

The National Cohesive Wildland Fire Management Strategy

Northeast Regional Action Plan

A Phase III Report by the
Northeast Regional Strategy Committee

April 2013



Resilient Landscapes



Fire Adapted Communities



Wildfire Response



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IMPORTANT NOTE:

The Wildland Fire Executive Council (WFEC) has accepted this plan for use in the development of the National Action Plan. The National Risk Analysis Report and National Action Plan will become WFEC recommendations to the Wildland Fire Leadership Council (WFLC) and ultimately Secretaries of the Interior and Agriculture. This plan reflects the regional perspective that is important in the development of that national-level recommendation. Implementation of actions identified in this plan is the responsibility of the sponsoring organizations at the discretion of those organizations.



The National Cohesive Wildland Fire Strategy:

Northeast Regional Action Plan



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The National Cohesive Wildland Fire Strategy: Northeast Regional Action Plan



Executive Summary

This Northeast Regional Action Plan details the goals, desired outcomes, investment options, outcome measures, and priority implementation actions for the Northeast Cohesive Strategy Region. These actions, as identified by the Northeast Regional Strategy Committee (RSC), will help guide all the partners in wildland fire management in the Northeast Region to make progress in achieving the overarching national goals: Restore and Maintain Landscapes, Fire Adapted Communities, and Wildfire Response.

The Northeast Region encompasses twenty Midwestern and Northeastern states and the District of Columbia. The twenty states comprise the most densely populated region of the nation, home to more than 41 percent of Americans. Land ownership and management, weather and climate event-created fuel loading (surface fuels loading), high wildfire occurrence numbers, and extensive wildland urban interface (WUI) distinguish the Northeast Region from the West, yet the Northeast has similarities to the Southeast. The Northeast can be described in risk management terms as having a large number of small, mostly human-caused, wildfires with a low occurrence of large wildfires, but all these present a high risk to life and property when they do occur.

Wildland fire management in the Northeast Region is the result of collaboration, partnerships, and cooperation among states, Fire Compacts, federal fire management agencies (e.g. The Forest Service (FS), Bureau of Indian Affairs (BIA), National Park Service (NPS), United States Fish and Wildlife Service (USFWS), Tribal governments, and many local fire departments. Addressing wildland fire is not simply a fire management, fire operations or wildland-urban interface problem – it is much larger and more complex. Each agency and organization represented by the Northeast RSC has the authority, responsibility, and autonomy to develop and implement their own policies. But long-term success can only be achieved through a unified, collaborative and focused effort of all. There are number of important considerations for Cohesive Strategy leaders and managers to keep in mind while implementing this Regional Action Plan:

- *The implementation actions expressed in this plan, while voluntary in nature, represent the collective work of the Northeast RSC and stakeholders to identify the most important actions needed to make progress toward achieving a more efficient, effective, and collaborative wildland fire management strategy for the Northeast.*
- *Leads and collaborators have been identified for each of the actions and task under each goal and option. It is important to note that not every agency and organization in the Cohesive Strategy partnership will have to work on every action and task.*
- *With each partner doing their share we can make significant progress in advancing wildland fire management in the Northeast as outlined in this action plan.*



- While more funding is not anticipated in the near term, the Cohesive Strategy is focused on making current investments more effective and working within current programs to get better results with available funding. Collaboration is especially important during times of economic stress.
- A commitment to addressing the greatest needs and achieving our common goals with the Cohesive Strategy is essential. Diversity of organizational and agency missions does not preclude, but rather can strengthen achievement toward the collaboratively developed goals.
- We strongly encourage agencies, organizations, and stakeholders represented on the Northeast RSC to take timely, decisive and effective steps to follow the Cohesive Strategy's Goals and Guiding Principles as they implement the actions and tasks in this action plan.
- Success in achieving the three broad goals of the Cohesive Strategy is a long-term proposition – no single decision by policymakers or management actions by land managers will solve our Nation's complex wildland fire issues.
- The strength and success of this Regional Action Plan will lie in its ability to motivate collaborative actions to reduce wildland fire risk by the diverse agencies, organizations, and partners involved in the wildland fire issue. Regular communications among Cohesive Strategy partners will be essential for success.

The Northeast Regional Risk Analysis completed in November 2012 identified a set of feasible investment options for addressing the Cohesive Strategy Goals in the Northeast U.S. For each of the investment options, the key risks, barriers, and opportunities were identified, and are addressed in this Regional Action. These options represent alternative strategies that wildland fire management organizations, federal, state, and local governments, non-governmental organizations and local communities can adopt in any number and combination to best meet their objectives and address the risks they may face from potential wildfire impacts. The options developed are not mutually exclusive, but complementary. ***There is no one preferred option to be applied across the Northeast Region.*** Instead the investment options should be balanced to achieve each of the national Cohesive Strategy goals and implement effective wildland fire management consistent with applicable land management objectives.

This Action Plan identifies key actions which are necessary to implement the options. As a starting point, the Northeast Region developed key actions under each option based upon feedback received from stakeholders during Phases I, II, and III of the planning process. The actions listed are key actions that are intended to be implemented during the next five years, and that will provide the most benefit to the region over that time period. The Action Plan describes the scope of the actions, the tasks associated with the actions, the lead and coordinating groups that will be implementing the actions, and the timeframe in which it is expected that the actions will take place.



The regional options for addressing each goal are summarized as follows:

Goal 1: Restore & Maintain Landscapes	Goal 2: Fire Adapted Communities	Goal 3: Response to Wildfire
Regional Option 1A - Expand the use of prescribed fire as an integral tool to meet management objectives in the Northeast.	Regional Option 2A - Focus on promoting and supporting local adaptation activities to be taken by communities.	Regional Option 3A - Improve the organizational efficiency and effectiveness of the wildland fire community.
Regional Option 1B – Maintain and increase where possible, the extent of fire dependent ecosystems and expand the use of fire as a disturbance process.	Regional Option 2B - Focus on directing hazardous fuel treatments to the wildland-urban interfaces.	Regional Option 3B - Increase the local response capacity for initial attack of wildfires.
Regional Option 1C - Focus on mitigating “event” fuels to reduce potential fire hazard.	Regional Option 2C - Focus on promoting and supporting prevention programs and activities.	Regional Option 3C - Further develop shared response capacity for extended attack and managing wildfire incidents with long duration fire potential.

The Northeast Regional Strategy Committee will continue to oversee, guide and coordinate implementation by all Cohesive Strategy partners. The Northeast Regional Strategy Committee is comprised of representatives from the following agencies and organizations:

- Department of the Interior
 - US Fish and Wildlife Service
 - US Geological Service
 - National Park Service
 - Bureau of Indian Affairs
- Department of Agriculture
 - US Forest Service
- Fond du Lac Indian Reservation
- Intertribal Timber Council
- Northeastern Area Association of State Foresters (20 Northeast and Midwest States, and District of Columbia)
- International Association of Fire Chiefs (IAFC)
- National Association of Counties (NACo) (Lake Co., MN)



It is anticipated that in the near future, a permanent regional coordinating entity will be established comprised of the leaders from the partners in the Cohesive Strategy, or their designated representatives to oversee the continued coordination, implementation, monitoring and accountability responsibilities committed to in the National Cohesive Strategy for the Northeast Region.

Monitoring of progress and accountability for accomplishment of the actions in this plan by Cohesive Strategy leaders and managers is critical to the success of the Northeast Cohesive Strategy Action Plan. Monitoring will provide an essential feedback loop that is the basis for continuous improvement. Monitoring also includes the opportunity to identify and incorporate new accomplishment data and scientific information as it becomes available. A regular process of reporting performance measure and activity accomplishments will maintain a regular focus on the three Cohesive Strategy goals, communicate progress nationally, with the other Cohesive Strategy Regions, and among the Northeast Cohesive Strategy partners and stakeholders, and provide an opportunity to make course adjustments as work progresses.

A Regional Communication Strategy will be developed in more detail following the completion and release of this Regional Action Plan. This communication strategy will be designed to:

- Identify and share of Lessons Learned, and examples of Success Stories related to the implementation of the Cohesive Strategy's three goals in the Northeast.
- Expand and maintain stakeholder outreach to engage partners, stakeholders, and local communities in the development dialogue and collaborative solutions for making progress on the three goals.
- Improve the understanding and maintain the engagement within those organizations and agencies represented on the Northeast Regional Strategy Committee.
- Provide all partners and stakeholders with timely accurate information on Cohesive Strategy progress in the Northeast.



The National Cohesive Wildland Fire Strategy:

Northeast Regional Action Plan



Introduction

The Northeast Regional Action Plan details the goals, desired outcomes, investment options, outcome measures, and priority implementation tasks for the Northeast Cohesive Strategy Region. These actions, as identified by the Regional Strategy Committee (RSC), will enable the Northeast Region to make progress in achieving the overarching national goals: Restore and Maintain Landscapes, Fire Adapted Communities, and Wildfire Response.

Addressing wildland fire is not simply a fire management, fire operations or wildland-urban interface problem – it is much larger and more complex. Each agency and organization represented by the Northeast RSC has the authority, responsibility, and autonomy to develop and implement their own policies. But long-term success can only be achieved through a unified, collaborative and focused effort of all.

The implementation actions expressed in this plan, while voluntary in nature, represent the collective work of the Northeast RSC and stakeholders to identify the most important actions needed to make progress toward achieving a more efficient, effective, and collaborative wildland fire management strategy for the Northeast. In addition, leads and collaborators have been identified for each of the actions and task under each goal and option. It is important to note that not every agency and organization in the Cohesive Strategy partnership will have to work on every action and task.

With each partner doing their share we can make significant progress in advancing wildland fire management in the Northeast as outlined in this action plan. While more funding is not anticipated in the near term, the Cohesive Strategy is focused on making current investments more effective and working within current programs to get better results with available funding. Collaboration is especially significant during times of economic stress.

Commitment to addressing the greatest needs and achieving our common goals with the Cohesive Strategy is essential. Diversity of organizational and agency missions does not preclude, but rather can strengthen achievement toward the collaboratively developed goals. We strongly encourage agencies, organizations, and stakeholders represented on the Northeast RSC to take timely, decisive and effective steps to follow the Cohesive Strategy's Goals and Guiding Principles as they implement the actions and tasks in this action plan.



The Three National Goals

Three goals were identified as the primary focus areas for the Cohesive Strategy. Flowing from the guiding principles and core values, and primary focus areas, three national goals were adopted in Phase I. The three national goals are:

- 1. Restore and Maintain Landscapes:** Landscapes across all jurisdictions are resilient to fire-related disturbances in accordance with management objectives.
- 2. Fire Adapted Communities:** Human populations and infrastructure can withstand a wildfire without loss of life and property.
- 3. Wildfire Response:** All jurisdictions participate in making and implementing safe, effective, efficient risk-based wildfire management decisions.

Success in achieving these three broad goals of the Cohesive Strategy is a long-term proposition – no single decision by policymakers or management actions by land managers will solve our Nation's complex wildland fire issues. The strength and success of this Regional Action Plan will lie in its ability to motivate collaborative actions to reduce wildland fire risk by the diverse agencies, organizations, and partners involved in the wildland fire issue. The Northeast Regional Risk Analysis identified a set of feasible alternative investment options for addressing the Cohesive Strategy Goals in the Northeast U.S. For each of the investment options, the key risks, barriers, and opportunities were identified, and are addressed in this Regional Action Plan.

The implementation actions and tasks presented in this action plan are consistent with the guiding principles of the National Cohesive Wildland Fire Management Strategy which are:

- Reducing risk to firefighters and the public is the first priority in every fire management activity.
- Sound risk management is the foundation for all management activities.
- Actively manage the land to make it more resilient to disturbance, in accordance with management objectives.
- Improve and sustain both community and individual responsibilities to prepare for, respond to and recover from wildfire through capacity-building activities.
- Rigorous wildfire prevention programs are supported across all jurisdictions.
- Wildland fire, as an essential ecological process and natural change agent, may be incorporated into the planning process and wildfire response.
- Fire management decisions are based on the best available science, knowledge and experience, and used to evaluate risk versus gain.
- Local, state, Tribal and federal agencies support one another with wildfire response, including engagement in collaborative planning and the decision-making processes that take into account all lands and recognize the interdependence and statutory responsibilities among jurisdictions.
- Where land and resource management objectives differ, prudent and safe actions must be taken through collaborative fire planning and suppression response to keep unwanted wildfires from spreading to adjacent jurisdictions.
- Safe aggressive initial attack is often the best suppression strategy to keep unwanted wildfires small and costs down.
- Fire management programs and activities are economically viable and commensurate with values to be protected, land and resource management objectives, and social and environmental quality considerations.



The Northeast Regional Action Plan also includes the identification of national outcome measures. The action plan identifies who will do what, where, and by when. The Regional Action Plan creates a mechanism for recording commitments the Northeast RSC has made, provides an immediate and tangible means to report regional successes to Congress and stakeholders, and ensures accountability in completing the actions. The implementation actions and tasks in the Northeast Regional Action Plan document the initial efforts in implementation of the National Cohesive Wildland Fire Management Strategy at the regional, Tribal, state, and local level in an effort to make an immediate and positive difference on-the-ground.

Regional Action Plan Considerations, Updates, and Revisions

This Action Plan identifies key actions which are necessary to implement the options. As a starting point, the Northeast Region has developed key actions under each option based upon feedback received from stakeholders during Phases I, II, and III of the planning process. The actions listed are key actions that are intended to be implemented during the next five years, and that will provide the most benefit to the region over that time period. The Action Plan will describe the scope of the actions, tasks associated with the actions, the lead and coordinating groups that will be implementing the actions, and the timeframe in which it is expected that the actions will take place.

It is recognized that further consideration and discussion of investment options developed as a result of the regional risk analysis will be necessary before emphasizing, adopting, and implementing any particular set of alternative regional strategies. Therefore, the Northeast Regional Action Plan will be limited to those actions and commitments that can be addressed now.

Future discussion of the implementation of the investment options resulting from the national trade-off analysis may require the need to supplement or amend this Regional Action Plan. The planning process is an iterative one, with annual review and new input. It is likely that some of the suggested actions may be amended, dropped or deferred, while others may be added upon completion of the final Northeast Regional Action Plan. In addition, the entire plan will be periodically updated in the future.



Regional Context

The Northeast Regional Landscape

The Northeast Region encompasses twenty Midwestern and Northeastern states and the District of Columbia (Figure 1). The twenty states comprise the most densely populated region of the nation, home to more than 41 percent of Americans. Land ownership and management, weather and climate event-created fuels, high wildfire occurrence numbers, and extensive wildland urban interface (WUI) distinguish the Northeast Region from the West, yet the Northeast has similarities to the Southeast.



Figure 1 – Map of the Northeast Region

More than 40 percent (170 million acres) of the 413 million acres of land in the Northeast Region is forest. Most of the forest land is privately owned (76 percent) versus 24 percent which is publicly owned. However, according to the Forest Inventory and Analysis (FIA) reports approximately 350 acres of forest land is being lost each day (Smith, Miles, Perry, & Pugh, 2009). This loss is expected to accelerate over the next 30 years to nearly 900 acres per day (Stein, et al., 2005). This will lead to a higher value placed on remaining forests to provide habitat, recreation, and ecosystem services.

Lands are owned and held in stewardship by a diversity of individuals, Tribes, industry, organizations, and local, state and federal agencies. The vast majority of land is in private ownership. Land uses and



ownership patterns are complex, with many small holdings creating a diverse range of owner objectives. Public lands are often isolated among other land uses, including private and industrial forests and agricultural lands. Many public lands are managed for multiple uses. Balancing the needs of society with the protection and management of natural resources creates challenges for the fire community.

Land-use patterns have greatly affected ecosystems' spatial distribution, connectedness and function. Ownership patterns, parcel size and varying management objectives makes ecosystem management in fire dependent landscapes challenging, and for some ecosystems nearly impossible. Expanding WUI areas as typically seen in Great Lake States in fire prone areas also increases costs for treatments and limits managers' ability to use beneficial fire on the land as a management tool. Smoke from prescribed burning or from wildfire can have negative impacts on public health and safety, which can restrict using fire to restore ecosystem health.

Fires occur throughout the year but are concentrated during the spring and fall, and over the summer months on dry soils. Due to variation in climate and growing season characteristics, fire season migrates across the region generally moving from south and west to north and east in the spring. A fall fire season generally appears after leaf fall. Episodes of ignitions during dry periods can saturate the landscape and overwhelm the capacity of local fire organizations. Large wildfires can be fast moving and are often contained within a single burning period (one day). Although not all fires are reported, available data shows over 150,000 fires burning over 600,000 acres during the 10 year period 2002-2012. Most wildfires are human caused with debris burning, miscellaneous and arson being the primary causes of fires in the Region.

The risk of wildfire increases as a result of natural events. Wind, ice, disease and insects can create large areas of downed timber and increased fuels (vegetation), leading to exacerbated wildfire conditions. All ecosystems can experience short and long-term wildfire hazards if these conditions remain in place. Removal of residual effects from natural events is more urgent with the current and expected population growth in forested areas.

