

Northeastern Area

Urban & Community Forestry Strategy

Collaborative Urban Land Stewardship in the Northeast and Midwest

FY 2011-2015

DRAFT

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Executive Summary

This document establishes a strategic approach to urban land stewardship that will optimize and leverage available resources to conserve and protect forests, and sustain and expand the benefits provided by urban tree canopy cover in the Northeast and Midwest United States. It provides a foundation for collaboration with four principal partners, including the Northeastern Area (NA) State and Private Forestry, National Forests of the Eastern Region (R9), Northern Research Station (NRS) and the Northeastern Area Association of State Foresters (NAASF).

For the purposes of collaboration, the term “urban land stewardship” is used to encompass all Forest Service activities related to urban, community, and developing areas, including, but not limited to the NA Urban and Community Forestry Program, NRS Urban Natural Resource Stewardship, and R9 Urban Connections initiative. This strategy will guide the priorities of NA staffs as they develop plans and collaborate with partners to achieve results at the regional scale.

Six strategic action areas have been defined that are aligned with Departmental and Agency strategic plans, integrated across State and Private Forestry programs, and reflect past investments as well as existing strengths and available staff expertise. The six action areas include:

1. Expanding urban forestry programs in the region served by the Northeastern Area.
2. Helping communities set urban tree canopy goals and monitoring progress towards meeting these goals.
3. Promoting the effective integration of green space with existing urban infrastructure.
4. Protecting and enhancing water quality through broad landscape-scale initiatives that include urban areas.
5. Enhancing the capacity of urban and community residents to build and maintain the urban forest.
6. Improving urban forest health through the early detection of and rapid response to threats that include invasive species, weather events, fire, and climate change.

From these six action areas, 40 specific actions were identified as important contributors. In addition, six were selected as priority actions for initial focus.

To optimize and leverage resources at the Area scale, this strategy recognizes and builds on the Collaborative Framework for Landscape Scale Conservation developed and agreed to by the principal partners in February 2010. Part II and Appendix A of this document includes a series of conversations with executive leadership focused on appropriate roles, priorities, and opportunities for collaboration and coordination in urban land stewardship. Key findings and next steps include the following:

1. There is general agreement that collaboration and a cohesive Forest Service role would be advanced by knowing each other’s strengths and creating an internal forum for communication and coordination on partner activities, events, projects, science, and technology transfer.
2. With executive engagement and clear principles established for effective collaboration, scientists and staff can develop a focused plan of work on mutually beneficial priorities, assess the results, adjust as necessary, and ultimately develop a shared vision of urban land stewardship. Important components would include consistent messages that communicate the value and benefits of urban forests and fostering collaboration with other federal agencies.
3. Engaging State Foresters earlier and more consistently will better engage the region’s full capacity and ensure relevant and timely products, and well-supported partnerships.

Purpose

This document establishes a strategic approach for urban land stewardship that will optimize and leverage resources to conserve and protect forests, and sustain and expand the benefits provided by urban tree canopy cover in the Northeast and Midwest United States. This strategy builds on the Northeastern Area (NA) Strategic Plan and provides a foundation for collaborative work with the National Forests of the Eastern Region (R9), the Northern Research Station (NRS), and the Northeastern Area Association of State Foresters (NAASF). For purposes of collaboration, the term “**urban land stewardship**” is used to encompass all Forest Service activities related to urban, community, and developing areas, including, but not limited to NA Urban and Community Forestry, NRS Urban Natural Resource Stewardship, and R9 Urban Connections.

This strategy will influence NA’s strategic business planning process into the future and identifies specific areas of mutual interest across programs and staffs that will fulfill and exceed the Forest Service strategic plan Goal 6, to Engage Urban America, and Goal 7 to increase public access to relevant information and resources.

The strategic action areas and associated action items described in Part I of this document are meant to guide the work of NA staffs as they develop plans of work and collaborate with partners to achieve results at the regional scale. This strategy will guide urban and community forestry efforts for NA for five fiscal years: FY11-15. The State Forest Resource Strategies will guide the work of individual states. The NA is committed to helping the State Foresters carry out their strategies to achieve results at state and local scales. A crosswalk between the action areas and the State Forest Resource Strategies in Appendix B highlights the degree to which NA actions and State strategies are complementary.

This strategy will guide the work of NA, while the State Forest Resource Strategies will guide the work of individual states.

Part II of this strategy identifies collaborative opportunities with our principal partners and Appendix A defines their roles and authorities. Part III provides a framework for high quality technology transfer.

Part I – Action Areas for Urban and Community Forestry tiered to the NA Strategic Framework

Relationship to the NA Strategic Plan:

The framework contained in the 2008 - 2012 NA Strategic Plan, defines the overarching goals, objectives, and strategies for the Northeastern Area. This Urban and Community Forestry (UCF) Strategy sets aspirations and actions in critical action areas tiered beneath the NA Strategic Plan’s Goal 2, Objective D.

Goal 2 – Enhance the Capacity of Forests to Provide Public Benefits

Objective 2D – Maintain and enhance the benefits that metropolitan areas and communities derive from their forests and trees. To achieve this, the central focus and desired outcome of the Northeastern Area’s UCF strategy will be to “Sustain and Expand the Urban Tree Canopy”.

Northeastern Area Role and Influence - The Northeastern Area is the Forest Service unit in the Northeast and Midwest that provides urban forestry services and assistance in metropolitan areas and communities. Primarily the NA does this through technical and financial support of state programs and other partner organizations. This support is focused on sustaining and expanding the Urban Tree Canopy (UTC) to achieve multiple public benefits. The NA plays a key role in delivery of technological tools for

managing the UTC and facilitates better understanding of the social, environmental, and economic benefits to people from the UTC. Another important NA role includes sustaining relationships with organizations that foster strong commitments to local stewardship of the UTC. NA also supports landscape scale planning that bridges forest conservation goals and practices in rural areas to sustainable use and green infrastructure goals in urban areas. The State Forest Resource Strategies also set priorities for action at the state level. A crosswalk between the Urban and Community Forestry Strategy priority action areas and the State Forest Resource Strategies is included in Appendix B.

