

Wildfire Management in Utah

*Strengthening the State's Wildfire Preparedness,
a report in response to Executive Order 2025-03*

June 1, 2025



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Executive Summary

This executive summary condenses the "Wildfire Management in Utah" report (June 1, 2025), commissioned by Executive Order 2025-03. The report assesses current practices, identifies challenges, and proposes actionable solutions across prevention, preparedness, mitigation, and response. Increased wildfire threats from drought, historical land use, and expansion into the Wildland Urban Interface (WUI) underscore the urgent need for proactive, sustained, and collaborative funding and actions to safeguard the state's communities, resources, and infrastructure.

The Evolving Wildfire Landscape in Utah

Utah's wildfire season now extends year-round, demanding continuous readiness. In 2024, 1,244 incidents burned 90,660 acres; 57% were human-caused, highlighting the need for effective public prevention. While 93% of fires were contained at 10 acres or less, large, catastrophic fires remain a significant concern, threatening water quality, soil, air, safety, and economic stability. Fire is ecologically beneficial in many ecosystems, but unusually large fires become detrimental. The prevalence of human-caused fires emphasizes public behavior as both a vulnerability and an opportunity. Despite "Fire Sense" campaign successes, continued education is needed to reduce human-caused wildfires.

Sustainable Funding and Resource Allocation

Utah's heavy reliance on federal funding for prevention resources, hazardous fuels reduction, WUI mitigation, and local fire department support creates uncertainty. Potential federal budget cuts, particularly to the U.S. Forest Service programs, jeopardize critical efforts and personnel. Many FFSL operational firefighting resources are self-funded, forcing them to seek billable activities out-of-state, limiting availability for Utah's priorities. This dependence on federal funding and billable work creates fiscal vulnerability, diminishing Utah's strategic autonomy and making planning reactive.

Workforce Capacity and Development

Utah faces intense competition for skilled wildland firefighters, with federal agencies and private entities offering competitive pay and benefits. A significant portion of FFSL's operational force comprises seasonal employees

without state benefits, impacting retention. Specialized positions are difficult to fill, and there's a concerning decline in volunteer firefighters. FFSL employs a relatively small number of wildland firefighters for the state's risk profile

Hazardous Fuels, Landscape Resilience, and WUI Risks

A core challenge is the vast hazardous fuel accumulation across Utah. Decades of fire suppression and drought have led to excess flammable vegetation, requiring extensive treatments. Funding for large-scale fuel treatments consistently falls short. The FFSL WUI program heavily relies on uncertain federal grants.

Interagency and Cross-Boundary Coordination

Wildfires frequently cross jurisdictions, mandating seamless coordination among all land managers. While Utah has interagency agreements, consistent implementation remains an ongoing task. Federal funding and contracting processes are often inefficient and restrict where and what type of work can be done, hindering timely mitigation in the highest-risk areas. Aligning hazardous fuel reduction priorities across agencies is challenging due to differing mandates and funding. Federal efforts or funding may not always align with Utah's local needs, and systemic federal issues often impede proactive cross-boundary mitigation.

Public Engagement, Community Preparedness, and Risk Perception

Public education campaigns, like Fire Sense, have reduced human-caused wildfires. However, continued human-caused fires indicate a need for more targeted messaging and new behavior change techniques. Consistent, unified messaging across local, state, and federal agencies is crucial. Utah communities must have comprehensive prevention, preparedness, and evacuation plans and must encourage and support private landowner mitigation, including defensible space. The report highlights a disparity: individuals bear preventative costs, while government agencies bear enormous suppression costs.

Resource Prioritization and Availability During Large Incidents

During high fire activity, critical firefighting assets are often drawn down by national priorities, frequently allocated on a "first-come-first-serve" basis,

disadvantaging states like Utah. Even local federal partners have limited control over these nationally prioritized assets. Utah lacks a unified, statewide system for accurately forecasting local wildfire resource availability during large incidents. Various agency platforms make a comprehensive, real-time picture difficult, combining external pressures and internal coordination challenges to hinder resource forecasting.

Post-Fire Recovery and Long-Term Impacts

Wildfire impacts extend beyond active burning, with post-fire threats like flooding, debris flows, and drinking water impacts posing severe, prolonged risks. Post-fire rehabilitation and recovery costs are enormous. Current funding mechanisms are often insufficient. Federal land management agencies struggle to secure adequate funding for rehabilitation on federal lands, impacting adjacent state, private, and community lands. Rebuilding conflicts arise in fire-affected communities over increased costs for safer building codes versus affordability.

Recommendations for Enhanced Preparedness and Resilience

The "Wildfire Management in Utah" report offers comprehensive strategic recommendations to bolster state preparedness and resilience.

Strengthening Prevention, Public Education, and Community Engagement

To reduce human-caused ignitions and empower communities, the report advises:

- Increase state and partner resources for public awareness campaigns like Fire Sense.
- Align wildfire prevention messaging consistently across agencies and federal partners.
- Promote joint public outreach campaigns (e.g., Fire Sense with Be Ready Utah).
- Actively support communities in developing robust evacuation plans.
- Invest in and promote the Utah Living with Fire campaign.
- Explore and implement tax credits or financial incentives to assist private landowners in home hardening and defensible space creation.
- Ensure Utah implements and maintains defensible space around all its own facilities and public schools.

Bolstering Firefighter Support and Operational Capacity

To ensure a skilled, stable, and effective firefighting workforce, the report recommends:

- Provide FTEs with comprehensive benefits.
- Ensure state firefighter pay and benefits remain competitive.
- Strategically reduce reliance on federal funding for core forestry and fire program positions.
- Secure stable state funding for FFSL's Operations Center resources (Hotshot crews, engines, etc.).
- Systematically expand state-funded operational resources to improve engine staffing and enhance capabilities.
- Further build Utah's fire aviation and heavy equipment programs.
- Develop meaningful incentives for volunteer firefighters (e.g., state benefits, tax credits, stipends, direct financial assistance).
- Develop and deliver specialized urban conflagration training and exercises.
- Invest in solutions for early wildfire detection and expand aviation support with real-time situational awareness platforms.

Advancing Fuel Management, Mitigation, and Landscape Resilience

To address hazardous fuels and build resilient landscapes, the report proposes:

- Lessen Utah's reliance on federal funding for fuel treatments and secure ongoing, dedicated state funding for staff and projects.
- Provide stable base funding for employees in community preparedness and WUI mitigation programs.
- Work collaboratively with the Utah Legislature and the Governor's Office to address current prescribed fire liability statutes.
- Prioritize fuel reduction projects based on effectiveness in reducing risk.
- Develop funding streams specifically focused on mitigation projects prioritized through multi-agency collaboration.
- Commit to building state capacity in mitigation, including dedicated funding, FTE positions, facilities and equipment.

