

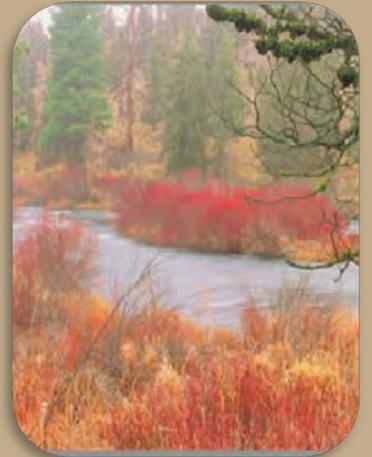
# The National Cohesive Wildland Fire Management Strategy:

## Phase III

### Western Regional Action Plan

Report of the Western Regional Strategy Committee

April 16, 2013



**Resilient Landscapes**



**Fire Adapted  
Communities**



**Wildfire Response**

*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.*

*Wildland Fire Executive Council  
April 15, 2013*

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## Executive Summary

The Western Regional Action Plan is part of the culmination of a three-year effort put into motion by the Federal Land Assistance, Management and Enhancement Act of 2009 (FLAME Act).

Representatives of federal, state, local, and tribal governments, scientists, interested governmental and nongovernmental organizations, businesses and industries worked together to develop a regional approach to achieving the goals of the National Cohesive Wildland Fire Management Strategy: Restore and Maintain Landscapes, Fire Adapted Communities, and Wildfire Response. The Western Regional Action Plan was developed with stakeholder input in an inclusive and transparent process. It is a dynamic document that will be updated continually and modified on a five-year basis to best focus on the issues of concern in terms of wildland fire in the West.

The Western Regional Action Plan is a science-based roadmap to direct a truly western approach to wildland fire that holistically addresses the needs of the landscape, the communities, and the brave men and women who respond when fire occurs. The *National Cohesive Wildland Fire Management Strategy: Phase III Western Regional Science-Based Risk Analysis Report of 2012* examined the existing situation in the West, including biophysical and social factors, and set forth recommendations for reducing wildfire risk, improving forest and rangeland health, protecting communities from wildfire, and enhancing firefighting effectiveness and firefighter and public safety. The Action Plan builds upon these recommendations – detailing actions, tasks, suggested lead and collaborating agencies, and the timeframes in which those actions and tasks should take place. The recommendations fall into four categories – overarching actions, actions to restore and maintain landscapes, actions to promote fire adapted communities, and actions to promote fire response. In addition, there are recommendations for monitoring and accountability, so that movement toward the goals can be assessed, and course corrections can be made as necessary. Annual review and a five-year cycle of updating will institutionalize the Cohesive Strategy and its philosophy of shared responsibility for generations to come.

There are many kinds of actions and tasks described herein. Many of them address issues at the local or regional level. The three Cohesive Strategy regions: the Northeast, the Southeast, and the West have all analyzed the unique needs within their regions and the national issues of concern. These emerging national issues will be addressed in a separate National Action Plan. The regions are

coordinating their efforts to address wildland fire from a top-down and bottom-up method to produce a multi-faceted and coordinated approach. Many of the recommendations do not require monetary investment; instead they focus on adjusting administrative procedures to better coordinate between stakeholders and cooperating agencies.

Collaboration is the key to the Cohesive Strategy, both in its development and in its implementation. The diverse missions of the organizations, agencies, and governmental entities that have joined together to address wildland fire are the strength of the Western Region's strategy. Through a sustained commitment on the part of these partners, the actions and tasks described in the Action Plan will bring the West closer to achieving the goals of the Cohesive Strategy.

In developing this Action Plan, the WRSC recognizes the good work that has been accomplished in the past twelve years under the National Fire Plan and the 10-Year Implementation Strategy. The actions described herein build upon the progress that has been made and the lessons learned, and place emphasis on continuing, and where possible expanding, the programs that have proven effective in reducing risk, restoring landscapes, protecting communities, and improving fire response.

## Introduction

Western landscapes are naturally prone to wildland fire. Smoke from wildfires is a familiar sight in the summer skies, often with snow-like accumulations of ash falling on western communities. Fire is a natural process that hastens the decay of organic material, and it is an essential process for many Western ecosystems. But like hurricanes and earthquakes, fire is a natural process that humans don't welcome when it happens near them, due to threats to human health and safety, and damage to property.

The National Cohesive Wildland Fire Management Strategy looks at the impact of wildland fire on communities, counties, states, and tribes, and what can be done to reduce the negative impacts of fire on people, property and natural resources. Phase I of the Cohesive Strategy identified three

goals: Restore and Maintain Landscapes, Fire Adapted Communities, and Wildfire Response, and created three regional strategy committees to develop actions and strategies to reduce or mitigate the effects of wildland fire: the Northeast, the Southeast, and the West. In Phases II and III of the Cohesive Strategy, concerned stakeholders in each of the regions came together to work as partners in addressing the needs of landscapes, communities, and fire response agencies.<sup>1</sup> The Western Regional Action Plan develops actions for addressing wildfire risk in 17 western states, including Alaska, Hawaii, and the Pacific Islands.

In October, 2012 the Wildland Fire Executive Committee (WFEC) approved the *Phase III Western Regional Science-Based Risk Analysis Report*. Within the report is a list of recommendations that the Western Region developed to address the three primary goals of the Cohesive Strategy. These recommendations are based upon stakeholder feedback and analysis. In the Action Plan, the Western Region builds on the recommendations from Phases II and III and presents a list of actions and tasks developed to address the goals of the Cohesive Strategy.

Throughout the development of the Cohesive Strategy, the Western Region focused on ensuring successful implementation. On-going communication with, and outreach to, stakeholders – and the use of the excellent substantive input received from them – enabled the WRSC to design an Action Plan that fire and land management organizations and agencies across the West will be able to integrate effectively into their operations. With ongoing, adaptive implementation, its impact will be generational.

The Western Regional Action Plan details the goals, objectives and monitoring and accountability actions, and sets priority implementation actions for the Western Cohesive Strategy Region. The Action Plan describes the scope of the actions, the tasks associated with the actions, suggested leads and coordinating groups that are involved in implementing the actions, and the timeframe in which the actions are expected. The monitoring and accountability sections will enable all parties to assess and track progress toward the desired outcomes, envisioned within each goal, while the priority implementation tasks identify specific actions needed to realize measurable progress. An

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<sup>1</sup> For a full description of Phases I and II, see the website, [www.forestsandrangelands.gov](http://www.forestsandrangelands.gov). National and regional Phase I, Phase II and Phase III documents are posted on the website with supporting resource material.

important element of the Action Plan is the emphasis on fuels treatments from the community outwards, into the middle lands and toward the wildlands. Protection of the middle lands is found in recommendations for both landscape restoration and fire adapted communities.

While the key actions are designed to be implemented, and will provide the most benefit over the next five years, it is important to note the role of the Action Plan in the larger, national scope of the Cohesive Strategy. As outlined in the FLAME Act of 2009, the Cohesive Strategy will be reviewed by Congress every five years, beginning in 2014. Implementation in the Western Region will only be in its second year at that time, but will provide valuable insight and information for the Congressional review process. Continued implementation of the Cohesive Strategy in the West (including strong stakeholder engagement) beyond the initial five years will offer a dynamic cycle of even greater insight to feed national review process.

The Western Regional Action Plan identifies the goals, objectives, monitoring and accountability actions, and priority implementation actions for the Western Cohesive Strategy Region. These actions, as identified by the Regional Strategy Committee, will enable the region to make progress in achieving the overarching national goals: Restore and Maintain Landscapes, Fire Adapted Communities, and Wildfire Response.

The tasks are consistent with the guiding principles of the National Cohesive Wildland Fire Management Strategy:

- 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.

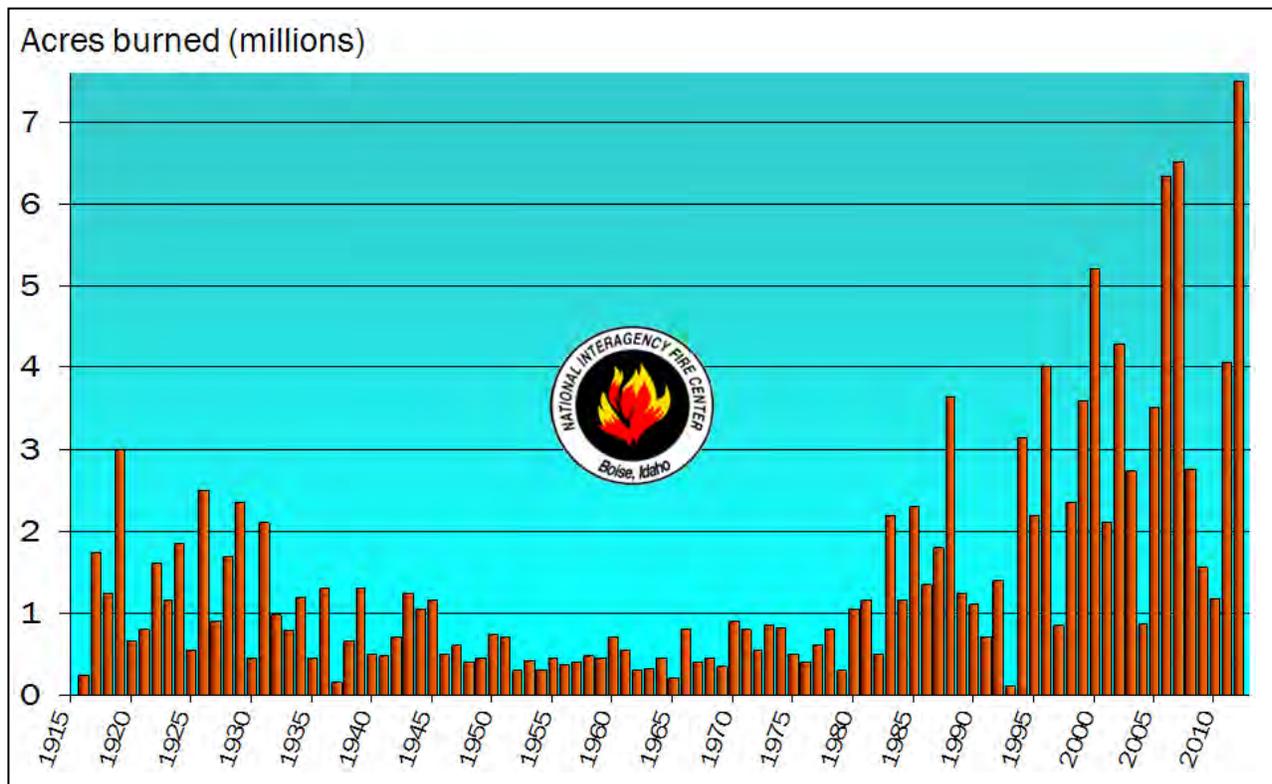
The Western Regional Action Plan is just the beginning. The plan defines and records the actions that the Western Region intends to undertake now, and over the course of the next five years, to make progress toward achieving the three long-term, National Goals of the Cohesive Strategy and lay the groundwork for generations of collaborative achievement.

## Regional Context

In the Western United States, a century of widespread fire exclusion and the more recent severe reduction of active forest management, have resulted in a build-up of surface fuels (downed wood, litter and duff) and the overstocking of forests with trees and ladder fuels. Large areas of western grasslands and fire-adapted forests are in need of restoration. Additionally, both forests and grasslands are suffering the effects of long-term drought, changing climate conditions, and the rapid spread of invasive species. The forest and rangeland health problems in the West are widespread

and increasing, affecting wildlife habitat, water quality and quantity and long-term soil productivity, while providing conditions for uncharacteristically large, severe, and costly wildfires, with increasing threats to human life and property. These environmental conditions, along with the effects of an expanding wildland urban interface (WUI) underlie four broad areas of risk: risk to firefighters and civilian safety, ecological risks, social risks, and economic risks.

Managing wildfires in the West is becoming increasingly complex, as the number of acres burned has increased substantially since the late 1980's. **Figure 1** illustrates the upward trend in acres burned by wildfires in 11 western states since 1916. In 2012, 7.5 million acres burned in these 11 states, with 1.67 million acres in Idaho, followed by Oregon (1.26 mm ac.), Montana (1.22 mm ac.), and California (0.87 mm acres).



**Figure 1.** Acres burned by wildfires in eleven Western states, 1916-2012 (Arizona, California, Colorado, Idaho, Montana, New Mexico, Nevada, Oregon, Utah, Washington, and Wyoming). Source data: National Interagency Fire Center; 1916-2000 data published in *Flames in Our Forest: Disaster or Renewal?* (Arno, S.F. and Allison-Bunnell, S., Island Press, Washington, D.C., 2002, Figure 2.1, p.21); 2002-2012 data available at [http://www.nifc.gov/fireInfo/fireInfo\\_statistics.html](http://www.nifc.gov/fireInfo/fireInfo_statistics.html).

Adding the totals for the other six states in the Cohesive Strategy's West Region (Alaska, Hawaii, North Dakota, South Dakota, Nebraska, and Kansas) to the other 11 western states' brings the total to 8.46 million acres burned in the West. In 2012, wildfires in the West accounted for almost 91

percent of the total acreage burned in the U.S., with the average-sized wildfire at least ten times larger than those in the Northeast or Southeast Regions (**Table 1**).

<b>Table 1.</b> U.S. wildfire statistics by Cohesive Strategy region, 2012.				
	Northeast	Southeast	West	Total U.S.
Number of wildfires	10,690	31,454	25,630	67,774
Acres burned by wildfires	137,505	727,761	8,460,972	9,326,238
Average wildfire size	13 acres	23 acres	330 acres	138 acres

Source: [http://www.predictiveservices.nifc.gov/intelligence/2012\\_statssumm/fires\\_acres.pdf](http://www.predictiveservices.nifc.gov/intelligence/2012_statssumm/fires_acres.pdf)

A unique feature of the West is the large federal land holdings, which characterize most western states. Public lands comprise more than half the total land area of the West. In many of the far western states, the public ownership is over 60%, with Nevada the highest at 83% federally owned. Figure 2 shows the largest land ownerships categories across the West.

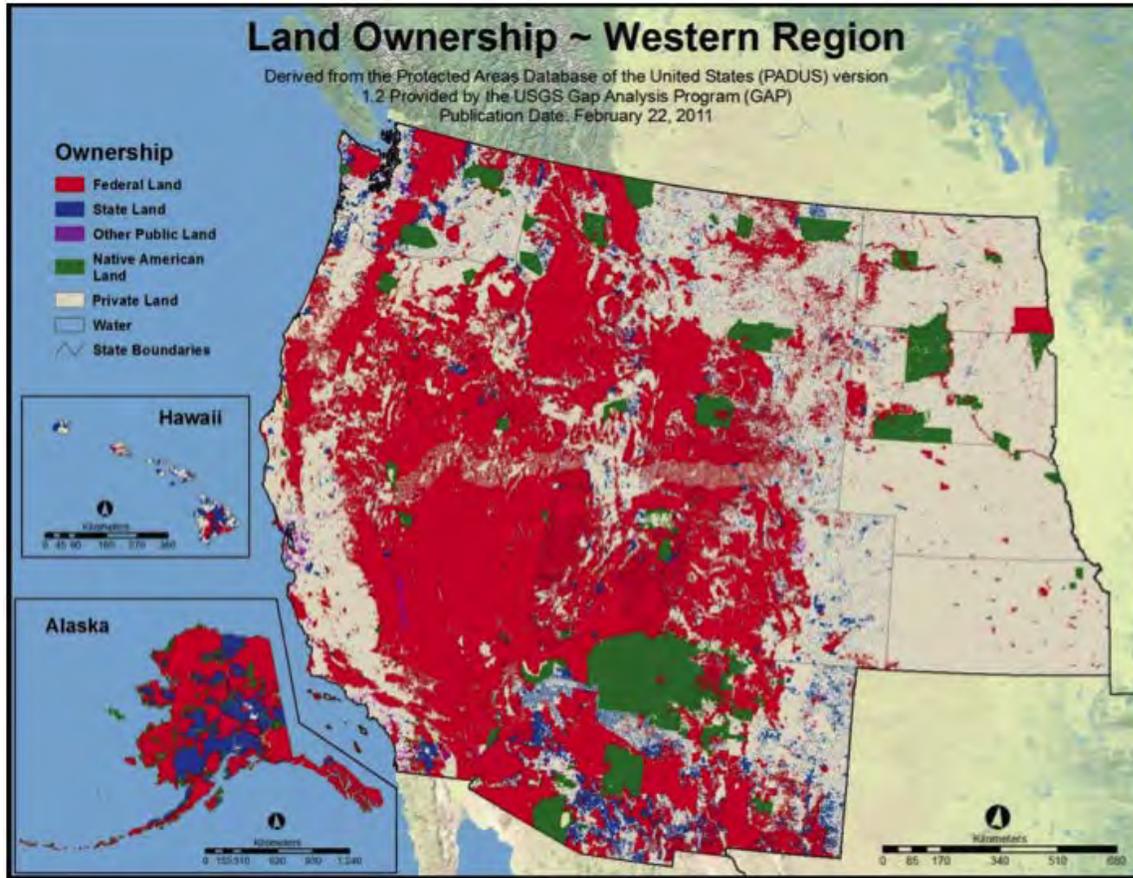


Figure 2. Land ownership the West.

There are many factors that determine the wildfire risk of any location. The largest factors are: vegetation type, topography, and climate. A comparative risk model of the United States shows that large expanses of the West are classified in the three highest risk categories due to low precipitation, steep slopes, and fireprone vegetation departed from its normal fire interval. The National Hazard and Risk of Wildfire Map shows the areas of highest risk across the country. Communities across the West need to take action to reduce fuels in and around the community to reduce the risk that the communities themselves will become fuel for wildfires. Homeowners should reduce the structural ignitability of their homes by reducing fuels and using fire-resistant building materials.

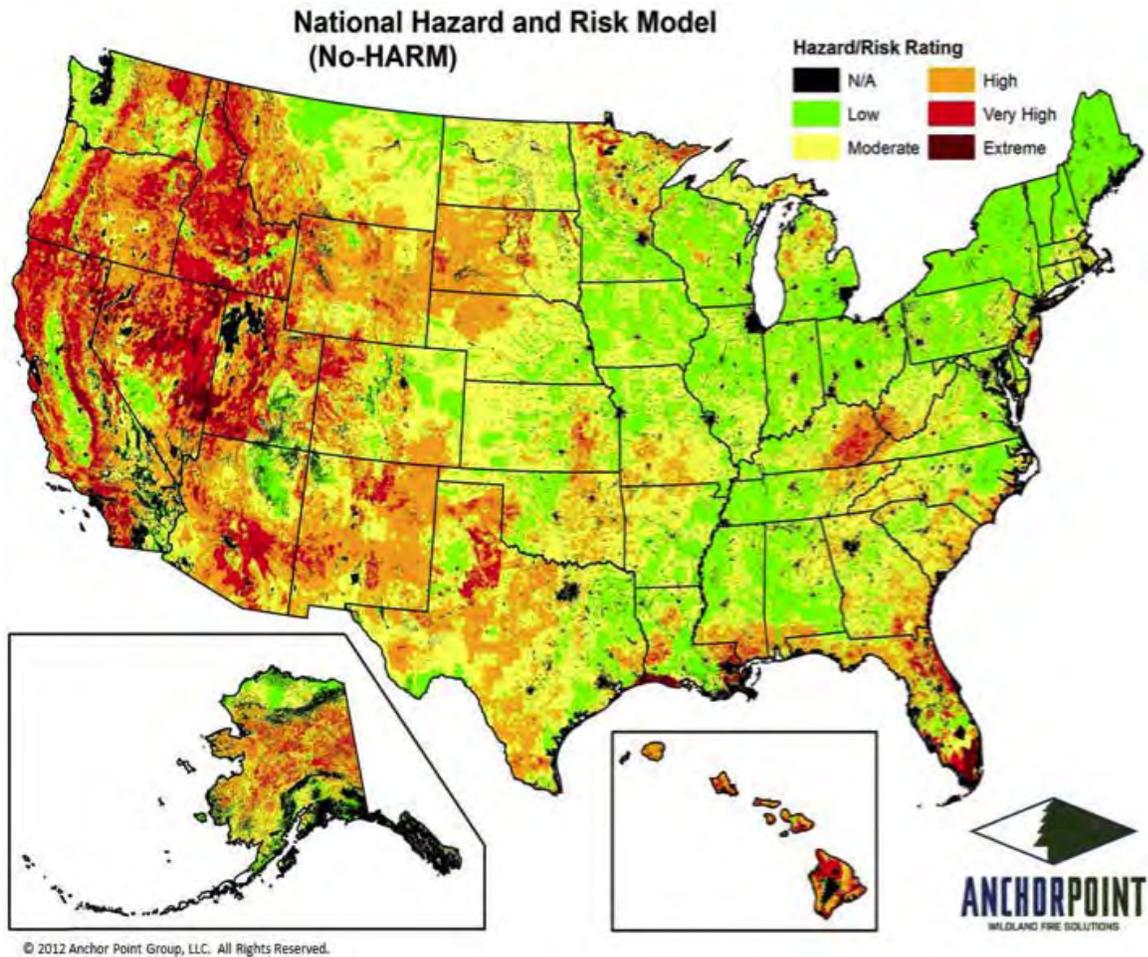


Figure 3. National Hazard and Risk of Wildfire Map

Another important factor contributing to risk in the West is the dispersed locations of fire protection resources. Figure 4 shows the number of fire stations in each western county. Vast expanses of the West have less than one fire station per 100 square miles. This leads to extended response times to fires in rural areas, areas often characterized by federal ownership, steep slopes, and beetle-killed trees.