Relationship to State Government: As we implement this strategy we will engage and coordinate with State Foresters or equivalent state officials. This engagement can take many forms including program direction advice, technical assistance, collaboration on project proposals for various funding sources, and support for the urban and community priorities in the individual State Forest Resource Strategies.

Relationship to Partners: We will engage the full range of federal, state, and local agencies, tribes, universities, researchers, nongovernmental organizations and private entities, international partners, and the general public to achieve this strategy.

Management Strategies – The table below exhibits the management strategies from the NA Strategic Plan goal 2D to enhance the capacity of forests to provide public benefits and maintain and enhance the benefits that metropolitan areas and communities derive from their forests and trees.

Goal 2D Management Strategies	Goal 2D Strategic Actions
Set goals and institute policies	Develop state and community capacity to set goals and institute policies to conserve, protect, and enhance strategic tree and forest cover at the landscape scale.
	Work with partners to develop an integrated planning approach to the full range of resource issues facing communities
Improve tree and forest management	Support states & communities in improving tree and forest management
	Build capacity for the use of science and innovation in management of healthy urban forests.
Enhance the health of urban watersheds	Work with partners to develop an integrated planning approach to the full range of resource issues facing communities
	Promote innovation in design and planning for low impact development, encouraging States and communities to incorporate trees into watershed practices

Six broad strategic action areas were selected to organize future activities that support the Northeastern Area Strategic Plan Goal 2D, and reflect both current NA expertise and past investments. The next section includes a brief overview of these action areas and 40 specific actions that support the goal.

Action Area 1 – Expanding urban forestry programs in the region served by the Northeastern Area. Urban land area in the United States is projected to increase from 3.1% in 2000 to 8.1% in 2050. Because of this urban growth, more regional planning and management will be needed to sustain the ecosystem services provided by urban tree canopy (Nowak and Walton 2005). Community goals and policies (e.g. planning and ordinances) addressing urban tree canopy are critical in meeting aims of sustainable development.

Management Strategies and Actions to Sustain and Expand the Urban Tree Canopy

Action Area	Goal 2D Management Strategies	Goal 2D Strategic Actions	Priority Actions
1. Expanding Urban Forestry programs in the region served by the Northeastern Area	Set goals and institute policies	Develop state and community capacity to set goals and institute policies to conserve, protect, and enhance strategic tree and forest cover at the landscape scale	1A. Work with State Foresters & their staff to maintain a viable state level program and assist them and other partners to address urban forestry issues as identified in State Forest Resource Strategies.
		Work with partners to develop an integrated planning approach to the full range of resource issues facing communities	1B. Expand NA network of partners in each state to co-identify and address priority issues.
	Improve tree and forest management	Support states & communities in improving tree and forest management	1C. Emphasize the important contributions forests and trees make to climate and carbon, including energy conservation.
		Build capacity for the use of science and innovation in management of healthy urban forests	1D. Support technical analysis, monitoring, and planning tools to build capacity and facilitate urban forest management.
	Enhance the health of urban watersheds	Work with partners to develop an integrated planning approach to the full range of resource issues facing communities	1E. Increase cooperation/communication with a broader array of state and federal agencies in urban areas to leverage additional resources.
		Promote innovation in design and planning for low impact development, encouraging States and communities to incorporate trees into watershed practices	See Action Area 3.

Action Area 2 – Helping communities set urban tree canopy goals and monitoring progress towards meeting these goals. According to the US Forest Service Resource Planning Act (RPA) assessments, the average tree canopy cover is above 30 percent across the Northeast and Midwest (New England, Mid-Atlantic, and Midwest communities averaged 44%, 29%, and 18% respectively) (Dwyer and Nowak 2000, Nowak and Greenfield 2010, Nowak GTR NRS-62). The trees that are present in urban areas are subject to a wide variety of stressors, which significantly shortens their lifespan. Urban development has eliminated space for trees. Because of this, many metropolitan areas and communities including Chicago (<http://www.cmap.illinois.gov/>), New York City, Philadelphia, and Cumberland-MD, Rutland-VT, and Woodbury-MN are responding by protecting and enhancing their urban and community forests through urban tree canopy goal setting processes. The aim of the Urban Tree Canopy (UTC) assessment is to increase decision maker’s understanding of their urban forest resources and the ecosystem services provided by that resource. The assessment provides information about current extent as well as canopy that could exist.

Management Strategies and Actions to Sustain and Expand the Urban Tree Canopy

Action Area	Goal 2D Management Strategies	Goal 2D Strategic Actions	Priority Actions
2. Helping communities set Urban Tree Canopy goals and monitoring progress towards meeting these goals	Set goals and institute policies	Develop state and community capacity to set goals and institute policies to conserve, protect, and enhance strategic tree and forest cover at the landscape scale	2A. Work with states & private organizations to promote benefits of UTC in those communities with less than average UTC and greater than average population density and impervious surface area.
		Work with partners to develop an integrated planning approach to the full range of resource issues facing communities	2B. Increase understanding by decision makers about the amount and value of UTC that currently exists and the amount that could exist. Encourage public participation to set and realize UTC goals.
	Improve tree and forest management	Support states & communities in improving tree and forest management	2C. Identify/encourage the conservation and/or restoration of significant urban forest tracts.
		Build capacity for the use of science and innovation in management of healthy urban forests	2D. Expand i-Tree & similar tools for community inventory & assessment. Add assessment capabilities for soils, habitat and ecological communities to UTC tools.
	Enhance the health of urban watersheds	Work with partners to develop an integrated planning approach to the full range of resource issues facing communities	2E. Evaluate change over time with paired studies to address UTC in areas of projected growth.
			2F. Support & communicate new and improved urban watershed best management practices. Integrate with other water initiatives.
		Promote innovation in design and planning for low impact development, encouraging States and communities to incorporate trees into watershed practices	See Action Areas 3 & 4

Action Area 3 – Promoting the effective integration of green space with existing urban infrastructure.