Seasonal and extended drought conditions often create wildfire hazards in the Northeast. Seasonal drought is anticipated on shallow and more coarsely textured soils, and is highly predictable. Prolonged droughts also occur and can affect a localized area or several states. Signs of prolonged drought conditions can be masked by seasonal precipitation and green vegetation.

The Northeast Region is comprised of diverse ecosystems; from prairie to pine, hardwoods to boreal forests, from coastal wetlands to mountains, displaying the full range of fire regimes across the Region. Some of the most critically endangered ecosystems exist in the Northeast Region, including grasslands, savannas and pine barrens all of which have declined by 98 percent since the onset of European settlement. All are fire – dependent and lack of fire in the system is part of the cause for their decline (Noss, La Roe III, & Scott, 1995).



Figure 2 – Wildfire in the WUI (National Fire Protection Association (NFPA) photo)



Both human and natural fire ignitions have played an important role in shaping the ecosystems of the Northeast. Soil and climate are determining factors to the distribution of fire adapted ecosystems across the region. Restoration objectives and hazard mitigation objectives can often be achieved through integrated planning. For example in pine types, more open canopied forest can be managed near homes. Ecosystem restoration and hazard mitigation can be very compatible objectives in fire adapted ecosystems in the region.

The Northeast Regional Wildland Fire Management Context

The Northeast Region is a patchwork of jurisdictions and ownership, and often more than one agency may be involved in the management of wildland fire. Every agency has a different set of policies guiding their response to wildland fire. States are mandated to suppress all wildfires, while federal agencies have some flexibility to manage natural ignitions to benefit resources. Land ownership juxtaposition creates challenges when responding to a wildfire incident. Suppression options, cost share, and policy differences are a few examples of what is considered on each initial attack.

Wildland fire management in the Northeast Region is the result of collaboration, partnerships, and cooperation among states, Fire Comacts, federal fire management agencies (e.g. The Forest Service (FS), Bureau of Indian Affairs (BIA), National Park Service (NPS), United States Fish and Wildlife Service (USFWS), Tribal governments, and many local fire departments. The coordination and integration of wildfire management across jurisdictions varies by state. State forestry agencies are typically the lead agency in wildfire suppression and have been mandated to suppress all wildfires. Many entities from the local fire chiefs, law enforcement officials,

and land managers to fire managers have roles and responsibilities that affect coordination for fire and fuels management and the use of fire to manage resources and protect values at risk. Alignment of wildland fire management priorities poses challenges within states as well as across broader agency and organizational jurisdictions.

The many and various scales of wildland fire management occur within and across the States, all with a dependence on local fire departments and other local resources. More than 13,500 local fire departments provide wildland fire protection support on public and private lands in the region (USDA Forest Service, Fire and Aviation Management). Local fire departments, both professional and volunteer, are key partners and are often the first and sole responders on wildland fires. Maintaining or increasing the capacity of local fire departments to respond to wildfires is vital to augment state, federal, and Tribal response needs. Most of the fire community is also vital to all hazard response in the Northeast.



Figure 3 – A wildfire in Missouri, 2012



The Northeast can be described in risk management terms as having a large number of small, mostly human-caused, wildfires with a low occurrence of large wildfires, but all fires present a high risk to life and property when they do occur. Wildfire response is swift and aggressive with a reliance on equipment. Thousands of miles of roads provide vehicle access for emergency response: aircraft are used in those areas where access is limited.

Although large destructive wildfires occur infrequently when compared to other areas of the country, homes and infrastructure can be lost or damaged on small fires as well as large wildfires in forest, non-forest, and urban areas. With longer intervals between large wildfire events, investments in preparedness, at least across some parts of the region, is challenged and questioned, because wildfire management is expensive. Wildfire preparedness at the local fire department level can be overshadowed because of the responsibility for all hazard and medical emergency response.

Shared responsibility between the public and local, state, and federal governments for wildfire protection is a key to success. Land/home owner wildfire awareness programs, where used, have been highly successful, but programs like Firewise Communities/USA® are not widespread in fire prone areas today. Regularly occurring wildfires do not necessarily motivate landowners into action to reduce risks, such as fuels treatments to reduce vegetation density and surface fuels, use of non-flammable building materials and fire resistant landscaping. Census projections show a steady increase in population and urban expansion in the Northeast. Increased human populations and development will impact ecosystem health, sustainability and management and increase the need for wildfire response services.

Summary of the Northeast Regional Risk Analysis Report

The Northeast Regional Risk Analysis completed in November 2012 identified a set of feasible investment options for addressing the Cohesive Strategy Goals in the Northeast U.S. For each of the investment options, the key risks, barriers, and opportunities were identified, and are addressed in this Regional Action Plan. These options represent alternative strategies that wildland fire management organizations, federal, state, and local governments, non-governmental organizations and local communities can adopt in any number and combination to best meet their objectives and address the risks they may face from potential wildfire impacts.

The options identify opportunities to focus wildland fire management activities tied to the Cohesive Strategy goals on important regional values including: firefighter and public safety, cultural values, ecological values, marketable products, and property owner values. The risk analysis looked at wildland fire related challenges, and identifies opportunities within the region, at the county level where information exists. The options developed are not mutually exclusive. ***There is no one preferred option to be applied across the Northeast Region.*** Instead the investment options should be balanced to achieve each of the national Cohesive Strategy goals and implement effective wildland fire management consistent with applicable land management objectives.

The wildland fire management community and those potentially affected by wildfire expressed their preference for investing in these options by Cohesive Strategy goal in the Northeast given the landscape conditions and available resources that currently exist. The actual mix of investments is dependent on many factors such as, but not limited to: local land management objectives, specific community needs, agency mission, potential risks, existing barriers, available skills, qualified personnel, budgets,



equipment, and other resources. The approximate ranges of desired investment levels expressed by the Northeast Regional Strategy Committee and stakeholders for each Cohesive Strategy goal on an annual basis are:

Goal 1: Resilient Landscapes	30-35%
Goal 2: Fire Adapted Communities	20-25%
Goal 3: Wildfire Response	40-50%

There are some distinct differences in goal investment preferences with the Federal and Tribal agencies indicating a more balanced distribution among the three goals, approximately a third for each goal. Federal agencies indicate the highest percentage of investment in fuel treatment activities. The State agencies preferred substantially less investment in goal 1 and would invest more in goal 3 as they have greater (and often mandated) protection responsibilities. This is true especially for local fire departments and agencies as they are primarily responsible for protection of life and property. Due to the relatively large amounts of wildland-urban interface in the Northeast and the associated complexities and risks to life and property, a rapid, effective response to wildfire is often the most cost effective and lowest impact approach to dealing with current wildland fire management issues on the Northeast.

There is also a difference in preferred options for investing in the three Cohesive Strategy goals by geographic sub-region within the Northeast U.S. The investments are much more balanced among sub-regions than among agencies and organizations within each sub-region. There is a noticeable difference between New England and New York and the Mid-Atlantic and Mid-West in goal 1 investments (fuel treatments activities). This may be due to less available and fragmented acreage to treat, seasonal variability of the “burning window”, different fuel types, and especially to a significantly higher population density limiting the feasibility of treatments due to proximity to urban areas and related health concerns to smoke from burning.



Regional Investment Options Summary

The following is the list of regional investment options that have been identified as the preferred regional feasible approaches to addressing the Cohesive Strategy goals in the Northeast:

COHESIVE STRATEGY GOAL 1: *Restore and Maintain Landscapes* – *Landscapes across all jurisdictions are resilient to fire related disturbances in accordance with management objectives.*

Regional Option 1A - Expand the use of prescribed fire as an integral tool to meet management objectives in the Northeast.

Regional Option 1B - Emphasize and actively manage to maintain, restore, and expand when possible, to increase the extent of fire dependent ecosystems and expand the use of fire as a disturbance process. Employ mechanical or other non-fire treatments to reduce risk before re-introducing fire to the ecosystem.

Regional Option 1C - Focus on mitigating “event” fuels through mechanical treatments and utilizing markets for biomass products to clean up and reduce the potential fire hazard from blowdowns, ice storms, and other forest damaging events.

COHESIVE STRATEGY GOAL 2: *Fire Adapted Communities* – *Human populations and infrastructure can withstand a wildfire without loss of life and property. Communities can assess the level of wildfire risk to their communities and share responsibility for mitigating both the threat and the consequences.*

Regional Option 2A - Focus on promoting and supporting local adaptation activities to be taken by communities such as increasing capacity of volunteer fire departments (VFD), passing ordinances, developing Community Wildfire Protection Plans (CWPP), joining Firewise Communities/USA®, or other similar programs.

Regional Option 2B - Focus on directing hazardous fuel treatments to the wildland-urban interfaces (WUI). Treatments of WUI lands should provide a broader area of effective protection and reduced risk.

Regional Option 2C - Focus on promoting and supporting prevention programs and activities (targeting them toward reducing when and where fires occur)

COHESIVE STRATEGY GOAL 3: *Response to Wildfire* – *All jurisdictions participate in making and implementing safe, effective, efficient risk-based wildland fire management decisions.*

Regional Option 3A - Improve the organizational efficiency and effectiveness of the wildland fire community (pre-suppression and pre-planning; administration). Areas to address include:

- Development of Memorandum of Understandings (MOU) and Memorandum of Agreements (MOA)
- Standardizing and streamlining training
- Radio compatibility and interoperability



- Appropriate suppression and detection responsibilities regardless of landownership through agreements or contracts
- Sharing of personnel (co-funding or contracting)

Regional Option 3B - Increase the local response capacity for initial attack of wildfires

Areas to address include:

- Support rural Fire Departments to include wildland fire training, personal protective equipment (PPE), equipment, and risk reduction.
- Reduce redundant response and reallocate/increase resources to areas needing stronger initial attack.
- Use existing capacity more effectively such as authorities, finances, liability, qualifications, and agreements or MOUs.

Regional Option 3C - Further develop shared response capacity for extended attack and managing wildfire incidents with long duration fire potential. Focus areas include:

- Improve mobility of resources to respond to larger, longer fires; better utilize Compacts
- Additional resources can be used for backup initial response
- Remove administrative and fiscal barriers that limit use of resources during extended or long-duration fires



Figure 4- Smokey Bear fire danger display, Black River Falls Service Center, WI



Regional Coordination

The Northeast Regional Strategy Committee will continue to oversee, guide and coordinate implementation by all Cohesive Strategy partners. The Northeast Regional Strategy Committee is comprised of representatives from the following agencies and organizations (see appendix 7 for specific partner contact information):

- Department of the Interior
 - US Fish and Wildlife Service
 - US Geological Service
 - National Park Service
 - Bureau of Indian Affairs
- Department of Agriculture
 - US Forest Service
- Fond du Lac Indian Reservation
- Intertribal Timber Council
- Northeastern Area Association of State Foresters (20 Northeast and Midwest States, and District of Columbia)
- International Association of Fire Chiefs (IAFC)
- National Association of Counties (NACO) (Lake Co., MN)

It is anticipated that in the near future, a permanent regional coordinating entity will be established comprised of the leaders from the partners in the Cohesive Strategy, or their designated representatives to oversee the continued coordination, implementation, monitoring and accountability responsibilities committed to in the National Cohesive Strategy for the Northeast Region.



Figure 5 - Briefing before the Fork Ridge Burn, Hoosier National Forest, Nov 09, 2012



Implementation Actions for Cohesive Strategy Goals

How the Northeast Regional Action Plan is organized

Under each national goal and regional option listed below are a set of actions, some having associated implementation tasks. In addition, there is a section with overarching actions. These actions and associated tasks address more than one or all of the Cohesive Strategy goals. Each of the actions and tasks will have a set of the following parameters completed that outline the details for implementing each action and task. These parameters are:

Regional Actions: Provides a description of each regional action. For each action listed, the following key components are addressed:

Scope: Regional, local, etc.

Lead: Agency or organization

Other Collaborators: Agencies and/or organizations involved

Implementation Timeframe: *Short term (0-2 years); mid-term (2-4 years) or long-term (>4 years).*

Tasks: (optional – specific steps that may be needed to complete the action; not all actions will require implementation tasks)

Supplemental Information: Include any other information the region feels is important to the action, i.e., additional detail about the action, activity tracking



Figure 6 - Red Lake MN Air Tanker, BIA, Dec 2003



Overarching Actions – The following are Regional actions, some with national implications, which apply to more than one of the Cohesive Strategy goals.

O1 - Form a Northeast Wildland Fire Leadership Council (NE WFLC)

Current Situation and Critical Success Factor: Currently in the Northeast Cohesive Strategy Region, there is no single entity in place that has the responsibility for coordinating all the wildland fire management organizations, policy direction, and operational activities envisioned under the Cohesive Wildland Fire Management Strategy. There are thousands of organizations with some wildland fire management and response responsibilities at the federal, state, Tribal, and local levels, including volunteer fire departments, and some non-governmental organizations. There are coordinating entities such as the Eastern Area Coordinating Group (EACG) and the four Fire Compacts present in the Northeast whose primary responsibilities are related to response and training needs, but no single wildland fire management oversight or coordination entity exists that includes all aspects of the Cohesive Strategy goals. In order for the Cohesive Strategy to be successful, there must be active participation and coordination among all entities that are involved in delivering and affected by wildland fire management implementation activities in the Northeast.

Supplemental Information: This action involves the formation of a wildland fire leadership coordinating body through a formal Memorandum of Understanding (MOU) to oversee, coordinate, and monitor the implementation of the Cohesive Strategy across the 20 states of the Northeast and Mid-west U.S. The Northeast Regional Strategy Committee strongly recommends to the leaders of all the Northeast Cohesive Strategy participating entities, as well as the WFEC and WFLC nationally, that such an entity be formed under a memorandum of understanding/agreement to help insure a collaborative and coordinated approach to implementing the Cohesive Strategy as set forth in the Northeast Regional Action Plan.

This regional coordinating body will be, at a minimum, comprised of all the current participating entities in the Cohesive Strategy. The Northeast Regional Action Plan will guide the MOU or MOA and provide the basis for developing a collective annual recommended program of work, and serve as the foundation for monitoring progress and insuring accountability for the implementation of the Northeast Cohesive Strategy Regional Action Plan.

Tasks:

- a) **RSC draft MOU by May 2013**
- b) **RSC present draft MOU for review and approval to Regional leaders of federal (FS, FWS, NPS, BIA, USGS, FEMA, EPA) and Tribal agencies, Northeastern Association of State Foresters (NAASF), National Association of Counties (NACO), International Association of Fire Chiefs (IAFC) regional leaders, regional non-governmental leaders i.e. The Nature Conservancy (TNC), etc.) at State Fire Supervisors Meeting in June 2013.**
- c) **Present proposed MOU for review and approval to Regional leaders of federal (FS, FWS, NPS, BIA, USGS, FEMA, EPA) and Tribal agencies, Northeastern Association of State Foresters (NAASF), National Association of Counties (NACO), International Association of Fire Chiefs**



(IAFC) regional leaders, regional non-governmental leaders i.e. The Nature Conservancy (TNC), etc. at NAASF meeting in July 2013.

Scope: All Northeast Cohesive Strategy partners

Lead(s): NAASF (For proposing action to Cohesive Strategy partners and developing the MOU)

Collaborators: Regional leaders of federal (FS, FWS, NPS, BIA, USGS, FEMA, EPA) and Tribal agencies, Northeastern Association of State Foresters (NAASF), National Association of Counties (NACO), International Association of Fire Chiefs (IAFC) regional leaders, regional non-governmental leaders i.e. The Nature Conservancy (TNC), etc.)

Implementation Timeframe: Short-term - prepare and sign MOU or MOA by September 2013

O2 - Form a Northeast LANDFIRE Coordinating Group

Supplemental Information: This action involves the formation of a multi-jurisdictional LANDFIRE leadership body to oversee, coordinate, and monitor LANDFIRE products and processes which cover the 20 states of the Northeast and Mid-west U.S.

Current Situation and Critical Success Factor: LANDFIRE data is being used across ownerships and at national scales to depict many characteristics of ecological health, potential risks, condition of the land, and is being used nationally to make estimations of hazards and risks. For the Northeast, LANDFIRE data and the inaccuracies created at a national view are barriers to being able to make accurate assessments of conditions in the regions. Many Northeast state wildfire fire management agencies have weighed in on the need to improve the accuracy of LANDFIRE.

In the Northeast there is no single entity in place that has the responsibility for coordinating review, development, revision, updating, and collection of data that is used to develop LANDFIRE products. There are organizations with some review, revision, and management capability at the federal, state, Tribal, and local levels. The fact that federal lands in the Northeast are not connected with each other and only in some areas are they connected to broader state level public lands only increases the complexity and time needed to have a coordinated review and updates, as FS and DOI are lead agencies for LANDFIRE. There have been efforts by federal agencies to identify and analyze localized problems, leading to some "fixes" at a regional scale, but the updates have been made largely based on the needs identified on federal lands. Errors identified on state jurisdiction and other federal jurisdictions have been noticed but there isn't a collective body with the analysis skills and ability to dedicate the time to work with LANDFIRE to resolve errors. So as a consequence, problems of fuel model calibration differences on map zone lines, non-burnable agricultural lands, and other inaccuracies remain in the products and data.