Improving Interagency Collaboration, Resource Management, and Federal

Engagement

To enhance coordination and effectively manage resources, the report recommends:

- Advocate for state forestry agencies to have a meaningful voting role in any national "Fire Intelligence Center."
- Ensure Utah's leadership is heavily involved in shaping any new single federal Wildfire Service.
- Advise state agencies to exercise caution with Good Neighbor Authority (GNA) projects, ensuring alignment with state interests.
- Urge Utah to actively work with the federal government to reform problematic federal land management contracting, grant, and agreement programs.
- Continue developing FFSL's aviation program with sustained state support for control over critical aerial resources.
- Implement a unified statewide system for coordinating state and local resource availability during wildfire incidents.

Enhancing Post-Fire Recovery and Long-Term Resilience

To address the critical post-fire phase and build lasting resilience, the report advises:

- Explore opportunities to streamline post-fire rehabilitation efforts.
- Secure adequate and reliable state and federal funding for post-fire rehabilitation activities. Proactively work with Congress and the federal administration to ensure federal land management agencies have adequate funding and streamlined pathways to mitigate post-fire threats on federal lands.

Introduction

Most of Utah is covered by federal, state, or local wildfire suppression resources, with various agencies involved in firefighting, mitigation, and prevention. When a fire is reported, the closest available resource responds and takes action. After ensuring safety, all fires are fought aggressively or, in some jurisdictions, strategically managed using wildfire as a tool for resource benefit when weather conditions and personnel availability allow. If resources are stretched thin, additional personnel from across the country may assist. Collaboration is essential for effective wildfire management in Utah.

Utah understands the importance of partnerships and how crucial they are, not just in times of need but in completing our everyday work in the most productive and efficient manner. Communication and safety are at the forefront of everything we do, and during wildfire incidents, the first priority for firefighters is protecting human life, then preserving property and valuable natural resources.

In addition to the immediate dangers wildfires pose, Utah also faces serious post-fire risks — including flooding and debris flows — that can devastate communities long after the flames are out. This report acknowledges these threats and calls for a comprehensive, forward-looking approach to mitigation and preparedness.

In Utah, we will continue to stand out as we lead the way in fighting the wildfire crisis that impacts our communities, watersheds, and landscapes. We will continue strengthening our partnerships and building new ones to help us better serve Utah.

Wildfire in Utah

Historically, Utah's wildfire "season" has been June through October, although recent years have demonstrated that wildfires can occur any time. In 2024, there were 1,244 reports of wildfires and 90,660 acres burned. Fifty-seven percent of these were human-caused, and 93 percent of all fires were suppressed before they exceeded 10 acres.¹

Wildfire plays an important role in ecosystem health, both beneficial and detrimental. While fire can be part of a natural cycle contributing to regeneration and biodiversity, large catastrophic fires can have an impact on water quality, soil health, air quality and impact the risk to communities. Educating communities

¹ Utah Wildfire Summary Report, 2024. Utah Division of Forestry, Fire and State Lands.

about the risk of wildfire and promoting fire-adapted communities and resilient landscapes can help protect lives, property, and the environment. Ongoing collaboration at the state, federal, and local levels is crucial for developing effective wildfire management strategies and prevention, preparedness, and mitigation.

Wildfire Management Working Group

Executive Order 2025-03, *Strengthening Wildfire Preparedness*, created a working group to discuss and provide recommendations to strengthen the state's wildfire management and coordination to better prepare the state against risks of wildfire. The group was composed of the Department of Natural Resources, Division of Forestry, Fire and State Lands, the Department of Public Safety, Division of Emergency Management, and the State Fire Marshal.

Wildfire Prevention and Preparedness

Wildland fire is a cross-boundary challenge, one which no single agency can tackle alone. The National Interagency Fire Center, located in Boise, Idaho, is the hub for coordinating wildfire assets in the US. To effectively accomplish this, the nation is divided into ten areas, each with its own "geographic coordination center." Utah is within the Great Basin Geographic Area, whose Coordination Center is located in Salt Lake City.

Successful coordination is achieved through effective agreements and local collaboration. The Stafford Act, enacted in 1988, guides federal agencies in disaster response and enables states to enter into agreements with federal agencies to further coordinate efforts. Utah enters into the Cooperative Fire Management Agreement (CFMA) with all of the federal land management agencies located within its borders. The purpose of this agreement is to improve efficiency by facilitating the coordination and exchange of personnel, equipment, supplies, services, and funds among the parties to this agreement in sustaining wildland fire management activities such as prevention, preparedness, communication and education, fuels treatment and hazard mitigation, fire planning, response strategies, tactics and alternatives, suppression and post-fire rehabilitation and restoration. The CFMA is strengthened by the Statewide Annual Operating Plan that establishes daily business practices on an annual basis. Utah has five interagency dispatch zones. Each has a Zone Annual Operating Plan to ensure follow-through to the commitments found in the CFMA. The plans spell out local implementation of those commitments.

The Utah Division of Forestry, Fire and State Lands (FFSL), housed within the Department of Natural Resources has statutory responsibilities found in Utah Code 65A which allows FFSL to enter into agreements with local governments enabling all emergency service public entities within Utah to support the wildland fire effort locally and nationally with clear responsibilities regarding procurement, use, and reimbursement. This is effectively managed within the Fire Business Program and allows FFSL to reimburse local governments for their response to eligible fires of any jurisdiction.

FFSL is the lead wildland fire agency for the State of Utah and has primary wildland firefighting responsibilities on state and unincorporated private lands. Their management of the Cooperative Wildfire System (CWS) is based on the principle of risk reduction wherein the state will become the lead agency through delegation, including financial obligation, for large and extended attack wildland fire (catastrophic fires) in exchange for local government taking proactive measures including initial attack for wildfires within their jurisdictional boundary and implementing prevention, preparedness, and mitigation actions that are proven to reduce the risk and costs of wildland fire in the long run.

Coordination with local, federal, and private partners

Multi-agency coordination is routine when it comes to wildland fire management in Utah. Rarely does a wildfire burn on only one jurisdiction, mandating the need to coordinate cost and effort across property lines. The Utah Wildfire Oversight Committee (UOC) and its subcommittees work year-round to ensure Utah is well served by its dedicated interagency wildland fire workforce.