Assessment methods that are emerging will allow urban planners and managers to better understand not just the extent, but also the condition and function of their forest infrastructure and urban tree canopy. There will be increased interest in food security and urban agriculture. There will be increased pressure to use open space to meet multiple needs. Spaces once used for recreation may also function as opportunities for gardens, agriculture, and stormwater retention. Urban managers need to take a systems approach, including at the global scale, to incorporate these and other trends.

Management Strategies and Actions to Sustain and Expand the Urban Tree Canopy

Action Area	Goal 2D Management Strategies	Goal 2D Strategic Actions	Priority Actions
3. Promoting the effective integration of green space with existing urban infrastructure	Set goals and institute policies	Develop state and community capacity to set goals and institute policies to conserve, protect, and enhance strategic tree and forest cover at the landscape scale	3A. Encourage practices and initiatives that promote green infrastructure design & development.
		Work with partners to develop an integrated planning approach to the full range of resource issues facing communities	3B. Support development of model ordinances and guidelines for increasing planting space.
			3C. Support development of canopy cover standards for different land uses.
	Improve tree and forest management	Support states & communities in improving tree and forest management	3D. Encourage collaboration with a broad array of partners on green infrastructure issues.
		Build capacity for the use of science and innovation in management of healthy urban forests	3E. Become more involved with the LEED concept expanding beyond the building envelope to incorporate natural resources.
	Enhance the health of urban watersheds	Work with partners to develop an integrated planning approach to the full range of resource issues facing communities	3F. Promote integration of green infrastructure into storm water mitigation practices. Collaborate with engineers and others to update stormwater management models to incorporate natural systems approaches.
		Promote innovation in design and planning for low impact development, encouraging States and communities to incorporate trees into watershed practices	3G. Identify and help address conflicts between grey and green infrastructure approaches e.g., stormwater BMP's, green roofs, cutting tree roots, mowing less grass, allowing more natural forest structure to develop.

Action Area 4 – Protecting and enhancing water quality through broad landscape scale initiatives that include urban areas. Forested watersheds are necessary to meet the needs of people and communities. These watersheds extend into rural landscapes and cross many political and ecological boundaries. Clean water is one of the most important benefits from forested watersheds. Stormwater runoff degrades water quality and is the number one cause of stream impairment in urban areas. More communities are recognizing the high costs of controlling stormwater with gray infrastructure such as stormwater sewer systems and water treatment facilities, and are looking for innovative, cost effective ways to implement controls through building green infrastructure. (Actions described below take into consideration and are consistent with the NA watershed strategy).

Management Strategies and Actions to Sustain and Expand the Urban Tree Canopy

Action Area	Goal 2D Management Strategies	Goal 2D Strategic Actions	Priority Actions
4. Protecting and enhancing water quality through broad landscape scale initiatives that include urban areas	Set goals and institute policies	Develop state and community capacity to set goals and institute policies to conserve, protect, and enhance strategic tree and forest cover at the landscape scale	4A. Support incorporating UTC into specific best management practices to meet Clean Water Act regulations for permitting Phase I and II municipal stormwater management.
		Work with partners to develop an integrated planning approach to the full range of resource issues facing communities	4B. Collaborate with partners to address drinking water supply and watershed health issues on state, private and NFS headwater forests. Link this work to development of measures for improving watershed quality in urban areas.
			4C. Support urban partners in landscape scale, watershed level planning.
	Improve tree and forest management	Support states & communities in improving tree and forest management	4D. Support implementation of urban watershed forestry best management practices and new innovations such as “engineered urban tree systems” for the purpose of stormwater management.
		Build capacity for the use of science and innovation in management of healthy urban forests	4E. Develop accounting tools for runoff reduction provided by green infrastructure designs.
	Enhance the health of urban watersheds	Work with partners to develop an integrated planning approach to the full range of resource issues facing communities	4F. Promote watershed forestry – e.g. expanding UTC for stormwater management.
		Promote innovation in design and planning for low impact development, encouraging States and communities to incorporate trees into watershed practices	4G. Facilitate innovative ecosystem market programs (e.g., Bay Bank) to complement regulatory and incentive based approaches to reducing stormwater runoff.

Action Area 5 – Enhancing the capacity of urban and community residents to build and maintain the urban forest. Many urban residents may not have the opportunity to develop a connection to nature and urban greenspace. The importance of sustaining urban tree canopy is well documented, but not well understood. In many urban redevelopment and community development schemes, urban greening is often regarded as a modest concern. As development pressure in urban areas increases, landscapes will need to be evaluated by the human services they provide. Research on the human dimensions of nature experiences confirms that the presence of green infrastructure in the daily activities and lives of urban dwellers generates profound and important effects.

