

- **SHARED CHALLENGES AND OPPORTUNITIES:** Northern Forest communities have a commonality that is far stronger east-west than it is north-south. As noted in the NFLC 10th anniversary report, they have “much more to learn from each other's successes and much to gain from coordinating their respective action.”
- **GEOGRAPHIC SCALE:** In a global economy, regions are rapidly becoming the locus of effective economic development due to their ability to offer a diversity of people, knowledge institutions, land types, and services to businesses¹³—a diversity that individual rural communities and even states often cannot match.
- **REGIONAL VOICE:** Northern Forest communities are physically isolated from the centers of financial and political power and influence. Yet the region working together can enlist the attention of four governors, eight U.S. senators, and nine U.S. House members. For visibility and funding, this bloc can be of much greater value than the representatives of one state alone seeking backing for a limited goal.

A key role for regional action is to provide critical capacity to make it easier and more rewarding for enterprises and initiatives of all sorts to thrive, while safeguarding and enhancing the shared resources—human and natural—that support and enrich the people and communities of the region.

LONG-TERM GOALS FOR THE NORTHERN FOREST

The charge given to the members of the SEI steering committee by the governors of the four states was to “develop and implement community and economic development strategies across the region to reinvigorate the rural economies of the Northern Forest.” To develop these strategies, the committee used a consensus-based decision process that built upon the collective experience of its members. The members participated in stakeholder meetings in each state and received primary and secondary research on the Northern Forest region's economy, communities and environment. The SEI Strategy presents specific recommendations to strengthen the region's economy while ensuring the distinct character of the region's communities and natural resources. The strategy is an integrated set of recommendations to achieve the following long-term goals:

- **PROTECT AND ENHANCE THE REGION’S ASSETS**

Invest in the people, communities, infrastructure, and natural resource base that are the foundation of the Northern Forest’s distinct regional character and competitive economic advantage.

- **EXPAND ENTERPRISE**

Create a fertile environment for workforce, entrepreneurial, and business development and increase the region’s ability to develop and commercialize new products and services that capitalize on the assets of the Northern Forest.

- **COORDINATE AND ADVOCATE AS A REGION**

Increase the capacity of the region’s individuals and institutions to anticipate and adapt to change and implement new initiatives by working and coordinating as a region to understand and advocate for regional interests and priorities.

From the start, the SEI has had a long term focus, and the strategies and recommendations that follow reflect the reality that securing significant and positive change in the Northern Forest economy will take decades. The intent is to have the *Strategy for Economic Resurgence* stand the test of time. In a dynamic world, the specific near term needs and opportunities facing the Northern Forest will continually evolve. Many actors and many actions at many scales will be required to implement this strategy. Yet the strategy’s essence—protect the region’s assets, develop and sell products and services derived from those assets, and work as a region to anticipate and adapt to change—will allow the Northern Forest region to thrive.

The goals, objectives, and action items that follow in this section all represent essential building blocks of a healthy and vibrant region.

PROTECT AND ENHANCE THE REGION'S ASSETS

Fundamental to the long-term vitality of the Northern Forest economy and its ability to compete in the 21st century is the stewardship and conservation of the communities and natural assets of the region. Small towns and main streets, offering a wide range of services and goods are characteristic throughout the Northern Forest. The abundant forest land which surrounds these communities is what is unique about the Northern Forest. These combined attributes will distinguish the region in a national and global marketplace.

Communities are at the front-line of adaptation in the Northern Forest. While community development is inherently local, there are steps that can be taken on a regional level to build and support local community capacity. The ability to effectively meet the challenges which face the Northern Forest region will require a critical mass of leadership, ideas and resources greater than any one community or state can generate alone.

Stewardship and conservation of the region's forests has been a focus of regional action for a century, and these efforts must continue. The forest defines the region and is the region's biggest asset. The forest's character and productive capacity are threatened by a variety of factors. Conserving the forest resource for its full spectrum of uses will conserve the region's comparative economic edge and the underpinning of its culture and heritage. Conservation will also contribute to a larger societal effort to slow and correct the effects of climate change and ecosystem degradation.

OBJECTIVE:

Invest in comprehensive community development to ensure that Northern Forest communities continue to be attractive places to live and work in the changing global economy.

ACTIONS:

- ◆ **COMMUNITY LEADERSHIP:** Provide community leaders with tools to develop knowledge and ideas and build networks that connect them with each other across the region.
- ◆ **PLANNING:** Develop and provide tools and information to support Northern Forest communities as they plan for their futures in uncertain times.
- ◆ **INFRASTRUCTURE:** Ensure sound and effective infrastructure to support human needs, move information and commerce, and connect people to one another.
- ◆ **EDUCATION AND HEALTH CARE:** Provide access to quality education and health care for Northern Forest residents.
- ◆ **AFFORDABLE HOUSING:** Ensure the availability of quality and affordable housing in Northern Forest communities.
- ◆ **COMMUNITY ASSET BUILDING:** Grow stable communities by maintaining and growing programs that build assets and financial stability for Northern Forest workers and families.

24 LONG-TERM GOALS FOR THE NORTHERN FOREST

- ◆ **FUNDING:** Maintain and grow the public and private funding streams that provide catalytic resources for community development and infrastructure.

OBJECTIVE:

Manage and conserve the character and productive capacity of the forest ecosystem to protect and enhance the essential economic and ecological services derived from the landscape.

ACTIONS:

- ◆ **CONSERVATION:** Continue public and private investment in the conservation and forest stewardship efforts catalyzed by the work of the original Northern Forest Lands Council.*
- ◆ **FOREST MANAGEMENT & STEWARDSHIP:** Support private landowners in practicing sustainable forest management and good stewardship while encouraging public access to private land for recreational purposes.*
- ◆ **WATER:** Steward and protect the water resources of the Northern Forest as a foundation for human well-being and as an economic resource.
- ◆ **SCIENCE & MONITORING:** Invest in scientific and consistent monitoring of the region's ecological assets to anticipate threats and inform responses.

*Recommendations of the Northern Forest Lands Council 10th Anniversary Forum.

