



**NASA HEALTH AND AIR QUALITY
APPLIED SCIENCES TEAM**
Connecting NASA Data and Tools with Health and Air Quality Stakeholders

Wildland Fire Commission Report

**A brief overview and connections
to wildland fire, health and
exposure in our future**

Released September 27, 2023

ON FIRE: The Report of the Wildland Fire Mitigation and Management Commission



September 2023



<https://www.usda.gov/topics/disaster-resource-center/wildland-fire/commission>

<https://www.usda.gov/sites/default/files/documents/wfmmc-final-report-09-2023.pdf>

Commission Background



Established by statute (Bipartisan Infrastructure Law)



Focused on recommendations to mitigate and manage wildland fire



50 members from diverse geographies and backgrounds



Complete two reports to Congress



Statute tasked the Commission with making recommendations.

- Some tasks were very specific; others broad
 - “Small and impoverished community”
 - “Mitigate and manage wildfire”



Commission Background



50

50 members from diverse geographies and backgrounds:

- 14 federal members
- 36 state, NGO, academic, and other seats
- Backgrounds in wildland fire, emergency management, community preparedness, public health and more
- Members with experience in both policy and practice
- Nonpartisan composition



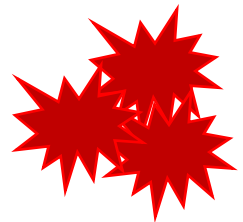
One year timeline highlights the urgency of the problem

Commission Background



Completed two reports to Congress:

- Aviation report released in Feb. 2023 and publicly available
- Final report released in Sept. 2023
- Final report includes additional context on discussions



- **Recommendations were by unanimous consensus**

- **148 consensus recommendations – 7 Key themes**
 - * short- and long-term recommendations
- **Focused on congressional action**

Defining the Crisis

“The wildfire crisis in the United States is urgent, severe, and far reaching. Wildfire is no longer simply a land management problem, nor is it isolated to certain regions or geographies. Across this nation, increasingly destructive wildfires are posing ever-greater threats to human lives, livelihoods, and public safety.”

Defining the Crisis

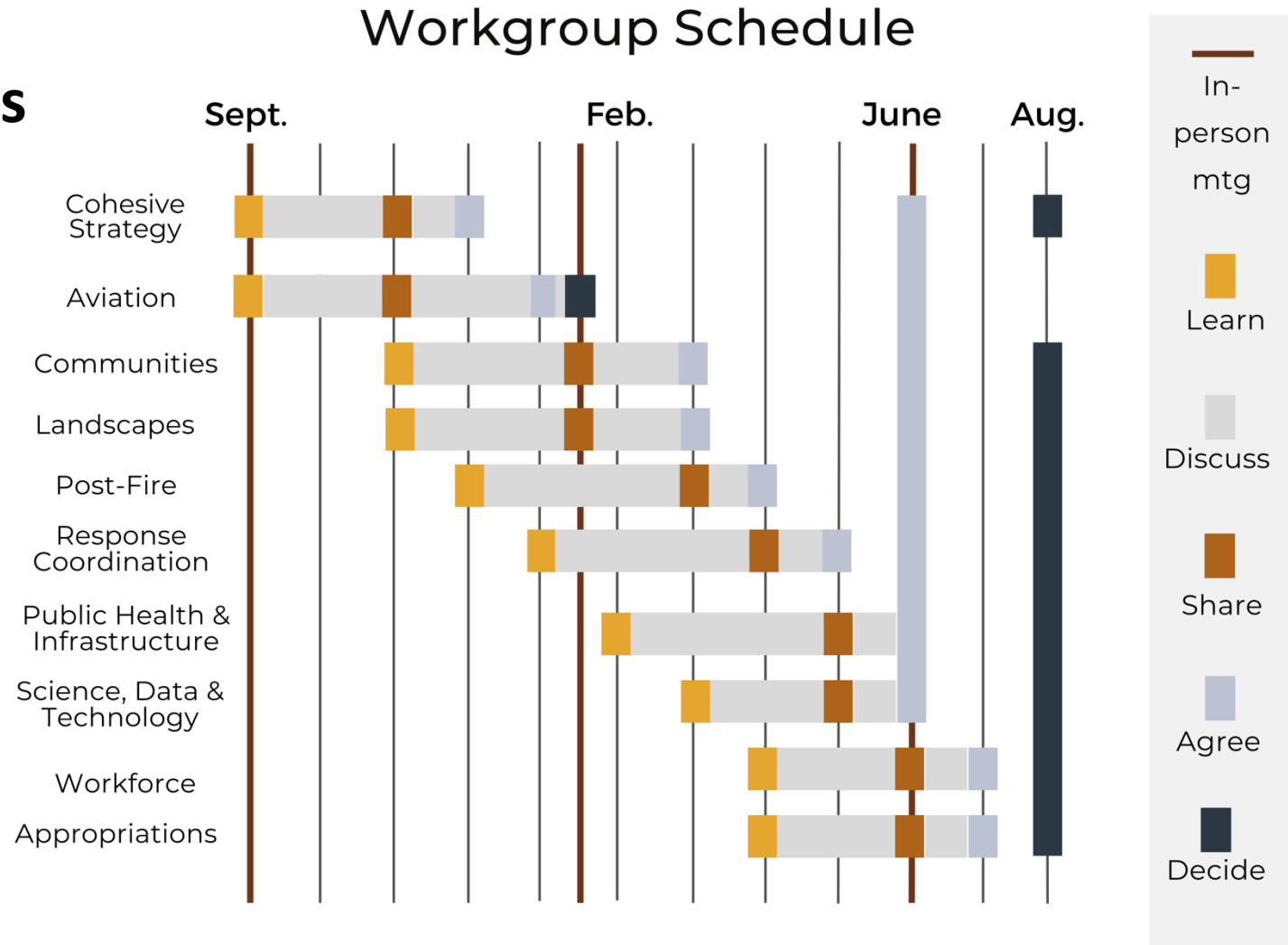


At the same time, fire is an essential natural process in many landscapes and can play a vital role in helping mitigate risk to people and communities, restoring ecosystems, and sustaining Indigenous cultural practices. The nation finds itself in a paradox, in which fire is both central to the crisis and one essential part of the solution.