An example of the culmination of the problems is when the Fire Behavior Fuel Models (FBFs) are used in the Northeast Fire Risk Assessment. This assessment is used to inform the State allocation methodology for State core funding. Inaccurate data impacts the risk assessment results in an erroneous determination that directly affects funding allocation for fire suppression support.



In order for the Cohesive Strategy to be successful and have credibility among partners, there must be active participation and coordination among all entities who are involved in the use, revision, and development of LANDFIRE products for across boundary management, research, and projects in the Northeast.

Recommended Approach: The Northeast Regional Strategy Committee strongly recommends to the leaders of all the Northeast Cohesive Strategy participating entities that such a group be formed under a memorandum of understanding/agreement to help insure a collaborative and coordinated representation between the Northeast fire management agencies and LANDFIRE. This coordinating group could be part of the interagency EACG or a stand-alone entity accountable to the CS governing body, such as the proposed Northeast WFLC in Overarching action O1.

This Northeast LANDFIRE group would be comprised of an analysis group who can represent the stakeholders of the Northeast including states, Tribes and federal agencies as well as other non-governmental land management organizations (i.e. TNC). The Northeast Regional Action Plan would provide the basis for developing a collective annual program of work, and serve as the foundation for monitoring progress and insuring accountability for the implementation of the Northeast Cohesive Strategy Regional Action Plan.

Scope: National; Includes all Northeast Cohesive Strategy partners

Lead(s): LANDFIRE Business Unit (For proposing action to CS partners and developing the MOU)

Collaborators: LANDFIRE business leads (FS, DOI), Regional ecology or fire leaders of federal (FS, FWS, NPS, BIA, USGS, FEMA, EPA) and Tribal agencies, Northeast state foresters, Northeast state fire supervisors, regional non-governmental leaders (i.e. TNC, etc.)

Implementation Timeframe: prepare and sign MOU/MOA by end of CY2013

Task:

- a) **Annual Data call for LANDFIRE update and rigorous analysis to identify problem areas, and prioritize the need for correction.**

Scope: National and Regional analyst group

Lead(s): FS, DOI, Regional Points of contact, (FMI)

Collaborators: LANDFIRE technical specialists/analysts (FS, DOI), Regional ecology or fire specialists of federal (FS, FWS, NPS, BIA, USGS, FEMA, EPA) and Tribal agencies, Northeast state fire specialists/planners, regional non-governmental leaders (i.e. TNC, etc.), Fire Science Consortia

Implementation Timeframe: End of CY2014, in time for next update

O3 - The Northeast states should integrate applicable actions from this Northeast Cohesive Strategy Action Plan into future revisions of their individual state's forest action plan.

Supplemental Information: By their very nature, state Forest Action Plans (FAP) are meant to include all partners and consider all land ownerships. The Cohesive Strategy needs to be integrated into the FAPs, particularly since federal cooperative grants must include a tie to a



state's FAP in order to receive funding for all programs including those supporting wildland fire management activities.

Scope: All Northeast Regional Cohesive Strategy partners

Lead(s): States

Collaborators: Regional leaders of federal (FS, FWS, NPS, BIA, USGS, FEMA, EPA) and Tribes, Northeastern Association of State Foresters (NAASF), National Association of Counties (NACO), International Association of Fire Chiefs (IAFC) regional leaders, regional non-governmental leaders i.e. The Nature Conservancy (TNC), etc.)

Implementation Timeframe: next revision of a state's FAP - short, mid or long term

O4 - Assist local communities with implementing the Cohesive Strategy. *Provide resources to support local government officials, such as fire chiefs, in the integration of Cohesive Strategy into their communities and operations - such as the development of the IAFC's Leaders Guide for Cohesive Strategy.*

Scope: All Northeast Regional Cohesive Strategy partners

Lead(s): IAFC

Collaborators: All Cohesive Strategy partners

Implementation Timeframe: short-term

O5 - Improve wildland fire reporting. *Streamline and coordinate all wildland fire reporting procedures and systems to improve reporting accuracy for more effective decision-making and resource allocation.*

Supplemental Information: The view of most RSC partners is that the national reporting systems such as NFIRS and FAMWEB have become too complex, burdensome, time consuming for most wildland fire entities to maintain to expected standards current entry. The result is that critical data is being lost or is inadequate for effective use by leaders and managers. There is a need for coordination at the national level to better integrate and simplify data entry to make it easier for local fire departments and others to provide important data needed for making effective policy and resource allocation decisions.

Scope: National

Lead(s): Federal agencies (i.e. DOI, FS, USFA)

Collaborators: All Cohesive Strategy partners

Implementation Timeframe: mid-term



O6 – Set up communications infrastructure to inform and educate the public and relevant policy makers on the role of wildland fire on the landscape, and to mobilize people for action.

Supplemental information: Research has found (McCafferty and Olsen, 2012) that the public has a fairly sophisticated understanding of fire's ecological role and the environmental factors that can increase fire risk. The public obtains information on fire from a wide variety of sources, but findings consistently show that interactive information sources are both generally preferred and more effective than unidirectional sources. As a way to improve ecosystem health and reduce fire risk, active land management generally has greater citizen support than a no-action alternative. Most respondents accept the practice of prescribed fire for active forest management and tolerate the accompanying smoke; in contrast, smoke is a highly salient issue for households with health concerns. The public tends to see mitigating the fire risk as a shared responsibility with landowners, whether public or private, responsible for taking appropriate action on their own property.

Wildland fire management, including fuels treatments, can have significant benefits to tourism officials and stakeholders, utility providers (e.g., watershed managers, utility line maintenance), transportation planners, insurance industry, not to mention the public at large through prevention of both smaller human-caused fires, especially in the WUI, as well as larger wildfires. These benefits must be communicated.

One effort underway to increase communication is the USFS Fire Adapted Communities (FAC) program which is working with The Nature Conservancy's (TNC) Fire Learning Network (FLN) and the Watershed Research and Training Center (WRTC) to establish nation-wide hub and spoke FAC Learning Network. Fire managers and social scientists have learned that in-person and interactive forms of communication are more effective than simple one-way education or blanket marketing campaigns. "Hubs" or sub-regional network leaders will be cultivated through technical support, communications facilitation, documentation of learning and workshop assistance. The "Spokes" will be the interactions between the hubs and local community based institutions. Goals for this effort include: 1) Share learning and innovation across the 3 goals of the Cohesive Strategy; 2) Accelerate adoption, innovation and diffusion of best FAC practices; and 3) Provide a feedback loop to FAC to more efficiently and effectively support fire adapted communities.

Task:

a) Establish and Maintain Learning Networks

- Expand The Nature Conservancy (TNC) hub and spoke FAC network
- Collaboratively fund workshops and peer learning opportunities
- Increase support for the work of the FAC coalition and the increased effective use of Firewise Communities/USA®; Ready, Set, Go!, CWPPs, and the tools thereof to achieve outcomes.



- Develop support (release time, performance measures, budgets) for state and agency personnel to provide technical support and work with integrated fire management collaboratives at the county, Tribal territory, and/or community level.
- Enlist the participation of Social Science research and researchers in the adaptive management of this system, to move from shared learning to action.
- Facilitate an information collection and dissemination system from pre-planning through outcomes and adaptation in an open source approach.
- Provide feedback loop from local to national level at the project to CS revision scales.

Scope: National

Lead(s): USFS Fire Adapted Communities Program, The Nature Conservancy (TNC)

Collaborators: Other collaborators: NFPA, DOI, FAC Coalition, NACO, NFPA Firewise Communities/USA®, Firesafe Councils, State and County Foresters, local, state and federal fire, Forest Service Research Stations, fire and land management agencies, NGOs, community practitioners, Tribes, WFEC/WFLC, FEMA, NRCS, Society of American Foresters, NASF, stakeholders in the transportation, utility, water management, tourism and insurance sectors.

Implementation Timeframe: short-term, mid-term and long-term

O7 - Support the use of a full range of natural resource management tools to reduce hazardous fuels, encourage the sustainable use of biomass, and accomplish other landowner management objectives.

Supplemental Information: Using the complete natural resource management toolbox (including timber harvests, thinning, mowing, and brush cutting options) to meet landowner objectives, including reducing the risk from hazardous fuels, is needed to achieve a landscape more resilient to disturbance events including wildfire. Achieving the goals of the Cohesive Strategy using prescribed fire is extremely challenging in many areas in the Northeast due to limited burning opportunities, limited resources for conducting burns, smoke impact concerns, high fuel loads, and extensive amount of WUI present.

Natural resource management activities that provide for biomass utilization provide a range of benefits to Cohesive Strategy implementation. Utilization can reduce fuel loads prior to the use of prescribed fire, can be an economically viable option in some areas, and can contribute to renewable energy development and greenhouse gas reduction strategies. The sustainable use of biomass for forest products and energy reduces the use of fossil fuels and the production of greenhouse gases, while promoting forest health, economic stability, and climate change resilience and adaptation by manipulating stand density and composition.

An exciting new pathway for reduction of hazardous fuels is wood-based nanotechnology. Wood-based nanotechnology uses forest biomass to produce cellulose nanomaterials. Such materials have unique properties with wide ranging applications and potential commercial uses in consumer products, electronics, energy, and defense. New markets for biomass will create new pathways for reduction of fuel loads and accelerate forest restoration. Hazardous fuels, forests that are too dense,



and event driven fuels such as those created by recent superstorms can be treated at an accelerated pace because the demand for biomass will be considerably greater.

This action and set of tasks contributes to the desired outcomes of all three Northeast Cohesive Strategy goals by: treating the landscape to reduce hazardous fuels and promoting resilient ecosystems; reducing risk from the excessive presence of hazardous fuels to citizens and property in local communities; and reducing the risk to firefighters responding to incidents.

Tasks:

- a) **Identify, analyze, and develop opportunities for the sustainable use of biomass to reduce fuel hazards in or adjacent to the wildland urban interface (WUI).**

Supplemental Information:

- Identify markets, assess the capacity, and communicate to agencies, Tribes, and local communities the availability of biomass utilization options that can assist with the reduction of hazardous and event-created fuels.
- Identify capacity gaps that could be opportunities for job creation and sustainability
- Work with the forest products, energy providers, and insurance industries to develop incentives and markets for the sustainable use of biomass while reducing the risk from hazardous fuel to communities.
- Encourage funding of pilot projects; for example work with cities, schools, hospitals, energy providers, and other businesses to demonstrate the use of woody biomass for energy (heating, cooling, electric power) and other value-added uses.
- The USDA Forest Service, Forest Products Laboratory is investing in wood-based nanotechnology and is producing cellulose nanomaterials. To fully realize the potential of wood-based nanotechnology on a commercial scale capable of accelerating forest restoration, public-private partnerships are needed to generate adequate investment of capital and other resources.

Scope: Regional

Lead: NE RSC, USFS NA WERC, USFS Northern Research Station and Forest Products Laboratory

Collaborators: All CS partners, forest products, energy providers, and insurance industries, NGOs, research universities, local communities

Implementation Timeframe: short-term, mid-term

- b) **Transfer information and technology**

Supplemental Information: Identify success stories and gather information that supports the sustainable use of biomass. Develop and disseminate training and guidelines for the sustainable use of biomass.

Scope: Regional

Lead: NE RSC, USFS Forest Products Lab, NA WERC



Collaborators: All CS partners, forest products, energy providers, and insurance industries, NGOs, local communities

Implementation Timeframe: mid-term

c) Expand biomass availability and treat hazardous fuels in the WUI

Supplemental Information: Increase biomass availability through State Forest Action Plans, CWPPs, etc. and other planning tools that identify hazardous fuel reduction opportunities and benefits, promote the use of low impact harvesting technology, and other practices that contribute to the economically viable use of woody or other biomass residues.

Scope: Regional

Lead: NE RSC, State Foresters

Collaborators: All CS partners, forest products, energy providers, and insurance industries, NGOs, local communities

Implementation Timeframe: long-term

d) Encourage forest products industry involvement in the development of Community Wildfire Protection Plans (CWPP).

Supplemental Information: Increased involvement of the harvesting and forest products industry in the development of CWPPs will help to identify economic options for the use of materials produced by CWPP implementation. Industry representatives may also suggest alterations in plan implementation strategies that reduce implementation costs and make the CWPP more effective.

Scope: Regional

Lead: NE RSC, State Foresters

Collaborators: All CS partners, forest products, energy providers, and insurance industries, NGOs, local communities

Implementation Timeframe: long-term



Implementation Actions for the Regional Options

COHESIVE STRATEGY GOAL 1: Restore and Maintain Landscapes – *Landscapes across all jurisdictions are resilient to fire related disturbances in accordance with management objectives.*

National Outcome Performance Measure:

- Risk to landscapes is diminished.

National output-based metrics, in support of the national measure, will center on risk to ecosystems at landscape scales.

Regional Option 1A - *Expand the use of prescribed fire as an integral tool to meet management objectives in the Northeast.*

Option Description - In the past when and where a burn would take place was solely the decision of the owner or manager (NASF Prescribed Fire Survey 2012). Native Americans once burned for conditions that improved berry production, fireproofed living areas, and improved hunting success. Present landowners in the Northeast Region have similar interests and objectives for their land including wildlife habitat, recreation and tourism, tax interests, aesthetics, and ecosystem health and sustainability. Stakeholder input has indicated that prescribed burning is used to meet a wide range of objectives, and that under many scenarios burning actually accomplishes more than the primary objective. For example, prescribed fire is a compatible tool used to meet fuels reduction objectives. There are state and private lands that also require intervals of burning to create or maintain the desired conditions. Many of the federal land management units, such as national forests, wildlife refuges, and national parks have plans that specify prescribed burning to meet their goals and objectives. Landowner objectives include, but are not limited to wildlife habitat, silviculture, threatened and endangered species habitat, and ecosystem restoration. Stakeholders acknowledge that the presence of some non-native invasive plant species can limit options; yet, control or eradication of non-native invasive plants can be accomplished with using prescribed fire or a combination of methods including fire for creating and maintaining the desired conditions.



Figure 7 – Applying prescribed fire on the Hoosier National Forest, Indiana



As outlined in the Northeast Regional Risk Analysis Report (November 2012), there are a number of barriers, critical success factors, and challenges to achieving this option. The following actions and implementation tasks have been developed by the Northeast Regional Cohesive Strategy partners to address and overcome these issues and concerns.

Regional Actions for Option 1A:

- 1. Develop and adopt prioritized prescribed burning strategies** - Adopt a prioritized implementation and coordination strategy among partners through which prescribed burning needs can be met, and opportunities maximized.

Scope: Sub-regional or multi-state, state-wide

Lead: Northeast RSC, EACG

Other Collaborators: All CS partners

Implementation Timeframe: short-term

Supplemental Information: Priority setting among local organizations and agencies could partially resolve availability and capacity issues, such as the conflict between using the same workforce for burning and wildfire response. Opportunities can be maximized, and costs reduced when resources are combined gaining efficiencies and cost effectiveness. Success would be measured in terms of trends in coordination and collaborative efforts.

- 2. Increase the number of prescribed burning qualified people including contractors, private citizens and landowners.**

Scope: Regional

Lead: Northeast RSC and EACG

Other Collaborators: Compacts, Tribes, agencies, EA Training working team

Implementation Timeframe: long-term

Supplemental Information: To increase prescribed burning in the Region, the number of trained people to plan and implement controlled burning needs to increase.

Task:

- a) Increase prescribed burning and smoke management training opportunities**

Scope: Local

Lead: Prescribed Fire Councils

Collaborators: Compacts, fire academies, state agencies, federal agencies (All partners with a role in prescribed fire management)

Implementation Timeframe: short-term

Supplemental Information: Training opportunities include both formal classroom training and practical field training. Both will need to be more frequent to build an available burning workforce. The focus could be businesses and potential contractors, organizations and volunteer fire departments. Private citizens and landowners would likely get practical field experience through state and NGO programs and as opportunities allowed. Smoke management and best management practices will be an important component of training.



3. Adopt liability laws for prescribed burners (similar to existing state laws in Florida).

Scope: State

Lead: State agencies that manage fuels and prescribed burning, prescribed fire councils

Collaborators: All partners with a role in prescribed fire management

Implementation Timeframe: short-term

4. Increase the number of prescribed fire councils. Increase the number of prescribed fire councils to assist public and private burners, and provide a communication and coordination network among burners statewide.

Scope: States that need, but do not have established prescribed fire councils

Lead: State agencies or other organizations that manage fuels and prescribed burning

Collaborators: All partners with a role in prescribed fire management

Implementation Timeframe: short-term

Supplemental Information: Prescribed fire councils have been successful in supporting and actively resolving issues in states like getting burner certification programs started, liability legislation for certified burners, and training. To date, the New Hampshire Prescribed Fire Council, which consists of 13 partners, has been successful in establishing State-wide prescribed fire qualification and training standards as well as a standardized template for prescribed burn plans. Ideally a prescribed fire council would be identified for each state in the Region. Depending on need, a council could be formed for more than one state.

