



Wildfire Resilience Workshop Series

Summary of Workshop 1: The US Forest Service's Effective Implementation Strategy for Expected Federal Funding Surge

On November 3-4, 2021, the Aspen Institute Energy & Environment Program and The Nature Conservancy convened a hybrid in-person/virtual workshop in Washington, D.C. – the first in a series on U.S. wildfire resilience. This convening brought together experts to discuss the expected surge in federal funding for wildfire resilience and the ability of the U.S. Forest Service (Forest Service) to develop and implement a comprehensive strategy in partnership. Participants included Forest Service and U.S. Department of Agriculture (USDA) leadership, conservation partners, state and tribal government representatives, among others. All participants recognized the potential historic nature of a surge in funding and shared a mutual interest in helping the Forest Service successfully deliver on the promise. This summary captures some of the key topics of discussion. While this workshop focused on the Forest Service's role in implementation, the takeaways may be relevant to and applied to other federal agencies and non-federal stakeholders who will share the responsibility for implementing surges in funding.

PLANNING FOR A FUNDING SURGE

Investments in fire suppression have long dwarfed investments in pre-disaster mitigation work like fuels reduction, leading to an unsustainable trajectory of managing wildfires and current approach to wildfire resilience, community safety and healthy ecosystems. The recently passed Infrastructure Investment and Jobs Act (IIJA) (also known as the bipartisan infrastructure law), the proposed Build Back Better, and Fiscal Year (FY) 2022 appropriations combined could deliver a significant influx of funding for wildfire resilience. The IIJA allocates approximately \$7 billion for the Department of the Interior (DOI) and the Forest Service for federally managed lands (almost half for wildfire)¹, \$1 billion for the Federal Emergency Management Agency (FEMA) for its Building Resilient Infrastructure and Communities (BRIC) program,* and funding for other wildfire-related work. The Build Back Better bill proposes \$27 billion for the Forest Service, a majority of which would address wildfire and climate resilience.

¹ The Bipartisan Infrastructure package was enacted (Public Law No: 117-58) shortly after this convening on November 15, 2021.

* FEMA funding infrequently gets used to address wildfire risk and resilience. There are several reasons for this, including match limitations and restrictions on burning slash piles. FEMA is not a wildland fire agency, but it could be beneficial if there was flexibility to direct some FEMA money through state and private forestry to be put to work on wildfire risk.

These proposed funding levels represent historic increases in investments in natural resources. The last major investment was in 2009, with the American Recovery and Reinvestment Act, when many federal agencies were unable to absorb the funding influx. Since the November meeting, the bipartisan infrastructure bill has been enacted representing historic levels of funding. The Forest Service is now challenged with absorbing and directing the funding quickly and effectively. In response to congressional expectations, the Forest Service is planning to report a clear path forward and any results in a relatively short time frame.

In September 2021, the Forest Service established an internal Wildfire Risk Reduction Infrastructure Team (WRRIT) to develop a ten-year strategic implementation plan to address wildfire resilience across the U.S. WRRIT is working to:

- 1) clearly understand the funding and legislative requirements (including congressional direction), and how to prioritize hazardous fuels, prescribed fire, and workforce development projects;
- 2) identify the internal needs to operationalize the incoming surges in funds, specifically related to capacity, internal policy, infrastructure, technology, and business practices, among others;
- 3) develop strategic plans and designs to address wildfire resilience at scale while providing flexibility for geographic differences; and
- 4) socialize and communicate the science and scenario planning, as well as how to engage with employees, partners, and others to get their input and communicate the need for action.

UNDERSTANDING THE OPPORTUNITY

Participants agreed that there must be paradigm shift to effectively improve wildfire resilience. This should include a shift from managing land to managing human relationships with land, building a new system and new approach to landscape resilience, and ensuring that communities and tribes living in and near high-risk areas be part of planning, implementation and monitoring — i.e., building (or re-building) local fire cultures. A major goal with the IJJA funding is to increase wildfire resilience and reduce wildfire risk by effectively creating more resilient post-fire landscapes and communities, thereby moderating fire behavior and ultimate risk.

There are other values that partners identified as outcomes as well, such as greater inclusion in project and process design and equity in access to information and opportunities. Equity considerations are relevant across the entire system, in how communities are prioritized, who benefits from improved water or air quality, who benefits from increased job opportunities, and who is included in the decision-making process.

Participants agreed that the development of resilient landscapes must include strengthening broader ecological integrity, improving the health of the landscape, and supporting proximate communities (economically and socially). To this end, the Forest Service will aim to tell a cohesive story explaining how

the funding will help accomplish these outcomes across the landscape over the next ten years. This includes exploring the co-benefits associated with addressing wildfire resilience including lower emissions of particulate matter and carbon dioxide from wildfires, healthy watersheds, improved fish and wildfire habitats, and recreational and economic opportunities.

