Wildfire and Outdoor Recreation in the West

POLICY REPORT
JULY 2023

How Recreationists Can Support a Fire-Resilient Future

Image Credit: Malachi Brooks

OUTDOOR ALLIANCE

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Executive Summary

Wildfires are an undeniable part of the outdoor recreation experience in the western United States and beyond. Although fires and fire danger have always played a role in how recreationists interact with public lands and waters, recent fire seasons have reached a new level in terms of their duration, intensity, and overall impact on peoples' lives and communities. At the same time, wildfire is a completely natural and in many cases essential ecological process in western landscapes, particularly in many forest ecosystems where recreation opportunities abound. Reconciling these two sides of fire—both destructive and restorative—is complex, and requires understanding fire's role on our landscapes and in our culture.

Outdoor Alliance unites the voices of the human-powered outdoor recreation community to protect public lands and waters, our climate, and the outdoor recreation experiences they support. Members of our community experience the impacts of wildfire directly—trips canceled due to smoky air, closures of public lands, degraded trails, lost income, polluted rivers, and more. As these effects become more pronounced in a changing climate, worsening wildfires can feel like an existential threat to the outdoor recreation experience as we know it. Fortunately, there are proven solutions to help mitigate wildfire impacts, and the outdoor recreation community can be a key partner in building support for these solutions across the West.

There is no single cause behind extreme wildfires, and no single solution for mitigating their impacts. Climate change, forest management, development in fire-prone areas, fire suppression, lack of agency capacity—all of these factors contribute to worsening wildfires, and the solutions needed to address them range from building houses with metal roofs all the way to allowing lightning-ignited fires to burn unimpeded in the backcountry when conditions are safe.

With this paper we attempt to disentangle the policy discussion around wildfire and wildfire solutions in western U.S. forests, with the goal of helping the outdoor recreation community better understand why fires have become so severe and what we can do about it, from the local level to Washington, D.C. Key points include:

- Fire is a natural part of western U.S. forests that has numerous ecological and cultural benefits.
- Because of fire suppression, removal of Indigenous burning, logging, climate change, and other changes over the past two centuries, the West is experiencing an increase in large, severe fires that threaten ecosystems and communities.
- Fire has a profound impact on outdoor recreation and the recreation economy, from air quality to forest closures to damage to trails and other recreation resources.
- Mitigating wildfire impacts requires policies and investments at multiple levels of government.

This should include a dramatic increase in the pace, scale, and quality of fuel treatments, particularly prescribed fire, which will affect numerous recreation areas across the West.

- Wildfire policy can and should be advanced in a way that is harmonious with recreation access and conservation goals. This includes incorporating recreation infrastructure into forest health projects, restoring beneficial fire to protected areas, and retaining core conservation laws.

Overall, there is no "no-fire, no-smoke" option in the West, and more fire—not less—is needed to bring our fire environment into balance.

Many of our most iconic recreation destinations—places like Yosemite National Park, the Colorado Front Range, and Idaho's Salmon River—are home to highly fire-adapted ecosystems that rely on fire to thrive. Removing fire from these places is not possible, and attempting to do so ensures that fires will only occur under extreme conditions when fire suppression fails. As frequent visitors to these landscapes, the recreation community has an important voice to guide the policy changes and stewardship actions we need to address increased fire in the West.

Context, Scope, and Caveats:

This paper focuses primarily on wildfire in the western U.S. and primarily in forest ecosystems. While wildfire issues are relevant throughout much of the country, and wildfire plays an important ecological role in other ecosystems like grasslands and shrublands, the extent of catastrophic wildfire in western U.S. forests has an outsized impact on outdoor recreationists due to the high concentration of recreation opportunities in these areas. Because of Outdoor Alliance's longstanding engagement and expertise in federal lands policy, and because human-powered recreation takes place overwhelmingly on public lands, the policies listed in this paper are focused on landscape-level, and to a lesser extent, wildland-urban interface solutions, primarily on federal lands. This represents our organization's focus and is in no way intended to imply that these policy efforts are of greater need than state or local level solutions like fire planning, home hardening, and emergency response.