5. Increase prescribed burning on private land by:

Tasks:

- a) **Integrating fuels reduction, defensible space principles, and controlled burning to achieve management objectives within private land management programs.**

Scope: National, Regional, Sub-regional and local

Lead: WUI and fire prevention coordinators

Collaborators: Private land management assistance program leads, adjacent public land agencies, Landowners, fire protection leads

Implementation Timeframe: short-term

Supplemental Information: Much of the rural private land in the Northeast is not associated with a community or development, so may not be included in CWPP type planning efforts, Firewise Communities/USA® or Fire Adapted Communities (FAC). Yet the rural private land is included in wildfire risk assessments done at local or state scales. Fuel reduction including burning should be considered in management activities under private land management programs in areas identified as having risk from wildfire. This task also supports Goal 2 actions to reduce wildfire threats.

- b) **Including prescribed fire in federal land management assistance programs.** Ensure that federal incentive and assistance programs include prescribed burning as a management tool and provide professional level assistance related to prescribed fire planning and implementation.

Scope: National, Regional/State level (NRCS works at state and county and multi county levels)



Lead: USDA, DOI

Collaborators: federal assistance program leads

Implementation Timeframe: mid-term

Supplemental information: There are many federal land management assistance programs and incentives for private landowners to achieve a variety of owner objectives. To increase the use of prescribed burning, advice and assistance should include burning as a viable tool, and provide the necessary assistance and support including funding for burning to achieve objectives. There is also a need to ensure program coordination in development of criteria, and actions that are not in conflict with each other.

- c) **Expanding current program incentives for landowners** (e.g., tax credits, free disposal of material, and increase use of finance or cost-share authorities).

Scope: National, Regional

Lead: Northeast RSC, especially NASF, NRCS, USFS, DOI

Collaborators: State DNR divisions (Private landowner assistance program leads etc.), local NRCS; national forests, national wildlife refuges, national parks; Tribes

Implementation Timeframe: short-term - focus in those areas where programs are being implemented

- d) **Ensuring that all prescribed burners are trained in best smoke management practices.**

Scope: Regional

Lead: Smoke management experts (state, federal, Tribal, EPA) – initiated by Northeast RSC

Collaborators: Prescribed fire councils

Implementation Timeframe: short-term

Supplemental Information: Smoke is one of the items identified in the NASF Prescribed Fire survey (2012) as a barrier to using more controlled burning in the Region. Smoke best management practices need to be part of training, widely distributed to current burners, and included as part of the professional assistance within private land management programs.

6. Increase prescribed burning in landscapes farther away from heavily populated areas.

Tasks:

- a) **Identify areas for prescribed fire opportunities.** Identify landscapes where multiple conservation partners are either currently using prescribed fire or desire to use fire (public or private). Assess and prioritize opportunities for using more prescribed fire.

Scope: Regional, State

Lead: Northeast RSC

Collaborators: All partners with a role in prescribed fire management

Implementation Timeframe: short-term

Supplemental Information: The action addresses one of the barriers to burning; air quality and smoke. The availability of larger contiguous landscapes where prescribed fire is authorized to occur is in more remote sectors of the region, and generally involves



public land management units. State Action Plans and similar plans, land management plans, or conservation plans may have many of these areas identified. This action could incorporate priority areas for protecting federal and state threatened, endangered, and sensitive species habitat and invasive plants (and other objectives) through the use of controlled burning. Private lands adjacent to public lands should also be considered within the larger landscape.

b) Ensure agreements allow for across boundary fuels reduction and prescribed burning.

Scope: State level

Lead: USFS Northeastern Area; Northeastern Area Association of State Foresters (NAASF)

Collaborators: State fire agencies, Tribes, federal land management agencies

Implementation Timeframe: short-term

Supplemental information: The Good Neighbor agreements in some western states are an example where hazard fuels and restoration activities including prescribed burning can be implemented by either party where lands are intermingled. Project plans are developed and decisions made which describe activities and desired outcomes. For the Northeast Region the Master Cooperative All-Hazard & Fire Agreement may provide a similar framework to engage across boundary restoration, fuels reduction, and prescribed burning. These agreements should be developed in each state.

c) Organize and fund mobile prescribed burning crews and modules.

Scope: Regional, sub-regional

Lead: EACG, Northeast RSC

Collaborators: federal agencies, Tribes, TNC, state agencies

Implementation Timeframe: mid-term

Supplemental information: This action partially addresses the capacity issue when not enough resources are available for burning. In the South, many out-of-region resources are mobilized to conduct burning on federal lands. TNC burning crews are another example of mobile workforce. Wildfire Management Modules are another organized and trained group to plan, implement and monitor prescribed burns.

7. Increase prescribed fire outreach and education efforts. Create opportunities for increased levels of prescribed fire outreach and education that can be tailored to local conditions using public and privately managed areas.

Tasks:

a) Share and disseminate science and monitoring results with others. This supports adaptive learning or learning from others mistakes and successes. Utilize partner websites and newsletters.

Scope: Regional

Lead: US Forest Service, TNC, (initiated by Northeast RSC)

Collaborators: All Cohesive Strategy partners

Implementation Timeframe: short-term



- b) Create self-guided or hosted wildland fire management demonstration areas** in a variety of ecosystems and geographic locations to display the various management objectives and outcomes where they are lacking. For example, advertise prescribed burning demonstrations that are open to visitors.

Scope: Regional to local

Lead: States, Prescribed Fire Councils, TNC

Collaborators: All partners involved in prescribed fire management activities

Implementation Timeframe: short-term

- c) Utilize, support, and expand The Nature Conservancy's (TNC) Fire Learning Networks (FLN) for education and fire use.**

Scope: Sub Regional or ecological breaks

Lead: TNC

Collaborators: All partners involved in prescribed fire management activities

Implementation Timeframe: short-term

Supplemental Information: Currently there are 2 FLNs that cover a small amount of the Northeast Region, and one in development (MI). Part of the mission of the FLN is peer learning and learning exchanges to overcome barriers to sustainable and integrated ecological, economic and social solutions.

- d) Develop a marketing campaign about the benefits of managed wildland fire.** This campaign should be tailored to the public's values for open spaces, as a learning platform for educating and increasing tolerance or acceptance for using fire to conserve and preserve what they value(i.e. wildlife species, plant diversity, open looking woodlands and forests, etc.)

Scope: Regional, Sub-regional

Lead: Federal and State Forestry and public affairs agencies

Collaborators: state, federal, Tribal, and county public land managers and fire agencies, TNC and other NGOs with common interests

Implementation Timeframe: mid-term

Supplemental Information: See examples like Visitmyforest.org where more information and links are provided of examples of desirable and unwanted fires.

- e) Support the formation of a fire science consortium in New England.**

Scope: sub-regional, New England

Lead: Federal and state agencies

Collaborators: Joint Fire Science Program (JFSP,) US Forest Service Northern Research Station, interested universities, all wildland fire management organizations

Implementation Timeframe: short-term



Regional Option 1B - Emphasize and actively manage to maintain, restore, and expand when possible, to increase the extent of fire dependent ecosystems and expand the use of fire as a disturbance process. Employ mechanical or other non-fire treatments to reduce risk before re-introducing fire to the ecosystem.

Option Description - Wildland fire has played a key role in shaping the ecosystems of the Northeast. Both lightning caused and human ignited fires once burned across landscapes creating a mosaic of conditions and habitats. Land uses, values, and fire suppression have changed the distribution, function, and sustainability of fire adapted systems. Some ecosystems that depend on fire, such as prairies, were converted for mostly agricultural purposes, while other fire-maintained ecosystems converted to more closed-canopied forests. Expanding development such as residential housing and commercial developments also increases costs for treatments and limits managers' ability to use beneficial fire on the land as a management tool. Smoke from prescribed burning or from wildfire can have negative impacts on public health and safety, which can restrict using fire to restore ecosystem health.

In the last decade we have seen the development of large-scale collaborative planning and implementation efforts such as the Fire Learning Network and the Collaborative Forest Landscape Restoration Act that emphasize fire adapted ecosystems. While there are eastern landscapes participating in these initiatives, Option 1B aims to elevate these approaches for the Northeast bearing in mind the fragmentation and smaller ownerships of the region. Ecosystems cross all political and ownership boundaries and it follows that ecosystem-based restoration efforts will be successful through collaboration and partnerships that emphasize inclusiveness. Option 1B aims to encourage cross-boundary restoration work through increased collaboration, communication and cooperation. Furthermore, Option 1B recognizes that restoration in the Northeast, a relatively densely populated area, must consider and communicate benefits to people in terms that are important to those populations.

Overarching Principles for Option 1B include:

- Restore and maintain function of fire adapted communities within Historic Range of Variability (HRV) of structure and composition to the extent possible.
- The role of fire needs to be acknowledged within all fire-dependent ecosystems but may need to be modified based on local conditions, issues, and tolerances.
- Efficiencies and effectiveness are sought throughout collaboration and coordination in planning, implementation and monitoring.



Figure 8 - Harvester in red pine - University of Minnesota Extension, Eli Sagor, 2007



As outlined in the Northeast Regional Risk Analysis Report (November 2012), there are a number of barriers, critical success factors, and challenges to achieving this option. The following actions and implementation tasks have been developed by the Northeast Regional Cohesive Strategy partners to address and overcome these issues and concerns.

Regional Actions for Option 1B:

1. Develop collaborative partnerships to facilitate ecosystem-based, multi-jurisdictional planning and implementation.

Scope: Sub-regional, multi-state

Lead: Northeast RSC, TNC or some other organization that is not one of the large landowners within the partnership

Collaborators: All landowners, Tribes, land managers, economic cooperators (forest products industry, grazers, etc.), policy makers

Implementation time frame: long-term

Supplemental Information: The vision of these collaborative partnerships is that they are applied conservation science partnerships with two main functions. The first is to provide the science and technical expertise needed to support conservation planning at landscape scales – beyond the reach or resources of any one organization. The second function is to promote collaboration among their members in defining shared conservation goals and focus on promoting the benefits of restoring fire-dependent ecosystems to people, property, and landscapes. With these functions in mind, partners can identify where and how they will take action, within their own authorities and organizational priorities, to best contribute to the larger conservation effort. The partnership does not place limits on partners; rather, they help partners to see how their activities can "fit" with those of other partners to achieve a bigger and more lasting impact.

Planning and implementing management actions on the landscape scale will almost certainly require crossing jurisdictional boundaries. There must be multi-jurisdictional coordination to make the process truly cohesive, inclusive, and strategically effective. An important element of success for this action is to include a diversity of fire and non-fire management partners because restoration and maintenance of fire adapted ecosystems involves a wide array of resources and has many benefits.

Successes in conservation partnering include the Fish and Wildlife Service (FWS) Landscape Conservation Cooperatives (LCCs), USDA Forest Service's Collaborative Forest Landscape Restoration Program, and TNC's Fire Learning Networks which utilize and leverage existing planning efforts and collaborative opportunities. Additionally, the State Forest Action plans and other plans may already have some of the frameworks in place.

Task:

a) Identify focal areas to serve as opportunities for expansion of fire adapted ecosystems.

Scope: State, multi-state

Lead: Land managers and prescribed fire planners within each state (multi-state in New England)



Collaborators: owners of those properties and their partners

Implementation Timeframe: planning short-term; projects will be opportunistic.

2. Increase Tribal and private landowner participation in landscape scale projects.

Scope: Regional

Lead: USFS (NA)

Collaborators: NRCS, States, TNC, Tribes

Implementation Timeframe: short-term

Supplemental information: Private landowner assistance programs, such as the NA Forest Stewardship Program, NRCS conservation programs, as well as state level landowner programs would be the mechanisms to raise awareness of and offer advice and funding opportunities to engage private landowners in larger landscape scale projects and conservation areas. Current participants could be invited into developing or ongoing projects.

3. Identify opportunities to manage natural ignitions for resource benefits.

Scope: Federal and state public lands

Lead: States leads for natural area management

Collaborators: federal agencies, Tribes, state fire supervisors

Implementation Timeframe: mid-term

Supplemental Information: There may be more opportunities to assess and define the role natural ignitions can play to meet land management objectives in some areas. It is recognized there are many variables to consider and prescriptive guidance must be developed.

4. Develop restoration guidance to address wildland urban interface (WUI) fire issues to help manage potential risk within fire adapted ecosystems. This guidance should include information on the use of all natural resource management tools such as prescribed fire, mechanical, and other non-fire treatments.

Scope: Local

Lead: States, local

Collaborators: state level WUI coordinators, fire ecologists, land management agencies and Tribes

Implementation Timeframe: short-term

Supplemental information: WUI will always be a focus, so local choices for specific burns or other management actions provide room for that decision. Ecosystem composition and structure can be used strategically to reduce threats to communities, developments, homes, private land, and infrastructure. For example openings may be used adjacent to developments where they can be mowed periodically yet provide ecosystem value when viewed within the larger landscape.



Regional Option 1C - Focus on mitigating “event” fuels through mechanical treatments and utilizing markets for biomass products to clean up and reduce the potential fire hazard from blowdowns, ice storms, and other forest damaging events.

Option Description - Most fuel hazards arise from natural events. Wind, heavy snow, ice, disease and insects can create large areas of very high fuel loading in forested areas. All ecosystems can experience short and long term altered fire behavior characteristics if event fuels are left untreated. Removal of event fuels is more crucial when the proximity to homes and other infrastructure could lead to significant economic loss if a wildfire occurs. Event fuels may also represent an economic opportunity to supply forest product needs ranging from biomass to higher valued products.

As outlined in the Northeast Regional Risk Analysis Report (November 2012), there are a number of barriers, critical success factors, and challenges to achieving this option. The following actions and implementation tasks have been developed by the Northeast Regional Cohesive Strategy partners to address and overcome these issues and concerns.

Regional Actions for Option 1C:

1. **Develop multi-jurisdictional fuel hazard response plans** to effectively coordinate efforts to address event created hazardous fuels across ownerships.

Supplemental Information: Common principles that would be incorporated into fuel hazard response plans include:

- Fuels are removed in spatial patterns that meet objectives for mitigating intense fire potential;
- Defensible zones are created in the WUI or around other values at risk are included in mitigation efforts; efforts include private lands; and
- The affected local communities’ economic sustainability is considered.

Tasks:

- a) **Identify existing authorities and barriers at all jurisdictional levels to developing response plans.**

Scope: Regional



Figure 9 – Debris in West Virginia from Superstorm Sandy 2012



Lead: States

Collaborators: All CS partners with land management responsibilities

Implementation Timeframe: short-term

Supplemental Information: Many authorities exist for federal and state agencies to expedite planning and treatment of event created fuels. Additional education and awareness of these authorities, and how and when to use them, is needed for responding to events.

b) Assess regional landscape and identify priority areas for treatment of event fuels.

Scope: Region

Lead: Northeast RSC, Interagency team of federal/state incentive program leads

Collaborators: Landowners - Tribes, states, local

Implementation Timeframe: short-term - with periodic review and input as technology or uses for event fuels emerge.

c) Identify current risk areas to prepare pre-wildfire planning and response operations. This action could include developing a planning aid or checklist to help land managers deal with large events.

Scope: state, local

Lead: Northeast RSC, Interagency team of federal/state incentive program leads

Collaborators: Landowners, foresters, forest industry, state and local policy makers

Implementation Timeframe: short-term - with periodic review and input as technology or uses for event fuels emerge.

d) Work with foresters, loggers, arborists, and other land care specialists to incorporate fuels reduction activities into management planning and land treatment activities to reduce treatment costs.

Scope: Regional

Lead: Northeast RSC, Interagency team of federal/state incentive program leads

Collaborators: Regional governments, economic development organizations, Landowners, foresters, forest industry, Tribes, state and local policy makers

Implementation Timeframe: short-term

e) Work with FEMA and other agencies to ensure they understand and recognize Tribal values.

By increasing FEMA's awareness of Tribal values, FEMA can assist with treating fuels and storm debris while maintaining or restoring important sacred and medicinal plants.

Scope: Regional

Lead: Northeast RSC, Tribal Natural Resource Commissioner

Collaborators: FEMA, States, Tribes, NGOs, other federal agencies

Implementation Timeframe: mid-term

2. Increase the use of program incentives for Tribes, communities, and private landowners to reduce the hazards from event fuels.

Supplemental Information: These incentives exist associated with programs sponsored by the federal and state agencies, and other foundations/organizations (AFF). Some examples include the Forest Stewardship Program, and the Forest Land Enhancement Program. Coordination among state



and federal agencies to improve assistance and incentives for landowners is needed to help mitigate event fuels.

Tasks:

- a) **Conduct a more complete assessment of available forest landowner assistance programs** and how to best apply these programs to address event fuel mitigation needs.

Scope: state, local

Lead: Northeast RSC, Interagency team of federal/state incentive program leads

Collaborators: Landowners, foresters, forest industry, state and local policy makers

Implementation Timeframe: short-term

- b) **Promote the awareness of forest landowner assistance programs and incentives** to private landowners and remove barriers to expedite their delivery.

