The National Strategy

Overview

The purpose of *The National Strategy in the Final Phase of the Development of the Cohesive Wildland Fire Management Strategy* is to help decision-makers understand the risks and consequences of decisions and how these decisions fit into the broader goals of the Cohesive Strategy—restore and maintain landscapes, fire-adapted communities, and wildfire response. The National Strategy sets broad, strategic, and national-level direction as a foundation for implementation of actions across the Nation. The Strategy is informed by regional and national analyses, including in-depth risk-based analysis that delves into the specifics of national challenges, underlying causes, and the management opportunities available to address them. The National Strategy explicitly links potential actions or opportunities to locations, a key element not found in prior documents.

Management Options

VEGETATION AND FUELS MANAGEMENT OPTIONS

Prescribed Fire. One of the more effective and cost-efficient means of managing vegetation for multiple purposes, including hazard reduction, ecosystem restoration or maintenance, silviculture and others. It is an effective tool in areas with fire-adapted or fire-dependent vegetation that has evolved with fire. Broad areas of the country have the potential for prescribed fire use based on their natural fire regime, vegetation, and level of human development.

Managing wildfire for resource objectives. This refers to a specific choice to use unplanned ignitions to achieve resource management objectives. Like prescribed fire, allowing wildfires to burn for the purposes of ecosystem restoration or hazard reduction has inherent risks. These risks must be balanced with the potential benefits on an individual incident basis. Due to statutory constraints and inherent risks this tool has limited potential across the U.S.

> **General Guidance on Vegetation & Fuels**
>
> >Where wildfires are unwanted or threaten communities and homes, design and prioritize fuel treatments to reduce fire intensity, structure ignition and extent.
>
> >Where allowed and feasible, manage wildfire resources objectives and ecological purposes to restore and maintain fire-adapted ecosystems and achieve fire-resilient landscapes.
>
> >Use and expand fuel treatments involving mechanical, biological, or chemical methods where economically feasible and sustainable, and where they align with landowner objectives.

Fuel Treatments using mechanical, biological, or other non-fire methods. A variety of methods can be used to change vegetation composition, structure, and ladder fuels, which will help reduce fire hazards. These include mechanical thinning, clearing debris in forests or mowing in rangelands, among others. The opportunities include using timber markets to offset costs of mechanical fuels, using mechanical (mowing), chemical (herbicide) or biological control (grazing). The advantage of these methods is that they offer greater control over the outcome and reduce the risk of unintended

consequences. The disadvantage is that these usually have higher economic cost, but in some cases the costs can be offset by active economic markets for the byproducts of the treatment.

HOMES, COMMUNITIES, AND VALUES AT RISK MANAGEMENT OPTIONS

Home and Community Action. Some communities would benefit by focusing on protecting individual homes and by property owners due to the high number of structures lost to fires.

Building Codes. Making buildings more resistant to ignition by focusing on building materials and constructions standards would reduce loss. Such standards engage property owners and enhance the effectiveness of community-wide actions. Changes in building codes are more likely to be effective when targeted at areas of new construction in high-hazards areas, and consequently counties with increasing WUI area or increasing WUI home density growth.

General Guidance on Homes, Communities, and Values at Risk

>Promote community and homeowner involvement in planning and implementing actions to mitigate the risk posed by wildfire.

>Emphasize proactive wildfire risk mitigation actions.

>Pursue municipal, county, and state building and zoning codes and ordinances that mitigate fire risk to protect life and property from wildfire.

HUMAN-CAUSED IGNITIONS MANAGEMENT OPTIONS

Reduce Accidental Ignitions. Counties were divided into two classes based on ignitions - high or low numbers of the human-caused incidents, and they were split based on high or low area burned by human-caused ignitions relative to the national median.
The southeastern and south-central states and the far west had a high-high combination. The Northeast has a high percentage of high-ignition-density and low-area burned counties, while the interior West displays the bulk of the low-ignition-density, high-area-burned counties.

General Guidance on Human-caused Ignitions

>Emphasize programs and activities that prevent human-caused ignitions, whether accidental or incendiary, where these ignitions, combined with high levels of area burned, suggest the greatest need. Programs should be tailored to meet identified local needs.

Reduce Intentional Ignitions. Larger portions of the East and more populated counties of the West exhibit a combination of high incendiary ignitions and high area burned. The NSAT assembled data sets that include a broad set of community metrics and more detailed causal information that can be explored to target specific causal factors within the various community contexts. For example, debris burning is one of the principal causes of accidental fires; its occurrence varies considerably among community clusters.

