

## Landscape Scale Conservation in the Northeast and Midwest

A Position Paper from the Three Mission Areas<sup>1</sup> of the USDA Forest Service:  
Eastern Region, Northeastern Area, and Northern Research Station; and  
the Northeastern Area Association of State Foresters.

### Foreword

Effective land stewardship in the face of change is a compelling issue in the Northeastern and Midwestern United States. Climate change, urbanization, fire, and pests are among many threats to the integrity of our Nation's forests and the ecosystem services they provide. With one-quarter of the Nation's forests, and nearly half (43%) of the Nation's population in this region, "...*conserving our forests is not a luxury, it is a necessity.*"<sup>2</sup> The USDA Forest Service in the Northeast and Midwest and the Northeastern Area Association of State Foresters (NAASF) together offer an inclusive vision of landscapes<sup>3</sup> and landscape scale conservation<sup>4</sup> designed to address these and other threats by reaching across ownership boundaries. In his recent groundbreaking speech, USDA Secretary Tom Vilsack advanced the need to conserve America's forests through an *all-lands* approach, accentuating community health and wealth, sustaining clean and abundant water, restoring forests, and protecting communities from wildfire. The National Association of State Foresters (NASF) has recently articulated an all-lands vision for forests that recognizes the value of all forests and trees—rural and urban, public and private—in all states and U.S. territories.<sup>5</sup> Secretary Vilsack's visionary statement holds that the Forest Service shall not be viewed solely as an agency concerned with the fate of our National Forests, which encompass 7 percent of the region's forested lands, but must use its direct *and* indirect role to help steward all of America's forests, including state, tribal, private, and urban lands. The Forest Service and NAASF together recognize that public benefits as well as forest threats cross boundaries and are best addressed through integrated partnerships and infrastructure (markets, resource professionals, and information).

### Forest Service and NAASF Vision

The work of the Forest Service and state forestry agencies is focused on maximizing the public benefits derived from trees and forests. The Forest Service and state forestry agencies are positioned to serve people in this region through a cohesive, comprehensive Landscape Scale

**Landscape<sup>3</sup>** may be defined by a combination of geography and resource issues or opportunities, and may be of varying scale and scope. They give rise to communities of interest and a family of local, state and federal resource agencies, tribes, and other landowners bound together by a mutual interest in the outcomes within the landscape.

**Landscape Scale Conservation<sup>4</sup>** is an emerging framework to conceive, plan, finance, and manage projects with significant conservation value – ecological, economic and social. The broad concept of Landscape Scale Conservation includes three basic features:

1. There is a *regional* system of interconnected properties (lands).
2. Actions are organized to achieve one or several specific *conservation objectives*.
3. Landowners and managers within a given conservation region *cooperate or collaborate* in some concrete fashion to achieve those objectives.

Conservation (LSC) approach to land management, protection, and wise use. We look forward to working with willing partners in a process to design collaboration in pursuit of LSC. Using the concept of LSC, we seek to work seamlessly within the Forest Service, state forestry agencies and a broad array of partners at a landscape level to achieve conservation objectives consistent with the issues and priorities that define and identify those landscapes. **LSC shall be a foundational concept of Forest Service and state forestry agency behavior and actions across the Northeast and Midwest.**

### **Foundations of Collaboration**

The successful pursuit of LSC requires exceptional collaboration; open to multiple goals and approaches, but with shared purpose and responsibility. A driving principle of the LSC approach is to take advantage of existing programs and efforts, while lending focus to the efforts of willing partners to address issues on landscapes. The Statewide Forest Resource Assessments and Strategies, National Forest Land and Resource Management Plans, and outputs from the Northern Forest Futures Project are integral to emerging LSC opportunities. Five key aspects of successful collaboration, referred to here as Foundations of Collaboration, include Information; Shared Landscapes, Issues, and Investments; Risk Management; Communication; and Implementation.