Scope: Regional

Lead: State and federal agencies

Collaborators: forest products industry, collaborative networks/partnerships

Implementation Timeframe: Short-term

- c) **Ensure landowner access to professional assistance before and immediately following fuel creating events**, including but not limited to forest/land management advice, economic assistance, and post event psychological assistance for homeowners.

Scope: State, local

Lead: State Foresters

Collaborators: Federal agencies, forestry consultants, collaborative networks/partnerships

Implementation Timeframe: short-term

- d) **Work with communities, Tribes and forest products industries to identify opportunities for increased utilization of biomass** created as the result of fuels treatments prior to and as the result of catastrophic events.

Scope: Regional

Lead: State Foresters

Collaborators: Federal agencies, Counties, forestry consultants, forest products industry, collaborative networks/partnerships

Implementation Timeframe: short-term

- e) **Work with communities, Tribes, and regional planning entities to develop markets for biomass** in order to develop transportation and market networks to reduce fuels treatment costs.

Scope: Regional

Lead: State Foresters, USFS NA WERC

Collaborators: Federal agencies, forestry consultants, Counties, forest products industry, collaborative networks/partnerships

Implementation Timeframe: short-term



COHESIVE STRATEGY GOAL 2: Fire Adapted Communities – *Human populations and infrastructure can withstand a wildfire without loss of life and property. Communities can assess the level of wildfire risk to their communities and share responsibility for mitigating both the threat and the consequences.*

National Outcome Performance Measures:

- Risk of wildfire impacts to communities is diminished.
- Individuals and communities accept and act upon their responsibility to prepare their properties for wildfire.
- Jurisdictions assess level of risk and establish roles and responsibilities for mitigating both the threat and the consequences of wildfire.
- Effectiveness of mitigation activities is monitored, collected and shared.

National output-based metrics will include indicators relevant to communities with mitigation plans and planned or completed treatments.

Regional Option 2A - Focus on promoting and supporting local adaptation activities to be taken by communities such as increasing capacity of volunteer fire departments (VFD), passing ordinances, developing Community Wildfire Protection Plans (CWPP), joining Firewise Communities/USA®, or other similar programs.



Figure 10 –A typical wildland-urban interface area (WUI) in Pennsylvania (PA DNR)

Option Description - This goal and investment option focuses on creating Fire Adapted communities that protect homes and infrastructure by promoting fire resistance within those communities. Becoming a Fire Adapted community reduces the chance of life, property, and natural resource losses through wildfires as well as the resulting economic and emotional stress on a community. Creating Fire Adapted communities is an investment of relatively few dollars that can be effective in preventing large losses due



to structure fires, increase public awareness of wildfires, reduce fire ignitions, make wildfires easier to extinguish, and reduce resource losses.

As outlined in the Northeast Regional Risk Analysis Report (November 2012), there are a number of barriers, critical success factors, and challenges to achieving this option. The following actions and implementation tasks have been developed by the Northeast Regional Cohesive Strategy partners to address and overcome these issues and concerns.

Regional Actions for Option 2A:

1. **Develop and maintain a state level list or map of all communities designated as being at-risk from wildland fire.** In states where a risk assessment has already been completed, the assessment should be used to prioritize community planning, education, and fuels reduction efforts and be updated when new information becomes available.

Scope: State

Lead: State agencies (NAASF)

Collaborators: CS partners and other agencies within the state conducting the assessment

Implementation Timeframe: short-term; continuous

2. **Provide targeted information on the benefits of becoming a Fire Adapted Community (FAC) to local governments (village, city, town, and county).**

Scope: State, Local

Lead: State and federal fire prevention and WUI specialists

Collaborators: Fire departments, local government, Tribes, homeowner associations, land managers

Implementation Timeframe: short-term

Supplemental Information: Information could be provided by public and private organizations, and could include homeowner associations, Tribes, volunteer fire departments, and other public service organizations. Promoting Firewise Communities/USA®, Community Wildfire Protection Plans (CWPP), and Ready-Set-Go will help advance the FAC initiative.

3. **Using existing codes and standards for establishing and maintaining Fire Adapted Communities.**

Coordinate with municipal agencies to incorporate WUI into their zoning codes which reflect regional and local wildland fire risks to communities, including landscape and structure components and related issues to ensure national standards are met by all involved entities.

Scope: National, Tribal, state, or local

Lead: State or local government unit

Collaborators: State and federal fire prevention and WUI Specialists, NFPA, fire departments

Implementation Timeframe: mid-term

Tasks:

- a) **Work through non-governmental organizations (NGO) at the national level to develop a list of best practices and model zoning laws and development standards.**

Scope: National

Lead: Federal agencies, NFPA



Collaborators: Regions, NGOs that include: the American Planners Association, builders associations, the National Association of Counties (NACO), League of Cities, Mayors Conference and other organizations.

Implementation Timeframe: mid-term

b) Explore the creation or revision of state or local level open burning regulations.

Scope: State and local

Lead: State

Collaborators: local communities and fire departments

Implementation Timeframe: mid-term

4. Increase the capacity of our partners to assist or provide leadership in the Fire Adapted Communities initiative.

Scope: National, Tribal, state

Lead: National

Collaborators: States, local government, fire departments, homeowner associations

Implementation Timeframe: short-term

Supplemental Information: “Increase the capacity” refers to the concept of providing the necessary resources to partners in order for them to fully function in an assistance or leadership role in the Fire Adapted Communities initiative.

5. Continue to explore and expand use of federal grant programs, (e.g. National Fire Plan, FEMA pre-disaster mitigation program, Volunteer Fire Assistance) to support community planning, hazardous fuels reduction, education and outreach activities.

Supplemental Information: Successful grant programs initiated during the National Fire Plan facilitated assistance for communities at risk of wildfire in the Wildland Urban Interface. For example, the Rural Fire Assistance program provided funding for Fire Departments that protect rural, wildland-urban interface communities that played a substantial cooperative role in the protection of federal lands.

Tasks:

a) Provide grant writing guidance to assist Federal, Tribal, State and Local governments to be more effective in providing, identifying and obtaining grant opportunities earmarked for wildfire related disaster prevention and preparation.

Scope: National/State

Lead: USDA Forest Service, State & Private Forestry, FEMA

Collaborators: Regional - federal, state, Tribal and local agencies with disaster response authorities

Implementation Timeframe: Mid to long-term

b) Establish a federal incentive program to reimburse communities for the creation of FAC through hazardous fuels reduction on private property, involvement in Firewise Communities/USA, creating CWPPs, and other comprehensive community planning practices.

Scope: National/State

Lead: USDA Forest Service

Collaborators: States, DOI agencies



Implementation Timeframe: Long-term

Supplemental Information: Stakeholders should be provided opportunities to obtain reimbursement incentives to implement hazard mitigation and community planning activities that will advance the FAC initiative.

- c) **Work with Congress and Federal agencies to tie fuels reduction incentive programs related to development** (e.g., community development grants) to be scored higher for programs that incorporate prevention programs into their State and local government development requirements.

Scope: National

Lead: Federal agencies

Collaborators: Regional/State agencies

Implementation Timeframe: mid-term

Supplemental Information: Explore existing grant and funding opportunities. For example, FEMA pre-disaster mitigation programs could be enhanced to maximize fuels reduction across landscapes, emphasizing private lands. Federal grant information is available on www.grants.gov.

- d) **Use Forest Service Fuels Reduction funds to analyze, design, and accelerate the development of wood energy systems** that will create markets for fuels reduction material in high fire risk communities that have a CWPP.

Scope: National

Lead: Federal agencies, States

Collaborators: Counties, local communities, forest products industry

Implementation Timeframe: mid-term

- e) **Work with USDA Rural Development to target Community Facility loans to projects which help create markets for biomass** in high fire risk communities with a CWPP and that have Firewise Communities/USA® status.

Scope: National

Lead: Federal agencies

Collaborators: State agencies

Implementation Timeframe: mid-term

6. Make Volunteer Fire Assistance funds available to increase fire department involvement in FAC initiatives.

Scope: National

Lead: Federal agencies (USFS, DOI, FEMA)

Collaborators: Regional/State agencies

Implementation Timeframe: mid-term

Supplemental Information: The DOI Rural Fire Assistance program (2001-2005) is an example of a successful program allowing grants to neighboring community fire departments to enhance local wildfire protection, purchase equipment and train volunteer firefighters specifically for



wildland fire. Demonstrated success, as illustrated in the RFA program, could be emulated or reinstated in future planning efforts.

7. **Develop a common system to characterize Fire Adapted Communities (FAC); track individual community progress; prioritize investment; and facilitate the identification of trends across communities.**

Scope: National/State

Lead: Fire Adapted Communities Coalition (USFS, NFPA, IAFC, NASF, IBHS and others)

Collaborators: NWCG, Regional Strategy Committee Chairs, state fire agencies

Implementation Timeframe: mid-term

Supplemental Information: Considerations for characteristics of a FAC include existence of recognized Firewise Communities/USA® and Community Wildfire Protection Plan(s), involvement in Ready-Set-Go, enactment of a mitigation/fire prevention ordinance, and/or implementation of a hazardous fuels reduction/mitigation project.



Regional Option 2B - Focus on directing hazardous fuel treatments to the wildland-urban interface (WUI). Treatments of WUI lands should provide a broader area of effective protection and reduced risk.

Option Description - The wildland-urban interface (WUI) is the area where houses meet or intermingle with undeveloped wildland vegetation. This makes the WUI a focal area for human-environment conflicts such as wildland fires, habitat fragmentation, invasive species, and biodiversity decline. This option focuses on the challenge to reduce wildfire risk and to increase the protection of the forests, homes and communities within the wildland urban interface from the threat of wildland fire in the Northeast Region.

Approximately 40% of the U.S. population lives within the 20 northeastern states. Of that percentage, one third of the population lives within wildland urban interface areas. Projections for the Northeast Region include increasing population along with expanding urbanization, and increasing forest conversion and fragmentation. Most fires in the Northeast U.S. are started by humans and immediately place homes and property at risk.

Currently, the lack of fire on the landscape has created two primary issues in the Northeast. These issues in the Northeast can be described in risk management terms as: 1 – a low public perception of wildfire risk due to a low occurrence of large fires, but having a high risk to life, property and infrastructure if or when they escape initial attack, and 2 – the Northeast has an extensive area of wildland-urban interface conditions. A spatial analysis of land cover and census block data performed by Radeloff *et al* (2005), found the eastern USA contains the greatest extent of WUI in the 48 contiguous states.



Figure 11 – A Firewise Community/USA thinning and chipping project in Wisconsin

The risk of wildfire increases as a result of natural events. Wind, ice, disease and insects can create large areas of downed timber and increased fuels (vegetation), leading to exacerbated wildfire conditions. All ecosystems can experience short and long-term wildfire hazards if these conditions remain in place. Removal of residual effects from natural events is more urgent with the current and expected population growth in forested areas.

A proactive, collaborative approach to identifying risks in the WUI combined with developing Community Wildfire Protection Plans, reducing hazardous fuels, treating event fuels and educating the public in the context of managing fuels across a multi-jurisdictional, fragmented landscape is necessary to manage the wildfire risk encountered throughout the Northeast Region.



Regional Actions for Option 2B:

1. **Increase fuels management on public and private land** to mitigate undesired fire effects, reduce the probability of fire damage and property loss, and reduce wildfire suppression costs.

Scope: Regional

Lead: Land managers responsible for fuels mitigation (e.g. state Department of Natural Resources, USFS, NPS, BIA, USFWS, Tribes, industrial forest owners, county forests, etc.)

Collaborators: Local Communities, Tribes, public and private landowners

Implementation Timeframe: mid-term

Supplemental Information: Support community needs to accomplish fuels management through financial incentives and education and training opportunities that teach land managers about appropriate treatment options. Provide them with Best Management Practices information when it becomes available.

2. **Use Community Wildfire Protection Plans (CWPP) to identify and influence fuel treatment areas in and around the Wildland Urban Interface.**

Scope: Regional

Lead: States and Tribes

Collaborators: Multiple local level collaborators depending on ownership and jurisdictions.

Implementation Timeframe: short-term; continuous

Supplemental Information: Lands surrounding CWPPs provide a tremendous opportunity to influence where and how fuel reduction projects funds may be distributed. Among those benefits is the opportunity to establish a localized definition and boundary for the wildland-urban interface at risk. In addition to giving communities the flexibility to define their own WUI, CWPPs also assist federal agencies in providing specific consideration to fuel reduction projects that implement CWPPs. CWPPs help influence increased private land management assistance to complement and implement broader fuel reduction management objectives across fire-prone landscapes; and encourage the implementation of the mitigation strategies identified in CWPPs.

3. **Provide incentives for local land managers to conduct education programs** familiarizing neighboring communities and Tribes of the positive benefits of hazardous fuels reduction treatments. These include benefits to the ecosystem, local economy, and public health and safety. Knowledge about specific fuel treatments positively influence support for fuels reduction treatments.

Scope: Local communities, Tribes

Lead: Federal, state, and county land managers

Collaborators: Grant opportunity providers

Implementation Timeframe: short-term

4. **Provide hazardous fuel reduction assistance to Tribes, communities, and counties.** State and federal WUI coordinators or specialists who are trained, understand the needs, can assist and coordinate in design and implementation of fuels reduction, and are linked with sources of available funding such as grants.

Scope: Regional, Tribal, State, depending on locations of federal WUI coordinators



Lead: State and federal fire prevention and WUI coordinators, depending on which state and how much federal presence is available to assist at local levels.

Collaborators: Tribal and local communities and counties; all affected jurisdictions and owners

Implementation Timeframe: short-term in locations with WUI coordinators and established WUI programs, long-term - elsewhere

5. **Promote the development of agreements and memorandums of understanding (MOU)** that ease jurisdictional barriers for efficient and effective treatment and maintenance of fuel treated areas (for example, neighborhood agreements).

Scope: Regional

Lead: States

Collaborators: State, Tribal, local, IAFC, non-profit partners

Implementation Timeframe: mid-term

6. **Evaluate the effectiveness of various fuels reduction and modification techniques** and create recommendations (e.g. Best Management Practices) for implementation. Support research that examines the effectiveness of various treatment options (for example, the degree and longevity of treatment, firebreak width recommendations, and success stories).

Scope: National, Regional

Lead: Joint Fire Science Program, Regional USFS

Collaborators: USFS, state fire agencies, NPS, BIA

Implementation Timeframe: short-term; mid-term: full implementation in 4 years



Regional Option 2C - Focus on promoting and supporting prevention programs and activities (targeting them toward reducing when and where fires occur).

Option Description - The Northeast Region as defined for the National Cohesive Wildland Fire Management Strategy, encompasses 20 Midwestern and Northeastern States and the District of Columbia. The 20 States comprise the most densely populated region of the nation, home for more than 41 percent of Americans. The vast majority of the land is in private ownership, and while wildfires occur year round, spikes occur in the spring and fall. Episodes of ignitions during dry periods can saturate the landscape and overwhelm the capacity of local fire organizations.

Many wildland fires can be fast moving but are often contained within a single burning period (one day). Although not all fires are reported, available data shows nearly 184,208 fires burning approximately 611,210 acres during the 10- year period 2000-2009. Most wildfires are human caused. Accidental fires and arson are the primary causes of fires in the Region.

Seasonal and extended drought conditions often create wildfire hazards in the Northeast. Seasonal drought is anticipated on shallow and more coarsely textured soils, and is highly predictable. Prolonged droughts also occur and can affect a localized area or multiple states.

Homes and infrastructure are involved in a high percentage of wildfires in the Region. Due to the heavy population and large proportion of landscape in the WUI/intermix even the small wildfires threaten at least one and usually many structures which increases risk and complexity for firefighters. *Preventing unwanted fires and increasing homeowner shared responsibility will reduce firefighter risk and decrease need for firefighting response.*

As outlined in the Northeast Regional Risk Analysis Report (November 2012), there are a number of barriers, critical success factors, and challenges to achieving this option. The following actions and implementation tasks have been developed by the Northeast Regional Cohesive Strategy partners to address and overcome these issues and concerns.



Figure 12 - Smokey in the classroom in Wisconsin



Regional Actions for Option 2C:

1. **Use fire reporting data to identify concentrated occurrences of arson and accidental human caused wildfires.** This information can help direct prevention activities to the most needed areas at the most appropriate times of year.

Scope: State, Tribal, and local

Lead: NFPA, State and federal fire prevention and WUI specialists

Collaborators: Media, state and federal agencies, Tribes, fire departments, homeowner associations

Implementation Timeframe: short-term; continuous

Supplemental Information: Emphasis is placed on the use of reliable fire occurrence data and support for improvements in fire reporting where it needs to occur.

2. **Develop a common regional communication strategy to help reduce unwanted human ignitions in and near communities.**

Scope: Regional

Lead: State agencies

Collaborators: Federal agencies (USFS, NPS, USFWS, BIA, FEMA)

Implementation Timeframe: short-term; continuous

Supplemental Information: Communication planning includes the identification of an overarching goal for a particular situation, supporting objectives, and key messages. Tactics are described along with their target audience, timeline, and budget. Including an evaluation component is helpful in determining which tactics are most effective at reaching audiences and preventing wildfires.