EFFECTIVE AND EFFICIENT WILDFIRE RESPONSE MANAGEMENT OPTIONS

Prepare for large, long-duration wildfires. 10 years is too brief an interval to precisely estimate the change of a relatively rare event. A more inclusive estimate of future occurrences of large, long-duration fires might be obtained by extrapolating the 10-year sample to all the combinations of

resiliency classes and community clusters. The West, Southeast and Mid-Atlantic regions display areas of relatively higher probability for fires of concern, as well as scattered counties of the upper Midwest.

Protect Structures and Target Landscape Fuels. A second opportunity focuses on the relationship between area burned and structures lost. The combination of high rates of structure loss with low area burned is dominant in the Central Plains and Eastern regions. Prioritizing response resources towards structure protection in these areas seems prudent.

Protect Structures and Target Ignition Prevention.

General Guidance on Effective and Efficient Wildland Fire Response

>Enhance wildfire response preparedness in areas more likely to experience large, long-duration wildfires.

>Enhance wildfire response preparedness in areas experiencing high rates of structure loss per area burned.

>At the community level, emphasize both structure protection and wildfire prevention to enhance the effectiveness of initial response.

The final response opportunity is most relevant to initial response, which is often the responsibility of local fire department or agency. Data was examined and indices computed of the number of buildings involved per incident and the relative frequency of reported accidental human caused-ignitions. The intersection of these two variables has an interesting pattern that illustrates the widespread extent of the challenges in managing wildfire risk and offers a guide to matching structure protection with prevention efforts. The relatively high frequency of accidental ignitions tends to be higher in the East and more populous areas of the West. Throughout much of the remainder of the country, it is expected that buildings frequently will be involved in local incidents, even if the overall number of responses is relatively low.

Risk Trade-Offs

An unavoidable tenet of risk management is that choices made today affect all future options. For example, management choices made in the past have disrupted historical fire regimes such that wildfires today are of much different character, magnitude, and extent than those that burned a century ago.

A more ideal solution is a trajectory that marginally increases risk in the short- term, but begins paying long-term benefits relatively quickly and keeps risk at manageable levels. Three key assumptions or premises underlie meaningful reductions in risk:

1. **Prioritization of investment and use of resources**. Reducing risk significantly will require that existing resources are used more efficiently. From a national perspective, this may require reallocation of resources across agencies, geographical areas, or program areas.
2. **Acceptance of increased short-term risk**. Significantly reducing fuels across broad landscapes will require expanded use of wildland fire to achieve management objectives. Using fire as a tool carries inherent risks that must be accepted in the short-term to achieve the longer-term benefits
3. **Greater collective investment.** Even with greater efficiency and acceptance of short-term risks current levels of investment may be inadequate to achieve the levels of risk reduction

desired. All who have a stake in the outcome, from property owners to the Federal government must share the financial burden.

Table 1. Summary of Management Options

| National Goals	National Challenges	Management Options
Restore and Maintain Landscapes	Vegetation and Fuels	▪ Prescribed Fire: Expand or maintain in areas of current use ▪ Prescribed Fire: Expand into areas of limited current use ▪ Prescribed Fire: Utilize on a limited basis ▪ Manage wildfires for resource objectives: In forested systems ▪ Manage wildfires for resource objectives: In non-forested systems ▪ Manage wildfires for resource objectives: In areas where increased awareness of community risk is necessary. Non-fire Treatments: Supported by forest products industry Non-fire Fuels Treatments: In non-forest areas Non-fire Fuels Treatment: In areas with limited economic markets Fuels Treatments as a precursor to prescribed fire or managed wildfire.
Fire-adapted Communities	Homes, Communities, & Values At Risk Human-caused Ignitions	Focus on home defensive actions Focus on combination of home and community actions Adjust building and construction codes, municipal areas Adjust building and construction codes, non-municipal areas Reduce accidental human-caused ignitions Reduce human-caused incendiary ignitions (e.g., arson)
Respond to Wildfires	Effective and Efficient Wildfire Response	Prepare for large, long-duration wildfires Protect structures and target landscape fuels Protect structures and target prevention of ignitions

National Priority Maps

Management options were mapped in an attempt to show where they would be most reasonable or potentially effective and generally were developed independent of each other. The Prioritization Maps that follow reflect how multiple management options can be employed in the same location for similar purposes.