Management Strategies and Actions to Sustain and Expand the Urban Tree Canopy

Action Area	Goal 2D Management Strategies	Goal 2D Strategic Actions	Priority Actions
5. Enhancing the capacity of urban and community residents to build and maintain the urban forest	Set goals and institute policies	Develop state and community capacity to set goals and institute policies to conserve, protect, and enhance strategic tree and forest cover at the landscape scale	5A. Expand localized green job opportunities and target initiatives in areas with below average UTC.
			5B. Assist states and other partners with methods to reach under-served communities and achieve broader and more diverse citizen participation.
			5C. Incorporate how UTC positively impacts human health factors such as stress reduction, air quality, recovery from illness, and toxins in the environment.
	Improve tree and forest management	Support states & communities in improving tree and forest management	5D. Emphasize the connection of people, trees and forests utilizing local organizations to engage community volunteers to implement projects and perform stewardship actions.
			5E. Invest in outreach & technology transfer that improves delivery methods to reach new groups e.g. Urban Forestry Index, Presentations Database, Content Management Websites. See Part III on “Technology Transfer.”
	Enhance the health of urban watersheds	Work with partners to develop an integrated planning approach to the full range of resource issues facing communities	5F. Engage with stakeholders on urban watershed issues. Coordinate with partners on public outreach messages related to watershed health, safe drinking water, and stormwater mitigation.
			5G. Facilitate training opportunities for sustainable urban watershed design, construction, and maintenance best management practices. Feature benefits of water retaining landscapes in the urban forest.
	Promote innovation in design and planning for low impact development, encouraging States and communities to incorporate trees into watershed practices		

Action Area 6 – Improving urban forest health through the early detection of and rapid response to threats that include invasive species, weather events, fire, and climate change. Urban areas are frequently threatened by invasive pests and disease infestations and are known to be sites of initial population establishment. Similarly, damage to urban forests by natural disasters is a threat to the structure, function and health of the urban tree canopy. Potential threats to UTC include: climate change, invasive species, weather events, wildland fire in the urban interface, and human activities all of which can significantly shorten an urban tree’s lifespan. Urban areas will continue to struggle with the effects of invasive forest plants, insects and diseases. Assessment of the extent, health, and function of the UTC needs to be continually updated along with the tools employed to carry out this work.

Management Strategies and Actions to Sustain and Expand the Urban Tree Canopy

Action Area	Goal 2D Management Strategies	Goal 2D Strategic Actions	Priority Actions
6. Improving urban forest health through the early detection of and rapid response to threats that include invasive species, weather events, fire, and climate change	Set goals and institute policies	Develop state and community capacity to set goals and institute policies to conserve, protect, and enhance strategic tree and forest cover at the landscape scale	6A. Link affected communities with the help they need to prepare and respond to wildfire, storm events, and invasive species and mitigate their impacts.
			6B. Encourage states and communities to understand the composition of their unique urban tree resource, its health and vulnerability.
		Work with partners to develop an integrated planning approach to the full range of resource issues facing communities	6C. Ensure integration and coordination of UTC goals with invasive species response both within NA and among key federal and state partners.
			6D. Promote increased use and involvement in CWPP efforts within NA and among partners.
	Improve tree and forest management	Support states & communities in improving tree and forest management	6E. Provide tools and resources to support response to widespread UTC damage, and minimize the loss of UTC due to invasive pests and other disturbances.
			6F. Promote utilization of urban wood.
		Build capacity for the use of science and innovation in management of healthy urban forests	6G. Promote efforts by local units of government, green industry, and community organizations to increase awareness and detection of threats to UTC.
	Enhance the health of urban watersheds	Work with partners to develop an integrated planning approach to the full range of resource issues facing communities	6H. Promote urban forest health practices in context of sustaining and restoring ecological function within broader watershed landscapes.
Promote innovation in design and planning for low impact development, encouraging States and communities to incorporate trees into watershed practices		See Action Area 4.	

Priorities for Early Action:

There are a total of 40 action items listed for the six Action Areas. In order to prioritize and ensure that investments are leveraged and integrated across State and Private Forestry programs, both the NA urban and community forestry staff and other NA program staffs were consulted, including: Forest Stewardship, Forest Health, Legacy, Conservation Education, Watersheds, Ecosystem Services, Fire and Aviation Management, and the Wood Education Resource Center. All staffs in this exercise had an opportunity to score the 40 actions from 1 to 10 (with 10 being most important and relevant action). From this exercise the following six priority actions were identified. These will be evaluated yearly by the NA UCF staff, and again by the larger NA staff when the Area Strategic Plan is updated.

- 1C. Emphasize the important contribution forests and trees make to climate and carbon, including energy conservation.
- 2A. Work with states and private organizations to promote benefits of UTC in those communities with less than average UTC and greater than average population density and impervious surface area.
- 2B. Increase the understanding by decision makers about the amount and value of UTC that currently exists and the amount that could exist. Encourage public participation to set and realize UTC goals.
- 3D. Encourage collaboration with a broad array of partners on green infrastructure issues
- 6E. Provide tools and resources to respond to UTC damage minimizing the loss of UTC due to invasive pests and other disturbances.
- 6H. Promote urban forest health practices to sustain and restore ecological function within broader watershed landscapes.

Part II – Collaborative Activities and Opportunities among Forest Service Units and the Northeastern Area State Foresters

The goal of this collaboration is a shared sense of purpose and responsibility for effective urban land stewardship that addresses the multiple goals among the partner organizations. NA supports landscape scale planning that bridges forest conservation goals and practices in rural areas to sustainable green infrastructure goals in urban areas. In turn, a comprehensive, science-based, “all lands” approach to achieve sustainable management of all forest resources (rural to urban) requires effective integration and collaboration between Forest Service units (Northeastern Area, Eastern Region, and Northern Research Station) and State Foresters (Collaborative Framework for Landscape Scale Conservation in the Northeast and Midwest, December 2009). Greater integration will be needed to address the action areas identified in this strategy.

Benefits of increased collaboration between Forest Service units and the State Foresters in achieving urban land stewardship are:

- Better coordination to optimize and leverage resources to sustain and expand the urban tree canopy;
- Increased visibility of the Forest Service and State Foresters’ shared role in urban land stewardship;
- Enhanced opportunity for input and feedback to Forest Service research and technology transfer;
- Improved understanding of urban attitudes towards natural resource issues that can be more readily incorporated into management decisions;
- Advanced awareness by urban residents of current threats to sustainable forest management and actions necessary to mitigate impacts on urban and rural forests, such as fragmentation and climate change.