EXPAND ENTERPRISE

The Northern Forest is rich with potential for new economic enterprise tied to its natural and community assets. Yet times have changed from an earlier era when the largest paper companies in the world, such as International Paper and Great Northern Paper, provided financial capital to take advantage of the region's natural capital and built business, wealth, and employment in the Northern Forest. The next generation of economic development in the Northern Forest will be led by smaller, locally grown businesses and civic organizations. As with earlier generations, today's leaders must invest extra effort to create a fertile environment for entrepreneurship and provide the financial investment and workforce that will enable these new ventures to thrive. Such investment will ensure the region's competitiveness.

Leveraging the assets of the Northern Forest into a significant and sustainable expansion of economic enterprise will require actions toward two objectives:

OBJECTIVE:

Expand programs and initiatives to research and develop Northern Forest products and services, train a modern workforce, and attract and develop entrepreneurial talent.

ACTIONS:

- ◆ **RESEARCH AND DEVELOPMENT:** Enhance the region's capacity to conduct state of the art research & development.
- ◆ **INCUBATION AND COMMERCIALIZATION:** Facilitate the transfer of research and ideas between research institutions, communities, and businesses.
- ◆ **BUSINESS CLIMATE:** Create a business-friendly environment that enables entrepreneurs and businesses to take new products and services in to the market
- ◆ **WORKFORCE & ENTREPRENEURIAL DEVELOPMENT:** Prepare Northern Forest youth and workers with flexible and transferable skills suited to emerging industries.

OBJECTIVE:

Grow and support regional and sub-regional initiatives to build a significant scale of economic impact in sectors where the region finds particular competitive advantage.

ACTIONS:

- ◆ **SUSTAINABLE FOREST PRODUCTS.** Support and promote innovation and new product development, identify and access new markets, and work regionally on policy, wood supply, and education needs to establish competitive niches for Northern Forest wood products.

- ◆ **NATURE-BASED RECREATION AND HERITAGE TOURISM.** Foster and increase private and public sector cooperation across the four-state region to develop and market the region as a national and global destination for nature-based recreation and heritage tourism.
- ◆ **ECOSYSTEM SERVICES.** Secure a place for forestry and the Northern Forest region in regional and national policymaking on carbon markets and other ecosystem services, and use these markets to develop new economic opportunity for forest landowners.
- ◆ **RENEWABLE ENERGY.** Develop strategies and policies to transition the region to a significant four-state renewable energy economy, with an emphasis on enhancing affordable and local use of indigenous energy resources—wood, wind, water, and solar.
- ◆ **AGRICULTURAL PRODUCTS.** Increase the viability and economic impact of local agricultural activities in the Northern Forest.
- ◆ **QUALITY OF PLACE.** Conserve and grow the cultural and quality of place assets of Northern Forest communities as a foundation for retaining and attracting residents and business.

COORDINATE AND ADVOCATE AS A REGION

Achieving and maintaining economic vitality in the Northern Forest region will require constant and nimble adaptation to new economic, social, and environmental trends. Regional challenges require regional strategies and coordinated implementation that build on the collective strengths of Northern Forest communities and the complementary roles of private, public, and non-profit-sector leadership. Designated leadership and capacity for coordinating these roles across the four states are essential.

The people of the Northern Forest are already adapting to change, and supporting actions already going on in the region is a second key component of building an adaptive regional economy. In addition to regional coordination and leadership three capacities—information, investment, and innovation—can be effectively nurtured on a regional level to support existing efforts, solve problems, and build capacity locally.

Advocating as a region is a powerful means for securing the resources and policies that can support these capacities. For two years the SEI committee has wrestled with the question of how to elevate the prospects of this relatively small region now that it operates in a global economy. The committee has concluded that our greatest opportunity for economic success is to band together as a region across our four states; to learn from each other, to support our mutual goals, and advocate together for the Northern Forest. When communities and citizens join together across state lines, it creates more power and talent and a stronger voice, to benefit everyone in the region.

OBJECTIVE:

Increase the ability of individuals and institutions across the region to anticipate and adapt to change, implement new initiatives and coordinate activities across the Northern Forest.

ACTIONS:

- ◆ **REGIONAL COORDINATION & LEADERSHIP:** Establish a public-private partnership to link and support government, community, business and non-profit leadership across the four Northern Forest states, coordinate the implementation of the SEI strategies, and provide coordinated and enduring ability to respond to future challenges and opportunities.
- ◆ **REGIONAL POLICY ADVOCACY:** Work across state boundaries to advocate on national and international policy issues which impact all four states, such as trade and border policy.

Designated Leadership for Follow-through

Northern Forest history bears out the importance of designated leadership for follow-through on regional initiatives. In 1994 the Northern Forest Lands Council disbanded after its landmark work. While private initiative picked up on some recommendations and spurred some public action, many of the ideas were only partially—or never—implemented.¹⁴ Thus a central recommendation of the SEI committee to the region's governors is to formalize a framework to continue the coordination function across the four states and support the implementation of the long term strategies presented here.

28 LONG-TERM GOALS FOR THE NORTHERN FOREST

- ◆ **INFORMATION & KNOWLEDGE:** Increase the availability of research, best practices, and market data required to solve problems and share information and ideas across the Northern Forest.
- ◆ **INVESTMENT:** Present a unified case for public and private investment in the region to catalyze innovation and new opportunities.
- ◆ **INNOVATION AND ADAPTATION:** Align leadership, information, infrastructure and investment to support the region's ability to innovate and adapt to ongoing change.

A NORTHERN FOREST ACTION AGENDA: TEN RECOMMENDATIONS

Even as the *Strategy for Economic Resurgence* identifies and puts forth complex and long-term goals for the Northern Forest region, it also includes a corresponding Action Agenda. The action recommendations are supported by the long-term strategies identified in the report and also by the wealth of activity taking place in the region.

For the region to achieve the maximum benefits from the Action Agenda, a collaborative and coordinated set of private, public and non-profit sector activities at the state and regional levels must be developed. The creation of systems to link and support existing efforts will enable the region to realize quick successes in the advancement of the strategy. At the same time, each state will benefit from the prioritization of their specific needs and opportunities.