With these agreements, operating plans, and committees in place, all lands in Utah receive wildland fire protection from the closest forces, regardless of agency jurisdiction, with seamless response and strong financial agreements.

Wildfire prevention and preparedness education

Wildfire Prevention Program FFSL's prevention program works to reduce the occurrence of unwanted, human-caused wildfires by focusing on collaborative wildfire prevention education and engagement efforts in high-risk, high-occurrence areas across the state. State office and area-level staff, including the Prevention and Fire Communications Coordinator, Statewide Prevention Specialist and Fire Wardens, coordinate with interagency partners, local fire departments, and counties to increase public understanding of what causes wildfires and what behaviors or

actions can prevent these ignitions in order to bring about positive behavioral change.

Fire Sense is Utah's public education campaign aimed at increasing awareness of activities that start wildfires and sensible things to do to prevent them and reduce human-caused wildfires. The mission of Fire Sense is to get Utahns to take personal responsibility for wildfires. Through this initiative, Utahns have successfully reduced human-caused wildfires by over 67% over the last three years. Using billboards, social and traditional media, public service announcements, partnerships, and various other methods has helped us achieve this. In the future, we aim to further educate people through a more targeted distribution of our message and by using new behavior change techniques to help them take personal responsibility for fire safety. While campfire safety is important and the national Smokey Bear Campaign has been successful, roadside fire starts continue to be the leading cause of human-caused fires across Utah, and a larger effort to make meaningful changes is needed.

Recommendations

- More state government and partner resources to increase public awareness using targeted messaging for success in prevention, with a large return on investment.
- Prioritizing and addressing wildfire prevention issues should also be embraced by respective land management agencies, neighboring state jurisdictions, and federal agencies to better align messaging and increase awareness.

Preparing and coordinating public messaging

FFSL is engaged in wildfire preparedness through a scripted messaging program and through collaboration with state, local, and federal agencies. Outreach increases as the wildfire season nears and is in full force. Targeted messaging is used to reduce the most common causes of wildfires, such as roadside starts, agricultural burning, vehicles, and target shooting.

Coordinating seasonal alignment of wildfire messages with other state and local agencies is beneficial. By working together, different agencies, organizations, and communities can create more consistent and impactful messages about wildfire risk, preparedness, and prevention. This leads to better public understanding, increased awareness, and ultimately, reduced wildfire risk. Recently, FFSL partnered with Rocky Mountain Power at a Wildfire Awareness Event. This focused on the importance of community planning, tips for residents for wildfire preparedness and the seasonal

outlook.

Recommendations

- A joint campaign/event with Fire Sense and Be Ready Utah to focus on community preparedness in the event of a wildfire.
- A UDOT and Fire Sense joint campaign/event to address the issues of roadside starts in areas that see a high number of these types of starts.

State-supported evacuation planning

While the state provides significant support and guidance, the primary responsibility for developing and implementing specific evacuation plans often rests with local governments (counties and municipalities) and individual citizens. Communities are encouraged to leverage all available resources to create tailored evacuation plans that address their specific wildfire risks. When developing evacuation plans, communities should consider the following recommendations:

- Conduct a risk assessment to better understand the hazard and the potential impacts of a wildfire on the community.
- Understand the demographics of the population in the community to include those with vulnerabilities (elderly, access and functional needs, etc.) and those with pets/animals for which additional plans may need to be considered.
- Encourage individual and community preparedness for those who live in communities that may need to be evacuated due to the impacts of wildfire. The Be Ready Utah and the Living with Fire campaigns are great resources for promoting personal preparedness efforts.
- Develop the evacuation plan, ensuring collaboration and input from all potential response agencies and stakeholders.
- Define the decision-making process and triggers for ordering an evacuation. Clearly identify who has the authority to make the decision to evacuate and outline the criteria that will be used to determine when to take such action.
- Establish interagency coordination to ensure all agencies (fire, law enforcement, emergency management, public works, etc.) involved in an evacuation plan understand their role and know how to communicate with each other.
- Develop, promote, and exercise clear plans for alerting and communicating with communities that might face an evacuation due to wildfire. Beyond the initial evacuation alert, ongoing public information will be critical to keep the community informed of the ongoing situation.
- Consider when the action of sheltering in place might be a better option than evacuation.

- Establish, maintain, and provide awareness of clear evacuation routes for the community while ensuring that there are primary and secondary ingress and egress options.
- Coordinate with law enforcement to plan for effective traffic management.
- Identify and establish shelters and convey information regarding shelter locations for those who are evacuated. Include considerations for animals (small and large).
- Include re-entry considerations in the evacuation plan.
- Local government agencies should plan to conduct an after-action review to determine the effectiveness of a wildfire evacuation. This review should include action items to consider for future updates to the evacuation plan and process.

Firefighter recruitment and retention

Recent strides by the Utah Legislature and the Governor's Office to place state firefighters in a competitive pay scale are recognized and are making a huge difference in the ability to both recruit and retain firefighters. Wildland firefighting and mitigation are career choices that leverage continual learning and experience to meet challenges safely and effectively, and we are in constant competition with federal agencies, other states, fire departments, even insurance and utility companies and private industry for this specialized knowledge, skills, and abilities. FFSL also relies heavily on federal funding to equip and operate many of the programs at a successful level. More work is needed as our competitors are several measures ahead of the state in pay and benefits, and continue to adjust, so work here does not end; it is a continual process. It should also be noted, however, FFSL does not have many wildland firefighters considering the scale of Utah. FFSL employs about 300 red-carded personnel, including non-fireline personnel, of which half are Operations Center firefighters. In fact, many areas struggle to properly and safely staff a fire engine, and specialized experience positions are difficult to fill, such as helitack. Fully half of our entire operational firefighting resources (Operations Center) are self-funded, and many are seasonal employees who do not receive state benefits. This is a major area for improvement to strengthen the state's wildfire management and coordination to better prepare the state against the risks of wildfire.

Another issue of significant concern is with volunteer firefighters. Fire departments are the primary initial attack workforce across the state. The majority of the fire departments consist of volunteer firefighters. Volunteerism is down significantly even in Utah," the volunteer state," with life and job demands there are wide

opportunities to improve in this area. This is especially true when it involves wildland fires, which often are longer-term time commitments for fire departments as compared to other shorter-duration emergencies.