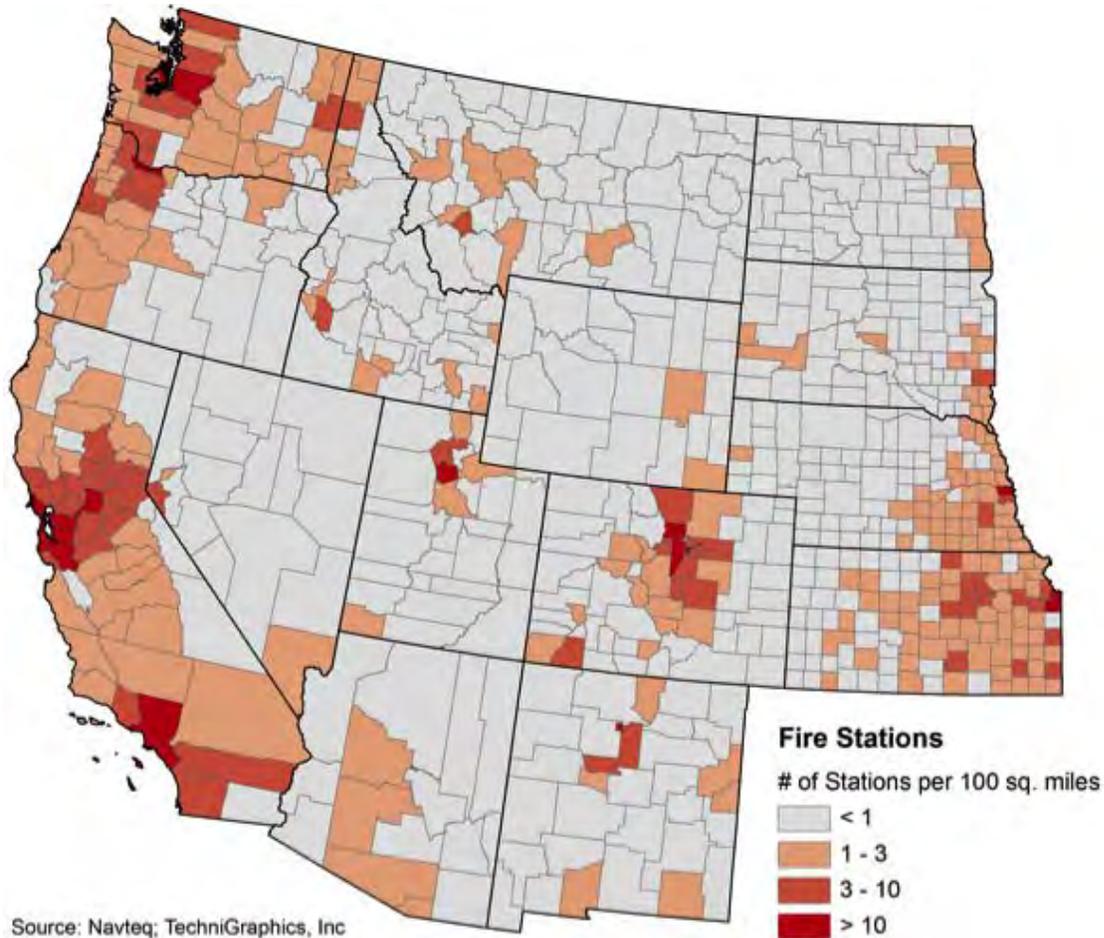


Figure 4. Mean number of fire stations per 100 square miles in western counties.

A variety of key stakeholder values relevant to wildland fire management have been identified at the national scale through both Phase I, Phase II, and Phase III of the Cohesive Strategy. Some values are widely or even universally held among all stakeholders, particularly the value of life and safety for firefighters and the public. Other identified stakeholder values are more unique to the West, including:

- Honoring tribal heritages and land uses.
- Valuing people for who they are, not what they have in the bank.
- Living and respecting the western/frontier culture.
- Enjoying vast, wild, open landscapes.
- Drinking good water and breathing clean air.
- Using and stewarding public lands.

The outcomes/recommendations, actions, and tasks that follow have been crafted to align both with national needs and these unique western stakeholder values, and are consistent with the stakeholder feedback received during the development of this Action Plan.

Addressing the threat of wildland fire to landscapes and communities in the West will take a multi-faceted approach that includes many stakeholders working together to improve landscape resilience, protect communities, and improve fire response at the same time. Restoring Western forests to a healthy, resilient state could generate great environmental and social benefits, create much-needed jobs and revenue for rural economies, and lead to tremendous cost saving in wildfire suppression efforts. Healthy, functioning ecosystems are vitally important to the ecological, social, and economic values in the West. The West needs landscape scale changes in vegetative structure and fuel loadings to significantly alter wildfire behavior, reduce wildfire losses, and ensure firefighter and public safety, while achieving longer term landscape resiliency. This can be achieved through active management of the landscape.

## Overall Strategies

*Goal 1: Landscapes across all jurisdictions are resilient to fire-related disturbances in accordance with management objectives.*

Basic premise: Sustaining landscape resiliency and the role of wildland fire as a critical ecological process requires a mix of actions that are consistent with management objectives. The West will use all available methods and tools for active management of the landscape to consider and conserve a diversity of ecological, social, and economic values. The West will coordinate with all partners and seek continued stakeholder engagement in developing market-based, flexible and proactive solutions that can take advantage of economies of scale. All aspects of wildland fire will be used to restore and maintain resilient landscapes. Emphasis will be placed on protecting the middle lands near communities.

*Goal 2: Human populations and infrastructure can withstand a wildfire without loss of life and property.*

Basic premise: Preventing or minimizing the loss of life and property due to wildfire requires a combination of thorough pre-fire planning and action, followed by prudent and immediate response during a wildfire event. Post-fire activities can also speed community recovery efforts and help limit the long-term effects and costs of wildfire. Community Wildfire Protection Plans (CWPPs) or their tribal equivalents should identify high-risk areas and actions residents can take to reduce their risk. Fuels treatments in and near communities can provide buffer zones to protect structures, important community values and evacuation routes. Collaboration, self-sufficiency, acceptance of the risks and consequences of actions (or non-action), assisting those who need assistance (such as the elderly), and encouraging cultural and behavioral changes regarding fire and fire protection are important concepts. Attention will be paid to values to be protected in the middle ground (lands between the community and the forest) including: watersheds, viewsheds, utility and transportation corridors, cultural and historic values, etc.

*Goal 3: All jurisdictions participate in making and implementing safe, effective, efficient, risk-based wildfire management decisions.*

Basic premise: A balanced wildfire response requires integrated pre-fire planning with effective, efficient and coordinated emergency response. Pre-fire planning helps to tailor responses to wildfires across jurisdictions and landscape units that have different uses and management objectives. Consideration should be given to the role that fire might play in ecosystem maintenance and restoration. It is possible in some cases to achieve conditions under which fire can spread with little or no damage to values and effectively be used to treat the landscape. Prevention of human caused fires is an important element of a fire management program. In most settings, an ignition management approach that uses prevention, fuels treatments and hazard mitigation, and aggressive initial attack in a cost-effective combination is the best approach to reduce risk, costs, and losses.

## Regional Governance

The Cohesive Strategy is a national, collaborative approach to addressing wildland fire across all lands and jurisdictions, set in motion by the FLAME Act of 2009. It is being developed with input from wildland fire management agencies and organizations, land managers, tribes, and policymaking officials representing all levels of governmental and non-governmental organizations. The Cohesive Strategy takes a top-down and bottom-up view of wildland fire and resource management, bringing the decision-making experience to the local level through the regional strategy committees (RSCs). The Wildland Fire Leadership Council (WFLC) establishes the national Cohesive Strategy guidance, vision and goals. WFLC provides oversight of Cohesive Strategy planning efforts through the Wildland Fire Executive Committee (WFEC). At the beginning of Phase II, the three regional strategy committees were created to involve local stakeholders in the planning process. The development of the Western Regional Action Plan is a collaborative process in which stakeholders assess the opportunities and barriers for achieving the three goals, and make recommendations, and develop specific actions and tasks to reach their goals.

Experience has shown that collaboration with stakeholders is the most effective method for public land management decisions. The Cohesive Strategy brings the many stakeholders together to form collaborative groups that will work together to address the complex issues surrounding wildland fire in the West. Collaboration has been the focus of the Cohesive Strategy throughout Phases I through III, and it will become even more important in the implementation phase.

The Western Regional Strategy Committee (WRSC) will continue to oversee, guide, and coordinate activities to accomplish the Western Regional Action Plan. The WRSC is comprised of representatives from the following agencies:

- Department of the Interior
  - US Fish and Wildlife Service
  - US Geological Survey
  - National Park Service

- Bureau of Indian Affairs
  - Bureau of Land Management
- Department of Agriculture
  - US Forest Service

#### Nongovernmental Organizations

- Western Governors' Association
- National Association of Counties
- International Association of Fire Chiefs (IAFC)
- Council of Western State Foresters
- Inter-Tribal Timber Council
- National Association of State Foresters

Additional stakeholder groups are represented in the subcommittees and working groups listed in Appendix 7.

As we transition from analysis and planning, with the completion of the Western Risk Analysis Report, and into the implementation phase with the Western Regional Action Plan, the membership, leadership, and administrative composition of the WRSC will change. Consideration will be given to adding representation by more stakeholders to the membership of the WRSC.

Through a grant from the U.S. Forest Service, the Western Governors' Association has hired a regional coordinator to work with the WRSC and our many stakeholder groups to guide implementation activities. The coordinator will work with the WRSC and our many stakeholder groups to guide implementation activities. Leadership for the Cohesive Strategy in the West, as well as the implementation of the Western Regional Action Plan will continue to be provided by represented decision-makers and jurisdictional authorities working with the WRSC. The coordinator will assume a facilitator and management role. An important aspect of implementation will be communications with stakeholders and the public, which will be coordinated at the national level with a regional component.

The role of the coordinator is to facilitate work on the actions of the various entities and agencies engaged in wildland fire and land management in the implementation of the Western Regional Action Plan, and increase stakeholder engagement. Among other activities, the coordinator will lead efforts to educate and inform decision-makers on the work occurring within the region, garner support, and assist in implementing positive actions that reduce wildfire risk. The WRSC will provide input and guidance to the coordinator in the strategic development, coordination, implementation, and integration of the *Western Regional Science-based Risk Analysis Report* and Western Regional Action Plan.

The Western Regional Action Plan shows suggested lead agencies for each of the actions described in the plan. The definition of roles and responsibilities has yet to be determined. The WRSC and the coordinator will reach out to stakeholder groups to develop a path forward for the prioritized actions and tasks.

The Western Region has developed communication tools that have been consistently utilized throughout the Phase II and III process. These tools include the use of websites, published periodic updates, success stories, and personal engagement by WRSC or Work Group members. The West will continue to work on education and outreach to decision-makers and stakeholders.

The WRSC will continue the process of identifying additional stakeholders through public outreach and through hub and spoke networks, following lines of communication between people with similar interests. As implementation moves forward, the Coordinator will work with existing collaborative groups to recruit a group of people to assist communities in the technical aspects of collaborating to reduce wildfire risk in the three goal areas.

The national aspect of the Cohesive Strategy is still on-going, with the development of the Phase III National Risk and Trade-off Analysis document due in June, 2013, and the National Action Plan to be completed in late 2013. It is anticipated that those documents will have an effect on the Western Regional Action Plan, and adjustments to the actions and tasks will occur in response to those documents, particularly in the actions that are national in scope. The Western Region will be looking for coordinated national assistance with those actions.

## Developing the Actions, Tasks, and Priorities

The following four sections of this Action Plan include the prioritization of key actions and tasks that the WRSC recommends be implemented over the next five years. The actions in these sections, Overarching, Restore and Maintain Landscapes, Fire Adapted Communities, and Wildfire Response are categorized into two responsibility areas – regional or national.

Regional actions are those that will be addressed within the Western region. National actions will be forwarded to WFEC for their consideration. National actions with strong regional influences will need to be addressed at both the national and regional levels. All of the actions will be addressed by the Western Region, while those designated as national will require participation and leadership by the WFLC membership. The WRSC will assist WFEC in accomplishing the national actions recommended by the Western region.

All of the actions have been given a priority rating for implementation:

- A - high implementation priority;
- B - moderate implementation priority;
- C - low implementation priority.

The priority rankings are not an indication of the importance of the action. All actions recommended in the Action Plan are important in the estimation of the WRSC. The WRSC established and used seven criteria in evaluating priorities for implementation. The criteria are:

1. Is there a high probability of social, political, environmental, and organizational acceptance of the action locally, at the state level, and regionally?
2. Will the action and underlying tasks materially contribute to achieving the three goals?
3. Is an increase in capital investment necessary to implement this action? If yes, what is the recommended source of the new investment?
4. Is the lead organization willing to accept responsibility, including coordination of the investment and fiscal portion, for the action?

5. Can the action and related tasks be accomplished in the first five years of the strategy?
6. Will the action and related tasks be supported (including investments) by WFLC at the national level, the WRSC membership affiliations regionally, and decision makers locally?
7. Will the action and associated tasks reduce an identified existing barrier to success in one or more goal areas?

The WRSC’s recommended priorities for implementation by action are shown in Tables 2 and 3 below.

**Table 2. Western Regional Emphasis Priority Table – Regional Actions**

<b>Western Regional Emphasis Priority Table</b>		
<b>Regional A</b>	<b>Regional B</b>	<b>Regional C</b>
O.1. Maintain and enhance communications efforts	O.4.A Utilize or develop state committees with broad and diverse representation to establish criteria for grant allocation, which will provide greater emphasis on collaboration.	O.7 Provide resources to local governments.
O.2.A Establish western coordination organization	O.5.A Establish a tribal collaborative landscape management program with pilot projects.	3.1 Identify and adjust protection responsibility.
O.2.C Monitor and evaluate the effectiveness of the Western Regional Action Plan.	O.5.B Evaluate pilot program.	
1.1.B Maximize state and local authorities for implementation.	1.1.E Expand use of the collaborative landscape restoration efforts.	
1.2 Identify and prioritize landscapes for treatment.	1.3 Expedite restoration of damaged landscapes.	
2.3 Establish and promote trained local workforce capacity.	3.4.B Increase local response capacity including supporting the development of Type 3 Incident Management organizations.	
2.1 Support CWPPs/tribal equivalent development, implementation, and updating.		

**Table 3. Western Regional Emphasis Priority Table – National Actions**

National A	National B	National C
O.2.B Align regulatory and management agencies for Cohesive Strategy implementation to improve cooperation among agencies, states, and the federal government.	O.3 Establish collaboration incentives.	O.10 Evaluate and fill key data gaps.
O.6 Evaluate barriers to risk reduction.	O.4.B Prioritize federal land management program dollars consistent with this recommendation and the state committees with broad representation developed under O4A.	1.5 Examine legislative related barriers.
O.8 Formalize a comparative risk model that includes federal, state, tribal and local costs. Use the model to complete a trade-off analysis and establish a risk base point.	O.9 Application of the National Risk Model in the West.	2.4 Develop and integrate information and awareness program.
1.1.A Promote collaborative planning and management.	1.1.C Implement projects using the best available and most feasible tools.	3.2.B Reduce wildland firefighter exposure to smoke and other toxic substances. Reduce wildland firefighter exposure to heat related illness.
1.1.D Simplify administrative processes regarding the exchange of funds between and within agencies.	1.4 Improve the planning process for landscape restoration projects.	3.2.C Create national all lands, all hands wildland fire accident and injury reporting system.
2.1 Support CWPPs/tribal equivalent development, implementation, and updating.	3.2.A Develop a fire response risk management protocol.	3.4.A Increase connectivity of DHS and related bureaus' grant capability with the goals of the Cohesive Strategy.
2.2 Coordinate and support activities to achieve and maintain Fire Adapted Communities.		
2.5 Establish and maintain learning networks.		
2.6 Streamline and coordinate FEMA support programs.		
3.2.D Improve firefighter safety and health by: increasing the recognition and acceptance of certification of EMS responders on incidents from state to state.		
3.2 E Establish a fire prevention program.		
3.2.F Develop a human factors-based approach to wildfire ignitions prevention.		
3.3.A Integrate incident communications.		
3.3.B Working with DHS and other cooperators continue to implement a national wildland fire qualification system that applies to and is accepted by all firefighting agencies and departments under NIMS.		



Thinned fuels provide safe areas for backfires

Photo courtesy of FireWise of Colorado

## Overarching Recommendations, Actions, and Tasks

Overarching actions are those that address more than one goal and are necessary for the functioning of the Cohesive Strategy in the implementation phase. The WRSC used stakeholder input in selecting and refining the Overarching Actions, as well as the actions relating to all three Cohesive Strategy goal areas.

*0.1. Recognize the depth and importance of the Communications Framework and provide resources to implement communications recommendations, as it establishes the foundation of our collaborative process.*

Action: Maintain and enhance communication efforts

Priority: Regional A

Tasks:

1. Review and update the existing communications strategy to reflect a shift from planning to implementation. Identify and develop community collaborative information needs.
2. Develop a speakers' bureau to meet with stakeholder groups and other publics to promote understanding, to learn about and respond to stakeholder concerns, and to encourage engagement and action. (Recognize that all stakeholders have a responsibility and need to be part of the solution.)
3. Educate and inform the public on the Cohesive Strategy and the Western fire issues, including the ecological benefits of fire and the impacts, such as smoke management.
4. Identify interested groups and seek participants from interested groups and other federal, state, tribal, and local agencies to assist in the communications efforts. Ensure that communication is two-way.
5. Develop and utilize existing networks to share information both internally and externally that relates to policy changes, budget issues, and other pertinent information.

**Scope:** Regional and local

**Suggested lead:** WRSC

**Other collaborators:** All stakeholders; connectivity is critical with the national framework.

**Implementation timeframe:** Short-term (0-2 years) to become long-term

**Supplemental information:** Review and update the communication strategy annually.

*0.2. Ensure the coordinated implementation of the Cohesive Strategy among all stakeholders.*

0.2.a Action: Establish Western Coordination Organization

Priority: Regional A

Tasks:

1. Review the membership and charter of the WRSC to reflect a new focus on implementation of the Cohesive Strategy.
2. Hire a regional coordinator and secure funding from WRSC membership organizations to provide self-sustaining leadership and coordination.
3. Establish work groups to accomplish the actions identified in this Action Plan. Reach out to existing local groups and tribes to help staff the work groups and to facilitate coordinated outcomes.