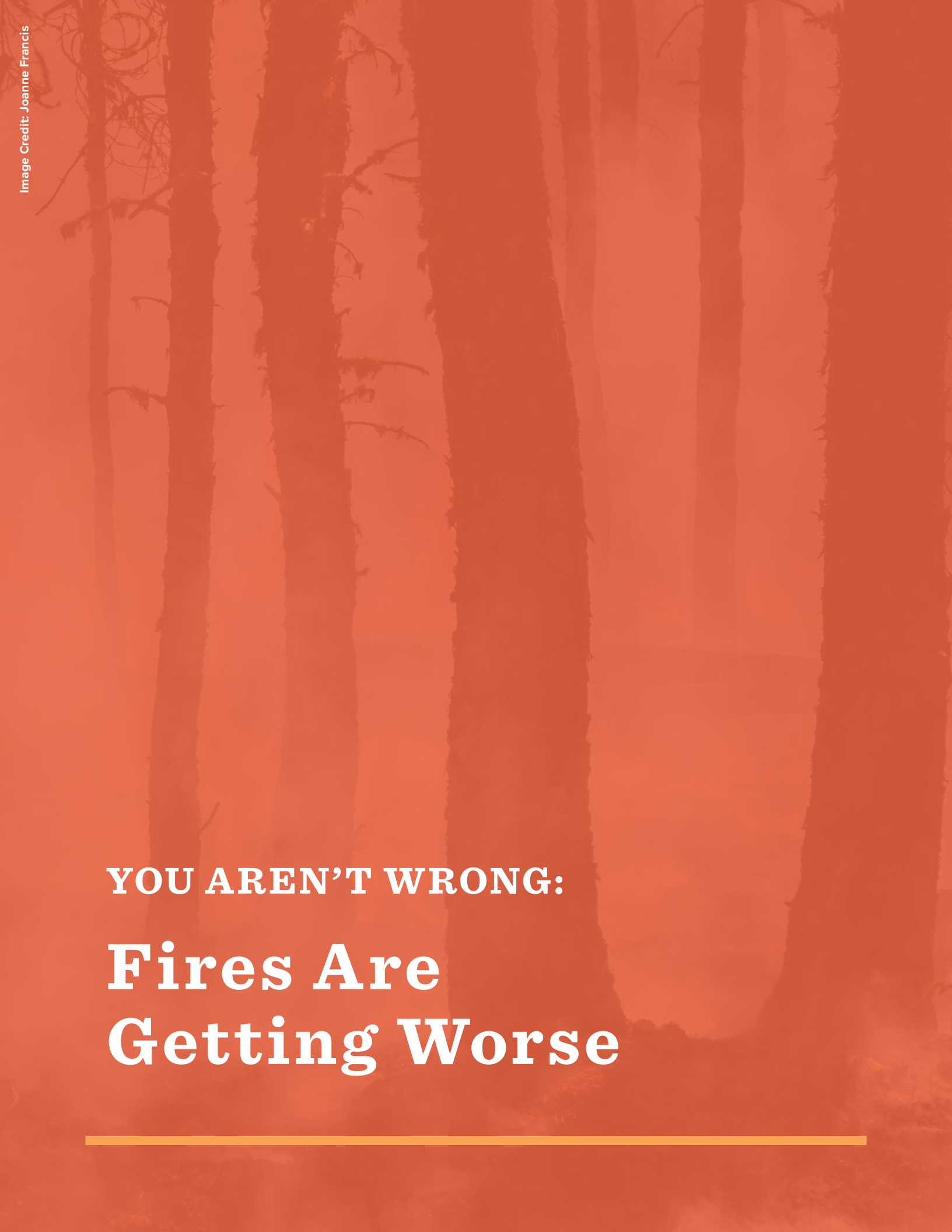


Image Credit: Joanne Francis

YOU AREN'T WRONG:

Fires Are Getting Worse

Wildfire Trends

If you live in the western U.S. or you've spent time there in recent years, you aren't imagining things: wildfire seasons have been getting worse. Over the past several decades, wildfires throughout the western U.S. (and much of globe) have become larger,[1] more severe,[2] costlier,[3,4] and more destructive,[5] and these trends are projected to continue as the climate warms.[6] These trends all have implications for our landscapes, the climate, and public health, and they all amount to wildfire playing an increasingly disruptive role in our lives. Understanding these trends—and the solutions to the wildfire crisis— first requires understanding fire's ecological role on our landscapes, and how our actions over the past two centuries have changed fire behavior and our cultural relationship with fire.

Prior to Euro-American colonization of the West, wildfire was very common and helped shape many of the region's most iconic ecosystems.[7] In California, for example, scientists estimate that approximately 4.45 million acres burned annually throughout the state prior to the Gold Rush.[8] In dry forest ecosystems (common throughout much of the West), many of these historic fires are thought to have been low-to-moderate severity surface fires that removed fuel from the forest floor without killing trees in the forest canopy on a large scale.[9] Multiple actions taken over the past two centuries have dramatically changed wildfire behavior across our landscapes:

- ***Removal of Indigenous fire stewardship.*** Prior to Euro-American settlement, Indigenous peoples frequently lit fires to meet a variety of cultural and ecological objectives. Tribes throughout the country had, and in many cases still have, a deep cultural understanding of fire, and Indigenous burning accounted for a significant portion of overall fire on the landscape.[10] Indigenous burning decreased dramatically starting in the late 1800s following the decimation of Indigenous populations and the suppression of Indigenous burning.[9]

- ***Fire suppression.*** Beginning in the early 1900s, the federal government adopted a series of policies aimed at total fire suppression.[11] These policies effectively removed fire from fire-adapted ecosystems across the West, causing an unnatural buildup of forest fuels to accumulate in the absence of frequent fires and resulting in a fire deficit across many forest ecosystems.[12]

- ***Commercial logging.*** Many forests in the western U.S. have been affected by widespread logging practices that target the largest, most commercially valuable trees that are also the most resistant to wildfire. Logging, combined with reforestation techniques that replanted large portions of the forest landscape in dense plantations, created a more homogenous landscape that left forests increasingly vulnerable to stand-replacing fire.[13–15]

- ***Development in fire-prone areas.*** Over recent decades, there has been an escalation in housing construction and other development in wildland-urban interface areas where risk of structure loss to wildfire is high.[16] By one estimate, there are now ~49 million residential homes in the wildland-urban interface.[17]

- ***Climate change.*** Perhaps the most significant contributor to worsening wildfires, climate change causes extreme fire conditions to occur with greater frequency and intensity. The specific effects of climate change include longer fire seasons, severe droughts, hotter temperatures, extreme winds, and more precipitation falling as rain rather than snow.[18–21]

Together, these factors (and others like insect outbreaks) create an environment that is prone to extreme, destructive fire events outside of what many western forests are thought to have experienced historically.[9] Because of the impact of fire suppression in particular, many modern forests are denser and more structurally homogenous, with higher levels of surface fuels (fuels on the ground such as pine needles, twigs, and shrubs) and ladder fuels (small or medium sized trees that allow fire to climb from the forest floor into the forest canopy).[22] This creates an environment that is ripe for large, destructive fires that cause damage to ecosystems and communities and that place a substantial burden on American taxpayers. As an example, the cost of federal fire suppression activities alone was estimated at $2.5 billion per year between 2016 and 2020.[4]