FFSL provides support to the local fire departments each year, with state and federal funding through the Cooperative Fire Program. FFSL received 73 Fire Department Grant requests totaling \$714,158.02 and awarded \$354,204.57 of Forest Service VFA funds and \$105,099.09 of Utah State fire cost recovery funds to 67 fire departments. Activities include training costs and the purchase of personal protective equipment. FFSL also received the Infrastructure Investment and Jobs Act (IIJA) funds of \$66,212.00 that supported six additional departments. FFSL certified approximately 4,483 Utah structural firefighters to fight wildland fire, and placed two firefighting apparatuses with fire departments and one apparatus with the Division through the Federal Excess Property Program (FEPP).

Recommendations

- Provide FTEs with benefits for specialized experience positions.
- Provide benefits for seasonal firefighters.
- Become less reliant on federal funding for fire program positions. Several critical positions are either partially or fully funded through funds received from the USFS.
- Consider appropriate funding for FFSL's current Operations Center wildland firefighting resources including Lone Peak Hotshots, Alta Hotshots, Twin Peaks Initial Attack Crew, Dromedary Initial Attack Crew, Thunder Mountain Fuels Crew, Engines 395, 491, 492, etc., which are self-funded, leading to high costs and heavy reliance on working on federal fires and projects to cover costs. This operational force currently runs as an enterprise fund model in which excess revenue covers administrative program costs. These operational resources are forced to seek billable activities to ensure all expenditures are paid. This model has worked, but due to increases in administrative and overhead costs, the ability to be competitive, especially for state mitigation projects, is strained. These operational resources have been forced to rely on the more lucrative fire and severity/pre-position work assignments in other states, where they can bill and collect enough revenue to keep the program funded. (This is discussed further in the section regarding Resource Availability.)
- Consider funding and expanding the above operational resources across the state to properly staff fire engines reliably and increase Utah's firefighting and mitigation capability.
- Consider funding and further building Utah's fire aviation and heavy equipment programs.

- Remain competitive with industry pay structures and incentives so that a career with the state of Utah is attractive to top talent.
- Incentivize current and new volunteer firefighters. Some examples based on some to-be-defined minimums of actual participation in both training and response could include:
 - Supplying state benefits
 - Tax credits for volunteer responders
 - Tax credits for employers with employee volunteer responders
 - Pay for response
 - Assist volunteer fire departments with costs (this could be especially important in light of the potential elimination of federal grant funding)

Community planning that helps identify key values and ways to mitigate fire risk

The Wildland Urban Interface (WUI) Program within FFSL provides educational tools and community preparedness programs for home and property owners to help them understand and prepare for wildfire risks. Staff work with fire departments and fire districts to leverage available funds through grants and the Cooperative Wildfire System (CWS) participation commitment funds to strategically implement projects that reduce the entity's local wildfire risk. The FFSL Fire Program also administers many federal grants to support wildland fuel mitigation projects on private, local, and state agency land as well as to support fire departments. These grant programs are reliant on federal grant funding administered through the US Forest Service, State and Private Forest program. Current federal budget requests to Congress completely eliminate USFS State and Private Forestry, and greatly reduce other federal forestry funding, putting ongoing fuel mitigation and risk reduction in the WUI in jeopardy, and threatens job security for state and local personnel who implement these projects.

- Utah's Wildfire Risk Assessment Portal (UWRAP) uses the best available science in fire behavior and risk modelling to identify areas of high wildfire risk along with the density and distribution of highly valued resources, in order to both inform and prioritize mitigation efforts where they are most impactful. The "Risk Explorer" application within UWRAP monitors the progress mitigation projects have on lowering the risk level as seen by a change in the fuelscape used to model risk. While UWRAP represents the best available modelling, it should be noted that continual maintenance and its associated costs are needed to keep the data up-to-date and accurate. To understand risk, the portal and its information are intended to be utilized at a community

scale or larger, not at the individual parcel or lot level, due to the older but readily available and affordable 30-meter pixel resolution remote sensing technology that UWRAP uses. There are newer and developing remote sensing platforms and technologies that could increase the accuracy of the models, albeit at increased cost.

- Utah's Communities at Risk (CARs) database, first established in the 2001 National Fire Plan, was recently updated. FFSL reviewed and evaluated through ground truthing, at a community scale, overall fire occurrence risk, structure hazards, fuel hazards, human and economic values, and protection capabilities to rate community risk. This coarse-scale look assists FFSL with determining the scope of the WUI challenge and prioritizes mitigation efforts in the communities with higher risk scores. Utah has over 700 communities at risk.
- FFSL empowers communities to organize, plan, and take action on issues impacting community safety by providing subject matter expertise during Community Wildfire Preparedness Planning (CWPPs). In most cases, FFSL staff take the lead in the organization of community and county-level CWPPs or equivalent.
- FFSL works with fire departments, fire districts, cities and counties to leverage available funds through state and federal grants and Utah's CWS Participation Commitment (PC) dollars to implement projects to improve response and reduce the local wildfire risk.
- FFSL provides education to communities on community preparedness programs such as Firewise, local Ready, Set, Go evacuation planning, and Utah-specific landowner mitigation messaging. FFSL is standing back up Utah Living with Fire, with our interagency partners. This will provide input to coalesce information on what Utah homeowners can do to prepare and protect their property from wildfire. Recognizing that wildfire is a necessary and vital part of Utah's many ecosystems and that the intertwined keys are as outlined in the National Cohesive Strategy – creating fire-adapted communities through building resilient landscapes to provide safe and effective wildfire response, where ultimately wildfires are not a catastrophe but part of life.
- FFSL provides education to landowners and communities through individual wildfire hazard mitigation lot assessments, which are typically followed up by FFSL-organized community chipping events leveraging state and federal funding to encourage homeowners to mitigate their fuels. The recent passage of House Bill 48 creates a substantially larger workload that has yet to be funded. In addition, FFSL performs mitigation work on private, local, state, and even federal lands, creating fuel breaks and performing fuel reduction

activities around communities. Of caution here is that mitigation work will likely drop significantly due to both the need for more lot assessments, and the massive reduction and possible elimination of federal grant programs in this area.

Recommendations

- Consider base funding employees, including support with vehicle authorization credits. Additional funding for equipment support, such as radios, firefighting gear and IT equipment, would benefit community preparedness programs from a state level. The current funding structure leads to a lack of staffing flexibility, planning and undermines the ability for employees to perform their job functions, including work in the communities.
- Continue identifying and working with private landowners while prioritizing projects for effectiveness.