***Information*** is at the core of decision-making both at the ground and policy levels. High-quality information must be produced, gathered, synthesized, and shared to create the basis of informed decision-making. This information ranges from basic science and resource assessments, through adaptive management techniques and other applied science, to sharing information about management goals across ownerships and landscapes. Multiple scientific and management entities working together can better identify and fill knowledge gaps, and address public concerns and benefits.

***Shared Landscapes, Issues, and Investments*** form focal points of intensive collaboration, integrating cutting edge science, assessment, adaptation, monitoring, and other appropriate actions between the Forest Service, State Foresters, and other partners. The intent is to bring shared expertise and resources to bear on existing priorities and efforts with ongoing investments in the short term, such as contributing to the development of statewide forest resource assessments and strategies that identify and address priority landscapes, and developing and applying new techniques in land management, and many others. In Shared Landscapes, the overarching goal would be to *integrate* these and other efforts where appropriate and possible, while fundamentally enhancing collaboration and public involvement and awareness throughout the region in the long term.

***Risk Management*** involves the assessment and mitigation of various ecosystem stressors and effectively tests potential management responses at the landscape scale. Key tenets of adaptive management include accepting some risk for failure, monitoring and evaluating results, and learning from experiences. By focusing our collaborative efforts on specific portions of Shared Landscapes, we ensure that we efficiently test ideas and approaches, and thereby replicate wise use decisions through sound ecosystem management and protection.

**Communication** is a critical component of successful collaboration, allowing all parties to benefit from the synergy of working together: sharing lessons learned, supporting common priorities, and accommodating different management objectives. Documenting and effectively communicating the processes described above will better enable management recommendations and guides for decision making that have a documented basis in science, testing, collaboration, and future predictions. Outreach is crucial in educating the public about current and future ecosystem challenges, the options in meeting those challenges, and why it matters.

**Implementation** of activities on the ground is ultimately where success will be determined. The Forest Service, States and other partners must identify and implement priority activities. Ultimately, success will be determined by how the elements work in concert to affect the provision of public benefits from forests in the Northeast and Midwest. Furthermore, the level of success will be correlated with the ability of the Forest Service and States to do this work in manner that builds on existing mechanisms and is done in concert with existing and new partners. The Forest Service and state forestry agencies provide important resources, services, coordination, infrastructure, oversight, research, and professional expertise needed to manage and protect forests across all ownerships.

### **Context of Forest Service Interest**

The Forest Service contributes to LSC as one of many interests in the intricate web of conservation. The Forest Service is itself an internal community of interests and service. By creation of the Forest Service, more than a century ago, the Mission Areas of the agency are bound together in a fundamental mission of “*sustaining the health, diversity, and productivity of the Nation’s forests and grasslands to meet the needs of current and future generations.*” The Eastern Region, the Northeastern Area, and the Northern Research Station maintain overlapping goals and unique roles in meeting the Agency mission across the twenty states of the Northeast and Midwest and the District of Columbia. Each has land stewardship at its core, with authorities respectively focused on land management, landowner and community assistance, and basic and applied ecosystem science and technology development.<sup>1,6</sup>

### **Context of State Forester Interest**

The state forestry agencies are responsible for protecting and sustainably managing the forests of their respective states, including the District of Columbia. They accomplish this through direct action, guidance to other forest landowners, and through an array of partnerships. As public servants, State Foresters are credible sources of information and provide leadership based on detailed knowledge of local economies, forest resources, partners, and landowners. State forestry agencies provide essential “boots on the ground” infrastructure that includes delivering technical and financial assistance to landowners, administering best management practices (BMP) programs and forest practices regulations, implementing conservation tools such as easements, and providing wildland fire suppression and invasive species control. State Forests and state tree seedling nurseries supply essential elements for landscape-scale conservation. Most importantly, State Foresters foster partnerships with citizens and local, regional, and national stakeholders that multiply the efforts of all resource professionals and conservation experts. The infrastructure provided and supported by state forestry agencies is essential for maximizing public benefits from forests and meeting emerging challenges.<sup>6</sup>

**Statement of Intent**

The Forest Service and State Foresters in the Northeast and Midwest will cooperate in the pursuit of LSC with other federal, state, tribes, and local agencies, private landowners, and non-profit organizations to:

*“...foster a greater appreciation in this country for our forests and that all Americans, regardless of where they live, see the quality of their lives and the quality of their forests as inseparable.”<sup>2</sup>*

Tom Vilsack, Secretary of Agriculture

We commit to support the positions in this paper in pursuit of Landscape Scale Conservation.