Wildfire and Healthy Forests

Fire is a critically-important ecological process in most western U.S. forests. Fires that burn within a natural range of conditions (hereafter "beneficial" fire) are important for creating a mosaic of forest conditions ranging from forest openings, to young, early successional forests, to dense stands of mature trees.[23–26] These diverse forest conditions provide important habitat for wildlife,[27] help forests sequester carbon over the long term,[28] and can even help forests store clean water.[29] Beneficial fires, such as cultural burns, also support multiple Indigenous cultural objectives such as encouraging the growth of important cultural plants.[30] Beneficial fires also create heterogeneous landscape conditions that are thought to make forests more resistant to active crown fires.[31,32]

Different ecosystems are adapted to different types of fire, and many require some level of fire to remain healthy. Scientists use the term *fire regime* to describe the type of fire that a particular area of vegetation type is adapted to (the pattern, frequency, and severity of fire). The following two terms are helpful for understanding fire regimes:

- ***Fire severity:*** Describes the effects of fire on the environment (i.e., how much of the pre-fire vegetation was killed). It is usually divided into 3 classes:[33]

  Low severity: Less than 25% tree mortality, limited effects on soils
  Moderate severity: 25–75% tree mortality, moderate effects on soils
  High severity: Greater than 75% tree mortality, extensive mineral soil exposure

- ***Fire return interval:*** The time between fires under natural conditions for a particular location or ecological community. Mean Fire Return Interval (MFRI) is a commonly used metric to describe the average number of years between fires under historic conditions. For example, scientists

estimate that Sierra Nevada mixed conifer forests (common around Yosemite Valley and Lake Tahoe) have a MFRI of 14 years, meaning that on average these forests burned every 14 years prior to fire suppression.[34]

Fire regimes vary widely throughout western U.S. ecosystems. By studying tree ring and fire scar records, pollen sediment and charcoal records, and other resources like historical photographs, scientists can estimate how frequent and how severe historic fires may have been in a particular ecosystem. As a general concept, dryer, warmer forests (ex. Sierra Nevada ponderosa pine) have a frequent low-to-moderate severity fire regime, while wetter, cooler forests (ex. Rocky Mountain lodgepole pine) have a less frequent moderate-to-high severity fire regime.[35–37]

There is considerable scientific evidence that fire exclusion has caused broad changes to forest structure and composition in the western U.S., and that many modern forests are at risk of extensive high severity fire outside of what they are thought to have experienced historically.[9] When these forests inevitably do burn—often under dry, extreme conditions when suppression operations fail—they burn at very high levels of high severity, sometimes over tens or even hundreds of thousands of contiguous acres.[38,39] Although high severity fire was an important part of many historic fire regimes, the scale seen in many modern wildfires is far removed from the process that many forests evolved with over millennia.[22,40,41] Large-scale high severity fires, commonly called "megafires," detrimentally affect water quality,[42] carbon storage,[43,44] biodiversity,[45–47] air quality,[48,49] and other ecosystem services that forests provide. In many cases, these areas will take decades or longer to regenerate as forests if they regenerate at all given the changing climate. Some evidence shows that forests are being converted to shrublands and other vegetation following high severity fire in various areas of the West.[50,51]

Changes in forest conditions following fire exclusion at Bethel Ridge, WA, east of Mt. Rainier, between 1936 and 2012.

Photo Credit: *Top photo: National Archives, Seattle, WA. Bottom photo: John F. Marshall.*

Impacts on Outdoor Recreation

To recap the previous two sections: In the absence of regular beneficial fire, and under a warmer, more erratic climate, modern western U.S. forests are increasingly vulnerable to large, severe wildfires that can damage forests' ability to provide ecosystem services like clean water and are more likely to destroy structures, especially those built in high fire hazard areas. These trends also have pronounced effects on outdoor recreation, some of which are summarized below.