4. WRSC leadership convenes workgroup members from Landscape Resilience, Fire Adapted Communities, and Wildfire Response to identify mechanisms for integration and removal of barriers.
5. Monitor and share awareness of collaborative efforts in the West to leverage Cohesive Strategy implementation with non-related efforts. At all levels, remain aware of other efforts with overlapping goals and objectives and seek opportunities to collaborate to leverage efforts.
6. Develop a Western Regional Cohesive Strategy archive.

**Scope:** Regional

**Suggested lead:** WRSC

**Other collaborators:** WRSC membership organizations

**Implementation timeframe:** Short-term 0-2 years

**Supplemental information:**

0.2.b. Action: Align regulatory and management agencies for Cohesive Strategy implementation to improve cooperation among agencies, states, and the federal government.

Priority: National A

Tasks:

1. WRSC convenes Fish and Wildlife Service, NOAA Fisheries, EPA leadership, and other regulatory agencies to present the Cohesive Strategy; determine where management and regulatory areas of responsibility intersect; and develop a process to resolve inherent conflicts identified.
2. Update field guidance to reflect solutions and concepts developed in support of the Cohesive Strategy.

**Scope:** National

**Suggested lead:** WRSC

**Other collaborators:** DOI, WGA, regulatory agencies

**Implementation timeframe:** Short-term (0-2 years)

**Supplemental information:**

3. Review, update, and simplify Cooperating Agency Status (relating to NEPA) between the Department of the Interior, the US Forest Service, and the Council on Environmental Quality. Expand inclusiveness in planning processes to include local, state, tribal and other agencies.

**Scope:** National

**Suggested lead:** DOI

**Other collaborators:** Forest Service, CEQ

**Implementation timeframe:** Short-term (0-2 years)

**Supplemental information:**

### 0.2.c. Monitor and evaluate the effectiveness of the Western Regional Action Plan

Priority: Regional A

#### Tasks:

1. Develop and implement an activity monitoring plan to provide comprehensive annual feedback on the effects of implementing actions and tasks.
2. 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.
3. Meet quarterly to discuss Action Plan progress and effectiveness. Recommend Action Plan changes as needed.
4. Report to the national Cohesive Strategy leadership (WFLC, WFEC) annually on progress and needed adjustments as work progresses.
5. Annually 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:** Regional

**Suggested lead:** WRSC

**Other collaborators:** Regional Cohesive Strategy partners, WFEC

**Implementation timeframe:** Short-term (0-2 years)

**Supplemental information:**

### *0.3. Enhance collaboration through incentives*

Action: Establish collaboration incentives.

Priority: National B

#### Tasks:

1. Define incentives (financial, recognition, resources, and traditional and non-traditional market-based solutions).
2. Establish a recognition process for successful collaboration that leads to results.
3. Establish a pool of grant funds to allocate to successful collaboration efforts to further landscape restoration and community protection work associated with CWPPs or tribal equivalents.

**Scope:** All

**Suggested lead:** National Association of Counties (NACo)/Western Interstate Region (WIR)

**Other collaborators:** All stakeholders

**Implementation timeframe:** Mid-term (2-4 years)

**Supplemental information:** Initially target federal agencies for grant funds, but expand to states and others over time.

*O. 4. Emphasize landscape treatments where existing collaborative groups have agreed in principle on management objectives and areas for treatment, and encourage and facilitate the establishment of collaborative groups.*

O.4.a. Action: Utilize or develop state committees with broad and diverse representation to establish criteria for grant allocation, which will provide greater emphasis on collaboration.

Priority: Regional B

Tasks:

1. Review existing grant program criteria at the state level.
2. Promote modification to emphasize collaboration, if needed.
3. Have states adopt new criteria, if needed.

**Scope:** State-level

**Suggested lead:** Council of Western State Foresters

**Other collaborators:** To be determined (TBD) by the State Forester

**Implementation timeframe:** Short term (0-2 years)

**Supplemental information:** Report annually to the WRSC on the development of state boards and implementation of new criteria. After five years, have states report on whether the new criteria have increased collaborative efforts and reduced risk.

O.4.b. Action: Prioritize federal land management program dollars consistent with recommendation O.4 and the state committees with broad representation developed under O.4.a.

Priority: National B

Tasks:

1. Have federal agencies prioritize collaborative efforts through the budget process.
2. Consider alignment with the action O.4a under this recommendation in the prioritization of projects. State and regional level federal managers will consider allocating their discretionary funds to support objectives established by broadly representative and diverse state committees.

**Scope:** All

**Suggested lead:** Initially, the lead organization should be the federal government, then NACo/Western Interstate Region should be involved

**Other Collaborators:** All stakeholders

**Implementation timeframe:** Mid-term (2-4 years)

**Supplemental Information:** Initially target federal agencies for grant funds, but expand to states and others over time.

*O.5. Expand collaborative land management, community and fire response opportunities, across all jurisdictions, and invest in programmatic actions and activities that can be facilitated by Tribes and partners under the Indian Self-Determination and Education Assistance Act (as amended), the Tribal Forest Protection Act (TFPA), and other existing authorities in coordination with the United Nations' Declaration on the Rights of Indigenous Peoples.*

O.5.a. Action: Establish a tribal collaborative landscape management program with pilot projects.

Priority: Regional B

Tasks:

1. Leadership between DOI and USDA to determine funding allocation. Pursue permanent authorization to enable transfer of funds from all federal sources to DOI to compact OR 638 contract programmatic actions and activities (consultation, partnership collaboration, implementation, research, monitoring, and adaptation) through the Indian Self-Determination and Education Assistance Act.
2. Recommend to leadership in DOI, EPA, and USDA to set aside program funds for tribes to assist in planning and to implement collaborative tribal network programs and projects across multi-jurisdictional landscapes.
3. Modify the regulations to enable the transfer of non-recurring funds to compacts to invest in collaborative training and supplemental project activities.
4. Establish pilot projects throughout the Western region to develop unique collaborative agreements, MOAs and MOUs, charter(s) and/or local operating plan(s) between Agencies, Tribe(s), State(s) and other partners. Maximize integration across all three goals of the Cohesive Strategy, define roles, responsibilities, and collaborative budgetary needs. Select pilot projects based on where one or more agreement is already in place to expedite pilot planning and implementation.
5. Recommend Environmental Protection Agency (EPA) participation in collaborative groups with an interest in enabling alpha testing of Western Regional Air Partnership Guidance on categorizing natural vs. anthropogenic emissions sources relating to Native American Cultural Burns, and assist in coordinating Performance Partnership Grants and/or General Assistance Program funding for pilot actions and activities.
6. Develop guidance on categorizing natural vs. anthropogenic emission sources relating to Native American cultural burns, prescribed fire, and wildfire management, and assist in coordinating performance partnership grants and/or general assistance program funding to support pilot actions and activities, and help facilitate climate adaption associated programmatic capacity building.
7. Use locally relevant combinations of compacts, MOAs and MOUs, contracts, grants, and/or agreements to align partnership program of work, and facilitate expediency and flexibility in using funds efficiently and effectively in a collaborative and mutually beneficial manner.

**Scope:** Regional and local

**Suggested lead:** ITC/BIA

**Other collaborators:** All stakeholders, DOI, Self-Governance Advisory Committee

**Implementation timeframe:** Mid-term 2-4 years

**Supplemental information:** Tribes, DOI, USFS and other federal agencies need to participate as key partners especially related to compact funding. EPA needs to be intimately involved in the Alpha testing. Evaluate pilots in five years, if proven beneficial, expand program beyond pilots.

#### O.5.b. Evaluate Pilot Program

Action: Once the Tribal Program is established and pilot projects have been initiated, evaluation of those projects should begin.

Priority: Regional B

##### Tasks:

1. Glean successes and barriers from pilot projects and recommend authorization of Tribal Resource Management Plans to apply to all lands through amendment to the National Indian Forest Resources Management Act.
2. Recommend compact negotiation authority for all agencies and departments through Tribal Self Governance amendments to the Indian Self Determination and Education Assistance Act.
3. Glean successes and barriers from pilot projects and recommend modification/permanent authorization of the Collaborative Forest Landscape Restoration Program (2009 omnibus). Extend overarching contract/agreement mechanisms to 20-year terms.
4. Glean successes and barriers from pilot projects and recommend modification to the Tribal Forest Protection Act, refine adjacency definition to be consistent with established tribal jurisdictions, extend overarching contract/agreement mechanisms to 20-year terms.
5. Glean successes and barriers from pilots and recommend updates to the Farm Bill, achieve consistency across all authorities.
6. Formulate an executive guide to integrated mandates, authorities, and opportunities.
7. Encourage legislative remedies to address barriers and institutionalize successful pilot programs and projects.

**Scope:** Regional

**Suggested lead:** Tribes/BIA/ITC

**Other collaborators:** Tribes, DOI and Forest Service, WRSC

**Implementation timeframe:** Mid-term (2-4 years)

**Supplemental information:**

*0.6. Address identified barriers and promote critical success factors across the region and at all levels.*

Action: Evaluate Barriers to Risk Reduction

Priority: National A

Tasks:

1. Support the WFEC to address the priority barriers identified by the CSSC. (See Appendix 8).
2. Facilitate working with the WFEC and other regions to assist in implementing actions and timeline for implementation to remove the 50-plus identified barriers that prevent regions from reducing risk.
3. Streamline processes for complying with environmental protection laws.
4. Enable and encourage agencies to share environmental compliance studies/documents in their individual agency decision-making processes.

**Scope:** National and regional

**Suggested lead:** WRSC

**Other collaborators:** Northeast and Southeast regions

**Implementation timeframe:** Priority barriers – short-term 0-2 years and remaining barriers – Mid-term 2-4 years and long-term

**Supplemental information:** Recognize goal-based actions that erode the barrier. Identify timelines for each identified barrier. Reassess barriers in five years.

5. Simplify the land exchange process between states and the federal government. Remove barriers to exchanges pursuant to the Federal Land Transaction Facilitation Act (FLTFA) and the Federal Land Policy Management Act (FLPMA). A provision should be added to FLPMA that addresses the public interest requirement and clarifies that a special relationship exists between the federal government and the sovereign states, and that agreed upon federal-state exchanges are in the public interest.

**Scope:** National

**Suggested lead:** WGA

**Other collaborators:** DOI and Forest Service, state land management agencies, CEQ

**Implementation timeframe:** Begin in short-term and move into long-term

**Supplemental information:**

*0.7. 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.*

Action: Provide Resources to Local Governments

Priority: Regional C

Tasks:

1. Convene a group of local government officials to assess their most important needs and resources to integrate the Cohesive Strategy into their communities and operations.
2. Develop a plan to secure resources to meet the needs assessment and implement.
3. Study the feasibility of developing a Leaders Guide for Cohesive Strategy as it pertains to all Cohesive Strategy stakeholders and, if feasible, develop a proposed process to create and implement the Guide.

**Scope:** Regional and Local

**Suggested lead:** IAFC

**Other collaborators:** WRSC, local government, and counties

**Implementation timeframe:** Short-term (0-2 years)

**Supplemental information:** After five years evaluate if local communities have utilized resources to meet the goals of the Cohesive Strategy.

*0.8. Formalize a comparative risk model that includes federal, state, tribal and local costs. Use the model to complete a trade-off analysis and establish a risk base point.*

Priority: National A

This recommendation is national in scope. The task is being accomplished at the national level with the formulation of the National Action Plan.

*0.9. Establish the use of the model, including training and data descriptions for local decision-makers, such as counties. Facilitate local updates to the models to enable updates to the national models.*

Action: Application of the National Risk Model in the West

Priority: National B

Tasks:

1. Analyze the information presented in the national risk model to determine if it meets regional needs.
2. If the Western Region has additional needs, work with the national science and technical community to address those needs, such as universities and federal, tribal, and state agencies.
3. Provide decision-makers with the tradeoff analysis for all lands.
4. Develop and validate the modeling tools that local decision-makers can utilize.
5. Use applied biophysical and social science to support the Cohesive Strategy.
6. Apply science in a local context available for decision-makers.
7. Develop mechanisms and protocols for integration of local indigenous knowledge into the science base for local decision-making.

8. National Science and Analytical Team (NSAT) data sets should be compared and updated as necessary with finalized Westwide Risk Assessment information.

**Scope:** Regional

**Suggested lead:** WRSC

**Other collaborators:** National science and technical community, including social science researchers.

**Implementation timeframe:** Short-term 0-2 years

**Supplemental information:** Tie in Communications group to provide education to decision-makers and stakeholders on trade-off analysis.

*0.10. Identify data gaps and inconsistencies, including describing the purpose of the data, in monitoring and evaluating progress to accomplishing the goals of the Cohesive Strategy. Prioritize action toward addressing gaps and inconsistencies.*

Action: Evaluate and Fill Key Data Gaps

Priority: National C

Tasks:

1. Upon completion of the National Risk and trade-off analysis, identify national and regional data gaps needed for future analysis.
2. Work with the science and technical community in developing a process for gathering or collecting and updating the needed data.
3. Solicit feedback from the NSAT concerning data gaps they are experiencing while conducting the "National Risk and Trade-off Analysis" which may have applicability to WRSC Actions Plans.
4. WRSC will engage the Pacific Islands and Alaska and Hawaii in assessing their data gaps to determine if they can accept this action plan, or develop an amended plan for their needs.

**Scope:** Regional

**Suggested lead:** WRSC

**Other collaborators:** NSAT and WRSC member organizations

**Implementation timeframe:** Short-term 0-2 years

**Supplemental information:** Evaluate within three years and reassess for additional data gap needs.



After fuels treatment, and after the Weber fire. Photo courtesy of FireWise of Southwest Colorado

## Restore and Maintain Landscapes Recommendations, Actions and Tasks

**GOAL:** *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 Metrics:

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

## 1.1 Maximize use of Existing Tools

*Encourage US Forest Service and Department of the Interior/Bureau of Land Management to use existing authorities under Healthy Forest Restoration Act, Healthy Forest Initiative, and other contracting authorities to expedite fuels treatments. Assess what is currently being spent on these tools and increase that amount. Project criteria to focus on strategic landscape approach that reduces risk to landscapes and/or communities by addressing areas with a high burn probability or departure; implementation of treatments to occur within 2 years after planning is initiated; and is based on collaborative processes.*

### 1.1.a. Action: Promote collaborative planning and management

Priority: National A

#### Tasks:

1. Develop fair and equitable funding allocation processes, from all sources, based on criteria giving priority to collaborative, strategic landscape-scale restoration, maintenance activities, and treatments that reduce risk to ecosystems, communities, and their values.
2. Ensure planning and funding processes are inclusive of ongoing restoration and maintenance activities to support local collaborative management and response capacities. Develop a plan of action that motivates our leaders and appropriators to take actions and make investments
3. Promote and coordinate planning and implementation activities across jurisdictional and ownership boundaries. Encourage federal, state, tribal and local partners to maximize collaboration and use of existing tools that will expedite the creation and maintenance of landscapes, especially in areas of national and/or global significance.

**Scope:** Regional and local

**Suggested lead:** USFS and DOI Bureaus

**Other collaborators:** State and local governments, tribes, NGOs, private landowners, NRCS

**Implementation timeframe:** Short-term (0-2 years) to long-term (>4 years)

**Supplemental information:** Understand that HFRA and HFI are only applicable to US Forest Service and Bureau of Land Management as legislative authorities. The other Department of Interior Bureaus may choose to apply the principles of that legislation within the limits of their bureau specific authorities and policies. The Ninth Circuit court ruling on the categorical exclusion portion of the act has affected agency implementation actions that were intended under the act.

1.1.b. Action: Maximize state and local authorities for implementation

Priority: Regional A

Tasks:

1. Encourage tax and other incentives for work done on non-federal lands to implement landscape resiliency projects.
2. Recommend reclassification of grant funds utilized to reduce fire risk on private lands as conservation activities (in the tax codes).

**Scope:** National, state and local

**Suggested lead:** WGA and USDA

**Other collaborators:** Private landowners, DOI, Council of Western State Foresters

**Implementation timeframe:** Mid-term 2-4 years

**Supplemental information:**

1.1.c. Action: Implement projects using the best available and most feasible tools.

Priority: National B

Tasks:

1. Increase the variety and use of tools such as contracting authorities (including stewardship contracting), grants, agreements, local labor force, and opportunities for biomass utilization in implementing treatments to accomplish prescribed fire, mechanical, chemical, and/or other culturally appropriate treatments.
2. Consider the full range of management response actions (i.e. fire for resource benefit, re-ignition of earlier suppressed fires, landscape-scale prescribed fire projects) when managing beneficial wildfire events in the restoration and maintenance of fire resilient landscapes, when and where appropriate.
3. Make greater use of legislative authorities and identify funding sources to enter into procurement contracts, grants, and cooperative agreements for vegetation and hazardous fuels treatment activities on all lands.

**Scope:** Regional to local

**Suggested lead:** USFS and DOI Bureaus

**Other collaborators:** States, tribes, and local governments, forest products industry

**Implementation timeframe:** Short- term (0-2 years) to long-term (>4 years)

**Supplemental information:**

1.1.d. Action: Simplify administrative processes regarding the exchange of funds between and within agencies.

Priority: National A

Tasks:

1. Develop simple administrative procedures that allow for the easy interagency exchange of funds between and within the Departments of Agriculture and the Interior and its Bureaus for the collaborative efforts to implement landscape restoration activities and treatments (i.e. expand and simplify Service First agreements).
2. Develop simple administrative procedures that allow for the easy transfer of funds between the federal agencies, state, tribal, and local governments for the collaborative efforts to implement landscape restoration activities and treatments.
3. Establish a working group to evaluate and alleviate barriers related to intergovernmental exchange and transfer of funds to improve effectiveness in all three goal areas inclusive of NGO partners and networks.
4. Develop system to account for contributions, both intra- and interagency, to be considered when supporting the achievement of another unit's target.

**Scope:** National to local

**Suggested lead:** WFLC

**Other collaborators:** USFS, OGC, DOI solicitor, tribes, state and local governments, NGOs, NSAT and WRSC member organizations

**Implementation timeframe:** Short- term (0-2 years) to mid-term (2-4 years)

**Supplemental information:**

1.1.e. Action: Expand use of collaborative landscape restoration efforts.

Priority: Regional B

Tasks:

1. Support and expand existing landscape treatment programs that integrate partnership interactions among federal, state, tribal, and local agencies, and NGO collaborators.
2. Develop and distribute information about Collaborative Forest Landscape Restoration Program (CFLRP), Landscape Conservation Cooperatives (LCC), Fire Learning Network (FLN), and the requirements to follow existing environmental protection laws.
3. Develop and share examples of successes where this process is working.

**Scope:** National and regional

**Suggested lead:** WRSC

**Other collaborators:** All stakeholders including USFS State and Private Forestry, NRCS, DOD and TNC

**Implementation timeframe:** Short-term (0-2 years) to mid-term (2-4 years).

**Supplemental information:** USFS-CFLRP review and monitor expansion; DOI establish review and monitor program. Examples of landscape treatment programs that integrate partnership interactions include, but are not limited to, the US Forest Service's Collaborative Forest Landscape Restoration Program (CFLRP); DOI's Landscape Conservation Cooperatives (LCCs), a network of public-private partnerships that provide shared science to ensure the sustainability of America's land, water, wildlife and cultural resources, with the BLM using a landscape approach with funding through the Healthy Landscape Initiative and other programs; and The Nature Conservancy's Fire Learning Networks (FLNs) that catalyze the restoration of fire-dependent ecosystems through landscape-scale collaborative planning, regional capacity building, and national coordination

*1.2. Explore data to identify and prioritize landscapes for treatment. This information would be provided to sub-geographical stakeholders, decision-makers, and state and federal officials for their consideration and use.*

Action: Identify and Prioritize Landscapes for Treatment

Priority: Regional A

Tasks:

1. Recognize and support collaborative solutions for the local prioritization of landscapes for treatment (i.e. WUI, middle ground, and backcountry or wilderness) to reduce potential large fire costs and mitigate negative consequences while considering the benefits of wildland fire.
2. Use completed risk and hazard assessments such as Westwide Risk Assessment (state and private), Regional Ecosystem Assessments (BLM), State Forest Assessments, Community Wildfire Protection Plan risk assessments (state, private, federal), and/or local risk and hazard assessments to prioritize landscapes for treatment and for building capacity for collaboration.
3. Consider local and regional priorities such as protection and enhancement of sensitive species habitat, air quality, and economic opportunities when utilizing data to prioritize treatments.
4. Enable local collaborative(s) to use national, regional, tribal, and local data to inform scale and interconnectivity of priority focal landscapes.
5. Recognize the value of previous investments and prioritize ongoing maintenance, enhancement of past treatment areas, or areas of post fire restoration in allocation of funds.
6. Provide opportunities to ground truth existing data, which feeds into the various risk and hazard assessments.