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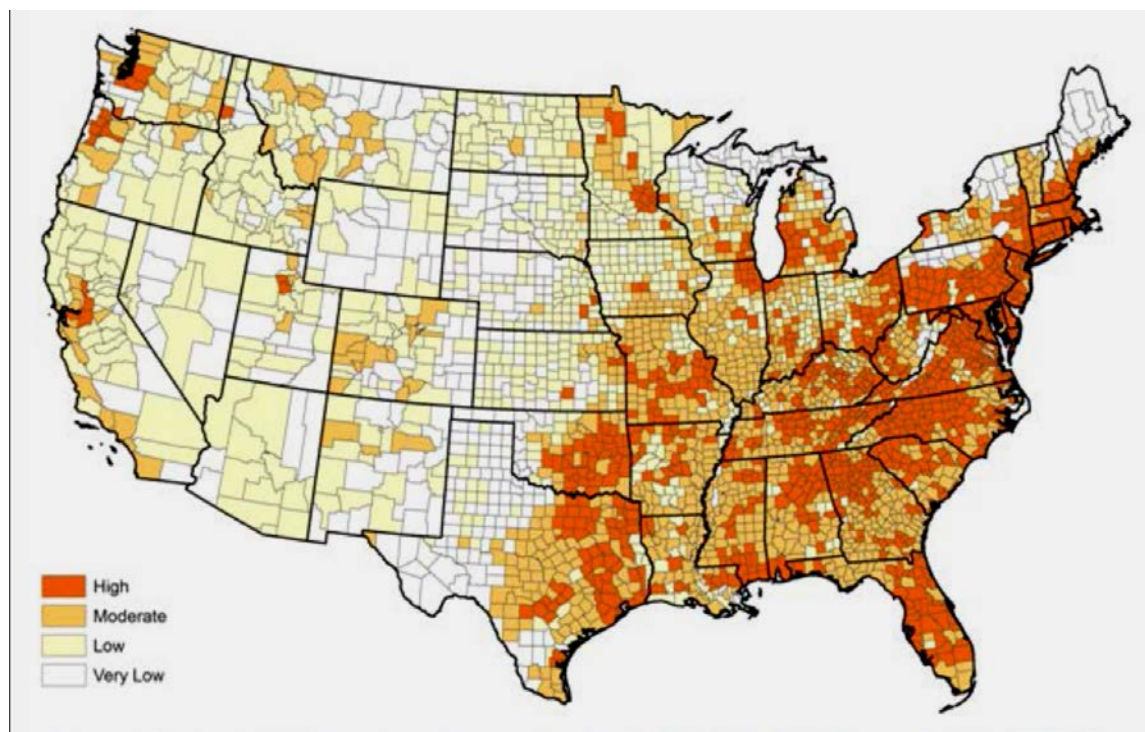**Map 1. National Priorities for Broad-Scale Fuels Management**
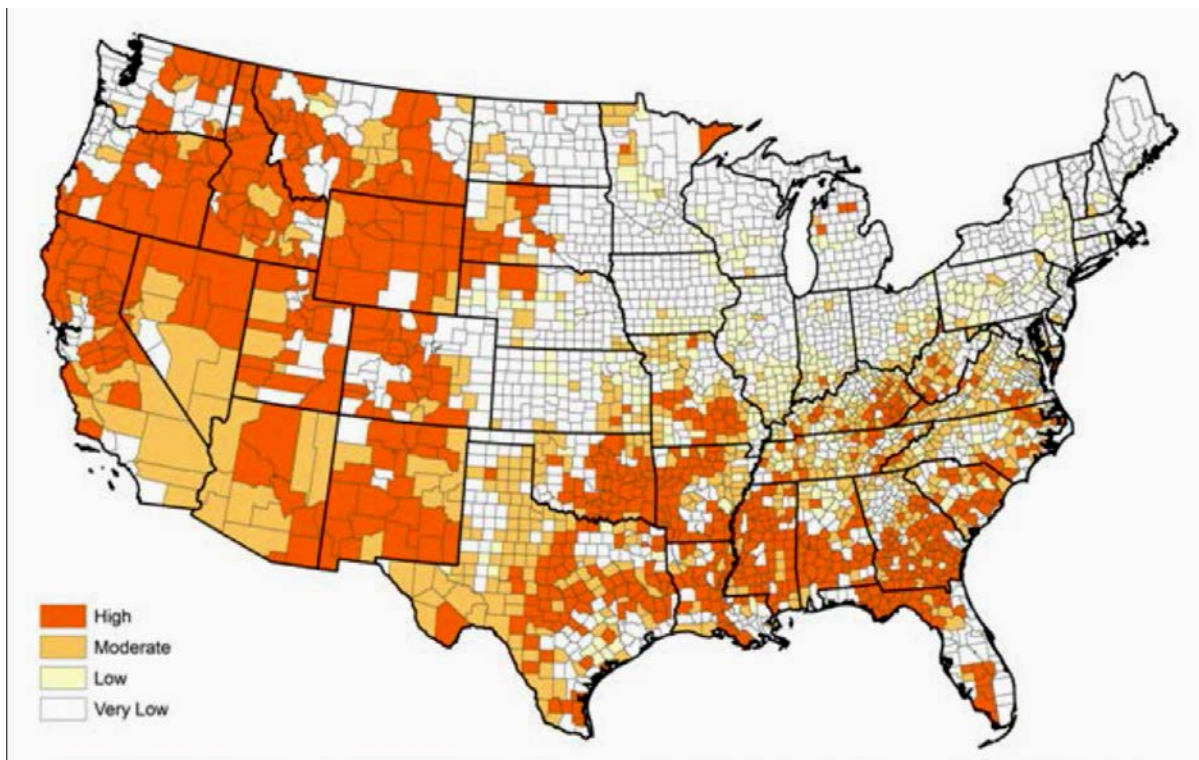