There are many examples of excellent collaboration between NA, the State Foresters, Northern Research Station, and the National Forests of the Eastern Region. Some current efforts to achieve greater integration include the position paper on Landscape Scale Conservation in the Northeast and Midwest, and the State Forest Resource Assessments and Strategies. These and other important collaborative efforts will need to continue and expand in scope.

NA Opportunities to Collaborate with Northern Research Station (NRS) –

The Northeastern Area and Northern Research Station have worked effectively to communicate and coordinate efforts to improve the science, design, and delivery of products that meet the needs of State Forestry agencies and key audiences and partners at the local level. Specific examples include:

1. i-Tree suite of analytical software tools
2. Urban Forest Inventory and Analysis protocols
3. Urban Street Tree Assessment protocols
4. Urban Tree Canopy assessment and goal setting techniques
5. Stewardship Mapping
6. Technology Transfer webcasts
7. Chicago Wilderness leadership and support
8. Living Memorial tools, and social and site assessment research

The NRS brings forward their tools and scientific expertise to communities that help to show the value of trees and forests, and how urban forests contribute to broader social concerns like public safety, health and education. Beyond ecosystem values, the NRS has particular interest in Social Science applications that help us to understand how urban natural resources stewardship improves the lives of people in urban areas. The focus is to link environmental health with community well-being.

In a meeting with executive leadership of NRS, we gained insight on opportunities to improve communication and collaboration, especially in our work to share information with elected officials and the public. The research community maintains direct relationships with local nonprofit and government leadership to achieve their goals of science delivery. The Northeastern Area works primarily with State Foresters and support their capacity and leadership to meet the needs of local partners. Collaboration would be advanced by creating a consistent forum for communication internally, and being flexible to work with wide range of partners to advance a cohesive federal role that would bring all of our resources to the front lines of Urban Natural Resources Stewardship (UNRS). UNRS was described as a comprehensive approach that links social, economic, and ecological resources to create an enhance quality of life for our diverse population.

A good example of where collaboration is occurring consistently is where NA and NRS are co-located in Chicago. Projects and partnerships are shared seamlessly, and staffs support one another to accomplish shared goals in urban land stewardship, including at the US Forest Service Midewin National Tallgrass Prairie. Staffs work with one another and with other federal agencies to meet the needs of Chicago Wilderness (providing leadership, chairing committees) and supporting Calumet restoration activities and other emerging opportunities in forest health, fire, and urban forestry, and communicating with members of Congress and the public in the Chicagoland region.

At the executive level, NRS shared a number of ideas for working together in a cohesive way to achieve common goals with a focus on tree canopy cover in urban environments. It was suggested that project and program leaders identify current high value collaborative work (above) and agree on principles for effective collaboration, including technology transfer. The Urban Waters Federal Partnership was highlighted for the strength that will result from a more cohesive federal approach. With line officer engagement, scientists and NA staff would work with one another with greater awareness, assess the results, adjust as necessary, and ultimately develop a shared vision of urban natural resources stewardship with other key partners. It was suggested that the results of national work in progress, “Vibrant Cities: A Call to Action”, could be used to inform our shared vision.

Reflecting specifically on the National Forest System role in urban land stewardship, NRS leadership expressed interest in knowing how the Urban Connections initiative might contribute to a cohesive urban natural resources stewardship strategy.

NA Opportunities to Collaborate with National Forests of the Eastern Region(R9) –

The Eastern Region (Region 9) of the Forest Service manages 12 million acres of national forests and tallgrass prairie, and provides leadership in forest conservation at a landscape scale to connect people with the land, forests, and nature. The Northeastern Area and Region 9 have worked effectively with one another to implement the Region’s innovative Urban Connections initiative in Boston, Detroit, Milwaukee, Minneapolis, and regional key cities such as Chicago and New York. We have a long standing and supportive relationship on forest health and fire issues, and remain committed to working collaboratively at a landscape scale, particularly on watershed related issues – most recently related to delivering the Great Lake Restoration Initiative.

Through the Region’s Urban Connections program, staff located in select cities focus on diversity (including underserved communities), partnerships, conservation education, public involvement, research delivery, and building public awareness of forest connections to water, recreation, invasive pests, air quality, green jobs, and forest products. Led by local steering teams, including leadership in Research, State and Private Forestry, and National Forests, the initiative meets people where they are, establishing networks, supporting their local work and educational objectives, and bringing them to national forests to develop long term partnerships, and potentially recruiting new employees. Urban Connections currently focuses its efforts in Minneapolis, Boston, Detroit, Milwaukee, including efforts in Chicago and New York.

In a meeting with Region 9 leaders, needs were expressed to improve our shared interaction with urban audiences including common branding, strong communications tools, consistent messages, awareness, and providing editorial

opportunities for leadership by communicating Forest Service messages to local communities. In addition to consistent communications among the mission areas, leadership highlighted the importance of leveraging resources, developing and sharing networks and partnerships so as to avoid conflicting or duplicative messages and actions. In other words, there is a sincere desire for us to work in a coordinated way in our interaction with urban audiences.

To achieve our shared goals, Regional Forester Kent Connaughton highlighted the importance of knowing the strengths and infrastructure of each Forest Service mission area to provide “seamless service” to the public. In regards to this urban strategy, Kent noted that sustaining urban tree cover is “not the NFS niche.” The larger focus will remain on promoting forest conservation at a landscape scale, including providing clean water as a central focus. He encouraged that staff and line officers in the three mission areas begin a dialogue on areas of collaboration, priorities, and gaps. One output from this dialogue should be key messages, next steps, and strategic connections.