Immediate implementation of these actions will represent significant gains for the region. The following ten action items present a multi-faceted approach to economic and community development and environmental stewardship throughout the Northern Forest:

- **TELECOMMUNICATIONS:** Deliver reliable, affordable and cutting-edge high-speed telecommunications to all Northern Forest communities through increased public investment.
- **CREATIVITY AND ENTREPRENEURSHIP:** Develop programs to support creative and entrepreneurial people in building businesses that are based on and enhance the natural and cultural resources of the Northern Forest.
- **TRANSPORTATION INFRASTRUCTURE:** Develop globally competitive energy efficient, multi-modal public/private transportation systems to interconnect the region and its communities and support regional, national, and international trade.
- **REGIONAL MARKETING:** Develop coordinated marketing of Northern Forest products, businesses, tourism services, amenities and attractions, while maintaining individual state branding efforts.
- **LOCAL PURCHASING AND OWNERSHIP:** Support activities that encourage Northern Forest residents, visitors, institutions and government to “buy local.”
- **RENEWABLE ENERGY:** Launch a four-state, Renewable Energy Initiative that encourages energy efficiency, increases public and private investment in a diversity of energy systems, maximizes community wealth and complements stewardship of the region’s natural resources.
- **REGIONAL ASSETS:** Invest in research, tracking, and forecasting of natural, social, and economic assets in order to make informed decisions to understand, anticipate and adapt to changes in the region.

- **FORESTED LANDSCAPE:** Maintain forests to protect and enhance the essential economic and ecological services derived from the landscape and to capture value from emerging markets.
- **FEDERAL INVESTMENT:** Maintain and grow funding for new and existing federal programs that serve the long term strategies outlined in this report; Analyze and identify opportunities to more explicitly align existing federal programs with the strategies outlined in this report.
- **PUBLIC-PRIVATE REGIONAL COORDINATION & ADVOCACY:** Establish a coordinating body of the Northern Forest states to support implementation of the recommendations outlined in this report, continue regional coordination, and address future challenges and opportunities.

In implementing these recommendations, aligning private sector, government, and non-profit leadership can build on the strengths of each sector and collectively address their limitations.			
	PRIVATE	NON-PROFITS	GOVERNMENT
STRENGTHS	<ul style="list-style-type: none"> • Innovating • Attracting capital • Turning good ideas in to economic activity (jobs) • Making things happen on the ground 	<ul style="list-style-type: none"> • Developing and disseminating information about public needs and innovations • Bridging between government and the private sector; Building and maintaining social and collaborative infrastructure (networks) • Linking political jurisdictions • Managing social processes 	<ul style="list-style-type: none"> • Creating policy incentives for change and removing barriers • Addressing economic and social gaps and injustices through public investment • Building and maintaining public infrastructure
LIMITATIONS	<ul style="list-style-type: none"> • Creating networks • Disseminating information 	<ul style="list-style-type: none"> • Direct generation of economic activity (creating jobs) 	<ul style="list-style-type: none"> • Crossing political boundaries

Telecommunications**Deliver reliable, affordable and cutting-edge high-speed telecommunications to all Northern Forest communities through increased public-private investment.****CASE FOR URGENT ACTION**

- Lack of high speed telecommunications capacity in many parts of the region is an impediment to business development; without modern telecommunications infrastructure, many options for economic development in Northern Forest communities are difficult if not impossible to consider.
- To address these issues, state initiatives and a number of public-private and private efforts are underway across the Northern Forest states, all with common goals of developing telecommunications infrastructure in underserved areas. Expanding, accelerating, and coordinating these efforts is an urgent priority for action.
- The relatively low density of customers in the Northern Forest is a barrier to the private sector shouldering infrastructure deployment alone. Community and non-profit efforts face significant financial limitations. Public investment—some have likened it to Rural Electrification of the 1930s—is needed as the catalyst to push these efforts over the top.

WHAT NEEDS TO HAPPEN

- ◆ **REGIONAL COLLABORATION FOR RESOURCES-** The public and private leaders of telecommunications initiatives across the Northern Forest should collaboratively identify common resources and incentives required to complete deployment and activation of high-speed telecommunications infrastructure in the region, and enlist the help of the region's congressional delegation in securing federal investment.

WHO (*initial leadership for gathering important stakeholders for implementation*)

Note: These are draft suggestions for consideration based on known public and private entities and initiatives in the region.

- ◆ **PUBLIC:**—ConnectME Authority, Vermont Telecommunications Authority, Public Utilities Commissions. Others?
- ◆ **PRIVATE:**—Fairpoint Communications, Regional Planning Commissions, ANCA, Tug Hill Commission, Eastern Maine Development Corp., North Link (VT), Wireless LINC (NH), Adirondack - Champlain Community Broadband Network (ABCN), others?

WHEN

- ◆ Forward a regional request for telecommunications investment to the region's Congressional delegation in advance of the FY10 budget cycle

Creativity and Entrepreneurship

Develop programs to support creative and entrepreneurial people in building businesses that are based on and enhance the natural and cultural resources of the Northern Forest.

CASE FOR URGENT ACTION

- The region is perceived as being inhospitable for new and even existing businesses.
- The region's natural, cultural and other resources hold increasing potential for economic use in view of emerging market opportunities.
- The region's economy is transitioning from a reliance on a small number of large employers to reliance on greater numbers of small and medium-sized businesses.
- Developing and attracting the entrepreneurial talent and creative workforce needed to create and run small and medium-sized enterprises is critical and a current area of weakness.
- What is needed are new businesses that are based on the assets of the Northern Forest region, and that are compatible with maintaining and enhancing those assets.

WHAT NEEDS TO HAPPEN

- ◆ **BUSINESS CLIMATE**- Review and adjust public policies that affect business development with the intention of facilitating development of new and existing enterprises that generate maximum economic value from sustainable use of the region's natural, cultural, and other resources without damaging quality of place - recognizing that quality of place is among the region's primary economic assets.
- ◆ **INCUBATORS**- Support/create both virtual and bricks and mortar incubators in the region to leverage existing research and development assets in the region through commercialization of emerging products and technologies as they address new market opportunities related to the region's assets.
- ◆ **INNOVATION**- Create and support a system of "Innovation Networks" and Entrepreneurial Clusters to better link businesses to each other as well as to academic, and non-profit innovation efforts in core sectors of the Northern Forest's asset-based economy, including:
 - ✓ Sustainable and/or Green Tourism
 - ✓ Renewable Energy
 - ✓ Ecosystem Services: Carbon and Water
 - ✓ Agriculture
 - ✓ Wood Products

- ◆ **CAPITAL**- Expand existing financing programs and opportunities for individuals to invest in local private companies. Include consideration of effective capital support for micro enterprises.
- ◆ **TALENT DEVELOPMENT**- Create a partnership among educational institutions, businesses, and non-profits in the region to connect curricula and workforce training with emerging industries and entrepreneurial opportunities in the region. Promote asset-based, entrepreneurial approaches among residents of the region, especially young people.

