

EXECUTIVE SUMMARY

On January 27, 2021, the Biden Administration issued an Executive Order on Tackling the Climate Crisis at Home and Abroad. In his remarks prior to signing the EO, President Biden said that he was "signing today an executive order to supercharge our administration's ambitious plan to confront the existential threat of climate change," and highlighted last year's wildfires as his first example of how communities are experiencing this threat.

Over millions of years, fire has shaped the landscapes of North America. Almost all of the continent's ecosystems are fire adapted, meaning they need fire at regular intervals to be healthy and resilient. However, we know that wildfires each year cause loss of life and property and have enormous direct and indirect costs. The risks and costs of fire increase each year, causing ever greater harm: One recent study estimated that the 2018 wildfire season in California alone caused \$150 billion in direct and indirect economic losses—and the 2020 fire season was worse. These risks and harms are often disproportionately borne by historically underserved and excluded communities, often low-income people of color, for whom recovering from wildfire and associated economic and public health concerns can take much longer.

But while the risks and costs of these fires have grown, our country's investment in the fundamentals of wildfire resilience have been left behind. Addressing the ever-increasing threat of wildfires represents a critical down payment toward efforts to address climate change and will also impact economic recovery and environmental justice. A paradigm shift is needed to address imminent needs—requiring a surge in investment in forest restoration and community resilience, new strategies for workforce and program deployment, cooperation across ownership boundaries, and complementary strategies to drive down costs and support continued maintenance of resilience investments over time.

Investment in wildfire resilience should be considered a public good, rather than a land stewardship conundrum. This work must occur at a pace and scale that is dramatically faster and more coordinated across the landscape than we have seen in the past. A paradigm shift would recognize the enormous externalities and costs, direct and indirect, of not addressing this challenge at the needed pace and scale.

The USDA Forest Service (Forest Service) has developed new science and risk-mapping tools that are a game-changer in helping policymakers and land managers identify the highest priority acres for treatment to restore fire to the land and mitigate ever-growing risks to people, communities and ecological resources, including carbon, water and wildlife. According to the Forest Service, their models suggest that targeted treatments on about 51 million acres of federal, state, tribal and private lands would significantly reduce exposure in the highest risk areas.

If we were to address this challenge over the next 10 years and with an average cost of \$1,000 per acre treated, a minimum investment of approximately \$5 billion to \$6 billion per year is needed for the highest priority work to reduce wildfire risks and resources needed for community adaptation and infrastructure investments.

This paper examines potential building blocks for a fundamental paradigm shift in investment and program coordination, with a focus on federal programs. Our goal is to create a menu of program options for policymakers to build toward fully funding the cost of top-priority work over the next 10 years. Beyond the 10 years, additional investments will be required on an ongoing annual basis to maintain forest and wildfire resilience. These programs also support the workforce expertise and infrastructure that will be needed to successfully deliver the work at the pace and scale to get ahead of this challenge.

This paper identifies core federal programs that already support wildfire resilience as a priority outcome; complementary programs that target related work or provide threshold support for planning, workforce development and science; and programs that are currently underinvesting in wildfire risk reduction but could be tapped under a federal government contribution to a whole-of-society approach to support wildfire and climate resilience work. The paper also identifies options for financing structures that facilitate partner, private capital, and other nontraditional investments in wildfire resilience at scale and across ownership boundaries. Government leaders and partners must employ a more strategic and coordinated approach to deploying these programs to reduce wildfire risks and invest in wildfire resilience in ways that contribute to addressing climate change, advancing economic recovery, and supporting historically underserved and excluded communities.

These building blocks include:

- **The Forest Service's** Hazardous Fuels Program; Collaborative Forest Landscape Restoration Program (CFLRP), State and Private Forestry Programs, Forest Products and Wood Innovations Programs, Vegetation and Watershed Management Program, Water Source Protection Program, Land Acquisition Programs, Planning Program, and Conservation Corps programs.
- **Department of Agriculture's** Joint Chiefs' Landscape Restoration Partnership, Natural Resource Conservation Service conservation programs including the Regional Conservation Partnership Program (RCPP), Rural Development Programs, and multi-agency Science and Research programs.
- **Department of the Interior's** (DOI) Hazardous Fuels and Fuels Management Programs; Land Acquisition Programs; and Conservation Corps programs; Bureau of Indian Affairs' Reserved Treaty Rights Land Program and Tribal Resilience Program; Bureau of Land Management's Forest and Woodlands Management Program.
- **Cross-Departmental Funded Initiatives** including the Promoting Ecosystem Resilience and Fire Adapted Communities Together (PERFACT) Partnership and Community Planning Assistance for Wildfire (CPAW) Partnership.
- **Federal Emergency Management Agency's** (FEMA) Building Resilient Infrastructure and Communities Program (BRIC) and Hazard Mitigation Grant Program Post Fire associated with Fire Management Assistance Grants and U.S. Fire Administration support for Community Wildfire Protection Plans.
- **Department of Defense's** (DOD) Readiness and Environmental Protection Initiative (REPI) and Sentinel Landscapes Initiative.
- **Environmental Protection Agency's** (EPA) Drinking Water and Clean Water State Revolving Funds and Air Quality Program
- **Department of Energy** and other agency infrastructure programs.
- Opportunities for **public-private, private and nontraditiona**l investments that can leverage federal dollars, including through Environmental Impact Bonds/Funds, water funds and direct partnerships, including those that invest in historically underserved and excluded communities.

When evaluating an investment strategy for wildfire resilience comprised of these building blocks, analysis of the return on investment must include the economic value of avoided costs and capture the value of social, economic and ecological cobenefits. Those co-benefits include:

- job creation
- supporting community economic development
- advancing environmental justice
- protecting critical infrastructure
- providing healthy watersheds and water supply
- supporting land conservation and the protection of green space
- restoring wildlife habitat
- providing opportunities for outdoor recreation
- preserving forest and soil carbon
- advancing natural and working lands solutions to climate change

The current strategies and level of investment are not working and are leaving us further and further behind. It is time for bold and urgent action to change the future trajectory for how we manage and prepare for wildfire impacts on our country and our communities.

A paradigm shift toward additional annual investments of around \$5 billion to \$6 billion in wildfire risk reduction and resilience could be included as part of a stimulus, infrastructure and climate change legislative package. Progress can also be made by advancing component pieces through separate policy vehicles.

Having a broad understanding of the benefits of reducing fire risk and restoring wildfire resilience should inform a whole-of-society approach, which requires partnering with local communities, states, American Indian tribal governments, and public and private sectors to achieve priority outcomes. Using the building blocks identified in this report, we can begin to correct our history of underinvesting in resilience and then paying the bill for harm. **It is time to change the paradigm.**

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