7. Utilize local and traditional ecological knowledge of fire history and vegetative conditions in prioritizing projects and informing the decision-making process.
8. Define treatment effectiveness and collect data to use in identification and prioritization of projects and in promoting the positive effects of hazardous fuel treatments.

**Scope:** National, regional, state and local

**Suggested lead:** WRSC

**Other collaborators:** NGOs

**Implementation timeframe:** Short-term (0-2 years) to long-term (>4 years).

**Supplemental information:** Decision-makers at the appropriate level will be ultimately responsible for prioritizing landscapes for treatment.

*1.3. Expedite coordinated identification, prioritization, and restoration of damaged landscapes as a result of natural disturbances including: insect/disease, weather events, wildfire, invasives, changing climatic conditions. To assist in prioritization of resources, identify where investments are not likely to restore areas.*

Action: Expedite Restoration of Damaged Landscapes

Priority: Regional B

Tasks:

1. Utilize existing and establish new expedited procedures, authorities and funding to mitigate and restore landscapes impacted by natural disturbances with potential unwanted consequences.
2. Develop post-fire risk assessments for damaged areas and develop tools to address fire impacts to include: infrastructure, water, fuels, natural and cultural resources, roads, and access, both short- and long-term.
3. Identify where investments are likely or not likely to restore areas to assist in prioritization of resources (i.e. funding, personnel, available seed, etc.).
4. Prioritize investments where funding for response to disturbance can also contribute to local collaborative fire adapted communities, wildland fire response capacities, and biomass opportunities.
5. Include local stakeholder representatives and potential funding agencies/organizations in pre-planning, suppression repair and burned area emergency response planning implementation, research, and monitoring.
6. Provide for aggressive response in areas of natural disturbance with high potential of unwanted consequences with low probability of success in restoration.

**Scope:** Regional to local

**Suggested lead:** US Forest Service, DOI Bureaus, NASF, NGOs

**Other collaborators:** Local and tribal governments, NRCS

**Implementation timeframe:** Short-term (0-2 years) to long-term (>4 years).

**Supplemental information:**

*1.4. Work with the Council on Environmental Quality (CEQ) in developing more efficient NEPA processes for landscape restoration.*

Action: Improve the Planning Process for Landscape Restoration Projects

Priority: National B

Tasks:

1. Make better use of NEPA processes designed to increase efficiencies to allow for shorter planning times in implementing projects at a landscape scale.
2. Provide additional guidance and training and to decision makers and field personnel on existing expedited NEPA processes available for landscape restoration projects.
3. Explore the development of categorical exclusions (CEs) for hazardous fuel reduction projects based on past treatment history, with established limitations and local level collaboration.
4. Use CE authority for rehabilitation projects after wildfire and expand limits for locally developed, consensus-driven landscape restoration activities and treatments.
5. Continue and increase the use of categorical exclusions where NEPA compliant land management plans exist, and make applicable across jurisdictional boundaries when collaborative consensus can be reached by stakeholders, sovereign tribes, and collaborative partnerships.
6. Fully use the determination of NEPA adequacy for multi-phased projects covered under NEPA and maintenance of existing projects that had prior completed NEPA. Identify maintenance and enhancements as reasonably foreseeable connected actions.
7. Provide information to field units regarding the appropriate use of CEQ alternative arrangements as a result of natural disasters (i.e. tornados, wind throw, catastrophic wildfire, floods).

**Scope:** National and regional

**Suggested lead:** US Forest Service, DOI Bureaus

**Other collaborators:** Council on Environmental Quality, EPA, OGC, Solicitor, DHS, state, tribal, and local environmental regulatory agencies

**Implementation timeframe:** Mid-term (2-4 years).

**Supplemental information:** Agencies have different NEPA authorities, and ability to implement the above tasks will vary by agency.

*1.5. Examine legislative-related barriers that are impeding implementation of collaboratively developed landscape health-related projects, and pursue reform of the existing process to increase effectiveness in active forest and rangeland management. (e.g., Endangered Species Act, Equal Access to Justice Act, National Environmental Policy Act (NEPA)). Encourage and enlist local, state, tribal, and federal environmental regulatory agency representatives to participate actively in collaborative efforts to restore resilient landscapes.*

Action: Examine legislative-related barriers.

Priority: National C

Tasks:

1. Evaluate scope of original intent, impacts, conflicting interpretations, and associated legislative barriers, and identify potential solutions, including practical integrations in carrying out legislation.
2. Inform decision-makers and cooperators of the effect overlaps and inefficiencies, created by multiple independent environmental laws, have on restoring and maintaining resilient landscapes.
3. Collaborate with environmental regulatory agency representatives to reduce legislative barriers to the restoration and maintenance of resilient landscapes.
4. Pursue legislative solutions to streamline and expedite fuels reduction and landscape restoration and maintenance actions and activities that are based on sound science and that enhance social, economic, and ecological vitality.
5. Develop legislation for permanent Stewardship End Result Contracting including a 20-year contract provision, a 20-year sovereign-to-sovereign (or inter-governmental) agreement authority, and expansion of the “Good Neighbor Authority.”

**Scope:** National to local

**Suggested lead:** WRSC

**Other collaborators:** Environmental regulatory agency representatives, legislative affairs within the USFS and DOI, congressional delegation, WGA, tribes, NACo-WIR National League of Cities, and NGOs

**Implementation timeframe:** Short- term 0-2 years to long-term (>4 years)

**Supplemental information:**



House after Weber Fire. Photo courtesy of FireWise of Southwest Colorado

## Fire Adapted Communities Recommendations, Actions and Tasks

**GOAL:** *Human populations and infrastructure can withstand a wildfire without loss of life and property.*

### National Outcome Performance Measure:

- 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 Metrics:

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

*2.1 Continue to create, update, and implement Community Wildfire Protection Plans (CWPPs) or tribal equivalents, and identify new funding sources. Be sure to include offices of emergency management and local response entities, such as sheriffs' offices, in planning efforts.*

Action: Support CWPP/Tribal Equivalent Development, Implementation, and Updating

Priority: National/Regional A

Tasks:

1. Identify grant sources, which can be used or repurposed administratively or legislatively, to support development, updating, and implementation of CWPPs (or tribal equivalents) at the local level.
2. Encourage development of CWPPs/tribal equivalents for all communities/counties at moderate, high, or extremely high risk of wildfire. Use CWPP guidance documents available at <http://www.stateforesters.org/files/cwpphandbook.pdf> and <http://www.stateforesters.org/CWPP-community-guide>.
3. Encourage regular updating of all existing CWPPs/tribal equivalents. Recommend all entities be involved in updating CWPP. Treatment plans for all ownerships should be coordinated to ensure landscapes and highest hazard areas are being treated to aid in suppression and reduce risk to firefighters.
4. Promote private, local, state, tribal, and federal collaborative efforts to treat highest hazard areas identified in CWPPs/tribal equivalents and other hazard/risk assessments.
5. Enlist high capacity local CWPP collaboratives to pilot the inclusion of fire management planning and post-fire risk analysis in their CWPPs and related implementation plans. Share successful techniques for engaging individual property owners and WUI residents in the protection of their own assets.
6. Encourage prompt updating and implementation of existing CWPPs/tribal equivalents by affected tribes/counties/communities following a wildfire event. Develop protocols for all entities to monitor effectiveness of treatments done in CWPP-/tribal equivalent-prioritized areas. Did treatments aid in suppression actions? Was fire behavior reduced in treated areas, making firefighting safer?
7. Enable and encourage open source updating and maintenance of the CWPP handbook by users.
8. In all updates, include fire adapted community concepts and community members' responsibilities in preparing their homes and properties for the possibility of fire. Identify technical and financial resources available. .
9. Develop a system/mechanism to integrate CWPPs/tribal equivalents into National Forest and DOI and DOD fire management planning processes. Investigate the inclusion of CWPPs/tribal equivalents in relevant agency plans (LRMP, FMP, IRMP, etc.). Use CWPP hazard maps in the prioritization of landscape treatments.
10. Provide information to state emergency services programs regarding "best practices" for their role in planning and fire events.

11. Continue and expand existing programs to integrate fire science into the local context for fire adapted community efforts, including use of fire behavior models and risk assessments and fire ecology.
12. Create national and/or state clearinghouses where completed hazard/risk assessment maps are available for use by local, state, and federal agencies. Use assessments to identify where high hazard areas overlap and ensure treatments are given priority for funding in these areas. Maps of areas that have been treated should also be made available for use in planning, suppression, and monitoring efforts at the local level.

**Scope:** National, regional, tribal, state and local

**Suggested lead:** NASF

**Other collaborators:** FAC Coalition, NFPA Firewise, NACo, IAFC, social scientists, fire ecologists, practitioners from firesafe councils and similar organizations, fire management leadership, fire learning networks, prescribed fire councils, state fire marshals, state emergency managers.

**Implementation timeframe:** Short- term 0-2 years

**Supplemental information:**

*2.2. Accelerate achievement of fire adapted communities using existing tools; offer incentives, such as chipping/disposal and incentives for collaboration, etc.*

Action: Coordinate and Support Activities to Achieve and Maintain Fire Adapted Communities

Priority: National A

Tasks:

1. Synchronize mitigation, fire education, prevention, and hazardous fuels reduction program activities that will create Fire Adapted Communities. Also support FAC Coalition work and that of other organizations and programs with similar/related goals at the state, tribal, federal and local levels. Agencies should work cooperatively, with complementary goals and actions among programs.
2. Expand scope of existing grant and cost share programs and pursue additional revenue sources for private land work to strategically reduce issues relating to transference of risk and make communities more fire-adapted in areas of moderate, high and extremely high wildfire risk. Projects prioritized in CWPPs/tribal equivalents, both in and around communities and in “middle lands” further from communities, should receive priority. Use completed risk and hazard assessments such as West-wide Risk Assessment (state and private), Regional Ecosystem Assessments (BLM), State Forest Assessments (state and private), Community Wildfire Protection Plan Risk assessments (state, private, federal) and/or local risk and hazard assessments to prioritize communities for hazardous fuels reduction treatment.

3. Continue and expand the use of grants and agreements to build collaborative capacity to develop CWPPs/tribal equivalents to implement collaboratively developed projects and on-the-ground treatments at the local level. Additional assistance should be provided, as needed, to disadvantaged populations (e.g., the elderly, low income, etc.).
4. Negotiate alignment of USDA and DOI hazardous fuels work with FAC/CWPP/tribal equivalent strategies. Support on-the-ground fuel hazard reduction projects identified through CWPPs, regardless of ownership.
5. Develop and disseminate best practices and sample wildfire zoning ordinances, which require the creation and maintenance of defensible space around homes and communities. Develop and disseminate best practices and sample WUI fire, building, subdivision, and development codes. Inform county commissioners, planning and fire departments, and code enforcement divisions on the application and enforcement of applicable regulations, including the need for continuing maintenance of areas where fuels have been reduced. Communicate the firesafe building message to builders and developers.
6. Work at the local level to motivate homeowners through FAC and similar programs. Work with insurance partners to identify best practices to incentivize adoption of Firewise Communities/USA recognition criteria or equivalent and NFPA standards and ICC codes or equivalent for fuels reduction and maintenance of reduced fuels over time.
7. Work with EPA and the state systems (Departments of Environmental Quality and State Foresters) to replicate successful state-level burning regulations and the use of burning permit systems throughout the Western region. Encourage interagency coordination to minimize smoke impacts from prescribed fires and fires that are not actively suppressed, including direct coordination with tribes, local governments and air districts.
8. Encourage and support social, economic, and ecological science research that will provide information needed to develop and carry out the education programs that will be most effective in motivating and/or mobilizing communities to become fire adapted. Collect and disseminate studies on how to strategically locate fuels treatments to effectively reduce wildfire risk to communities.
9. Engage social science researchers on how to motivate people to take action to prepare for disasters, individually and in groups. Foster and support research to determine what educational approaches and messages, financial incentives and/or disincentives, psychological considerations, and other factors and conditions are most effective in stimulating action to achieve and maintain fire adapted communities.

**Scope:** National, regional, tribal, state, local

**Suggested lead:** US Forest Service

**Other collaborators:** WRS, NFPA, DOI, FAC Coalition, Fire Adapted Communities Program, NACo, NFPA Firewise, DEQ, EPA, firesafe councils, state and county foresters, local, state and federal fire managers, IAFC, Forest Service Research Station, federal and state land management agencies, NGOs, community practitioners, IAFF, IAWF, National WUI Council, WFEC/WFLC, FEMA, NRCS, Society of American Foresters, NASF, CDC Foundation

**Implementation timeframe:** Short- term 0-2 years to long-term (>4 years)

**Supplemental information:** FS Fire Adapted Communities Program is expected to provide leadership for the coordination and support of these activities.

*2.3 Develop and promote local collaborative capacities to implement fuels treatments, forest restoration, and respond to fires.*

2.3. Action: Establish and Promote Trained Local Workforce Capacity

Priority: Regional A

Tasks:

1. Establish a collaborative, broadly representative group with appropriate expertise and experience to explore and develop solutions to increase local recruitment and retention of tribal, volunteer, and private organization (for profit and/or non-profit) personnel for fire response.

**Scope:** Regional, local

**Suggested lead:** WRSC

**Other collaborators:** USFS, DOI, DOL, States, tribes, VFD representatives, NACo, RFD organizations, NWCG, NGOs, Private Industry

**Implementation timeframe:** Short-term (0-2 years)

**Supplemental information:**

2. Build upon the existing interagency wildland fire organization to create a network of local cross-trained crews for on-call response to fire emergencies, prescribed fire opportunities, and on-going fuels reduction treatments – a local fire brigade.
3. Develop interagency and intergovernmental policy and agreements that make a local fire brigade both possible and desirable.
4. Describe the concept in enough detail to create pilot projects. Include:  
training and certification of local groups and private contractors in prescribed fire and wildfire response, forest restoration, and fuels treatments.
  - Review and revise contracting and agreement structures (including standard timber sale contracts) which currently inhibit the building of local capacity, including payment to organized local “on-call” crews for fuels treatments, prescribed fire, and wildland fire response.
  - Develop mechanisms and agreements to mutually accept, recognize and/or standardize appropriate qualifications across state, federal, tribal, and local land and fire management organizations.
  - Develop and maintain local capacities through identification of collaborative partner roles, responsibilities, and set-aside actions in agreements that are subsequently incorporated by reference into socio-economic NEPA analyses.
  - Create an agreement framework for set-asides, supplemental actions, and mobilization processes in local area operating plans (5-10 year plans with a process for annual supplemental addendum).

5. Create pilot projects in at least three adjacent counties, in one or more states, including a tribal area.
6. In non-pilot areas, use the above-identified mechanisms to begin building local capacity, as requested by local FAC collaboratives and local organizations.

**Scope:** Regional

**Suggested lead:** State Fire Marshals or Offices of Emergency Management, State Foresters, NWCG

**Other collaborators:** WRSC, Fire management leadership, I-Chiefs, Governors (WGA and its Forest Health Advisory Committee), land management leadership, TNC, FAC Coalition, Tribal representatives, county commissioners, Offices of Emergency Services, local NGOs and contractor representatives, social scientists, AQM leadership, EPA leadership, RFDs, State Community Colleges

**Implementation timeframe:** Short- term 0-2 years to long-term (>4 years)

**Supplemental information:** When accomplished this actions will facilitate the creation and maintenance of fire adapted communities, increase and more effectively utilize local workforce capacity, especially in rural areas, and foster a safer community and a more resilient local economy, society and environment.

*2.4. Use local, state, and West-wide coordinated campaigns to enhance the scope and effectiveness of efforts to inform residents and other stakeholders of their individual and collective responsibility to take action,*

Action: Develop an Integrated Information and Awareness Program

Priority: National C

**Tasks:**

1. Support a consistently funded, long-term, national and regional public awareness campaign to promote understanding of the need for communities to become fire adapted, and to motivate individual community members and key community interests to take positive action. The focus for the public at-large is “pre-fire strategy” becoming second nature.
2. In cooperation with concerned state and local agencies and organizations, provide coordinated, consistent, scientifically sound, and area/audience-specific information about fire’s natural role in the ecosystem, potential mitigation and adaptation strategies, and the tools available to communities to enable them to develop and carry out a fire adaptation strategy appropriate to their needs and capacity.
3. Develop a media and marketing plan, backed by social science research, which integrates all three goals of the Cohesive Strategy, while focusing on the “pre-fire strategy” (FAC) goal.
  - Develop promotional and practical informational materials for young audiences. Encourage active involvement of young people in home and neighborhood FAC-

related assessments and actions. Develop curricula for inclusion of wildfire and its mitigation in K-12 science classes. In researching and preparing education programs for schools, review the Mitigation Through Education material currently being developed by the DOI and USFS Hazardous Fuels Reduction Programs, the State of Florida, and others.

- Develop a fire ecology message that can be presented jointly with fire prevention messages. Key elements would be that: wildfires are a natural part of the environment, will continue to occur, provide multiple resource benefits, and (in the long term) usually will adversely affect only very small areas of the landscape. Related “talking points” should be developed for fire information personnel and local fire units to use in their public outreach activities.
  - Recruit national media assistance for information distribution, and enlist private sector, i.e. National Geographic, movie theater shorts, hardware retailers, nurseries and garden centers, etc. Encourage local libraries, museums, malls, etc. to create visual displays and provide related informational materials on the ecological role of wildfire, fire prevention and mitigation, and available tools and resources for becoming a fire adapted community.
  - Develop public service announcements (PSA) and films/video library for distribution.
  - Utilize social media and other interactive tools to encourage and facilitate individual and group involvement in FAC activities.
  - Encourage the creation of FAC-related demonstration sites, and publicize them widely.
  - Create a “teachable moment” package or template for local organizations to use when wildfire has threatened or burned homes in a community. Include tips, messages, and best practices for engaging the public and elected officials following a wildfire event to effectively respond to the heightened interest in mitigation, which normally follows a fire event.
  - Develop a centralized prevention and education clearinghouse through which all informational tools and resources can be easily accessed by both agency personnel and the public.
4. Coordinate efforts to avoid contradictory messages, eliminate duplication of activities, and make the most of available funding.

**Scope:** National, regional, state, local

**Suggested lead:** US Forest Service Fire Adapted Communities Program and NFPA

**Other collaborators:** WRSC, existing national, tribal, state and local level communications programs, NGOs, industry associations, media and marketing specialists, educators, Extension Service, Ad Council, and FAC Coalition members, tribal governments, and NRCS

**Implementation timeframe:** Short-term (0-2 years) to long-term (>4 years).

**Supplemental information:**

## *2.5 Facilitate shared learning among communities for fire adaptation.*

Action: Establish and Maintain Learning Networks

Priority: National A

Tasks:

1. Expand The Nature Conservancy's (TNC) hub and spoke FAC network.
2. Collaboratively fund workshops and peer learning opportunities.
3. 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.
4. Develop support (i.e., release time, performance measures, budget) for state and federal agency personnel to provide technical support and work with integrated fire management collaboratives at the county, tribal territory, and/or community level.
5. Negotiate inclusion of local collaborative integrated fire management outcomes in agency administrators' performance standards.
6. Enlist the participation of social science research and researchers in the adaptive management of this system, to move from shared learning to action.
7. Facilitate an information collection and dissemination system from pre-planning through outcomes and adaptation in an open source approach.
8. Provide a feedback loop from the local to national levels for adaptive management learning and use in the next Cohesive Strategy revision.