WHO (*initial leadership for gathering important stakeholders for implementation*)

Note: These are draft suggestions for consideration based on known public and private entities and initiatives in the region.

- ◆ **PUBLIC**-
 - ✓ Incubators: State Departments of economic/community development, public colleges, technical schools and universities, others?
 - ✓ Workforce Development: Public colleges, technical schools and universities, others?
 - ✓ Tourism: State Departments of Tourism, others?
 - ✓ Renewable Energy: State Departments of Energy and Forestry, others?
 - ✓ Ecosystem Services: State Departments of Environment and Forestry, others?
 - ✓ Wood Products: State Departments of Economic Development/Forestry, Cooperative Extension Service; Public Universities – SUNY ESF, UMO, USFS Forest Products Lab, others?
 - ✓ Agriculture: State Departments of Agriculture, Cooperative Extension Service, others?
 - ✓ Workforce Development- Public colleges, technical schools and universities, State-based workforce initiatives, others?
- ◆ **PRIVATE**-
 - ✓ Private Colleges in and near the region.
 - ✓ Incubators: Economic Development Districts, Dartmouth Incubator, Mt. Washington Valley Tech Village, Town of Greenville Business Incubator, Sector-based businesses, financing/non-traditional lending org reps, others?
 - ✓ Capital: Coastal Enterprises, Inc., Economic Development Districts, Vested for Growth (NH), Vermont Community Loan Fund; local investment groups, business Enterprise Development Corporation, Northern Community Investment Corporation; entrepreneurial lending institutions, others?
 - ✓ Tourism: Regional networks: Rural Destination Tourism Network - Mountain Counties Heritage, Northern Forest Canoe Trail, Northern Forest Center, Adirondack North Country Association, Coos Tourism Initiative, Economic Development Districts, Northern Kingdom GeoTourism; private business and regional promotional groups (including Chambers of Commerce), others?

- ✓ Renewable Energy: Private industry, NGOs: Biomass Energy Resource Center (BERC), Northern Forest Center, Trust to Conserve NE Forestlands, Economic Development Districts, Adirondack Energy Smart Park Initiative, Vermont Climate and Energy Action Network; state/regional networks, Wood Energy Advisory Roundtable, others?
- ✓ Ecosystem Services: Hubbard Brook Research Foundation, Wagner Forest Management, Northern Forest Center, North East *State* Foresters Association, others?
- ✓ Wood Products: Sustainable Forest Futures, Millinocket Area Growth and Investment Council, Professional Logging Contractors of Maine, Economic Development Districts, Empire State Forest Products Association, Maine Wood Products Association, Maine Forest Products Council, Vermont Wood Manufacturers Association, New Hampshire Timberland Owners, private industry, others?
- ✓ Agriculture: Adirondack Harvest, Coastal Enterprises, Inc. Maine Eat Local Coalition, Resource Conservation & Development Districts, Black River Produce, Northeast Organic Farming Association Vermont New Farmers Network, NH Made, Made in Maine, VT Made, others?
- ✓ Workforce Development: Coastal Enterprises, Inc., Adirondack Economic Development Corporation, Economic Development Districts, non-traditional lending institutions, others?

WHEN

- ◆ Much work is already underway on a local or sub-regional level. Use the 2008 Summit for the Northern Forest as an opportunity to develop or advance Production Network work plans for 2009

Transportation Infrastructure

Develop globally competitive, energy efficient, multi modal public/private transportation systems to interconnect the region and its communities and support regional, national, and international trade.

CASE FOR URGENT ACTION

- The federally sponsored Can-Am Connections initiative¹⁵ has found that the Northern Forest region and adjacent Canada are not meeting the necessary land, sea, air connections to compete globally including: insufficient transportation networks, high transportation costs, and a lack of a regional perspective.
- The region relies more heavily on trucks and less on rail than the rest of US and Canada as a whole, and the region's truck costs are on average 45-65% higher than national averages.
- In a time of dramatic rises in fuel costs, access to alternative forms of transportation will become increasingly important for moving people and goods to, within, and from the region. Inadequate transportation impedes access to jobs and critical services such as health care.
- Existing transportation infrastructure is failing and crumbling at an accelerating rate.

WHAT NEEDS TO HAPPEN

The SEI committee recommends a concerted public and private effort to invest in regional transportation enhancements and upgrade land, sea and air transportation, to support economic enterprise and cultural connections in ways that support the region's rural character and are sensitive to ecological integrity. Actions should include:

- ◆ **FREIGHT RAIL:** Rehabilitate and re-connect the east-west freight rail line connecting the Northern Forest regions of New York, Vermont, New Hampshire, and Maine.
- ◆ **HIGH SPEED PASSENGER RAIL:** Explore opportunities to connect the Northern Forest region with southern New England and southern New York and areas further south.
- ◆ **FUNDING:** Maintain and grow state and federal funding for regional transportation infrastructure and community transportation enhancements including walkable communities, bike trails, scenic byways, and water trails. Focus particular attention on the re-authorization of the federal transportation bill.
- ◆ **TRUCKING REGULATIONS:** Establish consistent trucking regulations, including truck weights and size, to facilitate trade within and through the region.

WHO (*initial leadership for gathering important stakeholders for implementation*)

Note: These are draft suggestions for consideration based on known public and private entities and private and initiatives in the region.

◆ **PUBLIC:**

- ✓ State and federal Departments of Transportation, Northern Border Regional Commission, Canadian Provincial Governments, Environmental agencies, State Economic Development agencies, Trade corridor commissions, Tourism agencies, Smart growth agencies, federal, regional state and local planning agencies, public railroad corps, social service agencies, maritime and canal authorities, FAA, others?