Commission broke into 10 workgroups

Most members participated in three

**Opportunities
for cross-
cutting
themes to
merge**



Commission Themes

Summary of Recommendations and Key Themes

- Seven key themes emerged from the process:
 - Urgent new approaches
 - Supporting collaboration
 - Shifting from reactive to proactive
 - Modernizing tools for informed decision-making
 - Enabling beneficial fire
 - Supporting and expanding the workforce
 - Investing in resilience
- Each with showcase recommendations
- Issues are interrelated and overlapped

Themes provide a more accessible way to encapsulate the Commission's significant body of work.

THEME: Urgent New Approaches

Significant change is needed in this space

 *Issue of public health and public safety*

Types of Recommendations:

- Governance and goals
 -  ◦ Increased partnership
 - Interagency coordination
 - Accountability
 - Performance measures
 - Better feedback loops

THEME: Urgent New Approaches



Wildfire is no longer – if it ever was – an issue simply of land management. Rather, the crisis has a direct nexus with emergency management, public health, and land management. Solutions must be comprehensive and encompass all of society in scope and scale in order to change our relationship with fire, restore ecosystems, and protect communities.

THEME: Supporting Collaboration

“Solutions should not and cannot be accomplished by federal agencies alone, but must involve individuals, entities, and jurisdictions at every level of society.”

- Financial support for collaborations at a community scale
- Increase accessibility of federal programs
 - e.g., Match Waivers
- Improve co-management with Tribal governments

THEME: Informed Decision-making

Use of best available science and technology

 *Updated models are needed for new conditions*

Types of Recommendations:

- Improve interagency technical coordination
 - Improve data sharing and accessibility
 - Shared service provision (e.g., mapping, decision support tool, etc.)
- Improve community decision support tools

THEME: Informed Decision-making



Climate change and rapidly changing ecosystems represent fundamental shifts in conditions that current fire behavior models, and indeed the current fire management system, are not designed to meet.

THEME: Reactive to Proactive

Increase investments in and focus on pre-fire mitigation and post-fire recovery

Types of Recommendations:

- Support for communities and the built environment
- Improve planning for the post fire environment
- Improve delivery of mitigation and recovery functions

“Only through significant investments in proactive planning, mitigation, risk reduction, and the workforce needed to accomplish these tasks can we break the current cycle of increasingly severe wildfire risk, damage, and loss.

THEME: Enabling Beneficial Fire

Recognize the importance and benefits of fire

Types of Recommendations

- Increase use of prescribed fire
- Acknowledge and support cultural burning
- Improve liability protection for burners
- Greater use of pre-fire planning
-  More integration of public health and smoke management

THEME: Enabling Beneficial Fire

“Beneficial fire – including prescribed burning, cultural burning, and wildfire managed for resource objectives – is necessary to restore fire-adapted ecosystems and reduce the risk of high-severity wildfires that pose a significant threat to communities.

THEME: Workforce

Expand, support, and diversify the workforce

Types of Recommendations:

- Workforce focused on restoration and mitigation
- Year-round, cross-trained workforce
- Increase wages and benefits
- Greater consideration of workforce physical and mental health needs
- Greater inclusion of nonfederal partners

Funding in risk reduction leads to decreased suppression and recovery costs

THEME: Investing in Resilience



...the wildfire crisis needs to be funded, staffed, and acted upon like the national emergency that it is. To do less is to resign ourselves to tremendous costs and losses.

Key Concepts



Taken together, these recommendations are intended to help lead the nation toward better wildfire outcomes including diminished loss of life and property, and functioning and resilient ecosystems.

- **There is a need for both incremental and fundamental change.**
- **Commission emphasizes that top-down and one-size-fits all and half-measures will fall short of the desired outcomes.**



AUDIENCE: Committees of Congress

Senate

- Energy and Natural Resources
- Agriculture, Nutrition, and Forestry
- Homeland Security and Governmental Affairs
- Environment and Public Works
- Appropriations

House

- Natural Resources
- Agriculture
- Homeland Security
- Ways and Means
- Appropriations

Report Release

- Commission remains empaneled for 180 days
 - Members available at Congressional requests
- Members as ambassadors in other venues
- Administrative change could occur through existing venues
 - Interagency Wildfire Working Group (IWG)
 - Wildland Fire Leadership Council (WFLC)

Terminology



Fire

- Basic process of combustion
- Without contextual or values-based associations



Wildland Fire

- Fires, both planned and unplanned, that burn in the natural environment.



Wildfire

- All fires that burn in the natural environment, regardless of their interaction with the built environment.

Beneficial Fire



- Prescribed fire, cultural burning, and wildfire managed for resource objectives