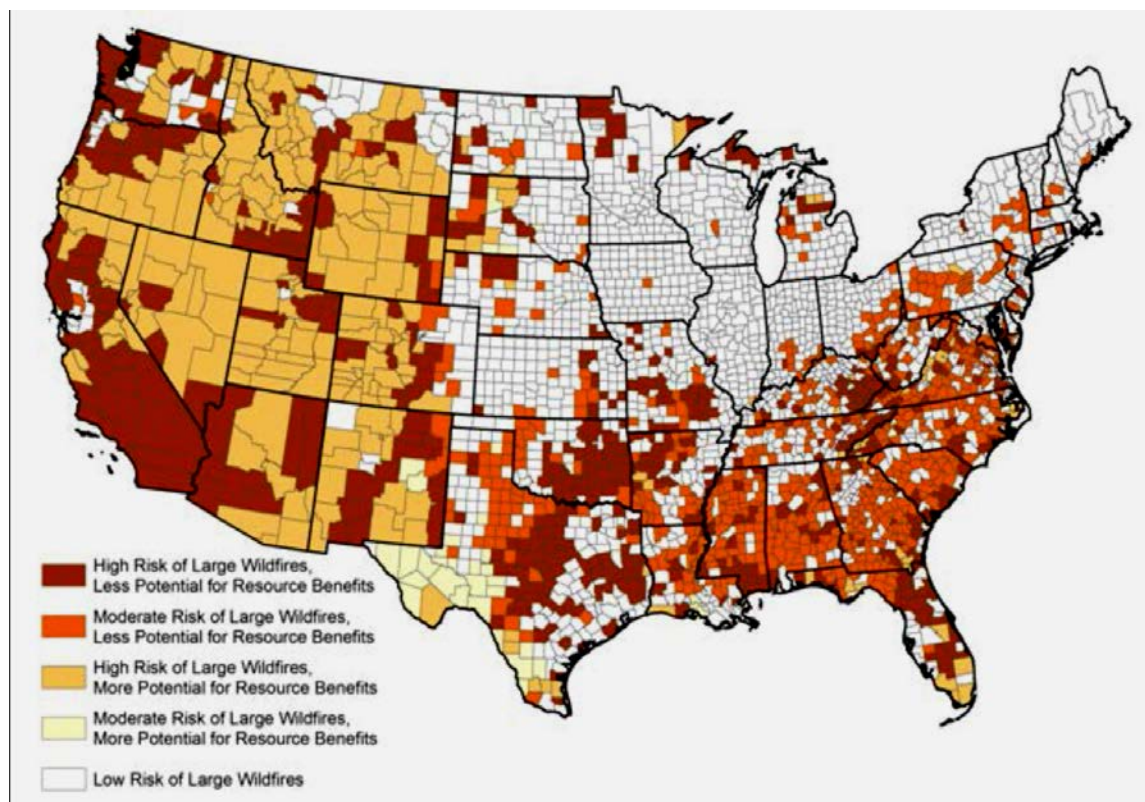**Map 2. National Priorities for Community Planning and Coordination**
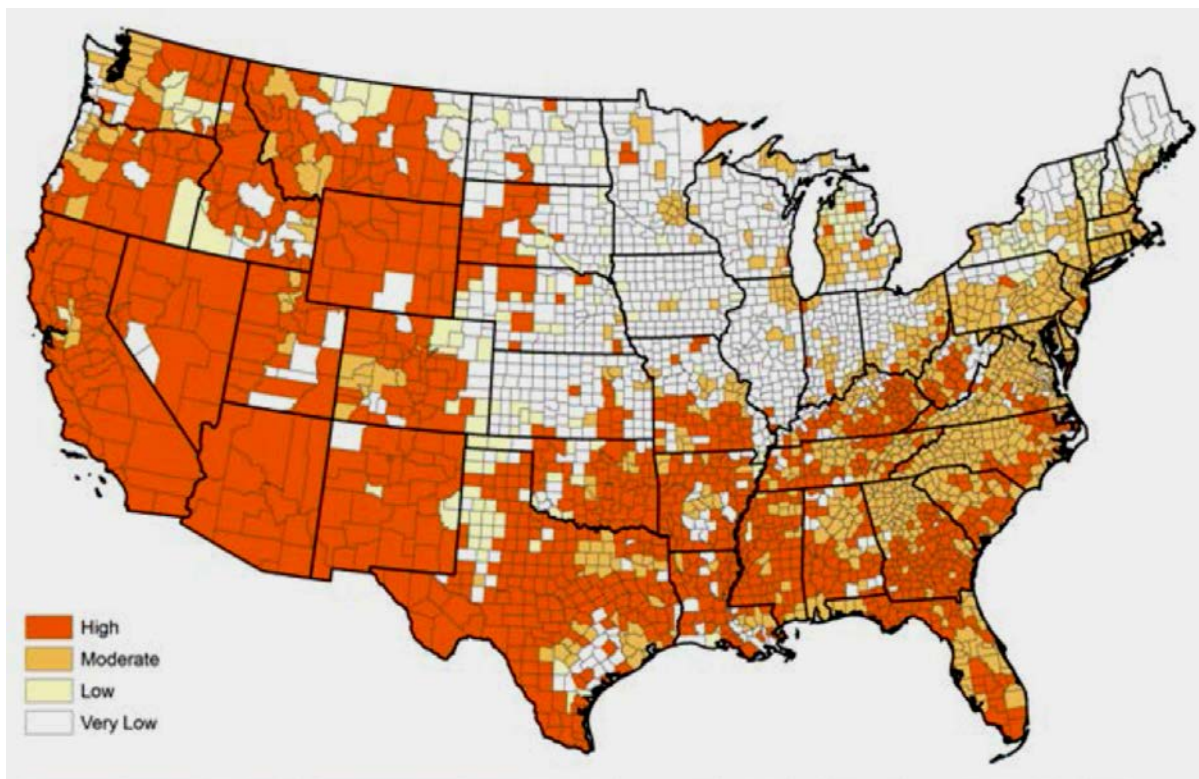
Map 3. National Priorities for Managing Human-Caused Ignitions