3. **Institute fire investigation and coordination standard operating procedures** between law enforcement and firefighting personnel in the event of human-caused fires.

Tasks:

- a) **Provide the NWCG course, FI-110, Wildland Fire Observations and Origin Scene Protection for First Responders.** Offer the advanced course, FI-210, Origin and Cause Determination to achieve Qualifications. Offer incentives for Qualified Fire Investigators.
- b) **Consider creating an investigation coordinator position to act as a liaison between law enforcement and firefighting personnel.**

Scope: Region, Tribal, state, local

Lead: NE RSC

Collaborators: All CS partners, Fire Departments, Firefighters, Law Enforcement Officers and other first responders.

Implementation Timeframe: short-term; continuous

Supplemental Information: Accurately identifying fire cause trends is critical to the success of a fire prevention program. In cases that involve negligent acts the responsible party may be pursued for recovery of suppression costs and property damages. In cases involving arson or other criminal acts, identifying and apprehending the perpetrator is of vital public interest.



4. Develop or expand a common wildland fire risk awareness communications toolbox.

Scope: National, Tribal, State, local

Lead: USFS Northeastern Area

Collaborators: Communities, Tribes, and counties, state fire agencies, Firewise Communities/USA©

Implementation Timeframe: mid-term

Supplemental Information: A communications toolbox could be an invaluable resource for fire prevention specialists, WUI coordinators, educators and others. The toolbox would provide an opportunity to share examples of education and outreach strategies, lessons learned, and success stories that highlight effective communication strategies. An option is to create a toolbox that functions in 'real time' which would include information on wildfire events, alerts on fire behavior, and red flag warnings as they are occurring.

5. Communicate local fire danger and coordinate the implementation of consistent fire restrictions between the local enforcement authorities.

Scope: Local

Lead: States

Collaborators: sheriff's offices, Tribes, volunteer fire departments, and local authority having jurisdiction (i.e. city, town, village), federal partners and land managers.

Implementation Timeframe: long-term



COHESIVE STRATEGY GOAL 3: Response to Wildfire – All jurisdictions participate in making and implementing safe, effective, efficient risk-based wildland fire management decisions.

National Outcome Performance Measures:

- Injuries and loss of life to the public and firefighters are diminished.
- Response to shared-jurisdiction wildfire is efficient and effective.
- Pre-fire multi-jurisdictional planning occurs.

National output-based metrics will reflect trends in changing risk to support the national measure. Indicators will include pre-season agreements and annual operating plans, integrated wildfire response scenarios, and shared training. Risk exposure to firefighters will be based on a balanced consideration of values protected and the probability of success.

Regional Option 3A - Improve the organizational efficiency and effectiveness of the wildland fire community (pre-suppression and pre-planning; administration).

Areas to address include:

- Development of Memorandum of Understandings (MOU) and Memorandum of Agreements (MOA)
- Standardizing and streamlining training
- Radio compatibility and interoperability
- Appropriate suppression and detection responsibilities regardless of landownership through agreements or contracts
- Sharing of personnel (co-funding or contracting)

Option Description - Success of the Cohesive Strategy and of this option depends on addressing the following barriers and critical success factors identified in the Northeast Regional Risk Analysis Report (November 2012):

"Investment in firefighting workforce - Need to invest in human capital at the field level. Budget cuts are reducing the number and quality of the on-the-ground firefighting workforce. Budget cuts always seem to land at the field more than at the national level. Continued and increased investment in the firefighting workforce is necessary in order to maintain capacity to respond to wildfire, mitigate fire hazards, and restore/maintain landscapes. A lack of investment in the firefighting workforce will lead to fewer firefighters on the ground, reduced safety, reduced capability at accomplishing local projects, and reduced initial attack success. In the long term we face a generation gap in the fire workforce available for future leadership of the program."

Impacts from a lack of adequate investment affect all agencies and organizations with wildland fire responsibilities – local, state and federal. There is a need to develop a wildland fire management program that focuses efforts on maintaining and developing field level leaders and workforce.



As outlined in the Northeast Regional Risk Analysis Report (November 2012), there are a number of barriers, critical success factors, and challenges to achieving this option. The following actions and implementation tasks have been developed by the Northeast Regional Cohesive Strategy partners to address and overcome these issues and concerns.

Regional Actions for Option 3A:

- 1. Expand NWCG membership** - All stakeholders with wildland fire responsibilities should be represented by either NWCG or another entity that represents all interests. The current charter for NWCG requires national wildland fire management responsibilities. Re-examine the membership of the NWCG Executive Board to ensure state and local government is adequately represented.

Scope: National

Lead: NWCG Working Team

Collaborators: EACG Working Team and some states

Implementation Timeframe: short-term – to initiate action, mid-term completion

- 2. Increase support for Compacts** - The Northeast Region is well organized sub-regionally with four forest fire compacts that cover all 20 states and portions of Canada – they need to be supported and enhanced through training, incident assignment opportunities, and funding.

Scope: National

Lead: USFS, NASF

Collaborators: Federal Agencies, Tribes, State wildland fire protection agencies

Implementation Timeframe: short-term and continuous

Supplemental Information: Federal agencies are often part of each compact organization as associate members or ad hoc participants. Where federal cooperators are not continuously engaged, efforts need to be made so that routine engagement is the norm. Compacts have greatly increased available resources for fire management in the Northeast Region by increasing initial response capacity via training of state and local firefighters and by providing coordination, regular training and academies.

- 3. Strengthen role of the EACG** - Maintain and enhance the role of the Eastern Area Coordinating Group (EACG) and its Working Teams.

Scope: Regional

Lead: EACG Chair

Collaborators: all EACG representatives

Implementation Timeframe: short-term



Figure 13 – Interagency wildfire training in New Hampshire



Supplemental Information: This can be attained through Executive Leadership commitment (such as from the proposed Northeast WFLC) to the EACG mission, and the consequent commitment and engagement of their regional staff.

4. **Eliminate resource sharing policy barriers** - Work at the local level to identify policy barriers that prevent the effective sharing of wildland fire management resources. Simplify international border crossings and resource exchanges between the US and Canada.

Scope: National

Lead: EACG IBWT

Collaborators: National GACC, Tribes, Compacts, and States

Implementation Timeframe: mid-term

Supplemental Information: For federal agencies, the EACG IBWT meets yearly and as needed through the year to meet objectives. They can identify barriers and recommend solutions to the NMAC. Issues for states and compacts include liability, authorities to hire and pay firefighters, qualifications systems and training, and interagency use of compact IMT members from Canada on federal fires.

5. **Improve radio compatibility** - Resolve and simplify radio frequency use authorization and licensing processes for all agencies (local, state, federal and Tribal); this issue needs recognition and action at the national level.

Scope: National

Lead: National Radio Interoperability Work Group

Collaborators: Mostly USFS, DOI, FEMA communications representatives

Implementation Timeframe: short-term

Supplemental Information: The states' forestry agencies are being driven to convert to the 800 MHz system. The work-around to fix this is going to require significant funding from states and federal agencies. This is an interagency issue, and should be addressed by the EACG.

6. **Improve pre-planning for wildfire response** - Ensure that wildfire response reflects the Cohesive wildland fire management strategy by:

Tasks:

- a) **Developing pre-fire plans that consider integrating wildland fire use with prescribed fire or mechanical treatments, where appropriate.**

Scope: Local

Lead: Local fire agencies

Collaborators: Entities that carry out prescribed fire or hazard mitigation strategies

Implementation Timeframe: mid-term

- b) **Considering applicable land management objectives in pre-fire plans** when deciding on appropriateness of suppression strategy and tactics.

Scope: Regional

Lead: Federal agencies, Tribes & states

Collaborators: Fire managers, landowners, and fire scientists

Implementation Timeframe: long-term



Supplemental Information: Consider private landowner values when responding to fires on private lands, tribal lands or in mixed ownership. Formulate pre-fire plans that identify specific needs such as archeological areas, sensitive cultural sites, environmentally sensitive areas such as eagle's nests, preservation areas and landowner management plans.

7. Improve organizational efficiency and wildfire response effectiveness.

Scope: Regional

Lead: Northeast RSC

Collaborators: Entities with fire protection responsibilities

Implementation Timeframe: mid-term

Supplemental Information: Some approaches to implementing this action include:

- Addressing preparedness strategically for greater efficiency and cost effectiveness through better coordination and planning by multiple jurisdictions for primary protection responsibility (For example: states protecting federal land and federal agencies protecting state land in some areas)
- Developing a flexible and mobile response capacity, given changing fire seasons and fuel events.
- Conducting cost benefit/efficiency analyses to determine best level of protection on smaller or low wildfire occurrence land ownerships.
- Using cooperating or reciprocal agreements/contracting/offsets or other instruments to provide the most cost effective protection.
- Coordinating wildfire detection and response (i.e. interagency dispatch).
- Improving wildfire prediction capabilities at the state and local level.
- Coordinating fire danger ratings between agencies within a local area.
- Utilizing technology and predictive tools to improve fire response.

8. Improve cost share and grant programs to leverage resources. Support local fire response organizations through programs like Ready Reserve, Volunteer Fire Assistance, and excess property programs and federal grants.

Scope: National, Regional

Lead: USFS WO, NA S&PF, R-9

Collaborators: All CS partners

Implementation Timeframe: long-term

9. Improve and maintain access infrastructure (airports, roads and bridges, etc.) that affect wildfire response to appropriate emergency response standards.

Tasks:

- a) **Identify and coordinate appropriate agencies** that have jurisdiction over this infrastructure (remove obstacles, provide letters of support).

Scope: Regional

Lead: States

Collaborators: Counties, local communities

Implementation Timeframe: mid-term to long-term



- b) Provide guidance to communities regarding emergency access needs and for a process to identify sub-standard access concerns.

Scope: Regional

Lead: States, Northeast RSC

Collaborators: Counties, local communities

Implementation Timeframe: mid-term to long-term

10. Address capacity issues related to all-hazard response.

Task:

- a) Improve efficiencies with Multi-Agency Coordination (MAC) group coordination and prioritization between wildfire and all-hazard issues by collaborating with the all hazard lead agencies such as FEMA, state emergency management agencies, and Homeland Security.

Scope: Regional

Lead: EACG

Collaborators: all wildland fire management and emergency response agencies

Implementation Timeframe: mid-term

11. Streamline and enhance the interagency qualifications system for wildfire and all hazard incidents to include cross training, crosswalk qualifications and use of life experiences.

Scope: National

Lead: NWCG, DHS

Collaborators: all emergency response agencies

Implementation Timeframe: mid-term

12. Modify federal and state legislation relating to wildfire and all hazard incident response in order to:

- Clarify and enhance authorities
- Facilitate initial payment for movement of resources
- Simplify financial exchanges between agencies
- Minimize liability exposure when sharing resources

Scope: National

Lead: NASF

Collaborators: NWCG

Implementation Timeframe: mid-term

Task:

- a) Develop templates for Cooperative Agreements that work for the Eastern Area. The National template is west-centric, and does not fit for most of the Eastern Area State Cooperators - especially those that do not border National Forest System lands.

Scope: National

Lead: NE RSC, NASF

Collaborators: NWCG, Compacts, EACG

Implementation Timeframe: mid-term



13. Provide current information on climate change impacts in the Northeast to assist wildfire response entities in assessing their response capacities.

Scope: Regional

Lead: NE RSC, USFS Research, EACG, GACC

Collaborators: All wildfire response agencies, local communities

Implementation Timeframe: mid-term

Supplemental Information: Some of the impacts identified in the Northeast Regional Risk Report (November 2012) from climate change observed in the Northeast in the last decade include:

- Extended Spring and Fall fire seasons
- Warmer average temperatures; more frequent and intense drought periods
- Multiple jurisdictions transitioning beyond initial attack on wildfires
- Mop-up and lingering heat requiring greater time, resources, and caution
- Greater intensity and quicker transition to larger fires
- Greater resistance to control at all levels; reliance on traditional barriers and techniques will be less effective
- Complexity and scope of fires to accelerate more quickly



Regional Option 3B - Increase the local response capacity for initial attack of wildfires. Areas to address include:

- Support rural Fire Departments to include wildland fire training, personal protective equipment (PPE), equipment, and risk reduction.
- Reduce redundant response and reallocate/increase resources to areas needing stronger initial attack.
- Use existing capacity more effectively such as authorities, finances, liability, qualifications, and agreements or MOUs.

Option Description - The Northeast Region has unique challenges in wildland fire management, particularly in initial attack response. Landownership in the Northeast is overwhelmingly in private ownership, with less than 10% being publicly owned by federal, state or local governments. The majority of land is protected by local fire departments, not large land management agencies. These rural fire departments may or may not have wildland fire training and adequate equipment. Additionally, where public and Tribal lands do occur, land ownership is highly fragmented, resulting in many jurisdictions being responsible for initial and long term fire suppression response. Many of these jurisdictions go long periods without experiencing a significant wildland fire, even though they experience a high number of ignitions. These ignitions typically create the most damage within the first burning period, so often obtaining resources from outside the jurisdiction are not feasible. Maintaining or building capacity, particularly at the local level, is critical to the successful suppression of fires in the Northeast. Local fire departments play a key role in initial attack success in the Northeast. The better equipped and trained they are, the better chance the fire will be brought under control quickly and safely, thereby reducing the need and associated costs for state and federal support for a larger fire.



Figure 14 – Initial attack on a wildfire in Wisconsin, 2007

As outlined in the Northeast Regional Risk Analysis Report (November 2012), there are a number of barriers, critical success factors, and challenges to achieving this option. The following actions and implementation tasks have been developed by the Northeast Regional Cohesive Strategy partners to address and overcome these issues and concerns.



Regional Actions for Option 3B:

1. **Assess needs for initial attack capability** - Within the Northeast Region there is a need to look closely at those areas that have greater initial attack demands to assess the level of resources currently available for responding to probable wildfire events. Following this, an assessment is needed to determine how to best re-allocate preparedness resources to those areas, and advocate for increased investments to provide adequate initial attack capacity to those communities at greatest risk to wildfire.

Scope: Regional

Lead: Northeast RSC

Collaborators: All Northeast wildland fire agencies (federal, state, Tribal, local)

Implementation Timeframe: short-term

2. **Ensure firefighters are properly prepared** - Maintain a firefighter workforce that is prepared mentally and physically. Ensure that training and performance standards are met by adopting and supporting firefighter fitness programs (e.g. FireFit) to help reduce accidents and fatalities resulting from personal health issues.

Scope: Regional

Lead: Northeast RSC, EACG

Collaborators: All Northeast wildland fire agencies (federal, state, Tribal, local)

Implementation Timeframe: short-term; continuous

Tasks:

- a) **Increase participation of local fire departments in wildfire response** - Support local fire departments as integral to the suppression of wildfires across the Northeast, by assisting in providing quality training, proper equipment and protective gear, and increased funding where needed.

Scope: Regional

Lead: USFS State and Private Forestry, States

Collaborators: All state, federal and grant recipients

Implementation Timeframe: mid-term

- b) **Improve the safety and capacity of local and Tribal fire departments** to respond to wildfires through increased firefighter training, providing adequate Personal Protective Equipment (PPE), and using NWCG certified training to meet applicable regional or state standards.

Scope: Regional

Lead: USFS State and Private Forestry, States, BIA

Collaborators: All state, Tribes, federal and grant recipients

Implementation Timeframe: short-term - Form team and educate VFDs; mid-term - fully operational.

Supplemental Information: Rural, Tribal, and Volunteer Fire Departments have been, and are continually in receipt of many fire grant funds from state and federal entities. This action would establish an interagency team to assist and assess rural FDs and VFDs for resource and training needs, efficiency in applying and meeting standards, and appropriateness of funds use.



- 3. Increase opportunities for firefighters to attain IMT qualifications** - Develop a work plan to include planned experience opportunities for Incident Management Team (IMT) development and for qualification currency of established federal, compact, and state IMTs.

Scope: National

Lead: NWCG

Collaborators: NWCG member agencies

Implementation Timeframe: mid-term; continuous

- 4. Streamline and simplify the qualifications system for interagency firefighters** to include credit for life experiences, relaxing the timeframes for currency through assignments, and be more flexible in accepting of agency standards.

Scope: National

Lead: NWCG

Collaborators: NWCG member agencies

Implementation Timeframe: mid-term

- 5. Resolve authorities and legislative issues for sharing resources** to include local hiring and exporting of firefighters, financial payment authorities, liability issues, export and import authority, and agreements. Address authority issues via federal legislation, for the USFS to mobilize state and local resources via the Master Cooperative Wildfire Management and Stafford Act Response Agreement, or implement a work around.

Scope: National

Lead: NASF, USFS

Collaborators: NWCG

Implementation Timeframe: mid-term

- 6. Establish an interagency dispatching system** that can be used by all wildland fire entities and jurisdictions consistent with local standards, decision-making, and needs. Facilitate formation of a reimbursable fund or payment mechanism for resource mobilizations among the states and federal agencies.