Fuels treatments on public and private lands in and around communities to reduce hazardous fuels and create fuel breaks

FFSL supports and engages in fuel treatments on public and private lands to reduce the risk of wildfire. This involves various techniques such as thinning, mechanical treatments and prescribed fire, which can help prevent wildfire and reduce the risk of wildfire intensifying and spreading. The goal of these treatments is to create defensible space in communities and fire-resilient landscapes. Funding for these types of projects is a combination of state and federal funding. While the Utah Legislature has been supportive and strategic in providing funds for these types of projects, the funding falls short in supporting large-scale projects, and the WUI program within FFSL is reliant on federal funding to support staff positions and projects. The funding of staff with federal dollars limits the availability of staff planning and the flexibility of staff.

During FY24, hazardous fuels were reduced on a combined total of 746 acres through SFA, HFR and CWDG grant funding. Over 18,000 acres were treated by FFSL statewide through state and federal funding. FFSL employees also provided education at 49 public educational events, attended 35 community meetings and hosted 115 community chipping events.

Recommendations

- Lessen reliance on federal funding to accomplish fuels treatments
- Obtain ongoing state funding to support staff positions and fuel treatments

- Continue identifying and working with private landowners while prioritizing projects for effectiveness

Availability and readiness of firefighting infrastructure and water supply

Recent large fires in southern California started as wildland fires, quickly became WUI fires, and then became more properly classified as urban conflagrations and have highlighted numerous systemic limitations even in the most firefighting resource-dense area of the world.

Water supplies, no matter how robust, are not a match for tactics typically used by municipal fire departments when operating in the extremely fast-moving and chaotic environment of an urban conflagration. This issue has been represented by some California fire chiefs as “too many straws in one cup.”

Independent firefighting actions and focus indicate a strong will to try to protect individual structures as part of the normal culture, instead of understanding the broad picture and the need to be strategic to limit the spread to many more structures. A good example of this is a Type 1 Structure engine plugged into a hydrant with its deck gun trained on a fully involved structure, as shown in many news clips. Where the motives are noble, there is no effect on stopping the forward progress of the main overall urban fire, and limited resources and water are wasted where strategically there are new structures downwind taking embers and starting on fire that could be saved and limit main fire progress. The situation requires improved situational awareness and demands a disciplined triage where every house is properly classified as just more fuel, some more flammable than others, and focus with limited firefighting and water resources should be on preventing further spread to new structures rather than trying to put the current structures on fire out, a difficult proposal for firefighters conditioned to fighting structure fires. Even more strategically, even under the best of scenarios, under extreme conditions, firefighting resources are too little and too late; mitigation must take place well before a fire, and evacuation planning and practice are key. Indeed, an ounce of prevention is worth a pound of cure. Utah could have a similar wildfire-caused urban conflagration; the Brianhead and Dollar Ridge Fires of 2017 serve as cautionary tales.

Early detection of wildfires is crucial for effective containment and response. AI-based technology can play a role in faster deployment of resources, and can prevent significant damage and lead to suppression dollar savings. The use of technology solutions for early detection is becoming more common to allow for the

identification of fires before they spread and become out of control. Investing in AI-powered solutions like satellite monitoring, ground-based heat detection monitors, cameras and drones can increase the likelihood of containment and help prevent large acreage fires.

FFSL administers grants to support wildland equipment and training for fire departments. These programs, “State Fire Assistance” and “Volunteer Fire Assistance,” are reliant on federal grant funding administered through the US Forest Service, State and Private Forest program, which are potentially going to be greatly reduced or eliminated, putting fire departments and FFSL at risk. FFSL’s Fire Department Assistance Grant Program provides technical and financial assistance to Utah fire departments to improve their ability to safely and effectively provide fire protection and manage hazardous material incidents.

Recommendations

- Work with Utah State Fire Chiefs Association, FFSL, DEM, US Fire Administration, National Fire Protection Association and others to develop an urban conflagration training and practice, especially for urban, but also rural and wildland fire organizations, to train critical skills of taking strategic approaches and importance of triage when shifting from a few structure fires and threats to a sustained urban conflagration to best use all resources including water supplies in a chaotic environment.
- Secure state funding to lessen reliance on federal funds that support fire departments.
- Continue supporting and issuing grants to support fire departments.
- Invest funding into expanded aviation support that provides real-time situational awareness such as Colorado’s Multi-Mission Aircraft or CAL-FIRE’s Fire Integrated Real-time Intelligence System aircraft, which provide real-time infrared imagery and high-definition mapping to Incident Command and ground operational resources during the heat of the day, allowing understanding in an otherwise chaotic environment of a WUI fire/urban conflagration along with “regular” wildfires.
- Ensure that state forestry agencies have a voting role in any national “Fire Intelligence Center” such as proposed in the Fix Our Forests Act.
- Consider AI-based solutions for the early detection of wildfires.

Defensible space around state buildings and schools

Across the state, this is largely a non-issue for most state buildings, by virtue of either location or typical layouts, but there are buildings that currently do not meet

defensible space standards. Examples include warehouses and structures within State Parks. Where there are funding challenges with performing these activities and hardening structures against ember intrusion, it is important to note that the State should be setting the example for the public, highlighted by the recent WUI Modification bill, (HB48), with both expectations of meeting and enforcing the WUI code, and setting higher fees on homeowners who do not mitigate their own risk in the high-risk WUI.

Recommendations

- The Utah State Fire Marshal's office will work with the Department of Natural Resources, Division of Forestry, Fire, and State lands, the Division of Facilities Construction and Management, school districts, and other partners to ensure adequate defensible space and code compliance, as it relates to fire prevention, in all schools and state buildings.
- The state should set an example for the public with its implementation of defensible space around its facilities.

Coordinated approaches to mitigate hazardous fuels on private, state, and federal lands

Utah partners with private landowners, HOAs, communities, and fire departments to educate on wildfire risk and mitigation, and help mitigate fuels using both state legislative funding and federal grant money when available. We collaborate and partner with our federal land management agencies to perform large cross-boundary fuel mitigation treatments, including prescribed fire whenever we can, to make more effective and efficient steps to reduce risk. Understanding the historic and natural role wildland fire has played within Utah, with the fire-dependent ecosystems we live within, is important when addressing concerns. Prescribed fire is one way to achieve a number of cost-effective goals related to fuels treatments for both reducing hazardous fuels and is also recognized as the best and most effective way to address the ecological role of wildland fire within Utah as well. The use of prescribed fire in Utah must be significantly increased to rise to the challenge, and while our state and federal agencies have been able to engage in and employ prescribed fire on a local and private level, prescribed fire has been limited in Utah. This is largely because of how Utah defines liability in the use of prescribed fire. Other western states, including Oregon, California, Washington, and Colorado, have modified their definition of prescribed fire liability to provide relief, and some have established prescribed fire claim funds, but importantly, have established certified burner education and credentialing programs. This has increased their use of

responsible prescribed fire and helped limit the amount of escapes from private land from field/debris burning.