NA Opportunities to Collaborate with State Foresters:

Historically the State Foresters and their staff have been a key piece in urban land stewardship and urban and community forestry program delivery. With funding from the Forest Service the states are asked to hire an urban and community forestry program coordinator, provide for volunteer/partnership coordination, establish an urban and community forestry council, and develop a State program strategic plan (five-year plan). However the State Forest Resource Assessment and Strategies provide for new opportunities for collaboration and integrated planning as it relates to urban land stewardship. A crosswalk between the NA Urban and Community Forestry Strategy six priority action areas and the State Forest Resource Strategies is outlined in Appendix B. The Northeastern Area is committed to assisting each State Forest in carrying out their State Forest Resource Strategy.

The state forester’s role in urban land stewardship in their states is leadership, technical assistance, a funding source for local communities and partners, as well as information and technology transfer. They also work with other federal agencies to bring resources to their communities, and work through the NAASF to garner support for federal programs. State foresters are the primary delivery agent for forestry assistance in their states, and they ensure equal access to resources and forest benefits for all their communities and residents.

State forestry agencies are engaged in all forms of urban land stewardship, supporting the development of sustainable programs at local to regional scales. They foster emerging and advanced tree care programs, support green infrastructure planning initiatives, improve land management in the wildland urban interface, promote defensible space and Firewise communities, respond to natural disasters and spread of exotic insects and diseases, and catalyze and sustain partnerships to keep forests as forests across the continuum of land uses from rural to urban.

In a meeting with executive leadership of NAASF, it was noted that this strategy document identifies many great opportunities for broader federal collaboration with States. Specific areas of opportunity were highlighted, including:

- Urban forest health assessments and tools
- Technology transfer activities, like i-Tree and Urban Tree Cover analysis
- Community Wildfire Protection Plans, Firewise, and Tree City USA integration
- Urban wood utilization
- Assistance in reaching “under-served” communities
- Increasing cooperation with a broader array of federal agencies

Specific mention was made of the NAASF committee structure, and the need for cross committee interaction to identify shared goals and opportunities for collaboration. With regard to Research there was broad acknowledgement of the advanced leadership being provided by the Northern Research Station in urban natural resources stewardship. There was also a desire for greater dialogue and a renewed effort by NRS to seek input from State Foresters on critical needs and opportunities for coordinated delivery of information and technology. For greater interaction to occur, state foresters suggested the need for more of a one-stop location for accessing the skills and resources of NRS. It was noted that NA and NRS staff show good collaboration, but that this often misses State involvement.

Finally, the role of the Eastern Region in urban land stewardship was little understood by state foresters, but there is an openness to dialogue for defining a clearer role that may result in a more coordinated approach to urban land stewardship.

Key Findings

In review of the dialogue above regarding collaborative activities and opportunities among Forest Service units and the Northeastern Area State Foresters:

1. There is general agreement that collaboration and a cohesive Forest Service role would be advanced by knowing each other's strengths and creating an internal forum for communication and coordination on partner activities, events, projects, science, and technology transfer.
2. With executive engagement and clear principles established for effective collaboration, scientists and staff can develop a focused plan of work on mutually beneficial priorities, assess the results, adjust as necessary, and ultimately develop a shared vision of urban land stewardship. Important components would include consistent messages that communicate the value and benefits of urban forests and fostering collaboration with other federal agencies.
3. Engaging State Foresters earlier and more consistently will better engage the region's full capacity and ensure relevant and timely products, and well-supported partnerships.

Part III –Technology Transfer (TT)

Technology transfer is one area where the potential exists for effective collaboration between NA, the NAASF, Northern Research Station, and the National Forests of the Eastern Region. To this end the following lays out a framework for high quality technology transfer.

The ability of the Forest Service to transfer information and new technology to community leaders and natural resource partners is critical to achieving our shared mission across the Northeast and Midwest landscape. To ensure that technology transfer is most effective, at least three things should occur.

First, program staff must maintain technical excellence in their respective disciplines. Technical knowledge is fundamental to understanding information so that it can be explained (transferred) to users.

Second, the most effective technology transfer occurs at the research planning stage. Keeping NA staff linked early and continuously throughout the life of a research project—whether it be Forest Service research or university research—is key.

Third, technology transfer efforts need to be focused, well funded, and flexible. NA's most successful efforts have occurred when staff:

- *analyzed* the audience,
- *invested* sufficient resources in product design and distribution,
- *tailored* products to maximize their use by specific users,
- *marketed* the products well and engaged other partners in doing so,
- *adapted* products in response to changing conditions or to take advantage of new media technologies.

Encouraging and promoting sustainable forest management across our large and diverse landscape and among forest managers and forest owners is a challenging and rewarding mission. To be successful, we must take full advantage of every tool in our toolbox

Key Principles:

- We will use the NA Strategic Business Plan (SBP), the UCF Strategy, and State Forest Resources Assessments and Strategies to drive the creation and prioritization of TT projects.
- We will identify and raise visibility of key TT products through larger “roll-out” efforts and active NA leadership involvement.
- We will invest in improved technology transfer systems that increase efficiency and effectiveness in the Forest Service and provide services to our partners (e.g., Urban Forestry Index [UFind], Presentations Database, Content Management database).
- We will work to continuously improve how we engage diverse audiences at different scales across the urban-rural continuum.
- Coordination and communication with other Forest Service Regions, Research, and other Federal Agencies will be a standard practice to minimize duplication, improve marketing and dissemination of final products, and greatly expand the visibility of work completed by the Area.