Scope: National

Lead: NWCG

Collaborators: NWCG member agencies

Implementation Timeframe: mid-term

- 7. Increase wildfire response efficiency** - Establish a regional policy for all Northeast wildland fire management and response entities that consistently promotes the use of the closest appropriate wildfire response unit(s) to improve efficiency, sharing of resources, allocation of resources, and cost effectiveness.

Scope: Regional

Lead: Northeast RSC, IAFC, NACO

Collaborators: All Northeast wildland fire agencies (federal, state, Tribal, local)

Implementation Timeframe: mid-term

Supplemental Information: Addressing this action would include developing model MOUs and MOAs for use by states and local jurisdictions to help ensure consistency.



Regional Option 3C - Further develop shared response capacity for extended attack and managing wildfire incidents with long duration fire potential. Focus areas include:

- Improve mobility of resources to respond to larger, longer fires; better utilize Compacts
- Additional resources can be used for backup to the initial response.
- Remove administrative and fiscal barriers that limit use of resources during extended or long-duration fires

Option Description - Sharing resources is standard operating procedure in the Northeast Region. It is an efficient and effective means of managing incidents while minimizing costs. Reductions in fire program budgets and fire staff, as well as the multi-jurisdictional nature of most incidents, have required an ongoing interagency response to incidents. Although the frequency of large incidents has been at historical lows over the last decade, the size of incidents is overshadowed by smaller very complex incidents and/or numerous incidents compressed into a short timeframe. These situations require the sharing of resources on a continual basis. In addition to the local sharing of resources among local, state and federal agencies within a state, the Northeast Region has well established forest fire compacts that are utilized to share resources among the states and provinces. These governmental entities work well to coordinate and dispatch resources over a broad geographic area, and enhance resource sharing for efficient and effective response.



As outlined in the Northeast Regional Risk Analysis Report (November 2012), there are a number of barriers, critical success factors, and challenges to achieving this option. The following actions and implementation tasks have been developed by the Northeast Regional Cohesive Strategy partners to address and overcome these issues and concerns.

Figure 15 – Using a shared aerial resource in West Virginia

Regional Actions for Option 3C:

1. **Streamline the national qualifications process** - Mobilizing firefighters and Incident Management Team members to other geographic areas for campaign fires is one of the few ways that NWCG qualifications can be acquired and maintained. A more structured and effective national training and



experience plan needs to be developed, and implemented, in order for the Northeast Region to be able to more effectively acquire and maintain resources that meet the national standards.

Scope: National

Lead: National (DOI, FS, NWCG, NASF)

Collaborators: Regions, States, Compacts

Implementation Timeframe: mid-term

- 2. Increase the use of Compacts and mutual aid agreements for sharing qualified firefighter resources** - No single agency can afford to train and staff an adequate number of wildland firefighters to meet its needs during above average years. The most efficient way to achieve proper staffing is to rely on mutual aid from adjoining jurisdictions and cooperators. A more cost effective way to provide wildland fire management is needed to build partnerships, increase the use of Compact authorities, and establish mutual aid organizations and agreements.

Scope: Regional

Lead: Northeast RSC Compacts, States

Collaborators: All regional wildland fire management agencies

Implementation Timeframe: mid-term

- 3. Improve the accuracy of wildfire reporting in the Northeast** at the local, state, Tribal and federal levels by:

- Communicating the need and importance of fire incident occurrence reporting (i.e. completing 209 reports).
- Ensure that all fire reporting entities use the same databases such as NFIRS and FAMWEB, and by following the same data entry protocols.
- Improving the accuracy of cause determination through training
- Working with VFD through state liaisons to get reporting done as a condition of continued grant funding.

Scope: Regional

Lead: Northeast RSC, USFS NA S&PF

Collaborators: All CS partner agencies, Tribes, and VFDs

Implementation Timeframe: mid-term

Supplemental Information: The importance of reporting, especially fire incident occurrence reporting, is critical for maintaining firefighter situational awareness and helping managers make better wildland fire management decisions in the Northeast Region.





Monitoring and Accountability

Monitoring of progress and accountability for accomplishment of the actions in this plan is critical to the success of the Northeast Cohesive Strategy Action Plan. Monitoring provides an essential feedback loop that is the basis for continuous improvement. Monitoring also includes the opportunity to identify and incorporate new accomplishment data and scientific information as it becomes available.

A regular process of reporting performance measures and activity accomplishments maintains a regular focus on the three Cohesive Strategy goals, communicates progress nationally, with the other Cohesive Strategy Regions, and among the Northeast Cohesive Strategy partners and stakeholders, and provides an opportunity to make course adjustments as work progresses.

The broad societal goals represented in this Cohesive Strategy Action Plan do not simply happen; they are a result of accomplishing many actions, activities, policies, investments, and priorities. It is important to track actions and tasks as they lead to intermediate outcomes and eventually long-term outcomes desired from the Cohesive Strategy.

While the national outcome measures are designed to measure broad outcomes, they may not be sufficient to manage the actions and tasks that necessarily precede the desired outcomes, therefore there is a need to both periodically assess outcomes and track and monitor activities. Outcome measures represent an approach to accountability that demonstrates how desired outcomes change through time so that decision-makers can reconsider policies and actions routinely.

Regionally specific actions are important for continued progress toward managing the risks associated with wildfire. There is a commitment to monitor progress toward achieving the goals of the Cohesive Strategy and to using measures that reflect broad outcomes. To this end, the process of refining and honing the outcome measures will continue.

Activities (represented by actions and tasks in this plan) are carried out through programs, projects, and collaborative agreements that implement the planned actions or tasks and result in desired changes in the landscape, delivery of programs, and short term progress in meeting wildland fire management objectives consistent with the three Cohesive Strategy goals are tracked and assessed.

The Northeast RSC recommends the following actions be adopted by the Cohesive Strategy partner organizations and permanent Northeast RSC governing body to help insure accountability for implementation of the Cohesive Strategy:

Monitoring and Accountability Actions

A. Develop and implement an activity monitoring plan to provide comprehensive annual feedback on the effects of implementing actions and tasks.

Scope: Regional Level

Lead: Northeast RSC

Collaborators: Federal, State, Tribal, local agencies and organizations

Implementation Timeline: short-term

B. Participate in the development and reporting to a national web-based action plan outcome measure and activity reporting system designed to facilitate information gathering and exchange in support of Cohesive Strategy decision-making.



Scope: National Level

Lead: National Wildland Fire Executive Council (WFEC)

Collaborators: Regional RSCs

Implementation Timeline: Short-term

C. Meet quarterly to discuss Action Plan progress and effectiveness. Recommend Action Plan changes as needed.

Scope: Regional level

Lead: Northeast Regional Strategy Committee

Collaborators: Regional Cohesive Strategy partners

Implementation Timeline: Quarterly

D. Report to the national Cohesive Strategy leadership (WFLC, WFEC) on progress and needed adjustments as work progresses.

Scope: National

Lead: Regional RSC

Collaborators: Regional Cohesive Strategy partners

Implementation Timeline: Annually

E. Review analysis of monitoring results and promptly adjust plans and/or reconvene groups to maximize the effectiveness—and minimize the adverse effects—of Action Plan implementation.

Scope: National

Lead: WFEC, Regional RSCs

Collaborators: National, State, Tribal, local

Implementation Timeline: Annually



Regional Communication Strategy

A Regional Communication Strategy will be developed in more detail following the completion and release of this Regional Action Plan. This communication strategy will be designed to meet the following objectives:

- Identify and share of Lessons Learned, and examples of Success Stories related to the implementation of the Cohesive Strategy's three goals in the Northeast.
- Expand and maintain stakeholder outreach to engage partners, stakeholders, and local communities in the development dialogue and collaborative solutions for making progress on the three goals.
- Improve the understanding and maintain the engagement within those organizations and agencies represented on the Northeast Regional Strategy Committee.
- Provide all partners and stakeholders with timely accurate information on Cohesive Strategy progress in the Northeast.



Figure 16 – Classroom training on Assessing Hazards in the Home Ignition Zone, Wisconsin DNR

In addition, a National Communication Framework is also being developed that will focus on communication to support Cohesive Strategy implementation. It is expected that, for the most part, implementation will be done by relatively small, local collaboratives within each Region. A major effort in the national and regional communication strategies must be to facilitate and support these local collaboratives by:

1. Promoting and teaching effective collaboration - Collaboration does not happen automatically. Even when the collaborative is made up of people of the best good will, success depends on members knowing the process and methods of effective collaboration communication group processes, and shared coordination. The communication strategies will provide resources to support learning how to collaborate by people relatively new to collaboration.
2. Teaching people about fire in wildland environments - Practiced wildland fire knowledge is rare among participants who seek to collaborate. Few know much about how fire behaves in wildland environments and how fire affects landscape resiliency and fire adapted communities. Without basic wildland knowledge, it will be difficult for diverse groups of stakeholders to converge on shared perspectives and understandings needed to ultimately pool resources and take joint actions to implement some part of the Cohesive Strategy. Regional and national



communication strategies will provide for stakeholder education in the applied principles of fire behavior and fire effects in wildland environments.

3. **Informing the networks** - Stakeholder organization and communities of place and communities of interest are stitched together by informal webs of communication and influence. Virtually all significant decision about collaboration will be strongly influenced by interpersonal relationships in those webs or networks. National and regional communication strategies will make provisions to: 1) monitor these networks to anticipate information needs and, 2) deliver that information to be distributed and discussed within the established communication processes of stakeholder groups and communities.
4. **Informing interested parties** - Traditional media, the new media, and social media will be used to provide up to date information about Cohesive Strategy implementation. Success stories and indication of progress will be reported using the tested methods of stakeholder (including agencies) public affairs organizations. National and regional communication strategies will include provisions for frequent and regular updates through these media.
5. **Recording successes and evaluation** - National and Regional communication strategies will make provisions for the collection of success stories and evaluation reports, store them in easily accessible databases, and market their availability to stakeholders, collaboratives and interested parties.
6. **Websites** - The regions will transition to one national website with regional pages. The website will serve as the library for communication material and portal to other information and education resources. The website will be marketed and regularly updated; social media such as Twitter will be used to alert stakeholder additions to the website collections.



Regional Contacts

- Northeast Regional Strategy Committee Chair:
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- Northeast Regional Strategy Committee Strategic/Technical Group Leader:
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- Northeast Regional Strategy Committee Communications Group Leader:
 - Maureen Brooks, USFS, NA S&PF, Community Fire Planner/Specialist, mtbrooks@fs.fed.us



Appendices

Appendix 1: Glossary

Barriers - Policy or administrative impediments that must be removed in order for the Cohesive Strategy to be successful.

Critical Success Factors - Policies, programs, agreements, partnerships, resources, and other factors that must be present for the Cohesive Strategy to be successful.

Fire Adapted community - Human communities consisting of informed and prepared citizens collaboratively planning and taking action to safely co-exist with wildland fire.

Fire Adapted ecosystem - An ecosystem is “an interacting natural system, including all the component organisms, together with the abiotic environment and processes affecting them.” (NWCG Glossary). A Fire Adapted ecosystem is one that collectively has the ability to survive or regenerate (including natural successional processes) in an environment in which fire is a natural process.

Fire community - A term that collectively refers to all those who are engaged in any aspect of wildland fire-related activities.

Fire exclusion - The land management activity of keeping vegetation or ecosystems from burning in a wildland fire.

Fire management community - A subset of the fire community that has a role and responsibility for managing wildland fires and their effects on the environment.

Fire science community - A subset of the fire community consisting of those who study, analyze, communicate, or educate others on the components of fire management that can be measured, such as fire behavior, fire effects, fire economics, and other related fire science disciplines.

Joint Fire Science Program - The Joint Fire Science Program funds scientific research on wildland fires and distributes results to help policymakers, fire managers and practitioners make sound decisions.

Joint Fire Science Consortium – An organization that serves as a conduit between fire and resource managers of a geographic area with the JFSP Governing Board. They assist in identifying research needs that can then be compiled and forwarded to the JFSP Governing Board for potential funding. The Lake States Fire Science Consortium is an example in the Northeast.

Resilient - Generally referred to in this document as “resilient ecosystems,” which are those that resist damage and recover quickly from disturbances (such as wildland fires) and human activities.

Regime - A fire regime is the pattern, frequency and intensity of wildland fire that prevails in an area.

Risk - A situation involving exposure to danger; the possibility that something unpleasant or unwelcome will happen.

Stakeholder - A person or group of people who has an interest and involvement in the process and outcome of a land management, fire management, or policy decision.



Appendix 2: Acronyms

BIA – Bureau of Indian Affairs
CWPP – Community Wildfire Protection Plan
DOD - Department of Defense
DOI – Department of the Interior
EACG – Eastern Area Coordinating Group
EPA – Environmental Protection Agency
FAC – Fire Adapted Community
FEMA – Federal Emergency Management Agency
FEPP - Federal Excess Personal Property
FFP - Firefighter Property
FLN – Fire Learning Network
FWS – US Fish and Wildlife Service
GACC – Geographic Area Coordination Center
IAFC – International Association of Fire Chiefs
IBWT - Incident Business Working Team
IMT -- Incident Management Team
JFSP – Joint Fire Science Program
LCC - Landscape Conservation Cooperatives
NMAC – National Multi-Agency Coordination
MOA – Memorandum of Agreement
MOU – Memorandum of Understanding
NASF – National Association of State Foresters
NAASF – Northeastern Area Association of State Foresters
NEMAC – National Environmental Modeling and Analysis Center (UNC Asheville)
NE RSC – Northeast Regional Strategy Committee
NIFC – National Interagency Fire Center
NFPA – National Fire Protection Association
NGO – non-governmental organization
NPS – National Park Service
NSAT – National Science and Analysis Team (for Cohesive Strategy)
NWCG – National Wildfire Coordinating Group
PPE – personal protective equipment
RFA – Rural Fire Assistance (DOI program)
RFD – rural fire department
RSC – Regional Strategy Committee
WG- Working Group
TNC – The Nature Conservancy
USGS – US Geological Survey
USFS – US Forest Service
VFA - Volunteer Fire Assistance Program
VFD – volunteer fire department
WFEC – Wildland Fire Executive Council
WFLC – Wildland Fire Leadership Council
WUI – wildland urban interface



Appendix 3: References

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Appendix 4: Communications Activities and Plans

Stakeholder Comment on the Draft Regional Action Plan

There were 2 comment periods and on-going outreach in drafting the Regional Action Plan. The first comment period directed the stakeholders toward the NE Regional Synopsis Report.

The NE RSC used existing mailing lists from previous outreach efforts, professional networks, newsletters and webpages to notify Stakeholders about the comment period. Two outreach emails were sent out, one prior and another midway during the comment period. Also, sample letters about the comment period were provided to the NE RSC to send to their constituents under their signature. A November Stakeholder monthly update was sent out announcing the upcoming comment period. The email below is an example of stakeholder outreach:

The Northeast Regional Strategy Committee is currently seeking stakeholder input to the development of the Regional Action Plan. This plan will shape wildland fire management across the disciplines and across the borders with our partners for the future. It is crucial that we get broad involvement from all who have a stake in the outcome. It is important that we are able to envision our programs in the plan and contribute to the three goals of the Cohesive Strategy. The comment period is open from now through December 14.

On the Northeast RSC website, we have two documents where you should focus your attention: The NE Regional Synopsis Report and the NE Regional Executive Summary. Of course, you can also review the full report – the NE Regional Risk Report. Your comments will be used in the development of the draft Regional Action Plan.

Northeast Region's Outreach Website

The following documents were provided to stakeholders for use in framing their comments:

- The NE Regional Risk Report
- The NE Regional Executive Summary
- The NE Regional Synopsis

During the December 3-14, comment period stakeholders were asked to complete a web based comment form to provide their comments on the Regional Risk Report Synopsis.

Northeast Stakeholder Webinar

A webinar hosted by the NE RSC was held on December 6, 2013 to provide an overview of the Cohesive Strategy and development of the Northeast Regional Action Plan. A total of 16 individuals participated in the webinar.

A total of fifteen stakeholders provided comments during the December comment period. The Stakeholders affiliations are summarized in Table below.



Stakeholder Affiliation	December 2012	
	Number	Percent
Federal Government	5	33%
Tribal		
State Government	5	33%
Local Government		
NGO	1	7%
Forest Industry		
Fire Departments		
Homeowner/Landowner		
Other	4	26%
Totals	15	100

Following the comment period on the Synopsis report, the Northeast Regional Strategy Committee (NE RSC) completed a Draft Regional Action Plan based on the Northeast Regional Risk Analysis Report (October 2012) and stakeholder comments provided in December. The Northeast Region's Draft Action Plan describes a combination of Overarching Actions and Regional Investment Options that have been identified as preferred regional approaches to addressing the Cohesive Strategy goals in the Northeast.

Based on stakeholder review of the Draft Action Plan and their specific role in managing or living with wildfire in the Northeast, stakeholder's perspective was sought on how well the Draft Action Plan meets their needs and the needs they perceive throughout the Northeast Region.

The final stakeholder comment period associated with Action Plan development was open from January 21 to February 1, 2013.