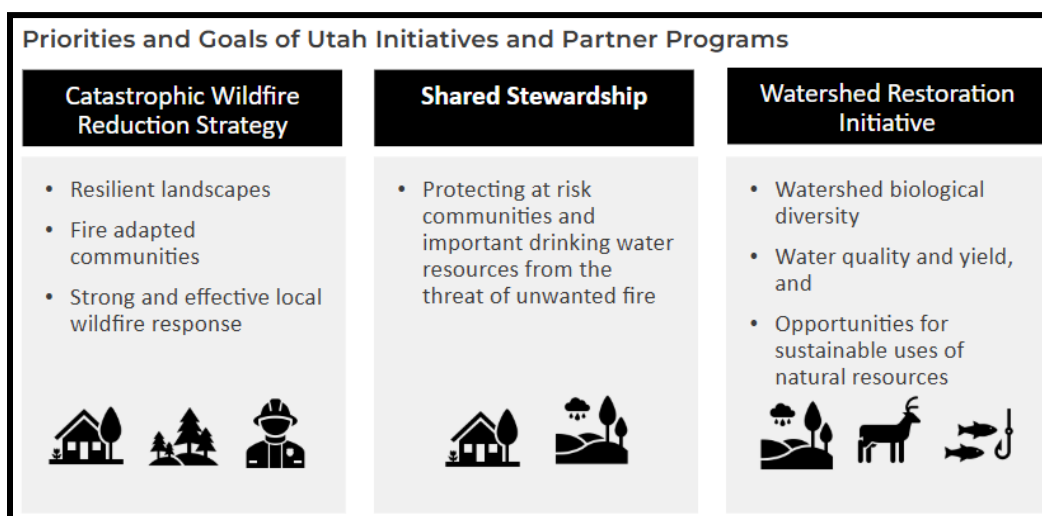
Of concern as well is the indicated move to a single federal Wildfire Service from the federal land management agencies, as this will certainly affect coordinated approaches for fuel mitigation between jurisdictions, and in particular, the use of prescribed fire, as the primary qualified practitioners are in the fire workforce. It should be noted that good fire management is good forest and land management; the two are completely overlapping. Careful attention by Utah will be critical to how a potential National Wildfire Service, divorced from the federal land management agencies, is enacted to ensure that holistic wildland fire management, including fuels and forest management, is conducted efficiently and effectively, not just a mega fire department of emergency responders.

Other areas of coordinated approaches to fuels management include:

- Shared Stewardship – Utah has been very proactive with the Shared Stewardship program. Even with the loss of federal financial support for this program, the Utah Legislature still sees this as a critical opportunity and continues to commit state funding.
- Collaborative Projects – Landscape-scale projects are often completed using combined collaborative funds aimed at restoring and improving Utah's high-priority watersheds. Although it should be noted that most Watershed Restoration Initiative projects focus primarily on wildlife habitat improvement, not fuel reduction.
- Good Neighbor Authority (GNAs) – Utah participates in hazardous fuel reduction projects through GNAs. This often includes prescribed fire and fuel mitigation projects on federal land near communities at risk. Recent developments in Washington indicate a desire to greatly increase the use of GNA to accomplish a wide variety of activities on federal land, but especially around timber and recreation. Concerns revolve around funding through timber and recreation revenues. In Utah, most timber has limited commercial economic viability, and federal recreation sites do not bring enough revenue in to cover the costs of management. Appropriated dollars would still be needed for successful management. Additionally, these focus areas of timber production and recreation, while important, do not directly address the wildfire crisis in Utah or priorities for limited staff and capacity within the state.
- Federal Competitive Grant Opportunities – Federal grants are critical and fund a majority of the mitigation work that Utah is able to accomplish. These grants include Regional Hazardous Fuels Reduction (HFR), Western States Fire

Managers Wildland Urban Interface State Fire Assistance (WSFM WUI SFA), BLM Community Assistance, Landscape Scale Restoration (LSR), the Community Wildfire Defense Grant (CWDG), and NRCS and BOR grants.

- State Grant Opportunities – State grants are becoming more critical, especially now that federal funding is in doubt, to accomplish important mitigation work. These grants have included the Catastrophic Fire Reduction Initiative (CAT Fire), Wildland Urban Interface Prevention, Preparedness, and Mitigation Fund (WUIPPM), and Comprehensive Watershed Restoration Fund (CWR), as well as the future Utah Wildfire Fund (UWF).



Recommendations

- States, including Utah, need to be heavily involved, from their Forestry and Fire agencies to the Governor's Office, in the crafting of a single federal Wildfire Service or perhaps single federal land management agency, to ensure that the best possible solution is enacted for both efficiency and effectiveness from both a fire management stance and a land management stance.
- State agencies approached to enter into various kinds of GNA project agreements must be cautious about whether such projects are both in the interest of the state and not a liability, financially or otherwise.
- Consideration should be given to federal dollars regarding state and private forestry, and where FFSL's federal grant funding is delivered. The Utah Legislature and Governor's Office should prepare for the need to both prioritize and fund efforts in mitigation, prevention and preparedness moving forward to avoid disruption in the momentum. This would necessitate state agencies to work to reduce their reliance on federal funding, but also provide

pathways to maintain critical firefighting resources for the state while also continuing to address fire prevention and prioritized mitigation activities important to Utah.

- To increase both the use of prescribed fire in the state and the education of landowners using fire as non-career fire practitioners, the Utah Legislature and Governor's Office should work with entities such as the Utah Prescribed Fire Council, FFSL, and the state's University System to address prescribed fire liability in state law and create a certified burner program to educate landowners on the responsible use of prescribed fire and a certification standard to attain reduction in liability in the event something goes wrong.

Priority areas for hazardous fuel reduction

With regard to priority areas for hazardous fuel reduction, there is a great opportunity to improve collaboration and efficiency as various agency priorities are different.