Workshop participants recognized the inherent tensions associated with the forest and fire related provisions in the IJJA, including: 1) a need to implement projects quickly to meet political pressures and congressional expectations, 2) a recognition that early projects may not represent the long-term shift needed, and 3) the need to concurrently develop a long-term plan for addressing wildfire resilience over the next decade. To address these tensions, discussions focused on the following categories:

PRIORITIZATION & PHASED APPROACH

National Assessment of Priorities

With the funding influx, many agency partners and members of Congress will push for activity in select regions and districts, yet others may advocate for less active management and attention. Historically, Forest Service leadership shared that the agency has allocated its appropriations through a consistent national process that attempts to normalize distributions across regions/units. Under the National Fire Plan, for example, each area received a portion of the increased hazardous fuels allocation, and work on the ground was diluted as a result. However, even with the significant levels of resources available through IJJA, the Forest Service cannot realistically treat every at-risk acre, further emphasizing the need to develop a national investment strategy that prioritizes landscapes at the highest risk of wildfire.

Agency leadership was clear that this national investment strategy will build on the good thinking, public processes, and work that has already been done. Participants agreed that there is no need to reinvent strategies that have proven successful, such as existing quantitative risk assessments developed by partners, collaboratively re-worked priorities in state forest action plans, good neighbor agreements, shared stewardship agreements, and other efforts. The Forest Service plans to leverage this existing work, because showing action and early successes will prove vital.

Prioritization Tools – Firesheds

Forest Service leadership explained that firesheds² will be a major component of the initial prioritization process, yet many participants expressed concern about using the fireshed model as the base map or as the only prioritization tool. For instance, congressional constraints may not align perfectly with fireshed model parameters. In addition, many states are neither familiar with nor using the “firesheds” concept and few have adopted the prioritization tool as part of their State Forest Action Plans. Workshop participants suggested that location in critical firesheds could be a criteria and a preference, but perhaps should not be a definitive requirement. Instead, participants offered that there could be multiple screens used to identify priority locations, and the agency should find ways to move between and sequence

² [Development and Application of the Fireshed Registry](#). (*Firesheds are containers that delineate areas where fires ignite and are likely (or not) to spread to communities and expose buildings.*)

screens based on context. Additional prioritization screens could include watersheds and collaborative planning (e.g., Community Wildfire Protection Plans, shared stewardship agreements, forest action plans).

Phased Approach - Years 1-2 and Years 3-10

The USFS is considering implementing a phased 10-year strategic implementation plan that divides activities into two clear phases: Phase 1 (FY 22-23) and Phase 2 (FY 24-31). Phase 1 will focus on work that is landscape-scale (or can be built out to get there) and located in high-risk fireheds. As such, these projects would be designed to address critical infrastructure exposure at scale, and ideally demonstrate community readiness (defined as having completed NEPA, the social license to operate, and a collaborative foundation). During this Phase, the agency will be looking at landscapes where regions have already implemented collaboratively designed, long-term plans for landscape-scale work in top-tier fireheds, such as Collaborative Forest Landscape Restoration (CFLR) Program projects, Joint Chiefs' Landscape Restoration Partnership projects, Tribal Forest Protection Act projects and others. These could be projects that are underfunded or require immediate added capacity to fulfill accomplishments.

USFS regions may also be tasked with identifying work that has evolved through other local or regional prioritization tools. The Forest Service will aim to quickly identify a small set of cross-boundary landscapes that collectively meet the goals for this work thus enabling the agency to demonstrate it can deliver on expectations, establish and maintain critical partnerships, and leverage multiparty learning and knowledge gains.

Phase 2 is not expected to mirror Phase 1, given evolving agency understanding, science, and internal/external engagement. Planning for the second phase will involve reaching out to internal and external constituents to determine what is needed to deliver a full paradigm shift.

Some participants suggested that how the Forest Service engages partners and implements work in Phase 1 could play an important role in helping or hindering future collaboration. Many partners are prepared to engage in prioritization, planning, design, implementation, and monitoring.

Equity Considerations

Advancing greater equity will also likely play into the criteria for selecting priority landscapes. For example, starting with projects that have collaborative history might make sense, but those are often places with a history of investment and an active partner environment (e.g., universities, NGOs, and other active stakeholders). Focusing solely on these high-capacity areas, despite being high risk, can leave behind certain places and communities, including those that have been historically underserved. Participants agreed that there must be a balance between projects that are ready to go (in places that have capacity, created by the existing system) and investments in those places that could benefit from increased capacity and outcomes. If criteria and prioritization screens do not explicitly include equity considerations, the need for expediency will likely lead to investment in the usual places, projects, and groups, and not result in the needed paradigm shift.