  
\_\_\_\_\_  
**Kent Connaughton,**  
**Regional Forester, Eastern Region**

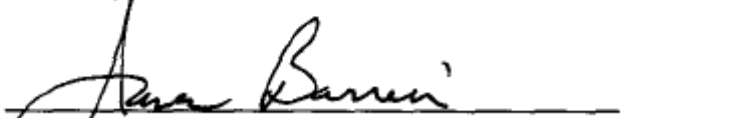
12/29/09  
Date

  
\_\_\_\_\_  
**Kathryn P. Maloney**  
**Director, Northeastern Area**

12/16/09  
Date

  
\_\_\_\_\_  
**Michael T. Rains**  
**Director, Northern Research Station**

12.16.2009  
Date

  
\_\_\_\_\_  
**James S. Barresi**  
**President, Northeastern Area Association of State Foresters**

12-17-09  
Date

<sup>1</sup>Eastern Region - National Forest System – Protection and management of natural resources on National Forest System lands; Northeastern Area - State and Private Forestry – Community assistance and cooperation with State and local governments, forest industries, and Indian tribes, and private landowners to help protect and manage non-Federal forest and associated range and watershed lands to improve conditions in rural and urban areas.); Northern Research Station - Research and Development: Working at the forefront of science on all aspects of forestry, rangeland management and forest resource utilization [Source: <http://www.fs.fed.us/aboutus/meetfs.shtml>]

<sup>2</sup>Vilsack, Tom. USDA Secretary. Speech in Seattle, Washington, “National Vision for America’s Forests”. August 14, 2009

<sup>3</sup>Levitt, James N. *Grappling with the Green Matrix*. Land Lines: January 2004, Volume 16, Number 1.

<sup>4</sup>Ericson, Peter. *Conservation on the Edge: Landscape Scale Conservation at Colorado's Urban-Rural Interface*. Massachusetts Institute of Technology, Department of Urban Studies and Planning. 2004

<sup>5</sup>National Association of State Foresters. “All-Lands Policy Platform: A Seven-Point Plan for America's Forests”. [Source: [http://www.stateforesters.org/all\\_lands\\_policy\\_platform](http://www.stateforesters.org/all_lands_policy_platform)]

<sup>6</sup>See Appendix A for specific contributions for LSC by the three Mission Areas of the USDA Forest Service and the Northeastern Area Association of State Foresters.

## Appendix A

### Forest Service and NAASF Contributions for Landscape Scale Conservation in the Northeast and Midwest

The leaders of the US Forest Service in the Northeast and Midwest (Eastern Region, National Forest System; Northeastern Area, State and Private Forestry; and the Northern Research Station, Research and Development) met in Philadelphia, PA on September 30, 2009 to discuss Forest Service contributions to Landscape Scale Conservation (LSC). The “Philadelphia Meeting” called for each Forest Service Mission Area to describe its specific contributions toward LSC in the Northeast and Midwest. The Forest Service leaders then met with the State Foresters from the 20 northeastern and midwestern states and the District of Columbia to discuss the specific contributions of the Northeastern Area Association of State Foresters (NAASF) and how these contributions are integral to successful LSC implementation. The contributions of the Forest Service and NAASF are detailed in this Appendix and tiered to the “Foundations of Collaboration.”