- Many individual federal and state agency efforts are siloed as a result of internal priorities and the need to acquire funding. The USFS "Wildfire Crisis Landscapes" is a prime example, where that agency's national prioritization effort prioritized two landscapes in Utah without state or local input, or even input from the Forests themselves. This has resulted in an energy, effort, and funding focus in places that do not completely match Utah's priorities. Similar issues lie with other agencies as a result of their internal funding processes and requirements. The state's CARs database, together with UWRAP's "Wildfire Hazard Potential and Structure Exposure Scores," should be used to prioritize infrastructure and communities for targeted mitigation projects. 2025's HB48, WUI Modifications, requires mapping high-risk WUI, followed by ground-truthing via individual lot assessments, which in turn would potentially give more granular abilities to prioritize risk across the state.
- The state of Utah has had its own issues with a convergence of personnel capacity, funding and funding strings attached (federal grants with particular caveats). Where we can get work done depends on the availability of willing landowners and cost/funding alignment issues, not necessarily aligning with high wildfire risk areas and state priorities. Because of the reliance on competitive federal grant funding and the application process being project-specific, planning efforts are often wasted, and landowner trust is eroded while pursuing additional willing landowners and project proposals that can take years to complete, or that never advance through the competitive process.
- Federal funding and contracting processes and systems are broken. The amount of time and effort for the major federal land management agencies to

contract fuel mitigation work is burdensome and hinders the process of getting work done. This has led to federal agencies using Good Neighbor Authority as a workaround process to pass funding and contract management of Forest Service lands to the state of Utah to accomplish projects. Similarly, this is the primary reason the BLM and USFS use WRI to move federal funding to the state. Federal agency funding is problematically tied to a single federal fiscal year, which more often is not approved by appropriations until late in their fiscal year, and even then, the BLM and USFS contracting arms are unable to complete contracting on a timely basis, much less within the fiscal year. This puts the contracting and liability onus on the state, the Division of Wildlife Resources for WRI, but does both eliminate the fiscal-year funding issue, and allow timely contracting through the state. This is a workaround for the federal agencies that could be reduced by fixing their systemic issues.

Recommendations

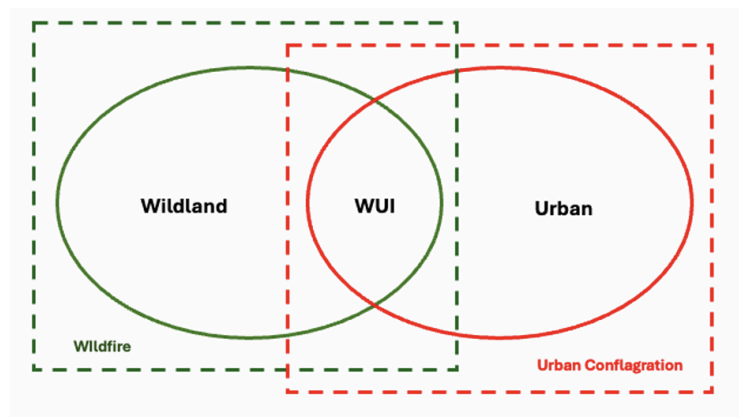
- Models that could improve the concentration of efforts on Utah priorities include encouraging funding streams that focus on mitigation projects prioritized with broad collaboration. This broad collaboration would be local communities, fire departments, government agencies, state agencies, and federal agencies working together to identify local focus areas that prioritize efforts across all jurisdictional boundaries based on wildfire risks. This should be first done at the local interagency dispatch level and then rolled up to a statewide level, similar to what was done with the original National Fire Plan rollout before individual agency funding pathways once again separated the agencies. Funding from multiple agencies should be dedicated to these cross-boundary focus areas, which then creates economies of scale from both a financial sense and an effective wildfire risk reduction sense. In addition, this would also work to solve landowner trust issues from the state perspective, because we could focus recruitment of willing private landowners, knowing the funding is already committed to fuel reduction efforts in that area. From a capacity perspective, long-term commitments to specific focus areas could allow for building more capacity. For the state, recognition of the need to build capacity in mitigation, including funding, FTE, and vehicle credit commitments, is necessary. This would help in keeping and attracting the necessary workforce to reduce wildfire risk to Utah's communities.
- Utah should work with the federal government, Congress, and the administration to tackle the problem of land management agencies' fiscal funding limitations as well as the need to reform the federal land management contracting, grant and agreement programs while this opportunity exists.

- Metrics used by all agencies for fuel mitigation continue to be total acreage-focused. However, this is not a good metric to use for mitigation. A predictable and realistic result is targeting the “easy” acres of large and inexpensive fuel reduction treatments, rather than the more difficult and more expensive fuel reduction treatments that may make a bigger impact on risk to Utah communities and infrastructure. For example, emphasis should be placed on the most important acreage as it pertains to risk reduction, following priorities of life safety, then property conservation. Ten acres of expensive fuel reduction around critical infrastructure, such as a communication site or around a community, should be weighed as more significant than 1,000 acres of less expensive fuel reduction far away from communities benefiting mule deer or sage grouse.

Issues of greatest concern in a large-scale wildfire incident

Across the state of Utah, the issues of the greatest concern in a large-scale wildfire event include:

Wildland Urban Interface (WUI) fires and those that become urban conflagrations are the most costly and destructive of all fires. Heavy investments in educating homeowners and assisting in mitigating risk to structures by both hardening the structures from ember vulnerabilities and reducing fuels around the structures to reduce



fire's potential to spread creating structure survivable/defensible space are cost effective when considering the enormous costs of the pound of cure during suppression, which is often too late and in the worst conditions. While Utah encourages individual responsibility, the reality is that when a fire occurs, we all, all of our cooperators and partners, local to federal, respond to the threat to life and property, often at great cost to the taxpayers of both Utah and the US. We all share the risk and the burden, the wildfire crisis demands new approaches and strategies from all of us.

Recommendations

- Agencies would be wise to invest in the Utah Living with Fire campaign to raise awareness of wildfire risk to homes in the WUI and steps to be taken to mitigate those risks.
- Similarly, even though the cost of home hardening and creating survivable/defensible space makes a massive difference in the costs and success of firefighting activities, the costs are not borne by the same entities. Individuals are responsible for the costs of hardening and mitigating fuels around their property, which can be prohibitively expensive to them, but the enormous costs of suppression are borne by the local, state, and federal government. The non-suppression costs of wildfires are borne by these same entities, and from an increasingly difficult insurance industry – perhaps the costs of homes. Much of our state work on private land relies on a small number of willing private landowners. In addition to advances being made as result of the WUI Modifications (HB48), to encourage more WUI homeowners to address their wildfire risk problems, local, state, and federal governments could capitalize on successful strategies to encourage individual private investment, similar to alternative energy, by making available tax credits for individuals for the cost of home hardening materials and mitigation work.