◆ **PRIVATE:**

- ✓ Regional Planning Commissions, Councils of Government, Adirondack North Country Association, Tug Hill Commission, Economic Development Districts, other Economic development non-profit and social agencies, rail companies, Major shippers/business, National Association of Private Transport Operations, others?

WHEN

- ◆ Freight rail- Restore east-west connection by 2010.
- ◆ Funding- Coordinate advocacy efforts for federal FY10 appropriations.

Regional Marketing

Develop coordinated marketing of Northern Forest products, businesses, tourism services, amenities and attractions, while maintaining individual state branding efforts.

CASE FOR URGENT ACTION

- Consumers worldwide are looking for ecologically conscious, “green,” and sustainable products and services, and there is great potential to align development and marketing of Northern Forest products with that demand.
- The region has great physical proximity to large retail markets in the north-east U.S. and southeastern Canada. Over 70 million people live within a one day drive.
- Due to the rural nature of the Northern Forest, the region must work hard to make its assets known in the global marketplace and create a competitive scale of activity.
- The Northern Forest states and many of their sub-regions have invested heavily in their respective brands. Linking these efforts through marketing strategies that respect existing brands will enable the region to sell a broader spectrum of products and services.
- Existing regional marketing efforts such as the Northern Forest Canoe Trail and Handmade in the Northern Forest offer models to build upon.
- Interest in green certification chain-of-custody forest products, particularly from overseas, is beginning to exceed supply.

WHAT NEEDS TO HAPPEN

- ◆ Support “niche” promotional efforts that bridge business, product and tourism interests across the Northern Forest, with an initial focus on:
 - ✓ Wood Industries and Products
 - ✓ Nature-based Recreation
 - ✓ Culture & Heritage
 - ✓ Agricultural Products
 - ✓ Craft/handmade products
 - ✓ Adventure recreation (e.g. Northern Forest Canoe Trail, Appalachian Trail, regional skiing)
- ◆ Create (or designate) central spokes-agency to tell the story of the Northern Forest and link to all SEI member websites.

WHO (*initial leadership for gathering important stakeholders for implementation*)

Note: These are draft suggestions for consideration based on known public and private entities and initiatives in the region.

◆ **PUBLIC-**

- ✓ Wood Industries & Products: State Forest Agencies, US Forest Service, others?
- ✓ Nature-based Recreation- State Tourism Departments; Land Management Agencies, others?
- ✓ Culture & Heritage: NH Dept Cultural Resources, Maine Arts Commission, Vermont Arts Council, New York State Council on the Arts, others?
- ✓ Agricultural Products: NY Department of Agriculture & Markets, NH Department of Agriculture, Markets & Food; VT Dept. Of Agriculture, Food & Markets; Maine Department of Agriculture, Food and Rural Resources, others?

◆ **PRIVATE-**

- ✓ Wood Industries & Products: Professional Logging Contractors of Maine, Trust To Conserve Northeast Forest Lands, Small Woodland Owners Association of Maine, North East State Foresters Association, Sustainable Forest Futures Economic Development Districts, MAGIC, Empire State Forest Products Association, Maine Wood Products Association, Maine Forest Products Council, Vermont Wood Manufacturers Association, New Hampshire Timberland Owners, National Tree Farm, Forest Stewardship Council, others?
- ✓ Nature-based Recreation- Northern Forest Canoe Trail, Adirondack North Country Association, Mountain Counties Heritage, Bethel Chamber of Commerce, Maine Winter Sports Center, New England Outdoor Center, Northern Forest Rural Destination Tourism Initiative, Regional Planning Commissions, Northern Forest Center, Economic Development Districts, Coos Tourism Initiative, Northeast Kingdom Geo Tourism, Community Forest Collaborative, others?
- ✓ Culture & Heritage: Arts Alliance of Northern New Hampshire, Highlands Guild, Adirondack North Country Association, Economic Development Districts, others?
- ✓ Agricultural Products: Adirondack Harvest, Regional Planning Commissions, CEI, Maine Eat Local Coalition, Resource Conservation & Development Districts, Black River Produce, Northeast Organic Farming Association, Adirondack Harvest, Vermont New Farmers Network, others?
- ✓ Maine: The Maine Woods Consortium

WHEN

- ◆ Continue/begin coordination efforts at the 2008 Summit for the Northern Forest (Nov '08), with a goal of having specific marketing efforts in the four focal sectors in place by the end of 2009.

Local Purchasing and Ownership**Support activities that encourage Northern Forest residents, visitors, institutions and government to “buy local.”****CASE FOR URGENT ACTION** (*why is this recommendation a priority*)

- Local ownership and local purchasing is proven to provide a significant economic multiplier affect in communities—dollars stay in the region longer.
- Government and large institutions such as hospitals, educational institutions, prisons, and military installations are significant and steady consumers of multiple products that could be provided in-region instead of via imports. Notable opportunities include energy, food, and wood products such as furniture and building materials.
- In-region use of indigenous resources can have positive impacts on food and energy security, food safety, carbon footprint, and fuel costs.

WHAT NEEDS TO HAPPEN

- ◆ **GOVERNMENT AND INSTITUTIONAL PURCHASING-** Commitments from state governments and large institutions in the region to seek and purchase from local suppliers whenever possible
- ◆ **BUY LOCAL ADVOCACY-** Enhance promotional efforts by government and private sector leaders to highlight local purchasing efforts and results.

WHO (*initial leadership for gathering important stakeholders for implementation*)

Note: These are draft suggestions for consideration based on known public and private entities and initiatives in the region.

- ◆ **PUBLIC:**—Northern Forest Governors and all state agencies/large public institutions, Vermont Agency of Agriculture (Buy Local program) others?
- ◆ **PRIVATE:**—Community Forest Collaborative; Biomass Energy Resource Center; Adirondack Harvest, Eat Local Foods Coalition of Maine, Maine Foods Network, NH Farm to School, NH Farm to Restaurant, VT Fresh Network, others?

WHEN

- ◆ Use 2008 to assess stakeholders and existing efforts; draft preliminary guide; advocacy effort to launch in 2009.