**Scope:** National, tribal, regional, state, watersheds

**Suggested lead:** TNC Fire Learning Network

**Other collaborators:** FS FAC Program, FAC Coalition, state and federal land and fire management agencies, tribes, NGOs, communities, local governments and fire departments, Watershed Center, all stakeholders

**Implementation timeframe:** Short-term (0-2 years) to long-term (>4 years).

**Supplemental information:**

*2.6. Review and modify requirements for technical and financial support of communities through Federal Emergency Management Agency (FEMA), i.e. NEPA administrative processes, and applications for funding.*

Action: Streamline and Coordinate FEMA Support Programs

Priority: National A

Tasks:

1. Convene fire adapted communities workgroup to review FEMA programs and make recommendation to FEMA leadership related to pre-event wildfire mitigation needs and administrative processes.

**Scope:** National

**Suggested lead:** US Fire Administration

**Other collaborators:** WGA, state foresters

**Implementation timeframe:** Short-term (0-2 years)

**Supplemental information:**



Photo courtesy of FireWise of Southwest Colorado

## Wildfire Response Recommendations, Actions and Tasks

**GOAL:** *All jurisdictions participate in making and implementing safe, effective, efficient risk-based wildfire management decisions.*

### National Outcome Performance Measures:

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

## National Output Metrics:

National output 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.

*3.1 Improve response effectiveness by convening state level groups to identify where fire protection exists for all areas within each state. Eliminate unprotected areas by establishing/extending jurisdictional responsibilities. Response cooperators in each state should identify those voids and negotiate to ensure that every acre within the state has designated protection. Promote realignment of protection responsibilities to the organization that is best suited to provide protection (e.g., block protection areas, offset protection agreements, protection contracts).*

### Action: Identify and Adjust Protection Responsibility

Priority: Regional C

#### Tasks:

1. Convene state-level groups to identify where existing fire protection resides for all burnable areas within each state this calendar year.
2. Response cooperators in each state will identify any voids, current service levels, or inefficiencies in protection that exist and use annual operating plans to negotiate to ensure that every acre within the state has designated protection.
3. Promote realignment of protection responsibilities to the organization that is best suited to provide efficient protection (e.g., block protection areas, offset protection agreements, protection contracts, intergovernmental agreements, collaborative local area operating plans, etc.).

**Scope:** Regional, local

**Suggested lead:** Signatories in the Statewide Master Fire Protection Agreement for each state.

**Other collaborators:** Federal Land Management Agencies, other State organizations, Local and Municipal representatives, Tribes, and other jurisdictional entities.

**Implementation timeframe:** Short-term (0-2 years)

**Supplemental Information:** Include any other information the region feels is important to the action, e.g., activity tracking, output-based metrics.

*3.2 Improve firefighter and public safety. Maintain and/or improve an aggressive human-caused ignition prevention campaign.*

3.2.a Action: Develop a Fire Response Risk Management Protocol (National, Regional, Local)

Priority: National B

Tasks:

1. Develop and act on a common vision of risk management among, tribes, community leaders, states and federal agency officials using shared decision support tools while recognizing the interdependence and statutory responsibilities among jurisdictions.
2. Review agency policies to ensure consistency with the vision.

**Scope:** National

**Suggested lead:** WFEC

**Other collaborators:** Federal, state, and tribal agencies with wildland fire use programs, IAFC, NACo.

**Implementation timeframe:** Short-term (0-2 years)

**Supplemental information:** There have been great strides among all agencies and partners regarding a common understanding of the response challenges and potential solutions on the landscape. There is still a need for a strong commitment to common terminology and consistent messaging over the long term at the national level. There should be energy at the WFEC level for addressing common definitions of response strategies that are accepted by WFEC partners and stable over the long term (15-20 years). This will reduce confusion and help develop trust at all stakeholder levels.

Tasks:

3. Develop a standard risk management process for wildland firefighting, agreed to by all stakeholders.
4. Include appropriate level of review by representatives from national, regional, and local fire jurisdictions.
5. Institutionalize risk management process in NWCG guides.

6. Establish a monitoring plan to review/modify the process after significant wildland fire use events.

**Scope:** National

**Suggested lead:** NWCG

**Other collaborators:** Federal, state, and tribal agencies with wildland fire use programs, IAFC, NACo.

**Implementation timeframe:** Short-term (0-2 years)

**Supplemental information:**

Tasks:

7. Avoid management decisions that transfer risk or increase threats to other ownerships without dialogue and shared understanding. Engage all partners in pre-season response planning to determine and map aggressive suppression areas prior to the next firefighting season.
8. Develop a local unified vision pre-season through annual operating plans, and involve affected agencies and stakeholders.
9. Engage key stakeholders (including key community leaders) in pre-season response planning, especially when other than aggressive suppression is being proposed in the response area.
10. Map areas where aggressive suppression is the expected initial response.
11. Discuss plans for areas and situations (weather, time of year, vegetation types, etc.) in which aggressive suppression is not the desired response.
12. Develop a common understanding of the decision process and role of key individuals when fires are being considered for other than aggressive suppression response.
13. Identify key stakeholders to be contacted when considering other than aggressive suppression response on new fires.

**Scope:** Local

**Suggested lead:** Local, state, federal, and tribal wildland fire management agencies planning for wildland fire response.

**Other collaborators:** Local federal, state, local, and tribal agencies with wildland fire use programs; adjacent landowners; and fire protection jurisdictions. (IAFC and NACo)

**Implementation timeframe:** Short term (0-2 years)

**Supplemental information:** Although the region feels that the national effort is improving significantly, and is demonstrated through instruments such as the Interagency Leaders' Intent Letter of February 2013, the region emphasizes local support and implementation of the concepts identified in tasks 3 - 13.

3.2.b. Action: 1. Reduce wildland firefighter exposure to smoke and other toxic substances (both immediate and chronic) 2. Reduce wildland firefighter exposure to heat-related illness.

Priority: National C

Tasks:

1. Complete a literature search and assessment of existing studies (including international) related to the impacts of smoke and other toxic substances on responders and the public, and synthesize the recommendations for use in mitigation guidelines.
2. Provide guidelines to minimize wildland firefighter exposure to smoke and other toxic substances, both short-term and long-term (chronic).
3. Complete an assessment of existing studies (including international) related to the contributing factors of heat-related illness to firefighters, and synthesize the recommendations for use in mitigation guidelines.
4. Provide guidelines to minimize wildland firefighter exposure to heat-related illness.

**Scope:** National

**Suggested lead:** NWCG

**Other collaborators:** WGA, NASF, IAWF, IAFF

**Implementation timeframe:** Short-term (0-2 years)

**Supplemental information:** The National Wildfire Coordinating Group (NWCG), Risk Management Committee (RMC), has completed, or is working on completing, tasks related to firefighter safety and health regarding smoke and heat. This includes literature search, field studies and implementing actions to mitigate the effects of these elements. The RMC feels these tasks have been, or will be addressed in the near future.

3.2.c. Action: Create a national, all lands, all hands wildland fire accident and injury reporting system.

Priority: National C

Tasks:

1. Develop a national wildland firefighter health and safety reporting system for all wildland agencies and jurisdictions that gathers and tracks accidents, incidents, and “no fault” close calls and supports a safety culture that effectively assesses risks and offers acceptable safe practices.
2. Design a proposal to offer the NWCG Executive Board that establishes a reporting commitment from each supporting agency (DOI, FS, NASF, USFA) to annually provide wildland injury and accident statistics in a consistent way for a comprehensive database to track trends in firefighter exposure. Attempt to establish this data profile by 12/31/2014.

**Scope:** National

**Lead:** NWCG Risk Management Committee

**Other collaborators:** Forest Service Research, CDC-NIOSH, IAFF, IAWF, IAFC

**Implementation timeframe:** Short-term (0-2 years), Mid-term (2-4 years)

**Supplemental information:** Include any other information the region feels is important to the action, i.e., activity tracking, output-based metrics. Consider using SAFENET, or a reporting process based on SAFENET.

3.2.d Action: Improve firefighter safety and health by: increasing the recognition and acceptance of certification of Emergency Medical Services (EMS) responders on incidents from state to state.

Priority: National A

Tasks:

1. Governors and state wildland fire authorities for state and private lands will actively support the National Association of State Emergency Medical Services Officials (NASEMSO) in their current project to create a national interstate compact to recognize EMS licenses/qualifications across state lines.
2. All stakeholder affiliations in the WFLC will actively support efforts for Emergency Medical Service (EMS) authorities to address barriers to EMS personnel working across state lines.

**Scope:** National, regional

**Suggested lead:** NGA/WGA

**Other collaborators:** State OEM leads, NASF, FEMA, IAFF, IAWF, NACo

**Implementation timeframe:** Short-term (0-2 years)

**Supplemental information:** Background: The states' EMS offices have the exclusive authority to license EMS personnel to practice in their respective states. This means there is no true reciprocity between states for EMS providers.

The situation of firefighters with EMS licenses dispatched to another state and not being able to legally practice their EMS skills poses significant safety and health risks for personnel on fires. Having EMS responders that are part of the fire crew being able to perform to their scope of practice can be a critical factor in patient outcome.

The NASEMSO is currently addressing this issue by looking at barriers facing EMS providers when crossing state lines, and developing possible mitigations to those barriers. The collaborators can support the efforts to address these issues at the national and state level.

3.2.e. Action: Establish a Fire Prevention Program

Priority: National A

Tasks:

1. Collaboratively establish (with land management agencies, fire response organizations, law enforcement agencies, emergency management, Red Cross, and Public Health departments) evacuation plans and places for people, pets, and livestock that include facilities that can accommodate people with special needs.
2. Develop a clear, concise, consistent education and awareness program using a full range of communication tools, including social media.
3. Establish and enforce state, tribal, and/or local ordinances related to wildfire prevention.
4. Use “cost recovery and restitution” authorities aggressively as an active fire prevention measure.

3.2.f. Action: Develop a human factors-based approach to wildfire ignitions prevention.

Priority: National A

Tasks:

1. Establish at the USFS Regional Forester and State Forester level a multi-agency task force to evaluate fire causes categorized by damage and cost. With interagency task forces, develop actions to prevent ignitions that are the most expensive and cause the most damage. Consider shifting resources from suppression to this effort for three to five years and evaluate effectiveness annually, compared to a baseline. Possible actions after the analysis are:
  - Improved fire prevention public education;
  - Recommended changes to enforcement options;
  - Engineering enhancements that would reduce ignitions.
2. Human-caused wildfire ignitions and fire escapes result from sequences of human behaviors. Develop effective fire prevention/mitigation approaches based on the behavior patterns that lead to ignitions and escapes.
3. Assist and support NASF, NFPA and IAFC efforts to develop a new fire cause classification system to be used by all agencies and jurisdictions based on human behaviors that lead to human-caused wildfires. Develop a robust Fire Prevention and Education Research program in the US Forest Service research stations, in the USGS, and at land grant universities. Continue and expand research in support of fire adapted communities.

4. Develop a Prevention Education, Knowledge Utilization, and Technology Transfer Program. A body of knowledge about prevention and education effectiveness exists in the field of Public Health and other areas outside of fire. Use an evidence-based approach to prevention and education that is based on science as well as considered experience. Recruit the Cooperative Extension Service as a key partner in knowledge utilization and technology transfer.
5. Fire Information: Direct the fire information focus to serve people whose lives, property and values are endangered by wildfire. Train fire information officers in the best communication practices and communicating information to help people cope with the threat of wildfire. Fire information can reduce economic and social disruption, fire losses, and psychological distress. Fires (both wild and prescribed) provide “teachable moments” during which fire education objectives can be met.

**Scope:** National and regional

**Suggested lead:** USFS

**Other collaborators;** State Foresters, USFS, DOI, fire chiefs, State Attorneys General, State Fire Marshals, tribes (Coordinating Group), electrical utility industry, railroad industry, timber industry, fluid minerals development industry. National Fire Administration, NWCG, USFS Research, USGS Research, Cooperative Extension Service, NACo, National League of Cities, National Fire Information Officers.

**Implementation timeframe:** Short-term (1 to 2 years) to long-term

**Supplemental information:**

***3.3. Integrate local, state, federal, tribal, and private response capacity. Identify where the greatest opportunities exist in communications, training, qualifications, mobilization, and instruments.***

#### 3.3.a. Action: Integrate Incident Communications

Priority: National A

#### Tasks:

1. Ensure communications interoperability and resolve the radio incompatibility issues for responders to include: digital, analog, narrow band, and wide band systems.
2. Continue to measure the three response goals established in the DHS 2008 National Emergency Communications Plan.
3. Continue to implement the goals and actions set out in the NMAC Action Plan of 2005 regarding narrowband and wideband radio systems.
4. Develop national interagency policy, leadership and direction for fireline communications. Include all cooperators in the development of the national policy.

5. Increase understanding and professional development training regarding radio issues to ensure proficiency of radio technicians in all wildland fire agencies.
6. Provide key stakeholders with a single comprehensive strategy and a process to report and provide oversight for radio communications issues.
7. Define the level of radio coverage, from a risk management standpoint, that is acceptable to key wildland fire stakeholders.

**Scope:** National

**Suggested lead:** DHS, USFS, DOI

**Other collaborators:** Responsibilities for this action plan lie with the NWCG IT Committee and its subordinate Incident Communications Sub-Committee.

**Implementation timeframe:** Short-term, mid-term (2-4 years) or long-term (>4 years).

**Supplemental information:**

3.3.b. Action: Working with DHS and other cooperators, continue to implement a national wildland fire qualifications system (both qualification/training standards, and a single automated tracking/mobilization system) that applies to, and is accepted by all firefighting agencies and departments under the National Incident Management System (NIMS).

Priority: National A

Tasks:

1. WFLC will encourage and support the DHS completion of the national incident qualification/standards of which the NWCG 310-1 wildland fire qualification standards will be a sub-set.
2. Continue to work with DHS and other partners to incorporate NWCG wildland fire qualification/training standards and endorsements into the National Incident Management System.
3. In collaboration with partners, continue to develop criteria and procedures for evaluating and crediting previously acquired wildland fire training and experience to meet national wildland fire qualification system requirements when applicable.
4. Continue to seek opportunities to utilize crosswalk and recognition for prior learning process solutions to meet the 310-1 standards when applicable.
5. Continue to look for opportunities to utilize non-wildland fire incidents (i.e. scenarios, all-hazard incidents) to satisfy position task book experience requirements when applicable.

**Scope:** National

**Suggested lead:** NWCG and DHS.

**Other collaborators:** IAFC, IAFF, IAWF, IFSAC

**Implementation timeframe:** Short-term (0-2 years).

**Supplemental Information:** Include any other information the region feels is important to the action, e.g., activity tracking, output-based metrics.

***3.4. Increase capacity where necessary in order to improve overall local response effectiveness and reduce the need for external (non-local) resources.***

**3.4.a. Action: Increase connectivity of DHS and related Bureaus' grant capability with the goals of the Cohesive Strategy.**

Priority: National C

**Tasks:**

1. Evaluate and assess federal DHS grant programs to more closely align them with the Cohesive Strategy goals and maximize community awareness of funding sources.
2. Make recommendations for adjustments to more closely align programs with the Strategy.
3. Provide a user guide or other tool, and ensure broad distribution for the end users.

**Scope:** National

**Suggested lead:** USFA

**Other collaborators:** IAFC, IAFF, IAWF, USFS

**Implementation timeframe:** Short-term (0-2 years);

**Supplemental information:** We are considering the expansion of this action to include all applicable grant issuers and posting updated information on the forestsandrangelands.gov website for use by communities.

**3.4.b. Action: Increase local response capacity, including supporting the development of Type 3 Incident Management Organizations.**

Priority: Regional A

**Tasks:**

1. Increase local capacity to provide and support development of Type 3 Incident Management Organizations.
2. Local interagency fire cooperators will reach beyond traditional recruitment sources; examples may include NGOs, private contractors, local governments, and tribes.

3. Provide training, vocational education, equipment, and emergency hiring opportunities to boost capabilities.
4. Invest in sub-geographic collaborative training and development programs and projects.

**Scope:** Regional

**Suggested lead:** Regional geographic multi-agency coordinating groups

**Other collaborators:** Agency and/or organization

**Implementation timeframe:** Short-term (0-2 years)

**Supplemental Information:** Include any other information the region feels is important to the action, e.g., activity tracking, output-based metrics. (Provide training, vocational education, equipment, and emergency hiring opportunities to boost Type 3 organizational capabilities. Local community colleges play a pivotal role, especially as the qualifications and training process becomes standardized.)

## Monitoring and Accountability

Monitoring of progress and accountability for accomplishment of the actions in this plan is critical to the success of the Western 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 accomplishments has many benefits. It keeps the focus on the three goals; it provides a mechanism to communicate progress nationally and to the Western Cohesive Strategy partners and stakeholders; and it provides an opportunity to make course adjustments as the work progresses.

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

While the national outcome measures are in development, and will be designed to measure broad outcomes, they may not be sufficient to manage the actions and tasks that precede the desired outcomes. Upon completion, the WRSC will review the national performance measures to assess their adequacy and applicability in the West. There is a need to periodically assess outcomes and track and monitor activities. Outcome measures represent an approach to accountability that allows desired outcomes to change through time, so that decision-makers can reconsider policies and actions.

The WRSC is committed to monitoring the activities within this plan as we move toward accomplishing the tasks assigned. This, in turn, will move us toward accomplishing the goals of the Cohesive Strategy. To this end, the process of refining and honing the outcome measures will continue. Activities, represented by actions and tasks in this plan, will be tracked and assessed. Actions and tasks will be carried out through programs, projects, and collaborative agreements to effect desired changes in the landscape, in delivery of programs, and in short-term progress, consistent with the three Cohesive Strategy goals.

To the extent possible, monitoring activity will rely on using existing data sources at the state and/or national level. The WRSC will review NSAT findings on gaps in existing data sets, and will review existing monitoring data sets to determine their adequacy and applicability in the West. If these data sets and sources are found to be deficient, the West could elect to augment the areas deemed deficient, to focus on efficiency. The West will work with the national science and technology community to evaluate the availability and feasibility of using remote sensing and modeling tools to evaluate change to risk and/or fuels profiles in relation to values and goals.

The WRSC will meet quarterly to review Action Plan activities and accomplishments in relation to projected timeframes for accomplishment. Based upon this review, the WRSC might recommend changes to specific tasks within the actions, adjustments of timeframes, and/or adjustments to the allocation of resources. The WRSC will meet annually to evaluate

progress and determine if the actions and tasks are having a positive outcome in reaching the desired goals. Based upon this evaluation, the WRSC may recommend modifying or ceasing activity on individual tasks, and may recommend adding additional tasks to the Action Plan. Additionally, as implementation proceeds, the WRSC may modify performance measures and/or metrics to help refine and improve implementation actions.

Some actions and tasks have scheduled review periods established within the action description. The WRSC will assign appropriate subject matter experts to accomplish this review, including reporting the results and any proposed changes. Accomplishments will be summarized annually, and shared with stakeholders.

Other considerations for accomplishment and monitoring:

Guidelines for Monitoring:

1. Acknowledge and respect individual entities' authorities, missions, and policies.
2. The diversity of the participating entities requires the willingness of each entity to cooperate, coordinate, and collaborate within their ability to do so.
3. Ability to participate in any one action or task may change over time due to statutory authorities, available funding, workforce, skill/knowledge, social acceptance.
4. Many government and non-government agencies work within different fiscal, planning, and work years. Defining a common starting and ending point for monitoring will be important, but thought should be given to monitoring that allows agencies/entities to enter data as they are able.
5. Metrics must be clear, concise, and communicated far enough in advance of implementation that each entity has time to make adjustments to their current processes of collecting data.
6. Monitoring should not be so cumbersome that it becomes a barrier to accomplishing the actions or tasks.

The monitoring actions recommended by the WRSC can be found in the Overarching section, O.2.c. The WRSC recommends that those actions be adopted by the Cohesive Strategy partner organizations and WRSC governing body to help insure accountability for implementation of the Cohesive Strategy.

## Regional Communication Strategy

As Phase III of the Cohesive Strategy closes, and we move into the implementation phase, communication and expanded engagement with stakeholders becomes even more important. The outreach and communication strategies will use an adaptive management philosophy to enable adjustments and improvements, as we learn from stakeholder involvement and our own collective experience implementing the actions described above. Western stakeholders will continue to be involved in the strategy. Engagement with western stakeholders will continue and must be expanded as the Action Plan is implemented. Members of the WRSC are committed to continue to emphasize and expand collaboration and engagement of stakeholders.