The Forest Service and NAASF currently work closely together on several landscape scale conservation projects, bringing individual strengths and authorities to the forefront. Together, we collaborate on development of the Northern Forest Futures Project; on submission of project proposals and strategies for the EPA-led Great Lakes Restoration Initiative; on implementation of the Upper Mississippi River forestry partnership; and on design and implementation of the Climate Change Response Framework for the Chequamegon-Nicolet National Forest and the northern portion of the state of Wisconsin. We are collectively working together on the development of Statewide Forest Resource Assessments and Strategies, in accordance with the 2008 Farm Bill. Additionally, we are committed to further enhancing our collaborative efforts with each other and partners in pursuit of Landscape Scale Conservation.

**The Foundations of Collaboration** – The successful pursuit of LSC requires exceptional collaboration; open to multiple goals and approaches but with shared purpose and responsibility. Five key aspects of successful collaboration, referred to here as Foundations of Collaboration, include *Information; Shared Landscapes, Issues, and Investments; Risk Management; Communication; and Implementation.*

#### Forest Service Mission Areas and NAASF in the Northeast and Midwest

Each of the Forest Service units (NA, NRS and the Eastern Region) and NAASF is able to address and contribute differently to the five foundations of collaboration, based on mission and authorities. That very fact lends itself to the added value of this collaboration. The sum is truly greater than the parts, with the opportunity for synergy and innovation. Listed below are the foundations and the contributions each entity is best able and suited to share. Through time, the collaboration will result in new processes, opportunities, and accomplishments to be monitored, captured, and replicated as appropriate.

**Eastern Region – National Forest System** – In 2005, the U.S. Forest Service celebrated the legacy of its first century of service. At that time, leaders in the Eastern Region asked "what will our legacy for the next century be?" This led to the development of a vision for the Region which is "Courageous Conservation," a sustainable future, and a legacy of restoration. Traditionally, the National Forest System (NFS) mission area focuses on lands it manages and is somewhat limited in its authorities outside of National Forest boundaries. However, by serving as "Living Laboratories" and working closely with Research and Development and State and Private Forestry, the NFS can have a wide and profound influence on land stewardship and Landscape Scale Conservation. In accordance with its mission of long-term land stewardship, the Eastern Region commits to adopting the Foundations of Collaboration. NFS provides a permanent nucleus, base, or foundation of forest resource from which to build and extend positive benefits (e.g. corridors and expansion of forest interiors).

**Northeastern Area – State and Private Forestry** – State and Private Forestry (S&PF) is collaborative by design, with this collaboration mandated by the 2008 Farm Bill. Several components of S&PF's Redesign, on which sections of this most recent Farm Bill was developed, are intended to shape and influence forest land use on a scale and in a way that optimizes public benefits from trees and forests for current and future generations.

The Northeastern Area works with state forestry agencies and others to address one of the largest concentrations of privately-owned forests in the world: more than three-quarters of the 170 million acres of forestland in the Northeast and Midwest are privately owned. NA's suite of programs provides technical and financial assistance and forest protection from pests and fire to non-federal forest landowners. A boundary-less approach is critical to sustain these forestlands and their benefits enjoyed by all Americans, particularly the forty-three percent of the Nation's population who call this region "home."

**Northern Research Station – Research and Development** – By the nature of the work in the Research and Development mission area, discovery and technology transfer reaches across all lands and all ownerships – from the natural to the rural to the urban environment. The Northern Research Station (NRS) is one of the largest forest science organizations in the world, with active research in all major components of forest ecology. The NRS commits to providing a unique contribution to Landscape Scale Conservation, expressed through the Foundations of Collaboration.

**Northeastern Area Association of State Foresters** – The State Foresters from the 20 northeastern and midwestern states and the District of Columbia collectively provide a direct link to 5 million family forest landowners and nearly 23 million acres of state forest land. They serve as the delivery mechanism for a suite of federal programs aimed at protecting, conserving, and enhancing the forest resources across the region. The State Foresters have the lead for developing Statewide Forest Resource Assessments and Strategies, which will focus on-the-ground activities by states, partners, and the Forest Service.