Major TT Development Steps	Description
1. Determine research and technology needs, and work to influence decisions to fund future research in priority areas.	Collaborate with researchers and other organizations and entities – e.g., the National Technology Transfer Team, the National U&CF Advisory Council -- to identify research and development needs and address priority issues. Foster and maintain interpersonal relationships with researchers and arrange formal topic-driven meetings to share current and upcoming project information. Involve the NA Executive Team (NAET) in identifying key issues and TT product needs, with engagement between the executive leadership of NA, Forest Service Research & Development and the Eastern Region as appropriate on selected projects.
2. Implement a clear process for developing and prioritizing TT project ideas within NA’s UCF Program and the larger NA Strategic Business Planning effort.	This will require improved coordination among Field Offices and the Area Office, and the NAET, stakeholders, as well as other Forest Service Regions, Research Stations, and other Federal agencies. The list should be reviewed by UCF staff on a semi-annual basis and used to request funding and guide annual work plans to address NA’s strategic and business plan priorities.
3. Improve marketing and dissemination of existing and new products.	Develop a marketing and dissemination strategy in advance of product development and devote adequate staff time to this phase after product release. Ensure that NA leadership is directly involved in marketing on the major products.
4. Ensure that TT is integrated with NA technical and financial assistance.	Ensure that NA technology transfer expertise is utilized in the review and monitoring of TT projects funded through competitive allocation. Ensure that innovative practices and new tools developed through NA funded projects are effectively identified and “transferred.”
5. Monitor and evaluate the success of technology transfer efforts.	Assess marketing, distribution, use, and impact of technology transfer efforts. Further, ensure that innovative tools developed through NA grants are identified and disseminated.

Appendix A
Role and Authorities in Regards to Urban Land Stewardship

Northeastern Area State and Private Forestry -- Program Authorities in Urban and Community Forestry:

The national UCF Program is authorized by Section 9, Urban and Community Forestry Assistance, of the Cooperative Forestry Assistance Act of 1978 (PL 95-313) as amended by PL 101-624. This law authorizes the Secretary of Agriculture to provide financial, technical, and related assistance to State Foresters or equivalent State officials for the purpose of encouraging States to provide information and technical assistance to units of local government and others that will encourage cooperative efforts to plan urban forestry programs and to plant, protect, and maintain, and utilize wood from, trees in open spaces, greenbelts, roadside screens, parks, woodlands, curb areas, and residential developments in urban areas. The Secretary is also authorized to cooperate directly with units of local government and others in implementing this section whenever the Secretary and the affected State Forester or equivalent State official agree that direct cooperation would better achieve the purposes of this section."

The Secretary, in cooperation with State foresters and State extension directors or equivalent State officials and interested members of the public, including nonprofit private organizations, shall implement a program of education and technical assistance for urban and community forest resources. The program shall be designed to--

- (1) assist urban areas and communities in conducting inventories of their forest resources, including inventories of the species, number, location, and health of trees in urban areas and communities, identifying opportunities for the establishment of plantings for the purposes of conserving energy, and determining the status of related resources (including fish and wildlife habitat, water resources, and trails);
- (2) assist State and local organizations (including community associations and schools) in organizing and conducting urban and community forestry projects and programs;
- (3) improve technical support in--
 - (A) selecting tree species appropriate for planting in urban and community environments and for promotion of energy conservation;
 - (B) providing for proper tree planting, maintenance, and protection in urban areas and communities;
 - (C) protecting individual trees and preserving existing open spaces with or without tree cover; and
 - (D) identifying opportunities for expanding tree cover in urban areas and communities;
- (4) assist in the development of State and local management plans for trees and associated resources in urban areas and communities; and
- (5) increase public understanding of the energy conservation, economic, social, environmental, and psychological values of trees and open space in urban and community environments and expand knowledge of the ecological relationships and benefits of trees and related resources in these environments.

Forest Service Research and Development:

The Forest and Rangeland Renewable Resources Research Act of 1978, under Section 3 (a) states: "The Secretary is authorized to conduct, support, and cooperate in investigations, experiments, tests, and other activities...to obtain, analyze, develop, demonstrate, and disseminate scientific information about protecting, managing, and utilizing forest and rangeland...resources in rural, suburban, and urban areas...."

The 1974 Forest and Rangeland Renewable Resources Planning Act, under the Renewable Resources Assessment, Section 3 (a) (6), directs: "...an analysis of the rural and urban forestry opportunities to mitigate the buildup of atmospheric carbon dioxide and reduce the risk of global climate change...."

With its national system of Research Stations, the Forest Service maintains several research work units that address urban natural resource issues. These research work units work closely with Forest Service UCF program staff, State agencies, universities, and external partners to identify important research questions, conduct studies, and transfer findings. Forest Service Research and Development seek knowledge and information that managers can use to

control costs while maximizing the physical, biological, economic and social benefits of our nation's urban natural resources.

The primary Forest Service Research & Development units involved with urban and community forestry research are:

1. Northern Research Station-Urban Forests, Human Health, and Environmental Quality
2. Pacific Southwest Station-Center for Urban Forest Research
3. Southern Research Station-Integrating Human and Natural Systems in Urban and Urbanizing Environments

National Forest System -- Eastern Region:

The National Forest organization has a mandate to involve interested publics in National Forest management decisions (FSM1620) and to utilize venues and communication channels that are appropriate for the targeted publics. The Eastern Region works in partnership with urban, suburban, and rural residents and stakeholders to understand forest problems, share information and encourage safe and sound use of National Forests. The job of the employees at the National Forests is to help people share the benefits and enjoyment of the forests and grasslands, while conserving the environment for generations yet to come.