Map 4. Intersection of the large, long-duration wildfire potential with the opportunities map for managing wildfires for resource objectives

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Implementation

Implementation of any management option requires a trained, committed, and supported workforce. It is likely that the same individuals will be called upon to implement multiple facets of the overall strategy. For example, first responders may be the only ones with experience and knowledge to conduct prescribed burning in many locations. If they are occupied responding to wildfires, prescribed burning is cancelled or postponed.

Successful implementation required three basic elements to be operating in tandem:

- **Strategic Alignment**- all parties agree to the same goals, principles, and strategic course of action.
- **Communication and Collaborative Engagement**-this includes governance, shared information, resources, communications, and monitoring and accountability.
- **Programmatic Alignment**- individual agency or organization objectives are explicitly supportive of the National Cohesive Strategy goals, recognizing the separate missions, roles and responsibilities of each, the cascade of decisions required and fiscal realities and constraints.

Conclusion

The ultimate success of the Cohesive Strategy effort depends on how strategic direction and national priorities can be translated into on-the-ground, local actions of agencies, organizations, governments, and individuals that can produce meaningful cumulative effects.

Planning efforts thus far have established a foundation for achieving strategic alignment, one of the three pillars of a successful strategy. Collaborative engagement, a second pillar of success has been a staple of the planning efforts thus far, and will continue to be a high priority for involved partners.

More information: www.forestsandrangelands.gov/strategy