Renewable Energy:

Launch a four-state, Renewable Energy Initiative that encourages energy efficiency, increases public and private investment in a diversity of energy systems, maximize community wealth and complements stewardship of the region's natural resources.

CASE FOR URGENT ACTION (*why is this recommendation a priority*)

- Fossil fuel purchases drain immense wealth from the Northern Forest region—an estimated \$6 billion for imported fuel in 2006. Stemming even a portion of this outflow will keep more money in the region to serve other needs.
- High energy costs are a barrier to businesses location or expansion in the region. The Northern Forest has some of the highest cost energy in the contiguous U.S., and is notably higher than costs in other parts of the U.S.
- The region has several commercial scale, indigenous and renewable energy resources- wood, wind, water, and solar. Increasing both local production of renewable energy and efficiency will provide a much greater degree of economic return and energy security for the Northern Forest, and make a contribution to global mitigation of climate change.
- Establishing the region as a hub of renewable energy R&D and use can create jobs and be a major attractor for growth, as “green” practices, communities and vendors become more important to destination and buying decisions of consumers, tourists and businesses.
- Trends highlight the negative attributes to the local community of a pure natural resource extraction model and the resulting imbalance created in economic and environmental arenas.
- Renewable energy producers are eager to enter the region; the region must be proactive in its approach to energy issues to ensure local benefit.

WHAT NEEDS TO HAPPEN

- ◆ We recommend that the four Northern Forest governors, in consultation with each other and private-sector stakeholders named below, commit specific funds per state and the time of key agency staff to a one-year effort to develop a regional renewable energy strategy. We suggest that the Regional Greenhouse Gas Initiative (RGGI) can serve as a model to affect multi-state coordinated effort and a potential source of capital for a renewable energy initiative. This initiative should include:

- ✓ **BIOMASS ENERGY-** Implementation of the recommendations of the Northern Forest Biomass Energy Initiative¹⁶

- ✓ **MAXIMIZING COMMUNITY (ASSET) BASED ENERGY INITIATIVES-** Sharing of best practices on community based energy efforts and increasing networking and collaboration opportunities in such areas as fuels for schools, etc.
- ✓ **RPS AND FORESTS-** Refinement of renewable portfolio standards (RPS) in each state to call for fuels from sustainably managed forests.
- ✓ **RENEWABLE ENERGY REGULATION-** Harmonization of regulatory frameworks for renewable energy across the four states.
- ✓ **ENERGY TRANSMISSION-** Enhancements to energy transmission systems to support renewable energy generation in and transmission within and from the Northern Forest.
- ✓ **ENERGY EFFICIENCY-** Incentives to builders, developers (among others) to conduct energy audits, retrofits, and utilize new practices in energy efficient construction.
- ✓ **MANUFACTURING AND WORKFORCE DEVELOPMENT-** Support the development of renewable energy and efficiency businesses (manufacturers) and help train workers to meet the increase in this sector.
- ✓ **PUBLIC EDUCATION-** Increase public education programs to strengthen energy efficiency and conservation practices.
- ✓ **CAPITAL FOR ENERGY CONSERVATION-** Expand existing models (e.g. NH surcharges, NY bonding) to provide capital sources for renewable energy development and energy efficiency.

WHO (*initial leadership for gathering important stakeholders for implementation*)

Note: These are draft suggestions for consideration based on known public and private entities and initiatives in the region.

- ◆ **PUBLIC:**—The Northern Forest Governors and relevant state agencies
 - ✓ **Maine:** Public Utilities Commission (Efficiency Maine); Maine Resources Council (Cabinet-level coordinating council of nine State agencies involved with energy issues), Maine Forest Service, Office of Energy Independence, Maine Department of Environmental Protection, others?
 - ✓ **New Hampshire:** Office of Energy and Planning, Public Utilities Commission, Dept. Environmental Services, Dept Resources & Economic Development, others?
 - ✓ **Vermont:** Dept. of Public Service, Agency of Natural Resources, Efficiency Vermont, others?
 - ✓ **New York:** New York State Energy Research and Development Authority, Public Service Commission, Dept. Environmental Conservation, New York State Dormitory Authority, others?
 - ✓ **Regional:** ISO New England, USDA Rural Development

42 TEN RECOMMENDATIONS FOR NEAR-TERM ACTION

◆ PRIVATE:

- ✓ Biomass Energy Resource Center
- ✓ Public Service of New Hampshire/Wood Energy Advisory Roundtable
- ✓ TransCanada
- ✓ Northern Forest Center
- ✓ Economic Development Districts, Energy Smart park Initiative (NY), Sustainable Energy Resource Group (VT), Vermont Climate and Energy Action Network, Utilities and other energy producers, Wind Farm, developers/owners, others?

WHEN

- ◆ Launch the 4-state Renewable Energy Initiative in early 2009.

Regional Assets

Invest in research, tracking and forecasting of natural, social and economic assets in order to make informed decisions to understand, anticipate and adapt to changes in the region.

CASE FOR URGENT ACTION (*why is this recommendation a priority*)

- Keeping a close eye on the health of the region's assets is key to ensuring that they remain in place as a foundation for the region
- The ecological integrity of the Northern Forest's terrestrial and aquatic ecosystems is threatened by climate change, acid rain, mercury pollution, invasive species and diseases, salinization of waterways, and fragmentation of the landscape.
- Communities are threatened by the outflow of young people, low educational attainment, and lack of access to health care, telecommunications, etc.
- The economic health of the region is challenged through the loss of manufacturing, lack of qualified workforce, and low availability of liveable wage and benefitted jobs.
- Good and consistent data are critical to monitoring water and air quality and forest health, identifying stewardship and conservation priorities, correcting problems and capitalizing on opportunities as they arise. Yet public funding for tracking, inventorying, and forecasting is frequently in danger.