Outreach Efforts

The NE RSC used existing mailing lists from previous outreach efforts, professional networks, newsletters and webpages to notify Stakeholders about the comment period. Two outreach emails were sent out, one prior and another midway through the comment period.

Sample letters about the comment period were provided to the NE RSC to send to their constituents under their signature. Specific outreach efforts included:

- A January Stakeholder monthly update from the NE RSC announcing the upcoming comment period was sent to the NERSC mailing list and posted on the NE RSC outreach webpage.
- A Region 9 (USFS) Fire Management Officer meeting was held where the draft was discussed and comments consolidated.
- The Northeast Forest Fire Protection Compact Meeting was held on January 29. Maureen Brooks discussed the draft and then took questions and comments at the meeting.
- The International Association of Fire Chiefs sent a message alerting 656 member departments and 356 secondary contacts about the opportunity to comment on the Cohesive Strategy Draft Action Plans.



Northeast Region's Outreach Website

The NE RSC invited stakeholders to visit the Northeast Region's outreach website to learn more about the Cohesive Strategy in the Northeast Region. Stakeholders could view and download a copy of the Draft Regional Action Plan and provide comments on the web-based comment form.

A total of seventeen stakeholders submitted comments using the web-based comment form.

Northeast Stakeholder Webinars

To provide stakeholders information on the Draft Regional Action Plan and to seek an opportunity to comments, three webinars were held during the comment period. These webinars were hosted by members of the NE RSC and occurred on: Thursday, January 24 – 10:00 am EST, Thursday, January 24 – 5:00 pm EST, and Wednesday, January 30 – 10:00 am EST. A total of eleven stakeholders participated in the webinars and provided comments.

Social Media

Social media networking alerted over 200 followers on Twitter of the January comment period via the National Wildfire @US_Wildfire Twitter account.

During the Round 2 comment period for Northeast, 40 distinct Twitter followers re-Tweeted messages at least once. For the Round 2 comment period along with the 200 followers the number of "re-tweeters" are estimated to reach a total of 301,257 Twitter users that potentially received outreach notifications.

Summary of Stakeholder Participation

A total of 31 stakeholders provided 223 individual comments on the Draft Regional Action Plan. A total of 11 stakeholders participated in the webinars, 17 provided comments using the web-based comment form and 3 provided comments via email. Cumulative stakeholder participation during development of the Northeast Regional Action Plan is summarized in Table below.

Stakeholder Affiliation	December 2012		January 2013		Cumulative Totals	
	Number	Percent	Number	Percent	Number	Percent
Federal Government	5	33%	16	52%	21	45%
Tribal			3	10%	3	7%
State Government	5	33%	6	19%	11	24%
Local Government						
NGO	1	7%	4	13%	5	11%
Forest Industry			1	3%	1	2%
Fire Departments						
Homeowner/Landowner						
Other	4	26%	1	3%	5	11%
Totals	15	100%	31	100%	46	100%

Stakeholder Participation During Action Plan Development



Regional Webpage Information and Content

The North East Regional Strategy Committee maintained a webpage to provide stakeholders with current and useful information and to serve as an outreach site to collect comments during the CS effort.

The “Welcome Page” provided a brief introduction to the effort and describes the three regions. It is available at <http://sites.nemac.org/northeastcohesivefire>.

The “About You” page served as the site where “success stories” were found.

The “Reports” page provided stakeholders with links to the monthly updates as well as links to the reports that were generated and draft phase. A tab under the “Reports” page also provided the page for comments during the comment period.

A “Contact Us” page was also on the site to direct the stakeholders to a Gmail account for sending comments and /or ask questions.

Monthly Updates

Ongoing communication was provided by monthly updates which was a brief newsletter that provided in highlights of:

- National Science and Analysis Team Activities,
- Progress and process items from the Eastern Regional CS effort,
- Items of current events from outside, but relevant to the CS effort,
- Success story vignettes,
- Links to outreach activities and comment.



An example is shown below:

The screenshot shows the header of the website with the logo and national goals. Below the header, a blue banner displays the text "Northeast Regional Strategy Committee (NE RSC) Update November 2012".

Northeastern Region Begins Development of the NE Action Plan

The release of the Northeast Regional Risk Analysis Report in October is not the final step in the Cohesive Strategy (CS) development. The contents of the report will be used in conjunction with the objectives and actions outlined in Phase II, and contained in the 2012 Assessment report, to develop a regional Action Plan that addresses the three CS goals. The Action Plan will be developed with stakeholder input, in an iterative and transparent process, beginning in early December and concluding in February.

The Northeast Regional Action Plan will detail the goals, objectives, outcome-based performance measures, implementation outcomes, and priority implementation tasks for the Northeast Cohesive Strategy. These actions will enable the Northeastern Region to make progress in achieving the three national CS goals: Restore and Maintain Landscapes, Fire Adapted Communities, and Fire Response. The tasks will be consistent with the guiding principles and core values of the National Cohesive Wildland Fire Management Strategy.

The Action Plan will define and document the actions intended for implementation over the course of the next five years to make progress in achieving the three CS goals. The performance measures and implementation outcomes will enable all parties to assess and track progress toward the desired outcomes envisioned within each goal. The priority implementation tasks will identify specific actions needed to realize measurable progress within the next five years.

The NERSC also envisions the Action Plan to be a dynamic document. Therefore, it will evolve as conditions or other factors (i.e. drought, economics, insects and disease outbreaks, etc.) warrant. The creation of the Northeast Regional Action Plan is fundamental in achieving the goals of the National Cohesive Wildland Fire Management Strategy in the Northeast.

We ask that you direct your attention to the three documents on the NERSC web page. Under Reports there is a tab called "Comment Period". There are links to the three reports: the Executive Summary, the Synopsis; and the full Northeast Regional Risk Analysis Report. Within the Synopsis Report you will see opportunities for actions under the options and goals. These opportunities provide a foundation for commenting on potential actions to be included in the NE Regional Action Plan.

Stakeholder Engagement Schedule for Action Plan Announced

The Northeast Regional Strategy Committee (NERSC) announces opportunities for stakeholders to help craft the Action Plan for the Northeast Cohesive Strategy.

- December 3-14 Stakeholders can review a synopsis of the Northeast Regional Risk Analysis Report as well as the full report and previous documents, and provide input to the Draft Action Plan development.
- January 14-25 Stakeholders can provide comments on the Draft Action Plan.

The comment periods will provide stakeholders expanded, iterative, and increasingly more focused opportunities to shape Action Plan content. Opportunities for both webinars and written comments will be provided. Following the comment periods, the NERSC expects to complete a Final Draft Action Plan by February 15.

The Synopsis and the complete Northeast Regional Risk Analysis Report are available at:
<http://sites.nemac.org/northeastcohesivefire/comment-period/>



Appendix 5: Stakeholder Outreach and Feedback

Summary from report titled: [Analysis of Stakeholder Comments, Northeast Region, Regional Action Plan](#), February 15, 2013, prepared by (METI) *Management and Engineering Technologies International, Inc., 8600 Boeing Drive, El Paso, Texas 79925*

Building a Collaborative Foundation

Collaboration among stakeholders forms the foundation for the development of the National Cohesive Wildland Fire Management Strategy. The Northeast Regional Strategy Committee (NE RSC) has worked toward inclusiveness and transparency to further understand and involve shared interests. Stakeholder input received during forums and comment periods has refined and clarified the regional objectives, options, values, barriers and actions to address wildland fire management issues in the 20 states forming the Northeast Region. In fact, the NE Region's guiding principles for implementation were developed from stakeholder feedback.

Continued Stakeholder involvement was used by the Northeast Regional Strategy Committee to frame and refine the regional investment options and actions in the Northeast Action Plan. A Stakeholder Engagement Plan was adopted including the following components:

1. Reviewing previous comments from stakeholder engagements to ensure all comments related to implementation actions are taken into consideration in developing the Regional Action Plan.
2. Holding two “rounds” of additional comment periods, including Stakeholder Webinars or Forums.
3. Engaging with Stakeholder groups at various meetings and conferences as opportunities arise.



Stakeholder outreach and participation was designed to provide stakeholders increasingly focused opportunities to shape Action Plan content. The following summarizes each of these efforts:

Review of Previous Stakeholder Comments - This look back at all comments received is designed to ensure stakeholder comments are fully considered in helping shape development of the Action Plan, regardless of when they were provided.

Stakeholder Comment on the Regional Risk Analysis Synopsis – Stakeholders were provided the opportunity to comment on the Overarching Actions and Regional Investment Options identified in the *Northeast Regional Risk Analysis Synopsis (Synopsis)*. The first stakeholder comment opportunity took place from December 3rd to the 14th, 2012



Stakeholder Comment on the Draft Regional Action Plan – Using comments on the Regional Risk Analysis Synopsis, the NE RSC refined the Overarching Actions and Regional Investment Options and developed the *Northeast Region's Draft Action Plan*. The second opportunity for stakeholder comment took place from January 21st to February 1st, 2013.

Summary of Stakeholder Participation

Stakeholders provided comments useful for the Action Plan development during all three Phases: Phase I field forums, Phase II comment period and during Phase III. The NE RSC conducted an extensive review of these comments to assure stakeholders their comments were fully considered and to demonstrate their use in development of the Action Plan.

The number of stakeholders participating in previous opportunities for comment during each Phase of Cohesive Strategy development in the Northeastern Region is shown in Table 1. The cumulative totals of all stakeholders participating during previous engagements are also summarized.

Stakeholder Affiliation	Phase I		Phase II		Phase III		Cumulative Totals	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Federal Government	32	43%	39	61%	7	70%	78	52%
Tribal	1	1%	3	5%			4	3%
State Government	25	33%	14	22%	1	10%	40	27%
Local Government	4	5%	2	3%			6	4%
NGO	9	11%	4	6%	2	20%	15	10%
Forest Industry							0	0%
Fire Departments			2	3%			2	1%
Homeowner/Landowner							0	0%
Other	5	7%					5	3%
Totals	76	100	64	100	10	100	150	100

Table 1: Number and Percent of Stakeholders Participating by Development Phase & Affiliation

During development of the Regional Action Plan, a total of 46 stakeholders provided comments that helped shape and refine the Region's approach. A total of 31 stakeholders provided 223 individual comments on the Draft Regional Action Plan during the final round of comment. Cumulative stakeholder participation during development of the Northeast Regional Action Plan is summarized in Table 2.

Stakeholder Affiliation	December 2012		January 2013		Cumulative Totals	
	Number	Percent	Number	Percent	Number	Percent
Federal Government	5	33%	16	52%	21	45%
Tribal			3	10%	3	7%
State Government	5	33%	6	19%	11	24%
Local Government						
NGO	1	7%	4	13%	5	11%
Forest Industry			1	3%	1	2%
Fire Departments						
Homeowner/Landowner						
Other	4	26%	1	3%	5	11%
Totals	15	100%	31	100%	46	100%

Table 2: Stakeholder Participation During Action Plan Development



Appendix 6: Useful Links

Bureau of Indian Affairs, www.bia.gov

Department of the Interior, Office of Wildland Fire, <http://www.doi.gov/pmb/owf>

Fire Adapted Communities, www.fireadapted.org

Fire Learning Network webpage, <http://conserveonline.org/worksheets/nw.fln.workspace>

Fire Safe Council webpage, <http://www.firesafecouncil.org>

Firewise Communities/USA®, www.firewise.org

Forest and Rangelands website, www.forestandrangelands.gov (*All key Cohesive Strategy documents are posted on this website*)

International Association of Fire Chiefs (IAFC), www.iafc.org

Intertribal Timber Council, <http://www.itcnet.org/>

National Association of Counties (NACO), www.naco.org

National Association of State Foresters, Wildfire webpage: <http://www.stateforesters.org/current-issues-and-policy/current-issues/wildfire>

National Fire Protection Association, www.nfpa.org

National Interagency Fire Center: www.nifc.gov

National Park Service, www.nps.gov

National Wildfire Coordinating Group, www.nwcc.gov

National Wildfire Programs Database, www.wildfireprograms.usda.gov

Northeast Regional Strategy Committee website, www.forestandrangelands.gov/strategy/Regional_Strategy_Committees/Northeast/index.shtml

Northeastern Area Association of State Foresters, www.northeasternforests.org

Ready, Set, Go! Website, <http://www.wildlandfirersg.org>

The Nature Conservancy, www.tnc.org

US Fire Administration, www.usfa.fema.gov

US Fish & Wildlife Service, www.fws.gov

US Forest Service, www.fs.fed.us

US Geological Survey, www.usgs.gov



Appendix 7: Regional Committee and Working Group Membership

Northeast Regional Strategy Committee

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Appendix 8: Photo Credits

Cover

Goal 1: *Prescribed fire, Dead Creek WMA, Addison, Vermont, April 13, 2012, Brooke Taber, NWS Sept 2012*

Goal 2: *Wildland urban interface; central WI subdivision adjacent to a pine plantation Sept 2002*

Goal 3: *New Hampshire Type VI engine assisting Mark Twain NF with fire suppression; week of July 30, 2012; NH Division of Forests and Lands, Brad Simpkins, Sept 2012*

Introduction and Background

Figure 1: *Map of Northeast US, USFS Northeastern Area State & Private Forestry, 2011/p.13*

Figure 2: *Photo of wildfire in the WUI (National Fire Protection Association (NFPA) website/p.14*

Figure 3: *Aerial shot, Missouri wildfire, July 2012, Missouri Dept. of Conservation, Sept 2012/p.15*

Figure 4: *Smokey Bear fire danger display, Black River Falls Service Center, WI, photo taken June 2006 by Jolene Ackerman, WDNR/ p.19*

Figure 5: *Briefing before the Fork Ridge Burn, Hoosier National Forest, Nov 2012/ p.20*

Figure 6: *Red Lake MN Air Tanker, C Wiggins BIA, Dec 2003/p.21*

Goal Options

Figure 7: *Option 1A - Lighting warm season grass stands on the Hoosier National Forest, Nov 2012/ p.30*

Figure 8: *Option 1B – Harvester working in red pine, University of Minnesota, Eli Sagor, 2007/p.36*

Figure 9: *Option 1C – Debris piled up from Superstorm Sandy, West Virginia, Tom Schuler, USFS Northern Research Station, Oct 2012 / p.39*

Figure 10: *Option 2A – Typical wildland-urban interface area in Pennsylvania, (PA DNR)/ p.42*

Figure 11: *Option 2B – Firewise Community chipping day with assistance from local fire department members, Jolene Ackerman, Wisconsin DNR, May 2004/ p.47*

Figure 12: *Option 2C – Smokey appearance at a grade school program, WI photo taken March 2012 by Amy Luebke, WDNR/p.50*

Figure 13: *Option 3A – A weekend wildland fire training with several partners; photo from NH Division of Forests and Lands, Brad Simpkins, Sept 2012/p.54*

Figure 14: *Option 3B – Hayward, WI tractor plow, Wisconsin DNR, Apr 2007/p.59*

Figure 15: *Option 3C – Fall wildfire in West Virginia, West Virginia Division of Forestry, Sept 2012/p.62*

Figure 16: *Classroom training on Assessing Hazards in the Home Ignition Zone; most of the students are local fire department members, Marty Kasinskas, Wisconsin DNR, Dec 2011/p.66*



Appendix 9: Acknowledgements

The Northeast Regional Strategy Committee hereby gratefully recognizes the following groups and organizations for their valuable contributions to the development of this Northeast Regional Action Plan.

Big Rivers Forest Fire Management Compact
Bureau of Indian Affairs
Connecticut Department of Environmental Protection
Delaware Forest Service
Firewise Communities U.S.A.
Fond du Lac Band of Lake Superior Chippewa
Great Lakes Forest Fire Compact
Illinois Department of Natural Resources
Indiana Division of Forestry
International Association of Fire Chiefs
International Association of Wildland Fire
Intertribal Timber Council
Iowa Department of Natural Resources
Maine Forest Service
Management and Engineering Technologies International
Maryland Forest Service
Massachusetts Bureau of Forest Fire Control
Michigan Department of Natural Resources
Mid-Atlantic Interstate Forest Fire Protection Compact
Mille Lacs Band of Ojibwe
Minnesota Department of Natural Resources
Missouri Department of Conservation
National Association of Counties
National Fire Protection Association
National Volunteer Fire Council
New Hampshire Division of Forests and Lands
New Jersey Forest Fire Service
New York State Department of Environmental Conservation
Northeast Forest Fire Protection Compact
Northeast Forest Fire Supervisors
Northeastern Area Association of State Foresters
Ohio Department of Natural Resources
Pennsylvania Department of Conservation and Natural Resources
Rhode Island Department of Environmental Management
The Nature Conservancy
U.S. Department of Agriculture Forest Service
• Eastern Region



- Northern Research Station
- Northeastern Area State and Private Forestry
 - Wood Education and Resource Center

U.S. Fish and Wildlife Service

U.S. Geological Survey

U.S. National Park Service

Vermont Department of Forest, Park and Recreation

West Virginia Division of Forestry

Wisconsin Department of Natural Resources