The National Communication Framework is being adjusted to focus on communication to support Cohesive Strategy implementation. It is expected that much of the implementation will be done by relatively small, local collaboratives. A major effort in the national and regional communication strategies must be to facilitate and support local collaboratives to:

- Promote and teach effective collaboration.
- Share wildland fire knowledge.
- Inform the networks.
- Inform interested parties.
- Record successes and evaluate results.
- Share information on websites.

The adaptive management technique to be used in communications will have positive feedback loops so it can be adjusted to the needs of the stakeholders, and what is working. Communications actions are described in greater detail in Overarching action O.1, which emphasizes two-way communications and sending messages both internally through agencies, and externally to the public. In a complex environment, such as the Cohesive Strategy, it is critical that everyone is informed of what others are doing so that actions can be coordinated and work synergistically to address needs.

## Conclusion

The WRSC will continue in its efforts to reach out to stakeholders and build a coalition to take on the hard work ahead. The Western Region's Action Plan is the culmination of over three years of discussions and analysis by the western and national fire community of why wildfire is a problem in western ecosystems. This Action Plan identifies what can be done to mitigate the effects of wildfire and how different agencies and organizations, levels of government, concerned stakeholders, and the tribes can work together to improve the resiliency of the landscape and communities, and better prepare for and respond to fire. There are ways to reduce the impact and destructiveness of wildfire through active management, community protection techniques and knowledge, and improved coordination of response resources. This Action Plan contains many actions with many more associated tasks that guide us forward to recognizing the benefits of wildfire on the landscape, where and when appropriate, and reducing the negative impacts of wildfire on natural resources, on humans, and on values at risk.

This Action Plan is dynamic and will be adjusted to meet future needs. The success of the plan is dependent upon the organizations and stakeholders who have a role and responsibility for addressing wildfire in the West. It requires commitment and a willingness of each organization, agency, and level of government to do what it can to accomplish the goals of the Cohesive Strategy. The groundwork has been laid to build understanding and partnerships to do the work necessary to see these actions through to completion.

Agencies and organizations within the WRSC are taking on leadership roles to implement the actions set forth in the Action Plan. The strong leadership from the members of the Wildland Fire Leadership Council and the Wildland Fire Executive Council will be needed again, as was provided during all phases of the Cohesive Strategy, to encourage all agency personnel and other stakeholders to continue their active engagement in its implementation. Through this joint effort, we can bring attention to the policies and actions needed to strategically address the issue of effective wildland fire mitigation and response, while meeting the requirements of the Federal Land Assistance, Management and Enhancement Act of 2009 (FLAME Act).

# Appendices

## Appendix 1 - Glossary

The National Wildfire Coordinating Group (NWCG) maintains an extensive glossary of fire management terminology and acronyms (found at [www.nwcg.gov/pms//pubs/glossary/index.htm](http://www.nwcg.gov/pms//pubs/glossary/index.htm)). Some terms used in this document that have specific meaning in the context of wildland fire management, but are not found in the NWCG glossary, are defined below.

**Active Management** Use of a full range of forest management tools to reduce hazardous fuels, encourage the sustainable use of biomass, and accomplish other landowner forest management objectives, including commercial timber harvest.

**Affected party** A person or group of people who are affected by the outcome of a decision or action

**Biomass** Any organic matter that is available on a renewable or recurring basis. Under the Farm Security and Rural Investment Act of 2002 (Title IX, Sec. 9001), biomass includes agricultural crops, trees grown for energy production, wood waste and wood residues, plants (including aquatic plants and grasses), residues, fibers, animal wastes and other waste materials, and fats, oils, and greases (including recycled fats, oils, and greases), but not recycled paper or unsegregated solid waste. (From Farm Bill Glossary on the National Agricultural Law Center Web site <http://nationalaglawcenter.org/#>.)

**Fire-adapted community** Human communities consisting of informed and prepared citizens collaboratively planning and taking action to safely coexist 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** Collectively refers to all those who are engaged in any aspect of wildland fire-related activities.

**Fire exclusion** 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 [according to the Phase I report glossary].

**Fire science community** 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.

**Fragmentation** Physical process whereby large, uniform areas are progressively divided into smaller fragments that are physically or ecologically dissimilar. Fragmentation can occur through natural disturbances such as wildfire, or more commonly, through land use conversion by humans (e.g., urbanization).

**Hub and Spoke Networks** A concept used in system design, which can be applied to human social systems. People interact in groups. Information passes within these groups from one person to another. In a hub and spoke network, key individuals are asked to pass information along to their peers within their social networks. In this way, information can be distributed to large groups of interested people.

**Landscape resilience** The ability of a landscape to absorb the effects of fire by regaining or maintaining its characteristic structural, compositional and functional attributes. The amount of resilience a landscape possesses is proportional to the magnitude of fire effects required to fundamentally change the system.

**Middle Ground or Middle Lands** Those nearby areas that contribute to the identity, structure, culture, organization, and wellbeing of a community, and are often considered essential to its economic, social, and ecological viability.

**Parcelization** Process of subdividing a large, intact area under single ownership into smaller parcels with multiple owners. The term can also apply to an administrative process of dividing a landscape into multiple management units with different management objectives. Parcelization is often a precursor of fragmentation because of differences in management priorities among property owners.

**Prescribed Fire** Any fire ignited by management actions to meet specific objectives. A written, approved prescribed fire plan must exist, and NEPA requirements (where applicable) must be met, prior to ignition.

**Science and technical community** Subset of the science community consisting of those who study, analyze, communicate, or educate others on the components of fire management and human response to fire that can be applied to questions relating to biophysical, social and economic science.

**Silviculture** *“The art and science of controlling the establishment, growth, composition, health, and quality of forests and woodlands to meet the diverse needs and values of landowners and society on a sustainable basis”* - definition from John A. Helms, ed., 1998. *The Dictionary of Forestry*. The Society of American Foresters, Bethesda, Maryland.

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

**Traditional Ecological Knowledge**, also called by other names including Indigenous Knowledge or Native Science, (hereafter, TEK) refers to the evolving knowledge acquired by indigenous and local peoples over hundreds or thousands of years through direct contact with the environment. This knowledge is specific to a location and includes the relationships between plants, animals, natural

phenomena, landscapes and timing of events that are used for lifeways, including but not limited to hunting, fishing, trapping, agriculture, and forestry. TEK is an accumulating body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (human and non-human) with one another and with the environment. It encompasses the worldview of indigenous people, which includes ecology, spirituality, human and animal relationships.

**Viewshed** An area of land, water, or other environmental element that is visible to the human eye from a fixed vantage point.

**Wildfire** An unplanned, unwanted wildland fire including unauthorized human-caused fires, escaped wildland fire use events, escaped prescribed fire projects, and all other wildland fires where the objective is to put the fire out.

**Wildlands** An area in which development is essentially non-existent, except for roads, railroads, powerlines, and similar transportation facilities. Structures, if any, are widely scattered.

**Wildland Fire** Any non-structure fire that occurs in the wildland. Three distinct types of wildland fire have been defined and include wildfire, wildland fire use, and prescribed fire.

**Wildland Urban Interface (WUI)** Any area within or adjacent to an at-risk community that is identified in recommendations to the Secretary in a Community Wildfire Protection Plan.

## Appendix 2 – Acronyms

AQM	Air quality managers
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
CAR	Community at Risk
CDC Foundation	Centers for Disease Control Foundation
CDC-NIOSH	Centers for Disease Control – National Institute of Occupational Safety and Health
CE	Categorical exclusion
CEQ	Council on Environmental Quality
CRAFT	Comparative Risk Assessment Framework and Tools
CS	Cohesive Strategy
CSSC	Cohesive Strategy Subcommittee
CWSF	Council of Western State Foresters
DHS	Department of Homeland Security
DOI	Department of the Interior
EMDS	Ecosystem Management Decision Support System
EPA	Environmental Protection Agency
FAC	Fire adapted communities
FAC Program	Fire Adapted Communities Program (Forest Service)
FAC Coalition	Fire Adapted Communities Coalition
FACA	Federal Advisory Committee Act
FEMA	Federal Emergency Management Agency
FFT2	Firefighter 2
FLAME Act	Federal Land Assistance, Management and Enhancement Act of 2009
FLN	Fire Learning Network (The Nature Conservancy)
FPA	Fire Program Analysis
FPD	Fire Protection District

FPU	Fire Planning Unit
FWS	U.S. Fish and Wildlife Service
GACC	Geographic Area Coordination Center
GACG	Geographic Area Coordination Group
GAO	General Accountability Office
HFI	Healthy Forests Initiative
HFRA	Healthy Forests Restoration Act
HVR	Highly valued resource
IAFC	International Association of Fire Chiefs (I-Chiefs)
IAFF	International Association of Fire Fighters
IAWF	International Association of Wildland Fire
ICS	Incident Command System
IQCS	Incident Qualification and Certification System
ITC	Intertribal Timber Council
JFSP	Joint Fire Science Project
LCC	Landscape Conservation Cooperatives
LMPs	Land Management Plans
LRMPs	Land and Resource Management Plans
MACG	Multi Agency Coordinating Group
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
NACo	National Association of Counties
NACo-WIR	National Association of Counties - Western Interstate Region
NASEMSO	National Association of State Emergency Medical Services Officials
NASF	National Association of State Foresters
NEMAC	National Environmental Modeling and Analysis Center (UNC Asheville)
NEPA	National Environmental Protection Act

NFPA	National Fire Protection Association
NGO	Nongovernmental organization (e.g. nonprofit)
NICC	National Interagency Coordination Center
NICG	National Interagency Coordinating Group
NIFC	National Interagency Fire Center
NMACG	National Multi-Agency Coordinating Group
NLC	National League of Cities
NOAA	National Oceanic and Atmospheric Administration
NPS	National Park Service
NRCS	Natural Resource Conservation Service
NSAT	National Science and Analytical Team
NWCG	National Wildfire Coordinating Group
OGC	Office of the General Counsel (Forest Service)
OMB	Office of Management and Budget
OWDC	Operations Workforce Development Committee
PPE	Personal protective equipment
QFR	Quadrennial Fire Review
RFA	Rural Fire Assistance
RFD	Rural fire department
RMC	Risk Management Committee
RSC	Regional Strategy Committee
SAF	Society of American Foresters
SFA	State Fire Assistance
TNC	The Nature Conservancy
USDA	U.S. Department of Agriculture
USFA	U.S. Fire Administration
USFS	U.S. Forest Service

USGS	U.S. Geological Survey
VFA	Volunteer Fire Assistance
VFD	Volunteer fire department
WFDSS	Wildfire Decision Support System
WFEC	Wildland Fire Executive Council
WeFLC	Western Forestry Leadership Coalition
WFLC	Wildland Fire Leadership Council
WG	WRSC Working Group
WGA	Western Governors' Association
WRSC	Western Regional Strategy Committee
WUI	Wildland Urban Interface

### Appendix 3 – References

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*A Call to Action, A New Wildland Fire Accord: It is in your hands,*  
[http://www.forestsandrangelands.gov/strategy/documents/foundational/call\\_to\\_action2010.pdf](http://www.forestsandrangelands.gov/strategy/documents/foundational/call_to_action2010.pdf)

*A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment: A 10-Year Strategy.* Western Governors' Association, 2001. Update, 2006.

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*Mutual Expectations for Preparedness and Suppression in the Interface,*  
[http://www.forestsandrangelands.gov/strategy/documents/foundational/mutual\\_expectations\\_2010.pdf](http://www.forestsandrangelands.gov/strategy/documents/foundational/mutual_expectations_2010.pdf)

*Quadrennial Fire and Fuel Review Final Report, 2005.* The National Wildfire Coordinating Group Executive Board, July 2005.

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US Forest Service, *Major Forest Insect and Disease Conditions in the United States: 2011*, United States Department of Agriculture Forest Service, FS-1000 June 2012.

Western Governors' Association, *Forest Health Landscape-scale Restoration Recommendations*, Forest Health Advisory Committee, December 2010, <http://westgov.org/initiatives/foresthealth>.

Western Regional Strategy Committee, *Western Regional Assessment and Strategy*, September, 2011.

Western Regional Strategy Committee, *Western Regional Science-Based Risk Analysis Report*, November, 2012.

## Appendix 4 – Stakeholder Involvement

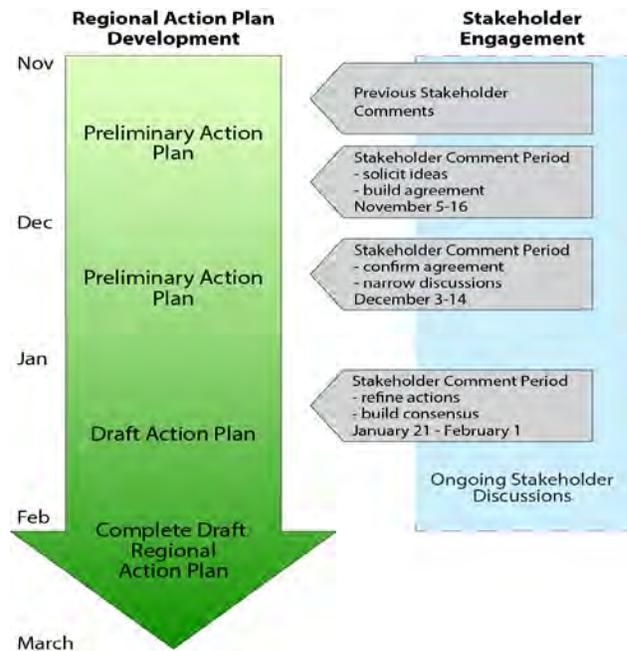
### *Stakeholder Comments Supporting Regional Action Plan Development*

#### ***Building a Collaborative Foundation***

Collaboration among stakeholders forms the foundation for the development of the National Cohesive Wildland Fire Management Strategy. In fact, the Western Region’s overarching goal during this development effort elevates the importance of stakeholder participation and feedback as a cornerstone of this effort.

The WRSC used an iterative process to facilitate stakeholder involvement in framing and refining the action items and tasks needed to accomplish the recommendations in the Western Region Action Plan. A Stakeholder Engagement Plan was adopted including the following components:

1. Reviewing previous comments from Stakeholder Engagements to ensuring all comments related to implementation actions are taken into consideration in developing the Regional Action Plan.
2. Holding three “rounds” of additional comment periods.
3. Engaging with Stakeholder groups at various meetings and conferences as opportunities arose.



Stakeholder outreach and participation was designed to provide stakeholders increasingly focused opportunities to shape the Western Region’s Action Plan as areas of agreement and topics requiring additional discussion were identified. The following summarizes each of these efforts:

**Review of Previous Stakeholder Comments** - This “look back” at all comments received was designed to ensure stakeholder comments regarding potential actions were fully considered in helping shape development of the Action Plan, regardless of when they were provided.

**Stakeholder Comment on the Recommendations in the Regional Risk Analysis Report** – This comment period gave stakeholders an opportunity to comment on the recommendations identified in the Regional Risk Report and to suggest possible actions for actions to achieve the recommendations. This comment period occurred from November 5<sup>th</sup> to 16<sup>th</sup>, 2012.

**Stakeholder Comment on the Preliminary Regional Action Plan** – Stakeholders were provided the opportunity to comment on the recommendations and action categories identified in the *Western Region Preliminary Action Plan*. This opportunity for stakeholder comment took place from December 5<sup>th</sup> to the 14<sup>th</sup>, 2012

**Stakeholder Comment on the Draft Regional Action Plan** – Using comments on the Preliminary Action Plan, the WRSC developed the Draft Regional Action Plan. Stakeholders were provided

the opportunity to comment on the Draft Regional Action Plan from January 18<sup>th</sup> to February 1<sup>st</sup>, 2013.

## Summary of Stakeholder Participation

Stakeholders provided comments useful for the Action Plan development during all three previous Phases of this development effort: Phase I field forums, Phase II comment period and during Phase III. The WRSC 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 Western 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 Assessment/Strategy		Phase III Risk Report		Totals	Percent
	May-June 2010	June-July 2011	January 2012	July 2012	Sept. 2012		
Federal Government	87	76	10	11	1	185	36
Tribal	11	14	0	2	1	28	6
State Government	46	30		4	1	81	16
Local Government	15	23	1	2		41	8
Fire Departments	8	18		2		28	6
NGO	17	38	4	16	5	80	16
Industry	2	20	1	1	1	25	5
Homeowner/Landowner	0	12		2		14	3
Other	12	14	1			27	5
<b>Totals</b>	<b>198</b>	<b>245</b>	<b>17</b>	<b>40</b>	<b>9</b>	<b>509</b>	<b>100</b>

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

During development of the Regional Action Plan, a total of 170 stakeholders provided comments that helped shape and refine the Region’s approach. A total of 83 stakeholders provided 786 individual comments on the Draft Regional Action Plan during the final round of comment.

Cumulative stakeholder participation during development of the Western Regional Action Plan is summarized in Table 2.

Stakeholder Affiliation	November 2012		December 2012		January 2013		Cumulative Totals	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Federal Government	1	33.3	23	27	21	25	45	26
Tribal	1	33.3	2	2	7	8	10	6

State Government			10	12	22	27	32	19
Local Government			9	11	4	5	13	8
NGO	1	33.3	25	30	14	17	40	23.5
Forest Industry			2	2	7	8	9	5
Fire Departments			4	5	2	2.5	6	3.5
Homeowner/Landowner			1	1	2	2.5	3	2
Other			8	10	4	5	12	7
<b>Totals</b>	<b>3</b>	<b>100</b>	<b>84</b>	<b>100</b>	<b>83</b>	<b>100</b>	<b>170</b>	<b>100</b>

**Table 1-4: Stakeholder Participation by Affiliation During Action Plan Development**

The Management and Engineering Technologies, Inc. (METI) content analysis team has prepared a comprehensive analysis of all stakeholder comments provided prior to and during Action Plan development. This report will be an appendix to the Region's Action Plan and summarizes stakeholder outreach and engagement efforts in addition to analysis of all comments received.

The report will also be found at : <http://sites.nemac.org/westcohesivefire/updates/>

## Appendix 5 – Communications Activities

### *Mailing Lists*

The WRSC used existing mailing lists maintained for the ongoing CS outreach efforts as well as professional networks to notify Stakeholders about the comment period. Specific outreach efforts include:

- At the start of each of the three outreach efforts for the Action Plan development, an announcement that the comment period was open was e-mailed to over a thousand stakeholders using the existing mailing lists from the WRSC. The message included links to the outreach website and instructions for providing comments.
- The Watershed Center in Hayfork, California also sent out notices to their extensive mailing list. The announcement included links to the appropriate website, comment form, and background documents. This mailing list included over 900 individuals and organizations.
- The International Association of Fire Chiefs sent a message alerting 656 member departments and to 356 secondary contacts about the opportunity to comment on the Cohesive Strategy Draft Action Plan.
- The International Association of Wildland Fire (IAWF) sent out e-notifications to over 2500 individuals and organizations which covered all three Cohesive Strategy regions.

### *Regional Webpage Information and Content*

The DOI and the ISDA, with input from the Western Regional Strategy Committee maintains a webpage at:

[http://www.forestsandrangelands.gov/strategy/Regional\\_Strategy\\_Committees/index.shtml](http://www.forestsandrangelands.gov/strategy/Regional_Strategy_Committees/index.shtml) to provide stakeholders with current and useful information and to serve as an outreach site to collect comments about the CS effort at the appropriate times.

The “Welcome Page” provides a brief introduction to the CS effort and describes the three CS regions.

The “About You” page serves as the site where “Success Stories” are found.

There are also links to other resources, which may be useful to communities and groups of stakeholders who are seeking information about the techniques, processes, tools and challenges of working together to achieve the three goals of the Cohesive Strategy.

The “Reports” page provides stakeholders with the links to the monthly updates as well as links to the Western Regional Strategy and Assessment, Content Analysis from two outreach efforts, and a link to the National Cohesive Strategy home page.

The “Welcome” web page is shown for illustration. It is available at [http://www.forestsandangelands.gov/strategy/Regional\\_Strategy\\_Committees/West/index.shtml](http://www.forestsandangelands.gov/strategy/Regional_Strategy_Committees/West/index.shtml).