## **Mission Area Contributions through Collaboration Foundations**

**Information** is at the core of decision-making. High-quality information must be produced, gathered, synthesized, and shared to create the basis of informed decision-making.

**Eastern Region** – The Eastern Region seeks to revolutionize effectiveness and efficiency. This involves developing cost-efficient, easy-to-use information systems that facilitate work at multiple scales. We will work to increase the public benefits we deliver by working at broader scales, seamlessly managing information, and changing our regional management processes to facilitate flexible and effective results.

**Northeastern Area** – The success of the states in development and implementation of their statewide assessments and strategies is part of our shared success. States are addressing landscape scale conservation through these efforts. A fundamental question in all we do, and as NA facilitates, coordinates, and assists state efforts is “What can help states be successful in developing their state assessments and strategies?” Through these collective efforts, the spark of collaboration begins to ignite, catch, and lead to a dynamic seamless landscape strategy.

The Northeastern Area (NA) and the Northeastern Area Association of State Foresters (NAASF) have provided a guidance and framework for statewide assessments that build from a subset of the Montreal Process Criteria and Indicators and from spatial data developed through the NA/NAASF joint spatial analysis project. Similarly, NAASF and NA have established guidance for the states’ statewide strategies. NA staff specialists continue to stay focused on helping individual states with information gathering and synthesis. The NA staff accomplishes this by facilitating access to data and specialists relevant to state assessment and strategy development and by maintaining the Forest Sustainability Indicators Information System, providing the technology transfer of ecological, social, and economic information relevant to 18 indicators of forest sustainability chosen by NA and NAASF. Data are presented in user-friendly graphs, maps, and tables that track trends over time at State, multistate, and other scales for the Northern United States, a region that includes the 20 Midwestern and Northeastern States and the District of Columbia. Much of the information provided is developed and maintained by NRS and other Research and Development units.

**Northern Research Station** – The NRS will produce, synthesize and share high-quality information from numerous sources to create the basis of informed decision-making and effective land stewardship. Full consideration of issues requires information about present and potential future conditions. The NRS will continue to lead, in collaboration with NA and NFS, and NAASF, the development of the Northern Forest Futures Project in producing cooperative assessments and future predictions. This project will offer projections based on alternative futures reflecting different possible responses to issues raised in its scoping activity. These issues, based in part on results of statewide issue identification associated with direction from the latest Farm Bill, might include, but are not limited to:

- Sustaining forests in the face of climate change,
- Addressing the needs of forest wildlife as forests change,
- Effective control of invasive species and changing disturbance regimes,
- Restoration of forests and ensuring clean water and adequate supply,
- Open space management and development, and
- Alternative energy sources using wood.

The NRS will document and share the findings from its science and technology development actions to enable other landscapes and partnerships to contribute to community health and wealth. Management

recommendations and guides for decision making will have a documented basis in science, testing, collaboration, reasoning, and predictions.

**NAASF** – State assessments and strategies provide State Foresters and partners with a powerful, collaboratively developed tool to assess the forest resources across all ownerships in each state. State assessments can help inform the management of public and private lands and identify data gaps that warrant further investment. These assessments incorporate data and information from many sources and incorporate components of State Wildlife Action Plans, Community Wildfire Protection Plans, and other state and partner planning documents. State results from stakeholder involvement with state assessments have provided a significant portion of the scoping input for the Northern Forest Futures Project.

**Shared Landscapes, Issues and Investments** form focal points of intensive collaboration, integrating cutting edge science, assessment, adaptation, monitoring, and other appropriate actions between the Forest Service, State Foresters and other partners.

**Eastern Region** – This involves working with partners, using traditional and creative new approaches, to expand the amount of National Forest System land managed for public benefit. We will cooperatively manage ecosystems at the larger landscape level, using both traditional approaches and new models of interest-based public, tribal, and private collaboration.