All National Forest System line officers have responsibilities for their level of organization and geographic area of responsibility to develop, maintain, and coordinate continuing contacts with specific groups whose primary areas of interest relate closely to theirs (FSM 1625.04a, 1625.04b). In carrying out assigned group contacts responsibilities, designated staff directors, or staff assistants have the responsibility to:

1. Identify those groups, organizations, and associations that may be interested in, or affected by, the programs or activities associated with their areas of work, and update the electronic group contact roster.
2. Identify officers and key leaders of those groups, organizations, and associations, and update the contact roster for their staffs.
3. Identify current mutual areas of interest with identified groups.
4. Develop cooperative activities and collaborative relationships with external groups, where appropriate and feasible.
5. Keep line officers and other appropriate staff informed of potential problems, issues, or cooperative opportunities.
6. Review group contact activities annually to evaluate the effectiveness of group contact efforts and whether these efforts should be continued.

Methods of strategically positioning ourselves and our resources while establishing and maintaining working relationships with groups and organizations vary according to circumstances, opportunity, and mutual interests. Consider the following activities:

1. Arranging one-on-one meetings and consultations with group officers or key leaders.
2. Attending or speaking at meetings of groups and organizations.
3. Conducting "show-me" Forest Service trips and open houses.
4. Encouraging group and organization involvement in specific Forest Service planning and decision-making processes.
5. Conducting workshops on natural resource management issues or processes.
6. Arranging for articles in organization publications and newsletters.

7. Arranging cooperative outdoor environmental programs and activities.
8. Providing groups with appropriate informational materials on Forest Service programs and policies and on current Forest Service natural resource issues.

Strategic approaches include:

- Utilize a public affairs approach to 2-way communications
- Recognize both the synergy and independence of each Forest Service branch
- Network to build on existing programs
- Focus on community leaders as an important audience
- Develop common messages and branding that is repeatedly utilized.

DRAFT

Appendix B
Crosswalk Between the Action Areas and the State Forest Resource Strategies

	Expand UF Programs	SFRAS Ref#	Help Set UTC Goals	SFRAS Ref#	Promote Green Infrastructure	SFRAS Ref#	Protect Water Quality	SFRAS Ref #	Enhance Local Capacity	SFRAS Ref#	Early Detection Rapid Response	SFRAS Ref #
CT	X	Action 5.b. (p.165)	X	3.d.vi	X	Action 2.d.; 7.2, 4.c.; Multi-state	X	Action 5.b.	X	Action 5.a; 3.b.i;	X	7.2.i, 7.18.11
DC	X	7, 8, 9, 10	X	1., 2.	X	10., 14.	X	7.,8.,9.	X	12, 13,	X	1.6
DE	X	Criteria 6; 1.6; 3.2;	X	1.60	X	Criterion 7; 4.1.4	X	Criterion 6; 1.6.5	X	4.1.5.	X	1.7.1
IA	X	5.1.c., 5.1.e, 5.1f	X	1.09.d., 1.11.d.	X	4.3.c, 4.3.d, 4.3.e,	X	1.10.f, 4.2n	X	1.07d., 1.09i,	X	1.9.n, 3.2.c,
IL	X	Encourage Greenspac	X	Priority Planting	X	greenspace					X	Monitor presence
IN	X	3.1			X	1.6, 4.1			X	4.1, 4.3,	X	3.1, 1.18
MA	X	Mission	X	4.1.a	X	4.3b.	X	2.4.d	X	4.1.a.	X	3.7.a,3.2
MD	X	II.C	X	IV.B.1.	X	III.B.2., IV.B.3., V.A.3	X	III.A.1.,III. B.2	X	IV.B.3.	X	II.A.2.
ME	X	4.1, 4.6	X	4.10	X	4.3	X	4.5	X	4.8	X	3.5, 3.8, 3.12, 4.4
MI	X	3.4.b.	X	3.2.c., 3.9.a.	X	3.5.e	X	2.1.d,3.2.c,	X	3.5.f, 3.4.a,	X	IV.E.3.9
MN	X	Issue 10	X	10.5	X	2.10	X	2.4	X	10.6,	X	3.8, 3.13,
MO	X	8.1.1	X	8.3.1	X	8.4.1,	X	4.3.1	X	8.1.1, 8.2.2	X	7.4.1, 8.3.1,
NH	X	I.B.5.60.	X	1.B.5.56	X	IB143, IB562	X	IB562	X	I.B.4.47 and 49, I.C.4.90	X	I.B.3.44., II.C.5.12 5,
NJ	X	3.2, 3.7	X	3.20	X	1.2	X	1.2	X	1.2, 3.6	X	1.2
NY	X	9.1.3	X	9.1.1	X	1.1.3, 6.1, 9.1, 9.4, 10.1	X	5.1.2, 5.1.7,	X	9.1, 9.2	X	7.1.2, 7.2.2
OH	X	2.4	X	3.1.1	X	6.1.2,	X	3.1.1	X	2.4.1, 2.4.2,	X	5.2.1,5.2 .2, 5.4.1
PA	X	3.1.H., 4.8, 6.D.4	X	3.5.A, 3.5.B,	X	3.2.F, 3.4	X	3.4, 3.8.B	X	3.5B, 3.7C,	X	2.2, 2.4
RI	X	AppendixD	X	U&CF	X	6.2B, 8.5A	X	6.2, 6.3B	X	3.4.B	X	4.1.A
VT	X	4.2.31, 4.4.43	X	Issue 8	X	1.1.2, 4.4.42, 4.4.43	X	3.2.20, 2.2.10,	X	4.2.31	X	2.1.7
WI	X	B.4.21, C.3.32	X	D.1.38	X	A.3.6, B.2.16, Action B.4.4.	X	B.2.15, B.4.21	X	D.1.38, D.3.42	X	B.4.20, B.5.23
WV	X	6.2.1, 6.4.1, 8.3.1	X	6.2.1	X	6.6	X	6.5.1	X	6.1.1	X	7.3.A.1.
	100.0%		95.2%		100.0%		90.5%		95.2%		100.0%	

Appendix C

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