WHAT NEEDS TO HAPPEN

- ◆ **FUNDING-** Secure consistent public and private funding for tracking and forecasting of the region's assets, Specifically, 1. Natural assets, including the Forest Inventory and Analysis Program, and acid rain programs, 2. Social assets including private investment. 3. Economic assets including Economic Development Administration and Department of Labor funding, State Departments of Employment Security, WIA funds, etc.
- ◆ **DATA COLLECTION AND SHARING-** Form a regional roundtable and/or conference for periodic sharing and coordination of data collection and research on the health of the Northern Forest region.
- ◆ **KNOWLEDGE TRANSFER-** Use data and lessons learned to enable the public and private sectors to make and implement well-informed decisions.

WHO (*initial leadership for gathering important stakeholders for implementation*)

Note: These are draft suggestions for consideration based on known public and private entities and initiatives in the region.

- ◆ **PUBLIC:**—State forest agencies, North East State Foresters Association, Northeastern States Research Cooperative, Colleges and Universities, UNH Carsey Institute, US Forest Service, Northern Forest Congressional Delegation, others?
- ◆ **PRIVATE:**—Hubbard Brook Research Foundation, WCS Adirondack Communities and Conservation Program, Adirondack Research Consortium, Maine Center for Economic Policy, NH Center for Public Policy, Public Policy Institute of NY State, Maine Development Foundation, others?

WHEN

- ◆ Incorporate relevant monitoring programs in to FY10 federal appropriations priorities.

Forested Landscape

Maintain forests to protect and enhance the essential economic and ecological services derived from the landscape and to capture value from emerging markets.

CASE FOR URGENT ACTION (*why is this recommendation a priority*)

- Extensive parcelization and conversion of forests to non-forest uses is resulting in the loss of forest land base in the region.
- While systems to value them are still in development, it is clear that both carbon sequestration capacity and water supplies will be tremendous assets in a carbon and water-limited world. Efforts now to protect these resources and position the region to capitalize on emerging markets will pay dividends down the road.
- The capacity of forests and wood for long-term carbon sequestration is significant in a world concerned with carbon control. In addition to traditional uses, monetization of ecosystem services such as carbon sequestration may provide a new economic use for the region's forests.
- Critical to life, water is already a barrier to development and growth in many parts of the world, and regions with water supply will hold a competitive edge. The ecological and economic values of the Northern Forest's water resources are an immense asset.
- Aggressive scientific and policy work is required to turn these concepts in to true opportunities for the region.
- Establishing economic values for new forest services can create a new revenue stream for landowners.

WHAT NEEDS TO HAPPEN

- ◆ **RGGI FOREST OFFSETS-** Expand the category of eligible forestry offsets under the Regional Greenhouse Gas Initiative to include active forest management and avoided deforestation to support forest land ownership.
- ◆ **EASEMENT AND STEWARDSHIP FUNDING-** Continue public and private funding for conservation easements and forest stewardship programs that protect and enhance the essential economic and ecological services derived from the landscape.
- ◆ **FOREST TAX POLICY:** Establish and support a new coalition of forest interests to transform policies and ensure that investments in silviculture and long term forest management are more financially rewarding.
 - ✓ **State policy:** Maintain favorable state current use property tax programs.*

- ✓ **Federal policy:** Create favorable federal forest tax policy towards private timberland ownership, particularly allowing for inflation adjustment on the original cost of timber and assuring favorable estate tax policy to allow for forestlands to be passed from one generation to the next.*

*Recommendations of the Northern Forest Lands Council 10th Anniversary Forum

WHO (*initial leadership for gathering important stakeholders for implementation*)

Note: These are draft suggestions for consideration based on known public and private entities and initiatives in the region.

- ◆ **PUBLIC:**—State Forest and Environment Agencies, US Forest Service, others?
- ◆ **PRIVATE:**—Trust to Conserve Northeast Forest Lands, Hubbard Brook Research Foundation, Vermont Land Trust, Northern Forest Alliance, Adirondack Council, Land Trusts, Forest Landowner Associations, Society for the Protection of NH Forests, Regional Planning Commissions, Communitive Forest Collaborative, others?

WHEN

- ◆ 2009

Federal Investment

Maintain and grow funding for new and existing federal programs that serve the long term strategies outlined in this report; Analyze and identify opportunities to align existing federal programs with the these strategies.

CASE FOR URGENT ACTION

- Federal programs are a crucial source of funding for community development, regional infrastructure, and ecosystem stewardship in the rural Northern Forest, where the tax base and state and private investment alone are seldom enough to fully meet community need.
- Declining budgets for federal programs combined with a tightening fiscal environment on the state level are together creating a shortage of catalytic resources in the Northern Forest at a time when those resources are especially needed.
- In addition to helping Northern Forest people and communities in a time of significant economic transition, federal investment in the region can serve a set of national interests.
 - ✓ **Energy Security:** The Northern Forest is a source of secure and renewable biomass energy and a region that currently spends nearly \$6 billion annually on imported fossil fuels for heat and power.
 - ✓ **Climate Change Mitigation:** The region is rich with forests and wetlands, which are the two land cover classes capable of long-term carbon sequestration, according to the U.N. Millennium Ecosystem Assessment.
 - ✓ **Clean Water:** The Northern Forest holds the headwaters of the rivers that feed some of the largest population centers in the eastern United States.
 - ✓ **A National Model:** With regional collaboration and the SEI strategy in place, the Northern Forest region can be a national model for other rural regions working to sustain their natural and cultural assets while succeeding in a 21st century economy.
- Aligning existing programs with current needs and opportunities in the region will help limited dollars go further and increase the “return” of federal investment

WHAT NEEDS TO HAPPEN

- Conduct an analysis of federal programs (see below) to determine the following:
 - Which programs are effectively delivering funding to the region (or other regions) and why (to learn from and build on existing successes of securing funding)