Resource prioritization at the local and national levels

The availability of critical resources for large-scale wildfires is often a concern. Assets such as large airtankers, air-attack platforms, helicopters, infrared mapping platforms, Hotshot crews, Incident Management Teams, and all types of specialty single resources are quickly drawn down by national priorities. These priorities are made with little regard to individual states and are often impacted by first-come-first-serve resources. Even federal partners locally have little control over nationally prioritized assets such as Hotshot crews or Type 1 and 2 helicopters. These are often sent to ongoing large wildfires rather than being held for new or developing wildfires as part of a complex balancing act nationally. Fire activity near large population centers can and do deplete the availability of these assets to lower population areas like Utah for initial attack and even WUI fires, increasing the likelihood of escaped wildfires, damage, and certainly cost. Future demands are likely to increase the competition for resources.

Resource availability at the local level needs to be better coordinated within the state and local partners in the event of a large-scale wildfire. Currently, there is no one statewide system that allows for the availability forecasting of wildfire resources in the event of a large-scale wildfire. In addition, local agencies are often competing

and modifying resource availability within different platforms, WebEOC, an Emergency Management Platform, Interagency Resource Ordering Capability (IROC), based upon the desirability of the deployment at various levels. FFSL must prioritize resources statewide based on severity and need in the state. A resource availability gap exists based on the various systems, the various resource ordering capabilities for wildfire resources and misconceptions at times that Utah's needs must be prioritized over any other requests, including any Emergency Management Assistance Compact (EMAC) requests.

Recommendations

- Continue developing FFSL's aviation program with legislative and the governor's support, allowing it to have control over its own resources, which are prioritized for the state of Utah and especially initial attack response.
- Taking advantage of the recently signed interstate compact also allows the state to access other states' own aviation and other firefighting resources.
- Additional state investments are advised for all firefighting resources, but particularly those high-demand resources that allow the state to retain control and ensure resource availability for Utah first. These resources can also be utilized, and costs reimbursed, by federal partners within the state, and if conditions allow, for other states or national efforts, thereby reducing overall cost to the state in the end.
- Airtankers can be extremely helpful in both initial attack and problematic large-scale wildfires if properly used, but certainly are the most visible of high-demand assets. Future efforts to secure such assets, perhaps in conjunction with other states, are recommended, as are aerial intelligence/reconnaissance/air attack aircraft. Continuing to fund and increase and improve a robust aerial firefighting force with the current two Type 1 helicopters and one Type 3 helicopter with helitack crew for initial attack is essential to providing Utah with the initial attack resources it needs to help prevent catastrophic fires.
- Although there are suppliers and lobbyists very interested in selling expensive platforms such as Blackhawk helicopters to the state, a contracting model of vastly more efficient and effective platforms, such as our current contracted Type 1 and Type 3 helicopters, is a much better and responsible way to accomplish Utah's wildfire goals.
- FFSL's operational ground handcrew and engine resources (Operations Center – formerly known as Lone-Peak resources), particularly Type 2IA crews and engines that are currently self-funded, necessitate availability on a first-come, first-served basis. It would be in Utah's interest to appropriate funding to these resources to have the ability to retain control for the state without risking the

financial viability of the resources. Reimbursement of these resources when assigned to non-Utah state fires would continue to offset the cost to Utah and could be deposited in the Utah Wildfire Fund. In such a way, this program and its resources could be expanded in the future to increase firefighting capability within Utah, and overall costs reduced to the state in the end.

- State and local agencies must coordinate on the availability of resources to be prepared for a wildfire event. This coordination includes transparency for resources available statewide, in a unified system, and a prioritization of resource drawdown based on preparedness level and severity statewide.

Post-fire threats, such as flooding, drinking water quality, and mitigation costs

Various state and local agencies contribute to post-fire efforts, particularly for erosion and flood control and drinking water quality, including seeding after fires and reforestation for forest and watershed health. The costs can be enormous, and where DEM pulls together Hazard Mitigation Grant Program (HMGP) grants, more money is needed for communities to be able to mitigate post-fire threats and also effectively rebuild. Federal land management agencies struggle to fund comprehensive post-fire rehabilitation and stabilization efforts on their land as well, which in largely federally owned land states like Utah often have negative results to adjacent communities. Partnerships and financial relief from all levels are critical to recover from these disasters. Rebuilding conflicts often arise over costs to rebuild and to build according to code to avoid a future repeat of the same scenario. Recognition of this conflict is key to leaning in from state and federal levels to assist in larger efforts to mitigate costs to homeowners, insurance companies, and local governments in order to make homes affordable and safer to avoid future wildfire threats.

Recommendations

- Consider streamlining post-fire rehabilitation efforts to reduce costs and to avoid conflicts with other agency agreements.
- Consider funding post-fire rehabilitation at a level that allows for effective rebuilding to be accomplished, to make for safer communities, and to avoid future wildfire events.
- Work with Congress and the Administration federally to ensure that adequate funding and pathways are available to federal agencies to mitigate post-fire threats on their own land.

Utah stands at a critical juncture in wildfire management, facing an evolving landscape of increased risk driven by drought, historical land use practices, and growing populations in the WUI. The state has made significant strides in prevention, preparedness and mitigation, but the path forward demands a continued, multi-faceted approach.

Effective wildfire management in Utah hinges on robust prevention and mitigation efforts, particularly given that a significant majority of wildfires are human-caused. Campaigns like Fire Sense are vital in educating the public on safe practices for campfires, vehicle use, and recreational activities. Beyond public awareness, strategic fuel management through thinning and prescribed burns is crucial for creating more resilient landscapes, although the scale of this problem requires sustained and large-scale implementation and dedicated funding.

While Utah's firefighting agencies are highly effective, suppressing 93% of wildfires on initial attack at 10 acres or less, the increasing intensity and size of fires necessitate ongoing advancements in suppression capabilities and technology. Furthermore, long-term recovery efforts are essential to rehabilitate burned areas, mitigate post-fire hazards like mudslides and erosion, and restore critical ecosystems and water quality.

Ultimately, safeguarding Utah's communities, natural resources, and vital infrastructure from the escalating threat of wildfires requires a unified commitment. This includes continued investment in prevention, cutting-edge suppression techniques, and comprehensive post-fire rehabilitation. By fostering a culture of preparedness, promoting responsible land stewardship, and leveraging scientific advancements, Utah can build greater resilience and navigate the complex challenges of a future with more frequent and intense wildfires.