LANDSCAPE ACTIONS & FINANCIAL SUPPORT

Potential Operation Delineations

While participants recognized the need for a national strategy and narrative, they also stressed the importance of recognizing local contexts and variation. Different places have different ecological and social communities and variable potential fire risk reduction solutions. Some suggested that the Forest Service must recognize those differences by devolving some of the governance and authority structures to enable action to be taken together.

One way to plan for fuel management and fire response is to use [Potential Operation Delineations](#) (PODs). PODs are fire management planning units that are defined by boundaries like roads and ridge tops, within which risks can be quantified. While there is significant funding targeted for POD adoption, it is not yet a widely known practice. The agency is making strong investments into the development of PODs and those will likely have to be brought into the agency's work in years 1-2.

Implementing the surge in funding will likely require recognizing local context and variation and PODs could be a way to increase the application of prescribed fire and sustaining investments.

Prescribed Fire

Greater investments in prescribed fire, from training and planning to application and monitoring, are needed to really see a difference in fire behavior. A lack of leadership and incentives to prioritize prescribed fire limit its use. Prescribed fire can also be challenging. For example, in California, there is a stronger focus on fire suppression and air quality requirements make it difficult to schedule prescribed fires. The consequences of a prescribed fire getting out of control also creates significant risk aversion among Forest Service staff.

Sustained Funding Beyond IJA

Because reducing wildfire risk in the long-term will likely require decades of work, participants discussed the need for a long-term strategy to sustain financing of wildfire risk reduction activities. There is precedent that surges in investment can be sustained; the National Fire Plan in 2000, for example, saw a surge in investment for hazardous fuels management that then stayed relatively consistent in the budget afterward. That outcome is not a given, however, and other innovative financing strategies (e.g., carbon revenues) may be needed to ensure long-term projects are sustained over time.

WORKFORCE CAPACITY

USDA Staffing Declines

The USDA workforce (reflecting broader government-wide trends) has declined substantially in recent years. Meanwhile, the Forest Service has also experienced historic shifts in staffing from declines in programs to the growth of fire suppression. This includes declines in the fire workforce needed to match

the scale of the wildfire resilience challenge. Even with an influx of funding to address wildfire resilience through the IJJA, and potential Build Back Better, the Forest Service does not currently have the skills and capacity needed to achieve future work alone. Participants discussed how the agency should aim to build a workforce appropriate for current and future needs, rather than simply rebuilding an antiquated model based on the past. There is a tension in the Forest Service between building an organization to deliver the urgent wildfire-related services expected of the agency, while recognizing the huge gap in workforce for delivering other basic services the public expects (e.g., recreation).

Forest Service leadership stated that they have already started scaling up business operations functions (e.g., Human Resources, contracting and grants & agreements support) to prepare for the needs anticipated by the IJJA. However, it may be difficult to fill positions quickly with qualified people as agencies compete for talent and procedural requirements belabor hiring processes. Participants agreed that the Department and the agency will need to improve the efficiency by which they fill positions in order to quickly implement on-the-ground projects.

Prescribed Fire Workforce

Participants agreed that workforce capacity is a significant challenge for implementing prescribed fire for the Forest Service. In the middle of fire season, suppression tends to trump all other activities. Holding back a portion of the workforce to conduct prescribed burns could be an option, however there is concern that this approach may result in political backlash stemming from the perception that resources are being shifted away from wildfire emergencies. Piloting a middle ground, such as holding back a burn boss or two as opposed to whole crews, would serve to increase understanding around how such an approach may work.

Participants offered that many partners (e.g., NGOs, tribes, and states) are well positioned to fill gaps in the agency's capacity for prescribed burning. To absorb the funding influx, the Forest Service said that they will actively consider ways to share this specific set of skills and capacity among partners. This could be done by mapping out the needs and capacities of partners to collectively source the necessary components of readiness that will set the work up for success. Participants acknowledged that sharing resources on fire suppression is common, but less so on risk reduction efforts. Coordinating with partners could also benefit the agency because partners can generally hire contractors more quickly.

Industry Capacity

It is important to note that wildfire risk reduction activities also rely on the capacity of the forest products industry. Industry can play the role of removing material off the forest and utilizing products in innovative ways. However, too often the material is of low or no value. Participants noted that industry capacity takes time to build, and supply may need to be guaranteed. However, there needs to be more discussion about how to remove material that simply has no value and the investment needed to remove that material as a service rather than for profit.