## Western Region



### Welcome

Interested in the Cohesive Strategy? Here's a quick background:

#### The FLAME Act

Faced with increasing numbers of catastrophic, emergency wildland fires, the U.S. enacted the Federal Land Assistance, Management and Enhancement Act (FLAME) Act in 2008 to establish a new federal fund to cover the growing costs associated with fighting these fires.

#### Western Region

The FLAME Act also required a cohesive wildland fire management strategy. To achieve this, the U.S. was divided into three zones: west, southeast and northeast. Representatives from agencies, governments and other stakeholders in the 18 western states are working towards a cohesive strategy that will enable them to plan for and respond to wildland fires efficiently and strategically by restoring and maintaining resilient landscapes, creating fire adapted communities and encouraging jurisdictional collaboration.

Similar efforts have been underway for the last decade; however, the Secretaries of Interior and Agriculture directed this to be the most all-inclusive effort ever attempted to develop a national wildfire management cohesive strategy.

Find Success Stories in our  
About You section

Search our site

Search



### *Monthly Updates*

Ongoing communication activities include monthly updates, a brief newsletter format which provides highlights of:

- National Science and Analysis Team Activities,
- Progress and process items from the Western Regional CS effort,
- Items from current events from outside, but relevant to the Cohesive Strategy process,
- And links to current outreach activities.

The update also includes links available for additional information about the CS, as well as to the co-chairs of the WRSC. Monthly Updates were posted to the WRSC website beginning in July of 2011 and continuing to the present. These are available at <http://sites.nemac.org/westcohesivefire/updates/> or <http://www.forestsandrangelands.gov/strategy/index.shtml>.

An example is shown below:



**Cohesive Wildland Fire Management Strategy**  
National Goals; Collective Solutions

*Resilient Landscapes  
Fire Adapted Communities  
Response to Wildfire  
Supported by Science*

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Western Regional Strategy Committee (WRSC) Update

January 2013

**Third and Final Comment Period for Draft Action Plan Opens January 18 for Two Weeks**

The Western Regional Strategy Committee (WRSC) is providing a third and final opportunity for stakeholders to review and comment on the Draft Action Plan for the Western Cohesive Strategy.

This comment period will open on **JANUARY 18** and close on **FEBRUARY 1**. Stakeholders can review the **DRAFT ACTION PLAN**, which includes additional detail and information on the potential actions reviewed by stakeholders during last month's comment period.

To review the draft and provide suggestions and comments go to: <http://sites.nemac.org/westcohesivefire/updates/>.

To ensure your comments are given full consideration, please use the procedures describe on the webpage. Based on stakeholder comments, your comments can be submitted in a variety of formats. The WRSC will consider stakeholder comments and those from previous comment periods to assist them in the completion of the Regional Action Plan, scheduled for completion in late February.

**WHAT IS THE ACTION PLAN?**

The Western Region Action Plan will detail the goals, objectives, outcome-based performance measures, implementation outcomes, and priority implementation tasks for the Western Cohesive Strategy. These actions will enable the Western Region to make progress in achieving the three national CS goals: Restore and Maintain Landscapes, Fire Adapted Communities, and Fire Response.

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**Stakeholder Affiliation  
December 2012**

Federal Government	23
State Government	10
Tribal	2
Local Government	9
NGO	24
Forest Industry	2
Fire Departments	4
Homeowner/Landowner	1
Other	8
<b>Total</b>	<b>84</b>

**DECEMBER ACTION PLAN COMMENTS INDICATE BROAD AGREEMENT IN SOME AREAS**

During the last Action Plan comment period that ended in December, stakeholder comments indicated broad-based agreement on the outcomes described in the action plan. However, there is less agreement about the specific procedures and techniques that were described to accomplish these desired outcomes.

There is also broad and consistent support for the application of "best science" and accurate data in identifying priorities and actions described throughout the plan. These comments and suggestions, as well as those from the next comment period (see above), will assist the WRSC in their effort to construct the final Action Plan.

Participation during the December comment period, open from December 4th through the 14th, included comments from 84 separate stakeholders representing all affiliation categories (see table above). The final Content Analysis for the three comment periods for the development of the Western Region Cohesive Strategy Action Plan will be made available in February.

### *Social Media: "Twitter"*

Outreach included the use of the social media site "Twitter". Twitter is a real-time information network that connects interested "followers" to the latest stories, ideas, opinions and news about topics of interest. At the heart of Twitter are small bursts of information called Tweets. Twitter connects people and organizations to their interested followers in real time. Twitter is used to quickly share information with people, gather real-time market intelligence and feedback, and build relationships with partners and influencers.

This network alerted over 200 Cohesive Strategy "followers" of the opportunity to comment on the Draft Action Plan. Using the username of "National Wildfire @US\_Wildfire", CS outreach information

was passed along to followers, and they in turn passed along the CS information (“re-tweeted”) to other individuals resulting in a potential audience in the thousands.

A sample Tweet read: “Western states – help us improve the Cohesive Strategy action plan to address your #Fire concerns and perspectives! <http://ow.ly/gWUNk>” .

### ***“Hub and Spoke” Networks***

The members of the WRSC as well as the WRSC Work Groups maintain a “hub and spoke” networking system with their individual peers and counterparts throughout the western region. That network was utilized throughout the Action Plan development process, but the actual extent of the outreach is not known.

## Appendix 6 - Useful Links

Bureau of Land Management, [www.blm.gov](http://www.blm.gov)

Bureau of Indian Affairs, [www.bia.gov](http://www.bia.gov)

Community Wildfire Protection Plan Handbook,  
<http://www.stateforesters.org/files/cwpphandbook.pdf>

Community Guide to Preparing and Implementing a CWPP, <http://www.stateforesters.org/CWPP-community-guide>

Confederated Salish and Kootenai Tribes, [www.cskt.org](http://www.cskt.org)

Conserve Online; Northwest Fire Learning Network:  
<http://conserveonline.org/workspaces/nw.fln.workspace>

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

Fire Adapted Communities, [www.fireadapted.org](http://www.fireadapted.org)

Fire Learning Network,  
<http://www.conservationgateway.org/ConservationPractices/FireLandscapes/FireLearningNetwork/Pages/fire-learning-network.aspx>

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

Firewise Communities/USA®, [www.firewise.org](http://www.firewise.org)

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

Institute for Business and Home Safety, [www.disastersafety.org](http://www.disastersafety.org)

International Association of Fire Chiefs (IAFC), [www.iafc.org](http://www.iafc.org)

International Association of Wildland Fire, <http://www.iawfonline.org/>  
Intertribal Timber Council, [www.itcnet.org](http://www.itcnet.org)

Keep Oregon Green webpage, <http://keeporegongreen.com>

National Association of Counties (NACO), <http://www.naco.org/Pages/default.aspx>

National Association of State Foresters, [www.stateforesters.org](http://www.stateforesters.org)

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

National Cohesive Strategy Regional Strategy Committees.  
[http://www.forestsandrangelands.gov/strategy/Regional\\_Strategy\\_Committees/](http://www.forestsandrangelands.gov/strategy/Regional_Strategy_Committees/)

Northeast RSC,  
[http://www.forestsandrangelands.gov/strategy/Regional\\_Strategy\\_Committees/Northeast/index.shtml](http://www.forestsandrangelands.gov/strategy/Regional_Strategy_Committees/Northeast/index.shtml)

Southeast RSC,  
[http://www.forestsandrangelands.gov/strategy/Regional\\_Strategy\\_Committees/Southeast/index.shtml](http://www.forestsandrangelands.gov/strategy/Regional_Strategy_Committees/Southeast/index.shtml)

Western RSC  
[http://www.forestsandrangelands.gov/strategy/Regional\\_Strategy\\_Committees/West/index.shtml](http://www.forestsandrangelands.gov/strategy/Regional_Strategy_Committees/West/index.shtml)

National Fire Protection Association, [www.nfpa.org](http://www.nfpa.org)

National Interagency Fire Center, [www.nifc.gov](http://www.nifc.gov)

National Park Service, [www.nps.gov](http://www.nps.gov)

National Wildfire Coordinating Group, [www.nwccg.gov](http://www.nwccg.gov)

National Wildfire Programs Database: [www.wildfireprograms.usda.gov](http://www.wildfireprograms.usda.gov)

Project Wildfire, <http://www.projectwildfire.org>

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

The Nature Conservancy, [www.tnc.org](http://www.tnc.org)

The Watershed Research and Training Center, <http://www.thewatershedcenter.com>

US Fire Administration, [www.usfa.fema.gov](http://www.usfa.fema.gov)

US Fish & Wildlife Service, [www.fws.gov](http://www.fws.gov)

US Forest Service, [www.fs.fed.us](http://www.fs.fed.us)

US Geological Survey, [www.usgs.gov](http://www.usgs.gov)

Utah Fire Info, <http://www.utahfireinfo.gov>

Western Governors' Association Forest Health and Wildfire Initiative,  
<http://westgov.org/initiatives/foresthealth>

## Appendix 7 – Committee Members and Work Groups

### ***WESTERN REGION STRATEGY COMMITTEE***

Doug MacDonald	Co-Chair/WFEC Liaison- IAFC
Tony Harwood	Co-Chair/Confederated Salish and Kootenai Tribes / ITC
Ann Walker	Co-Chair/ WGA
Corbin Newman	Co-Chair (previous)
Dick Bahr	NPS
Leon Ben	BIA/alternate
Kent Connaughton	FS (present)
Robert Cope	Lemhi County, ID – NACo
Warren Day	USGS
Pam Ensley	FWS
Sam Foster	Station Director, FS
Joe Freeland	BLM/alternate
Bob Harrington	Montana State Forester/NASF (previous)
Rich Homann	NASF (present)
John Philbin	BIA
John Ruhs	BLM
Katie Lighthall	WGA (WRSC Coordinator)

### ***WESTERN REGION WORK GROUP***

Joe Freeland	Team Lead/BLM
Carol Daly	Co-Lead/Flathead Economic Policy Center
Alan Ager	FS

Bill Avey	FS
Jesse Duhnkrack	NPS
Craig Glazier	Local Government-Idaho
Lynn Jungwirth	Watershed Research and Training Center (WRTC)
Eric Knapp	FS
Laura McCarthy	TNC
Travis Medema	Oregon Dept. of Forestry/NASF
Alan Quan	FS
Kevin Ryan	FS
David Seesholtz	FS PNW Research Station
Joshua Simmons	BIA
Sue Stewart	FS
Bill Tripp	Inter-Tribal Council

***WESTERN REGION TECHNICAL WORK GROUP***

Carol Daly	Flathead Economic Policy Center
Chuck Bushey	IAWF
Dave Driscoll	WGA/Contractor
Jesse Duhnkrack	NPS
Joe Freeland	BLM
Katie Lighthall	Coordinator
Laura McCarthy	TNC
Geoff McNaughton	Utah Department of Natural Resources
Jay O'Laughlin	University of Idaho
Karen Prentice	BLM

Alan Quan	FS
Tom Quigley	NSAT/Contractor
Cheryl Renner	WGA/Contractor
Kevin Ryan	FS
Bill Tripp	Inter-Tribal Timber Council
Brad Washa	BLM

***WESTERN REGION STRATEGIC WORK GROUP***

Dick Bahr	NPS
Tim Burke	BLM
Sarah Craighead	NPS
Carol Daly	Flathead Economic Policy Center
Jim Fox	UNC/NSAT
Joe Freeland	BLM
Matt Hutchins	UNC/NSAT
Danny Lee	USFS/NSAT
Doug MacDonald	WFEC Liaison/IAFC
Laura McCarthy	TNC
Caitlyn Pollihan	WeFLC/USFS
Alan Quan	FS
Tom Quigley	METI/NSAT
John Ruhs	BLM
Ann Walker	WGA

***WESTERN REGION COMMUNICATIONS WORK GROUP***

Mark Beighley	METI
Carol Daly	Flathead Economic Policy Center
Erin Darboven	OWF
Judith Downing	FS
Joe Freeland	BLM
Terina M. Goicoechea	BLM-Montana
Jim Golden	METI
Shelley Gregory	BLM-Wyoming
Candace Iskovitz	IBHS
Mary Jacobs	National League of Cities
Lynn Jungwirth	WRTC
Pam Leschak	FS
Laura McCarthy	TNC
Michelle Medley-Daniels	WRTC
Jennifer Myslivy	BLM-New Mexico
Kevin Ryan	FS
Jon Skinner	BLM
Steve Solem	METI
Bill Tripp	Inter-Tribal Council
Ann Walker	WGA
Julie Woldow	METI

## Appendix 8 – Barriers and Critical Success Factors

### *National Cohesive Wildland Fire Management Strategy*

#### *Barriers and Critical Success Factors*

*August, 2012*

During Phase II of the National Cohesive Wildland Fire Management Strategy (Cohesive Strategy), each of the three Regional Strategy Committees (RSCs) – Northeast, Southeast, and West – identified barriers and critical success factors that would impact their ability to be successful in implementing the Cohesive Strategy. The terms as used in this process are defined as:

**Barriers** – Must be removed in order for the Cohesive Strategy to be successful.

**Critical Success Factors** – Must be present for the Cohesive Strategy to be successful.

When the regional lists were combined into a master list, over fifty barriers and critical success factors had been identified by the regions. The Wildland Fire Executive Council (WFEC), through the Cohesive Strategy Subcommittee (CSSC), tasked the RSCs with further defining the factors and creating a sub-list targeting the highest priority factors that reasonably could be addressed within the next five years.

The row labels in the following tables were adapted from the original factor spreadsheet. Several of the labels are described in more detail below.

**Impact** – What are the potential implications or effect if the barrier is removed or the critical success factor is met?

**Supporting Details** – Additional information and references

**Existing Groups and Past Efforts** – Is there an existing group that could review and define proposed actions to address the barrier or critical success factor? Has there been a past effort(s) to address the barrier; and if so, by whom?

The last three rows – Impact on Achieving Objectives, Probability of Success, and Investment of Resources Versus Benefit – were added following the WFEC members' review of the highest priority barriers and critical success factors identified by the RSCs. The responses, when combined for each factor, represent the WFEC's assessment of the likelihood of achieving a positive outcome.

Each of the 11 barriers and critical success factors (CSF) that follow was selected by the RSCs as being the highest priority barriers/CSFs to be addressed in order to contribute to the successful implementation of the Cohesive Strategy. These barriers/CSFs were further stratified into two tiers.

**Tier 1** (blue headings) – Contains the most urgent of the RSC's highest priority barriers/CSFs

**Tier 2** (tan headings) – Contains the remainder of the RSC's highest priority barriers/CSFs

Finally, the number in parentheses in the heading of each table corresponds to the barrier or critical success factor number in the original master barrier and critical success factor spreadsheet.

<b>CRITICAL SUCCESS FACTOR (5): <i>Increase Fuels Management on Private Land</i></b>	
<b>Tier (Priority)</b>	<b>1</b>
<b>National Goals Addressed</b>	<ul style="list-style-type: none"> <li>• Landscapes</li> <li>• Fire-Adapted Communities</li> <li>• Response to Fire</li> </ul>
<b>Description</b>	There is a need to increase private land management assistance to complement and implement broader fuel reduction management objectives across fire prone landscapes. Incentives for private landowners are needed to increase the fuels management on private lands. Incentives may include providing cost share funds through current landowner assistance programs. There is a need to integrate federal and state level fuels and prevention programs and provide fuels management incentives to mitigate undesired fire effects and property loss.
<b>Impact</b>	Increasing incentives for private lands fuels mitigation will result in more acres being mitigated of undesired fire effects to the landscape/watershed and reducing the probability of fire damage/loss. It can also bring about multiple program integration to reach the same outcome on a larger portion of the landscape with more efficient leveraging of funding sources. Treated areas must be maintained. Increases in the acres treated results in reduced wildfire risk to the public and firefighters and reduced wildfire suppression costs.
<b>Supporting Details</b>	Could be integrated with various private and public land conservation and stewardship programs. Integration and coordination of WUI planning with land management objectives. There is a need to integrate federal and state level fuels and prevention programs which integrate WUI protection planning with land management objectives. There must be social incentives in addition to financial incentives. The emphasis must be at the local level which requires active engagement with constituents at that level.
<b>Existing Groups and Past Efforts</b>	The NRCS currently has the Conservation Stewardship Program (CSP) that covers many of the natural resource and fuels reduction needs addressed here. It is specifically geared to tribal and private agricultural lands and non-industrial private forest landowners. Additionally, the USFS has the Forest Stewardship Program. This program has specifically been coordinated within the Northeastern and Midwestern U.S. and addresses the very needs that the Cohesive Strategy seeks, including, risk management, communication, natural resource management and fuels treatments across this landscape. States utilize hazardous fuels mitigation funds via State Fire Assistance (NASF-USFS).
<b>Potential Action(s)</b>	<ol style="list-style-type: none"> <li>1. Develop landowner incentives (e.g., tax breaks, free disposal of material, increased use of Wyden Amendment and other finance or cost-share authorities).</li> <li>2. Integration of fuels reduction and defensible space principles with private land management programs.</li> <li>3. Integrate USFS and NRCS funding and programs to achieve success. Work with NRCS, FSA, and other USDA agencies to better incorporate and/or incentivize prescribed burning on tribal and private lands.</li> <li>4. Work with EPA to reduce restrictions to the use of prescribed fire due to smoke tolerance and emissions (air quality). Part is education of the general public; the other part is education/science working with EPA on short term effects verses long term impacts and extent of emissions.</li> </ol>
<b>Impact on Achieving Objectives</b>	High
<b>Probability of Success</b>	Medium
<b>Investment of Resources versus Benefit</b>	Medium
<b>Recommended Disposition</b>	Critical success factors and barriers could be integrated into regional and national analysis reports and action plans. WFEC/WFLC will determine how to proceed with those critical success factors and barriers national in scope.
<b>CRITICAL SUCCESS FACTOR (14): <i>Increase Fuels Management on Federal</i></b>	

<i>Land</i>	
<b>Tier (Priority)</b>	<b>1</b>
National Goals Addressed	<ul style="list-style-type: none"> <li>• Landscapes</li> <li>• Fire-Adapted Communities</li> <li>• Response to Fire</li> </ul>
Description	<p>1. Need revised standardized guidance and direction for fuels treatments on federal land to enhance fire adapted communities and landscapes.</p> <p>2. Landscape scale restoration is often difficult to achieve due to the complex process requirements of federal laws, rules and policies. New interpretation and engagement with key partners can take advantage of flexibility that currently exists, but may not be exercised for fear of litigation.</p>
Impact	<p>If guidance is revised, DOI agencies will be able to effectively target fuels treatment dollars to achieve integrated Cohesive Strategy goals for fire adapted communities and landscape resilience.</p> <p>Increased acres treated on federal lands reduces wildfire risk to the public and firefighters, and results in reduced wildfire suppression costs.</p>
Supporting Details	<p>Currently, guidance and direction comes from HFPAS and OMB. The emphasis is to prioritize WUI treatments, with approximately 90% of the HFR funds going to this endeavor. However, a gap exists between the DOI agency missions, which are different for NPS, FWS, BLM and BIA, and the WUI emphasis. For example, spending HFR funds in Yosemite to reduce fuels around structures in and adjacent to the park does not fully advance the NPS mission, and in fact could have severe consequences if a large portion of the park burns in a mega-fire and the critical values of Yosemite (including the tourism economy) are lost.</p>
Existing Groups and Past Efforts	<p>DOI Fire program Assessment. NWCG Fuels Committee has been involved with fuels allocations and processes. The use of the Good Neighbor authority was approved by Congress in 2009 for projects in Colorado and Utah. The authority enables state agencies to act as an agent for the federal agency to complete similar or complementary forest and land management activities across state, federal and private landowner boundaries. The Authority has not been widely used due to limited application and problematic contracting requirements.</p>
Potential Action(s)	<ol style="list-style-type: none"> <li>1. Move from a national criteria based allocation model to a process that considers the core principles of the Cohesive Strategy and funds the federal organizations at the regional levels, and that would also allow for management discretion at the local level that takes into account priorities, capabilities, and the changes in individual project dynamics. If standard guidance and direction for fuels treatments is modified it must be done at the Department level, between USDA and DOI, with discussion of the relationships to state, tribal and private partners.</li> <li>2. Encourage federal agencies to use authorities under the Healthy Forest Restoration act (HFRA) and the Health Forest initiative (HFI) to expedite the planning /collaboration process to treat large landscapes.</li> <li>3. Integrate Community Wildfire Protection Plans with agency land management and/or fire management plans to facilitate fuels treatments across multiple jurisdictions (RSC level).</li> <li>4. Support the Good Neighbor Authority Act and broaden the use of the Act's provisions to other states where local interest and support exists.</li> <li>5. Seek relief from impediments in the Forest Service Planning Rule for fuels management.</li> </ol>
Impact on Achieving Objectives	High
Probability of Success	Medium
Investment of Resources versus Benefit	Medium
Recommended Disposition	<p>Critical success factors and barriers could be integrated into regional and national analysis reports and action plans. WFEC/WFLC will determine how to proceed with those critical success factors and barriers national in scope.</p>
<b>CRITICAL SUCCESS FACTOR (20): <i>Growth Management, Land Development</i></b>	