**Northeastern Area** – NA works with states and other partners to provide technical assistance and support identified in resource-driven strategies through existing authorities and the suite of S&PF programs (Forest Stewardship, Forest Legacy, Urban and Community Forestry, Forest Health Protection and State Fire Assistance, and others). The state strategies are focused on priority issues and priority places (e.g. landscapes) within a state, and across state boundaries, regardless of jurisdictional and ownership boundaries, along a rural to urban continuum. Because states are directed to involve all stakeholders and consider existing plans (e.g. Comprehensive State Wildlife Action Plans, Community Wildfire Protection Plans, etc) these strategies will serve as the foundational drivers for program and organizational integration among all land management entities.

**Northern Research Station** – The NRS will focus our science and technology development efforts on landscapes, targeting place-based conservation. The landscapes shall be delineated from a set of agreed to criteria and be focal points for addressing issues through a concentration of available resources that integrate leading-edge science including, assessments, adaptation tactics, monitoring, prediction models and other appropriate actions. Science and technology development in these landscapes will be collaborative in nature and utilize past and current work. Using landscapes will enable the investments in science and technology development to be more focused to better meet the needs of land managers and others being served. Effective and efficient solutions will be replicated to other landscapes.

**NAASF** – State Foresters work across a landscape from largest metropolitan areas such as New York City and Chicago to some of the most rural forested areas in the country. Partners, whether NGOs, other state agencies or others, are an integral part of successful program delivery and strategic thinking. State Foresters will focus federal, state and other resources in a strategic manner on landscapes identified as high priority.

**Risk Management** involves the assessment and mitigation of various ecosystem stressors and effectively tests potential management responses at the landscape scale.

**Eastern Region** – The Eastern Region will work with federal, state and academic researchers to create Living Laboratories in which adaptive management is aggressively pursued at multiple spatial scales and at all levels of management.

**Northeastern Area** – NA and NAASF are undertaking the Stewardship Project, with National support and involvement to reform delivery of the Forest Stewardship Program. Reform will expand and expedite the influence of the program through a focus on the landscape and stakeholders within the landscape. The reformed Stewardship Project will allow for rapid, coordinated assessment and mitigation of ecosystem stressors across a landscape scale.

Through the Stewardship Project and implement of statewide strategies landscape scale planning, technical assistance and support in priority landscapes will engage communities and businesses while benefiting forest landowners. The reformed program will expand its influence on private forest management and help build broad-based support for forest management. The program will focus at a landscape scale to provide technical forestry assistance, access to ecosystem services markets, coordinated government services and support for associated collaborative efforts.

Competitive project proposals from state forestry agencies are solicited by NA and evaluated annually by NA and NAASF according to the following criteria: 1) Priority Issues or Landscapes. 2) Measurable Results and Significant Outcomes. 3) Capacity for Replication. 4) Partnerships and Collaboration. States are encouraged to take risks in innovation and collaboration through the competitive grants without jeopardizing their core program delivery and existing commitments. This balance in risk and consistency leads to solid program delivery.

Expected benefits of the reforms from the Stewardship Project and potentially from competitively granted projects include effective landscape scale forest planning and management, supported by forest landowners, communities and other stakeholders, including those who depend upon the benefits they derive from healthy, productive forestland. Lessons will be learned and applied through critical evaluation and adaptive management.

**Northern Research Station** – Choosing different landscapes with varied conservation issues will enable Research and Development to more effectively test potential management responses, more efficiently focus work, and develop new alliances. One tenet of adaptive management is accepting some risk for failure. The NRS will work with partners to develop appropriate monitoring protocols and systems designed to provide rapid feedback supporting adaptive management. Fully understanding shortfalls will ensure that we replicate good forest stewardship decisions.

**NAASF** – A new set of comprehensive performance measures has been developed to monitor and evaluate the success of state forestry programs over time. These measures, along with information captured over time by a national assessment, will provide states and others with valuable feedback on program delivery effectiveness and necessary adjustments. The State Foresters are front line in

providing technical advice to landowners on the appropriate mitigations to any potential ecosystem stressors.