- To what extent they are currently aligned and effectively delivering towards the implementation of the SEI strategies.
 - Develop integrated 4 state proposals by program (building on the existing state level block funding proposals (e.g. Clean Water) and 4 state block funding (e.g. Forest Legacy)
 - Develop integrated cross program funding approaches to ensure that critical programs do not compete with or cannibalize one another.
 - Establish better “feedback” mechanisms that provide information about program outcomes on an ongoing basis to the program customers
 - This information also needs to be consolidated and provided to our collective state delegations to ensure that they can speak with one voice in helping to deliver funding to the region
 - Engage the private sector to leverage the existing federal resources
 - Coordinate an annual effort to secure stable and expanded federal appropriations for key programs serving the Northern Forest:
- ◆ **COMMUNITY DEVELOPMENT** programs that provide resources and financing options for key community development projects, including health care and education infrastructure and other community facilities, affordable workforce housing, water and sewer, and community cultural amenities.
 - ✓ (USDA RD) Rural Housing Service
 - Community Facility Program Grants
 - Rural Community Development Initiative
 - ✓ (USDA RD) Rural-Business Cooperative Service
 - Rural Business Enterprise Grants
 - Rural Business Opportunity Grants
 - Intermediary Relending Program
 - ✓ (DOC) Economic Development Administration
 - ✓ (DHHS) Community Health Centers
 - ✓ HUD) Community Development Block Grant Program
 - ✓ (HUD) HOME Investment Partnerships Program
 - ✓ (HUD) Rural Housing and Economic Development Program
 - ✓ (DOL) Community-based Job Training Grants
 - ✓ (EPA) Brownfields Programs
 - ✓ (EPA) Safe Drinking Water State Revolving Loan Fund
 - ✓ (EPA) Clean Water State Revolving Loan Fund
 - ✓ (SBA) Small Business Development Centers
 - ✓ (SBA) MicroLoan Programs
 - ✓ (Treasury) Community Development Financial Institutions Fund
 - New Markets Tax Credit

- ◆ **REGIONAL INFRASTRUCTURE** programs that fund telecommunications and transportation infrastructure enhancements, including broadband deployment and road, rail, and air infrastructure in the region.
 - ✓ (USDA RD) Rural Utilities Service
 - Water & Waste Disposal Program Grants
 - Distance Learning & Telemedicine Grants
 - Broadband Telecommunications Grants
 - ✓ (DOT) Federal Aviation Administration
 - Airport Improvement Program
 - ✓ (DOT) Federal Highway Administration
 - National Scenic Byways Program
 - Transportation Enhancements Program
 - Section 5311 Non-urbanized Area Formula Grant Program
 - ✓ (DOC) Economic Development Administration

- ◆ **ECOSYSTEM STEWARDSHIP** programs that support private and public landowners and state and federal agencies in stewarding, monitoring, and conserving the Northern Forest ecosystem
 - ✓ (USDA FS) State & Private Forestry
 - Forest Stewardship Program
 - Forest Legacy
 - Urban and Community Forestry
 - Economic Action Programs
 - ✓ (USDA FS) Forest and Rangeland Research
 - Northeastern States Research Cooperative
 - ✓ (USDA) Resource Conservation and Development
 - ✓ (DOI) Land and Water Conservation Fund

WHO (*initial leadership for gathering important stakeholders for implementation*)

Note: These are draft suggestions for consideration based on known public and private entities and initiatives in the region.

- ◆ **PUBLIC:**—The Northern Forest Governors and Congressional Delegation
- ◆ **PRIVATE:**—Broad and diverse regional coalition(s) representing the interests served by the federal funding programs listed above, coordinated by: the Northern Forest Center, Northern Forest Alliance, Economic Development Districts, others?

WHEN

- ◆ Beginning with the FY10 annual appropriations cycle

Public-private Regional Coordination

Establish a coordinated body of the Northern Forest states to support implementation of the recommendations outlined in this report, continue regional coordination, and address future challenges and opportunities.

CASE FOR URGENT ACTION (*why is this recommendation a priority*)

- Northern Forest communities share common opportunities and challenges and have “much more to learn from each other’s successes and much to gain from coordinating their respective action.” (NFLC 10th Anniversary Forum)
- Regions are the emerging unit of competitiveness in the global economy, and functioning as an economic region requires an ability to coordinate economic strategy via institutions and networks.
- The region working together can enlist the attention of four governors, eight U.S. senators, and nine U.S. House members. For visibility and funding, this bloc can be of much greater value than the representatives of one state alone seeking backing for a limited goal.
- Maintain the momentum of the current SEI effort to ensure short and long-term effectiveness.
- Individual state resources are limited, a regional effort can leverage existing resources.

WHAT NEEDS TO HAPPEN

- ◆ **GOVERNORS COUNCIL ON THE NORTHERN FOREST-** We strongly recommend that the Northern Forest governors formally continue to collaborate and coordinate their actions related to SEI strategy and other regional initiatives via a regional advisory group, regional commission, or other mechanism. Regardless of form, this coordinating body should represent the diversity of the region, include public, non-profit, and private sector representation, and respect locally driven priorities.
- ◆ **NORTHERN FOREST NETWORK-** Develop an umbrella network to coordinate dialogue, exchange best practices, build and support regional leaders, and create periodic regional gatherings for the range of networks working to implement the long-term strategies outlined in this report.
- ◆ **KNOWLEDGE AND INFORMATION EXCHANGE-** Create an on-line Northern Forest clearinghouse and toolkit of community development resources, funding opportunities and best practices related to implementation of the SEI strategy.
- ◆ **STRATEGIC ALIGNMENT-** Incorporate the goals and strategies of this report into existing plans and processes across the region.

- ◆ **RESOURCES-** Establish a diverse funding strategy (public/private) to establish the continuance and accountable nature of regional coordination and advocacy efforts.

WHO (*initial leadership for gathering important stakeholders for implementation*)

Note: these are draft suggestions for consideration based on known public and private entities and initiatives in the region.

◆ **PUBLIC:**

- ✓ Governors Council: Northern Forest Governors, Northern Border Commission, others?
- ✓ Northern Forest Network: All relevant state agencies
- ✓ Knowledge and Information exchange: USDA Rural Development, others?

◆ **PRIVATE:**

- ✓ Network of Networks: all SEI steering committee members and organizations, Northern Forest Center, others?
- ✓ Knowledge and Information Exchange: Regional Planning Commissions, Maine Rural Partners, Northern Forest Center, Economic Development Districts, others?

WHEN

- ◆ Governors Council: First meeting by January, 2009
- ◆ Northern Forest Network: First convening of regional networks at the 2008 Summit for the Northern Forest (Nov '08)
- ◆ Knowledge & Information Exchange: Clearinghouse contributors convene at 2008 Summit for the Northern Forest (Nov 08); prototype site developed and live by June 2009.

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