<i>and Zoning Laws</i>	
<b>Tier (Priority)</b>	<b>1</b>
National Goals Addressed	<ul style="list-style-type: none"> <li>• Fire-Adapted Communities</li> <li>• Response to Fire</li> </ul>
Description	Need growth management, land development, and zoning laws that require defensible space and wildland fire risk reduction actions as communities develop; and the maintenance of wildland fire risk reduction practices, e.g., defensible space, fire resistant construction, hazard reduction, etc.
Impact	Reduced risk to firefighters and homeowners, reduced suppression costs, and lower insurance rates.
Supporting Details	Mostly a local government issue but national support and coordination are needed.
Existing Groups and Past Efforts	NFPA has completed national surveys on zoning laws. Additional information is available from the Fire Adapted Communities Coalition and NWCG WUI Committee. NACO, IAFC, NGA, and NLC have also contributed.
Potential Action(s)	<ol style="list-style-type: none"> <li>1. Work through NGOs (American Planners Association, builders and other organizations and NACO/League of Cities/Mayors Conference) at the national level to develop a list of best practices and model zoning laws/development standards.</li> <li>2. Work with the insurance industry on products that motivate homeowners to create fire adapted homes/communities – create a model fire adapted community concept that can be replicated in high fire prone areas resulting in reduced fees and higher ISO ratings.</li> <li>3. Construct a federal incentive program to reimburse for the creation of fire adapted communities through CWPPs and other comprehensive community planning practices (FEMA and/or USDA/DOI).</li> <li>4. At Federal Agency, State and local government level develop codes and standards for developing and maintaining Fire Adapted Communities reflecting regional and local wildland fire risks to Human Communities, including landscape and structure components/issues.</li> </ol>
Impact on Achieving Objectives	High
Probability of Success	Low
Investment of Resources versus Benefit	Medium
Recommended Disposition	Critical success factors and barriers could be integrated into regional and national analysis reports and action plans. WFEC/WFLC will determine how to proceed with those critical success factors and barriers national in scope.

<b>BARRIER (31): <i>Inefficiencies in the National Qualification</i></b>	
<b>Standards</b>	
<b>Tier (Priority)</b>	<b>1</b>
National Goals Addressed	<ul style="list-style-type: none"> <li>• Response to Fire</li> </ul>
Description	Inefficiencies in the national qualification standards and procedures must be addressed to increase response capabilities. Develop one wildland fire qualification standard for the federal, state, tribal, and local wildfire community. Currently NWCG PMS 310-1 provides qualifications for national mobilization and recognizes the ability to accept qualifications of local jurisdictions while in those jurisdictions. These standards are in sync with FEMA NIC efforts to bridge the gap with local government.
Impact	<ol style="list-style-type: none"> <li>1. Many resources that would otherwise be available for mobilization are unavailable because of cumbersome qualification standards and procedures. As a result, resources are not available for mobilization.</li> <li>2. Better coordination between and among local, state, tribal and federal agencies who are investing in training. A clear definition of position requirements for training and experience.</li> <li>3. NWCG develops and maintains interagency qualifications and training standards. Implementation is the responsibility and decision of the individual agencies.</li> </ol>
Supporting Details	<ol style="list-style-type: none"> <li>1. Build on existing success (Recognition of Prior Learning [RPL], Service First). Should accept experience, training and qualification classes, and nomenclature of DHS/NIMS as well as the U.S. Fire Administration.</li> <li>2. We need to shorten time for qualifications which is part of the NWCG Workforce Development Goal and IMT Succession Project. Agency support for implementation is required.</li> </ol>
Existing Groups and Past Efforts	<ol style="list-style-type: none"> <li>1. Past efforts have only looked @ NWCG affiliation. Currently, RPL has been modeled in the south and west and sponsored by BLM; FEMA is now completing the RPL guide materials.</li> <li>2. The U.S. Fire Administration (USFA) has a fire crosswalk qualification system that is recognized by the NWCG and recognizes prior obtained skills of structure fire departments. This system has provided an avenue to incorporate fire personnel into interagency fire organizations where agencies have chosen to recognize them.</li> <li>3. NWCG Evolving Incident Management (IMT Succession Project): strategic implementation plan is complete and work units with leads are identified.</li> </ol>
Potential Action(s)	<ol style="list-style-type: none"> <li>1. WFEC should consider tasking the NWCG Executive Board to provide a plan for implementation of Section 5 Incident Capacity/Workforce Development/IMT Succession from the Evolving Incident Management Report 10/17/2011 (Single Qualification System, Alternative Qualification Pathways, Experimental Training, Wildfire and Incident Management Academies, Position Task Books, Previous Experience Credit, Mentoring Programs).</li> <li>2. Build on existing success, e.g., Incident Qualification and Certification System (IQCS), Recognition of Prior Learning (RPL), and Service First, to develop a national qualification system to track federal, tribal, local, state, and private community responders.</li> <li>3. Continue to utilize the USFA crosswalk as a component of the National Wildland Qualification System. Expand the concept.</li> </ol>
Impact on Achieving Objectives	Medium
Probability of Success	Medium
Investment of Resources versus Benefit	Medium
Recommended Disposition	Critical success factors and barriers could be integrated into regional and national analysis reports and action plans. WFEC/WFLC will determine how to proceed with those critical success factors and barriers national in scope.

<b>BARRIER (33): <i>Remove Policy Barriers and Process Complexities for Sharing Resources</i></b>	
<b>Tier (Priority)</b>	<b>1</b>
<b>National Goals Addressed</b>	<ul style="list-style-type: none"> <li>• Landscapes</li> <li>• Response to Fire</li> </ul>
<b>Description</b>	Need to remove policy barriers and process complexities which affect the ability to effectively and efficiently share resources, not only for wildfire, but for fuels and prescribed fire work. The statutory authority for the USFS to pay for state resources responding to another state's incident, even though the receiving state reimburses the USFS for those responding resources, has been questioned.
<b>Impact</b>	<ol style="list-style-type: none"> <li>1. Qualification standards pose barriers to sharing resources when the USDA Forest Service follows one set of rules, while all other state and federal agencies follow the Wildland Fire Qualification System Guide, PMS 310-1. (USFS requires 5901 but NWCG PMS 310-1 is the standard for national mobilization.)</li> <li>2. It is an appropriate and key role for the USFS and other federal agencies to maintain a national and regional mobilization system to facilitate the coordinated mobilization of suppression resources, including state-sent local resources, to support fire suppression efforts nationally.</li> <li>3. If not resolved, this issue is likely to restrict mobilization of key resources for the protection of private, state and local government lands.</li> </ol>
<b>Supporting Details</b>	As budgets decline and skill gaps grow, reliance on a mobile skilled workforce is one option, while local expertise is developed. Processes for updating and revising agreements are slow and cumbersome.
<b>Existing Groups and Past Efforts</b>	<ol style="list-style-type: none"> <li>1. The guidance for state to state mobilization and fire billing cooperative fire agreements is currently under development and billing procedures have not yet changed.</li> <li>2. A USFS/NASF task group has developed recommendations for addressing the authorities issues for the USFS, and developed a potential work around if needed.</li> <li>3. NWCG task team has worked on revisions to the national template for the Master Cooperative Wildfire Management and Stafford Act Response Agreement.</li> <li>4. Cohesive Strategy foundational documents: Mutual Expectations for Preparedness and Suppression in the Interface, The Responsibilities, Authorities, and Roles of Federal, State, Local and Tribal Governments.</li> </ol>
<b>Potential Action(s)</b>	<ol style="list-style-type: none"> <li>1. NWCG to complete revisions to the Master Cooperative Wildfire Management and Stafford Act Response Agreement.</li> <li>2. Rectify 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.</li> <li>3. Identify and correct policy barriers that prevent the effective sharing of resources.</li> <li>4. Local government needs national clarification on structure protection verses wildfire suppression and who pays.</li> <li>5. Identify complexities that need to be simplified in order to efficiently share resources.</li> </ol>
<b>Impact on Achieving Objectives</b>	High
<b>Probability of Success</b>	Medium
<b>Investment of Resources versus Benefit</b>	High
<b>Recommended Disposition</b>	Critical success factors and barriers could be integrated into regional and national analysis reports and action plans. WFEC/WFLC will determine how to proceed with those critical success factors and barriers national in scope.

<b>CRITICAL SUCCESS FACTOR (10): <i>Enforceable State/Local Ordinances</i></b>	
<b>Tier (Priority)</b>	2
<b>National Goals Addressed</b>	<ul style="list-style-type: none"> <li>• Fire-Adapted Communities</li> </ul>
<b>Description</b>	Need adequate state and/or local ordinances related to wildfire prevention which are enforceable.
<b>Impact</b>	Reduced number of human caused wildfires. Cost-benefit ratio of fire prevention versus the cost of fire suppression.
<b>Supporting Details</b>	Issue appears to reside at local and state level rather than federal level.
<b>Existing Groups and Past Efforts</b>	Southern WUI Center-Prestemon Study. Cooperative Forest Fire Prevention Committee-NASF, USFS. Ad Council may have additional information, as well as the NWCG Communication, Education and Prevention Committee. NACO, IAFC, NGA, and NLC have also contributed.
<b>Potential Action(s)</b>	<ol style="list-style-type: none"> <li>1. Implement coordinated information sharing between RSCs regarding successful state and local government community growth management planning and enforcement that results in sustainable wildfire risk reduction in WUI communities.</li> <li>2. Work through NGOs (NACo, League of Cities, etc.) to develop a list of WUI Codes, growth management policies and land development regulations, special wildland fire risk reduction ordinances, and best management practices related to community risk reduction and prevention from wildfire from across the Nation, and develop into an information and education program to State and local government agencies responsible for community development.</li> <li>3. Work with Congress and Federal agencies to tie 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 (the carrot).</li> <li>4. Tie federal funding requirements to the presence of enforceable state and/or local community wildfire risk reduction ordinances with an emphasis on prevention (the stick).</li> </ol>
<b>Impact on Achieving Objectives</b>	Medium
<b>Probability of Success</b>	Low
<b>Investment of Resources versus Benefit</b>	High
<b>Recommended Disposition</b>	Critical success factors and barriers could be integrated into regional and national analysis reports and action plans. WFEC/WFLC will determine how to proceed with those critical success factors and barriers national in scope.

<b>CRITICAL SUCCESS FACTOR (12): <i>FEMA Pre-Disaster Mitigation Program</i></b>	
<b>Tier (Priority)</b>	2
<b>National Goals Addressed</b>	<ul style="list-style-type: none"> <li>• Fire-Adapted Communities</li> </ul>
<b>Description</b>	Enhance FEMA pre-disaster mitigation program to maximize fuels reduction across the landscape with emphasis on private lands.
<b>Impact</b>	Currently FEMA has pre-disaster mitigation grants available but less than 1% of those funds go towards wildland fire mitigation. If those funds could be significantly increased, much more investments could go towards private lands.
<b>Supporting Details</b>	FEMA has very limited use of NEPA Category of Exclusions. Most projects funded by FEMA require them to go through an Environmental Assessment prior to award. Through their granting process FEMA will not fund prescribed fire or slash burning due to liability issues. It makes perfect sense for both existing and increases in this program to be "block grant" awarded to either federal or state agencies with expertise to complete the projects. Block grants to the states would eliminate the costly NEPA process of analyzing fuels reduction activities on private lands, and provide for the expertise that would allow other tools such as prescribed fire and slash pile burning.
<b>Existing Groups and Past Efforts</b>	This has never been attempted, so no previous action. Hazardous fuels mitigation on private lands is supported by National Fire Plan funding through State Fire Assistance from USFS.
<b>Potential Action(s)</b>	<ol style="list-style-type: none"> <li>1. Revise FEMA grant guidelines that require direct funding of projects on private lands, eliminating the need for NEPA, and to include funding for prescribed fire.</li> <li>2. Transfer FEMA assistance program and funding to USFS State and Private programs or provide block grants to the states.</li> <li>3. Increase the amount of FEMA funds available for pre-disaster mitigation.</li> <li>4. If FEMA determines that it needs to directly fund projects, have FEMA establish NEPA Categories of Exclusion, which would reduce NEPA costs and timeframes, making more funds available for project work, and would accelerate project approval.</li> <li>5. Have FEMA reduce the cumbersome reporting requirements for reimbursement.</li> </ol>
<b>Impact on Achieving Objectives</b>	High
<b>Probability of Success</b>	Medium
<b>Investment of Resources versus Benefit</b>	Medium
<b>Recommended Disposition</b>	Critical success factors and barriers could be integrated into regional and national analysis reports and action plans. WFEC/WFLC will determine how to proceed with those critical success factors and barriers national in scope.

<b>CRITICAL SUCCESS FACTOR (16): <i>Rating Fire Adapted Communities</i></b>	
<b>Tier (Priority)</b>	<b>2</b>
<b>National Goals Addressed</b>	<ul style="list-style-type: none"> <li>• Fire-Adapted Communities</li> </ul>
<b>Description</b>	Develop a common system to characterize and rate fire-adapted communities (FAC); track individual community progress; prioritize investment; and to allow for identification of trends across communities.
<b>Impact</b>	This would create a common understanding and mechanism for tracking progress in FAC in each region. The standards could also be used for investments from all stakeholders.
<b>Supporting Details</b>	NFPA and NWCG definition of Fire Adapted Communities. Maintain the full intent of the CS goal of fire adapted communities.
<b>Existing Groups and Past Efforts</b>	The Fire Adapted Communities Coalition (USFS, NFPA, IAFC, NASF, IBHS, and others), the FireWise Community Program, along with IAFC Ready, Set, Go!, are all working toward this goal. NASF provides national guidance to states for identifying communities at risk and prioritizing risk reduction projects. NASF provides an annual report on the number of communities at risk to wildfire.
<b>Potential Action(s)</b>	Utilize Regional Strategy Committee Chairs, NFPA and the Fire Adapted Communities Coalition, IAFC, NASF, and other stakeholders to facilitate and devise this system.
<b>Impact on Achieving Objectives</b>	Medium
<b>Probability of Success</b>	Medium
<b>Investment of Resources versus Benefit</b>	Medium
<b>Recommended Disposition</b>	Critical success factors and barriers could be integrated into regional and national analysis reports and action plans. WFEC/WFLC will determine how to proceed with those critical success factors and barriers national in scope.

<b>CRITICAL SUCCESS FACTOR (39): <i>Investment in Firefighting Workforce</i></b>	
<b>Tier (Priority)</b>	2
<b>National Goals Addressed</b>	<ul style="list-style-type: none"> <li>• Landscapes</li> <li>• Fire-Adapted Communities</li> <li>• Response to Fire</li> </ul>
<b>Description</b>	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.
<b>Impact</b>	Continued and increased investment in the firefighting workforce is necessary in order to maintain capacity to respond to wildfire as well as mitigate fire hazards. 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.
<b>Supporting Details</b>	Impacts all agencies and organizations with wildland fire responsibilities – local, state and federal.
<b>Existing Groups and Past Efforts</b>	NWCG Evolving Incident Management (IMT Succession Project) strategic implementation is complete and assignments to work units with leads are in progress. Section 5 workforce development has not yet been officially tasked to a work unit. The USFS and others are developing Workforce Succession Plans.
<b>Potential Action(s)</b>	<ol style="list-style-type: none"> <li>1. Develop a fire program that focuses efforts on maintaining and developing field level leaders and workforce.</li> <li>2. WFEC should task the NWCG Executive Board to provide a plan for implementation of Section 5 Incident Capacity/Workforce Development/IMT Succession from the Evolving Incident Management Report 10/17/2011 (Single Qualification System, Alternative Qualification Pathways, Experimental Training, Wildfire and Incident Management Academies, Position Task Books, Previous Experience Credit, Mentoring Programs).</li> </ol>
<b>Impact on Achieving Objectives</b>	High
<b>Probability of Success</b>	Medium
<b>Investment of Resources versus Benefit</b>	High
<b>Recommended Disposition</b>	Critical success factors and barriers could be integrated into regional and national analysis reports and action plans. WFEC/WFLC will determine how to proceed with those critical success factors and barriers national in scope.

<b>CRITICAL SUCCESS FACTOR (42): <i>Improve Fire Data</i></b>	
<b>Tier (Priority)</b>	2
<b>National Goals Addressed</b>	<ul style="list-style-type: none"> <li>• Landscapes</li> <li>• Fire-Adapted Communities</li> <li>• Response to Fire</li> </ul>
<b>Description</b>	Landfire: The accuracy of various aspects of the Landfire data is questionable, even when used at intended scale. Landfire data is being used nationally to depict existing vegetation, surface and canopy fuels, fire regime condition class, and estimates of national fire hazard/risk. Without accurate data, many assumptions and actions based on this data will be compromised.
<b>Impact</b>	More realistic and accurate depiction of where wildland fire hazard/risk actually occurs across the country, which can be used to base decisions upon. More people willing to utilize this data for broader collaboration efforts.
<b>Supporting Details</b>	For the SE and NE regions particularly, Landfire data and the inaccurate analysis created at a national view are barriers to these two regions playing on a level field nationally. It is a barrier to being able to accurately predict and plan. Many state wildfire agencies have weighed in on the need to improve the accuracy of Landfire.
<b>Existing Groups and Past Efforts</b>	There is no effective, consistent way to provide feedback and critical review to the Landfire team. If feedback is given, there is no guarantee that suggested improvements will be conducted, and no feedback for why suggestions are not incorporated.
<b>Potential Action(s)</b>	Present the issues to the Landfire Executive Oversight Group.
<b>Impact on Achieving Objectives</b>	Medium
<b>Probability of Success</b>	Medium
<b>Investment of Resources versus Benefit</b>	Low
<b>Recommended Disposition</b>	Critical success factors and barriers could be integrated into regional and national analysis reports and action plans. WFEC/WFLC will determine how to proceed with those critical success factors and barriers national in scope.

<b>BARRIER (28): <i>Intergovernmental Wildland Fire Governance</i></b>	
<b>Tier (Priority)</b>	2
National Goals Addressed	n/a
Description	Need an intergovernmental wildland fire governance structure to serve the needs of all jurisdictions in both wildland fire and all-risk incidents.
Impact	All stakeholders with wildland fire responsibilities would be represented by either NWCG or another entity that represents all interests. The current charter for NWCG requires national wildland fire management responsibilities.
Supporting Details	NWCG does not satisfy this need fully; for example, each of the RSCs reported that municipalities do not feel they are adequately represented by NWCG, nor are the standards recognized.
Existing Groups and Past Efforts	Past efforts have only looked at NWCG affiliation. WFEC current tasking for governance is in progress.
Potential Action(s)	1. Reexamine the membership of the NWCG Executive Board to ensure local government is adequately represented . 2. WFEC report findings and recommendations on wildland fire governance to WFLC.
Impact on Achieving Objectives	Medium
Probability of Success	Medium
Investment of Resources versus Benefit	Medium
Recommended Disposition	Critical success factors and barriers could be integrated into regional and national analysis reports and action plans. WFEC/WFLC will determine how to proceed with those critical success factors and barriers national in scope.