**Communication** is perhaps the most important component of successful collaboration, allowing all parties to benefit from the synergy of working together: sharing lessons learned, supporting common priorities, and accommodating different management objectives.

**Eastern Region** – Connecting citizens to the land involves building greater capacity to engage citizens in our work by using partnerships, agreements, budgets, training, and management to get work done. We will link potential partners and volunteers to high priority programs. We will increase communication, education, and outreach efforts to make National Forest users more informed about LSC and the knowledge gained in the previous Foundations.

**Northeastern Area** – NA Director works in true partnership and collaboration with State Foresters of the Northeast and Midwest, to share in decisions affecting the state forestry agencies. The State Foresters are integrally involved in the Northeastern Area decisions that affect them directly and indirectly including funding allocation formulas, changes in funding levels, competitive grant project selection, and program direction and emphases.

Integration is a core principal of NA, looking for, facilitating, and responding to opportunities to integrate among the state forestry agencies and the people they serve, Forest Service Eastern Region and Northern Research Station, and other partners, including other state, federal and local agencies, tribes private landowners, and non-profit organizations.

**Northern Research Station** – The NRS is committed to effective science delivery through multiple platforms. Traditional outlets include publication of scientific results and recommendations in general technical reports, manager’s guidebooks, and peer-reviewed scientific journals. General information is released through pamphlets, brochures, and circulars. The NRS also supports technology transfer through websites, “webinars”, videoconferences, and same-time-same-place conferences, workshops, and seminars.

**NAASF** – State forestry agency staff, working through NAASF’s committees, provide a valuable staff-level conduit of information not only with NA, NRS, and the Eastern Region, but also with a wide range of partners and other state agencies. In addition, the NAASF Executive Committee will continue to serve as an executive-level forum for the Forest Service and NAASF leadership to discuss priority investments and program direction. State Foresters and their staff also provide direct communication with private landowners.

**Implementation** of activities on the ground is ultimately where success will be determined. Public lands (federal, state and local) provide a nucleus of forest habitat, access and the stewardship of forests, particularly in the Northeast and Midwest where forests are fragmented.

**Eastern Region** – The Eastern Region is tasked with directly managing the nearly twelve million acres of national forest system lands in the Northeast and Midwest on behalf of the American people. The

National Forests work beyond boundaries to collaborate with many other owners and interests to affect a more successful ecological outcome through planning and environmental analyses. Using the best available sciences, these public lands can be used for demonstration purposes as living laboratories, contributing to understanding and controlling threats.

**Northeastern Area** – The Northeastern Area provides coordination in shared landscape planning and implementation with state forestry agencies, NRS, and the Eastern Region, focusing on non-federal forest lands for program delivery oversight. NA with NAASF and other partners point to several successes of landscape planning including the New York City Watershed efforts; the Highlands of New York, New Jersey, Connecticut, and Pennsylvania; Chesapeake Bay watershed forestry efforts and many others.

NA works with NAASF to strategically invest well, and optimize return on investment, with full disclosure and opportunities to economize and share resources. Focus on existing commitments; learn from those experiences, then shift elsewhere.

**Northern Research Station** – Engaging in science-based resource management is fundamental to pursuing sound stewardship and maintaining public credibility. With a shared sense of purpose and responsibility, the NRS provides more than just decision support tools – it provides people. The NRS thus creates information necessary for science-based management, and then seeks to work with land managers in the conversion of science to management. This outreach takes place by individual scientists as well as through specific groups within the NRS created for that purpose.

**NAASF** – State forestry agencies have the primary role in implementing the broad suite of federally funded programs aimed at maximizing public benefits from private forests. State staffs serve as a direct connection to family forest owners, communities and non-governmental organizations. Additionally, state forestry or other state agencies implement regulatory programs to address water quality, forest practices, invasive species, and other key issues.