Current Labor and Workplace Trends

Participants recognized that building capacity at the agency level, and among partners and industry, will take time. Current workforce trends and labor shortages will likely exacerbate these capacity challenges. There is also a change underway in the country regarding how people work following the pandemic (i.e., leaving standard jobs, rethinking working in offices, willingness to work for lower wages), which has created an even more challenging environment for the agency and others to find people for the hard work involved in fire risk reduction.

PARTNERSHIPS

Partnerships will be essential to accomplishing the immense challenge of reducing wildfire risk and creating resilient landscapes and communities. The tremendous work that Congress is looking to the Forest Service and other agencies to deliver on is an opportunity to embody shared stewardship and shared responsibility. Specifically, how the Forest Service will leverage existing partnerships to achieve these goals was a key topic of discussion. Recurring themes included the need for transparency and consistency, more flexible authorities, and improved transition management of Forest Service staff.

Consistent Principles

A common theme during small group discussions was that the Forest Service can struggle with partnerships. Some partners have felt the relationships have been one-sided, as opposed to mutually beneficial arrangements. Participants discussed whether it would be worthwhile for the agency to establish clear partnership principles, such as: What does it mean to be transparent? What does it mean to be accountable? What does shared decision-making space and shared risk look like? Partnership principles could provide consistency throughout the agency, from the agency's Washington Office to the district level, particularly for partners who engage with the agency in multiple ways and places. Principles could also help partners better understand how to show up, what is required of them, and how to engage moving forward.

Authorities and Flexibility

Capitalizing on and leveraging the expertise of partners may necessitate more flexibility in traditional process and policy application. It could also necessitate a need for new authorities. The Forest Service does not always have the authority to partner in the ways the agency talks about partnering. One example raised by a participant was partnering with counties — many of which are facing economic challenges. To work in the wildland-urban interface, counties would benefit from the ability to hire local people and build local skill sets. In addition, current cost-share and match requirements often exclude smaller organizations, and those with fewer resources. Likewise, there are equity concerns about competitive grant or award processes, which can exclude potential partners. These approaches to partnership may warrant policy review.

Complex Processes

Navigating the agency’s contracting system can be difficult. Contract administration, compliance, recordkeeping, reporting, accounting, and liability insurance are hard for potential partners, especially those with limited capacity. Some partners shared that it can be hard to advance local innovative approaches that end up getting stalled as they run through layers of bureaucracy. Other complex processes raised included wildfire liability insurance, cancellation and termination clauses in stewardship contracts, and reimbursements instead of upfront funding. Agency standards (e.g., multi-party stewardship agreements, revisions to template arrangements) and national level approval processes should be nimbler.

Personnel Transition Management

Inconsistent personnel can pose an additional challenge for partners. Detailees and personnel lost to fire assignments represent barriers to relationship building. Partnerships rely on building trusting relationships, which can be challenging when Forest Service employees move frequently.

As surges in funding materialize, participants agreed that the agency needs to assess its internal policies and systems to see where it can reduce hurdles to partnerships. There may be a need for partner liaisons — which could be inside or outside the agency — to help navigate partnership challenges. More broadly, the agency may need to pursue a partnership modernization effort, like the recent forest products modernization effort.

ENGAGEMENT & COMMUNICATIONS

Regardless of the extent of funding allocated to wildfire resilience the Forest Service is working to enhance engagement as it develops and socializes its wildfire resilience strategy. The WRRIT team has already shared its initial goals for internal/external engagement which includes setting a strong foundation of information and relationships, informing the agency’s strategic implementation plan (e.g., through regional and targeted roundtables), ensuring the right kind of work is conducted in the right places (through local processes), promoting transparency and accountability (e.g., metrics, monitoring frameworks), and advancing long-term project sustainability.

It will also be critical for the Forest Service to socialize this work on both a national and local scale. For instance, while there are many places where fuels reduction work has been ongoing for a long time, it has not been done at the size and scale currently envisioned. Getting the “buy-in” from communities will be important, especially for communities that may never have experienced smoke from prescribed fires that last multiple weeks or from other fuels reduction activities at scale. While national messaging and communications is critical, local efforts will be vital to help communities understand the need for this work and accept what actions may be needed to achieve desired outcomes.

The Forest Service aims to use the entire engagement spectrum, from informing to empowering. The engagements will be both internal and external: employees need to be engaged and empowered as much as partners and communities do. The Forest Service is considering co-convening initial conversations with stakeholders (e.g., state roundtables, tribes) to gather feedback to filter back up to the national strategy.

One proposed method of achieving this goal of better engagement is for the Forest Service to work with partners in developing local workshops by the summer of 2022.