DAMAGE TO TRAILS AND OTHER RECREATION INFRASTRUCTURE

Wildfires, and particularly high severity wildfire, can cause damage to trails and other recreation infrastructure like climbing areas, river access points, and campgrounds.[52] This damage occurs during fires themselves, and also through erosion, hazard trees, and other issues that persist in a post-fire environment. These impacts can be extensive following major fire events and can create a significant funding and capacity challenge for land management agencies, as well as partner organizations that complete restoration work on public lands.[53] The U.S. Forest Service estimates that 1,029 recreation sites were damaged by wildfire in 2020 and 2021 alone on national forests, and that repairing these damages will cost more than $126 million (U.S.D.A. Forest Service, Unpublished Estimate).

In the past five years nationwide, wildfires affected:

- **More than 23,750 trail miles**
- **More than 1,360 climbing sites**
- **More than 1,708 miles of whitewater paddling runs**

These numbers show overlap between wildfires and recreation resources from 2018-2022 and are not intended to imply damage to all of these resources. Data source for trails: Andrew Burrington, OnX. Data source for river miles: Scott Harding, American Whitewater.

CLOSURES OF PUBLIC LANDS

Land managers commonly close access to public lands during active wildfires, in the period following wildfires, and increasingly, during periods of high wildfire danger. Although closures are often warranted in order to protect public health and safety, many are broad and long-lasting, with an unknown end date and without a clear process for reopening lands to the public. These closures greatly limit public use of national forests, particularly in the West, and have curtailed access to many recreation opportunities including boating, hiking, cycling, climbing, hunting, angling, and even snow sports. Examples include:

- Forest Service Region 5 closed all 18 National Forests in California in September 2020 and again in 2021 as a pre-emptive measure.

- Forest Service Region 3 closed public access to all five National Forests in New Mexico for over a month in 2022 due to active wildfires and hazardous fire weather conditions.
- The Plumas National Forest closed the Wild & Scenic Middle Fork Feather River for over two years following the 2020 North Complex.
- The Mt. Hood National Forest closed 168,000 acres for more than two years following the 2020 Riverside Fire and has similarly done so after other fires in 2020 and 2021.

SMOKE

In recent years, smoke emissions during uncontrolled wildfire events have become one of the greatest threats to air quality in the West.[48,49,54] Wildfire smoke contains a variety of harmful pollutants, including fine particulate matter (PM2.5), which causes a number of adverse health impacts including respiratory problems (asthma, chronic obstructive pulmonary diseases), cardiovascular disease (heart attacks, stroke, etc.), pregnancy complications, and even premature death.[55] Recent evidence also shows that smoke from wildfires that burn structures and other man-made infrastructure also contain dangerous levels of heavy metals like lead and zinc.[56] These impacts are especially serious for at-risk individuals like young children, pregnant women, and people with pre-existing conditions like asthma. This all amounts to a serious public health concern that effectively makes outdoor recreation unsafe throughout the worst parts of fire season.

DAMAGE TO SCENIC VALUES

The opportunity to experience scenic landscapes is one of the primary reasons that recreationists venture outdoors. In western U.S. forests, the presence of living mature and old growth trees contributes greatly to the overall scenic integrity in areas where they exist. Widespread high severity wildfire can detrimentally affect these scenic values and decrease the quality of the recreation experience. As an example, trail studies in New Mexico, Colorado, and Montana found that crown fires decreased hiking and biking trips as well as the overall benefits provided to hikers and bikers by recreating outdoors.[57,58]

ECONOMIC IMPACTS

All of the wildfire impacts noted above cause wide-ranging economic harm to recreation and tourism-related businesses, with pronounced effects in areas in close proximity to wildfires or closure areas.[59,60] Wildfire season coincides with peak recreation season in many areas of the West, and wildfires, closures, and smoke can all deter people from visiting public lands, thereby harming local economies that rely on visitors during peak season. Research shows that on average, wildfires reduce National Park visits by about 700,000 per year, and this reduction is disproportionately larger for popular parks with a high level of fire activities.[61] Wildfires also deter campers from visiting camping areas and can cause smoke-related illnesses for campers that do venture outside.[62]

Image Credit: Mason Werner, Yuba Expeditions

Adapting to More Fire

Strategies for Fire Mitigation

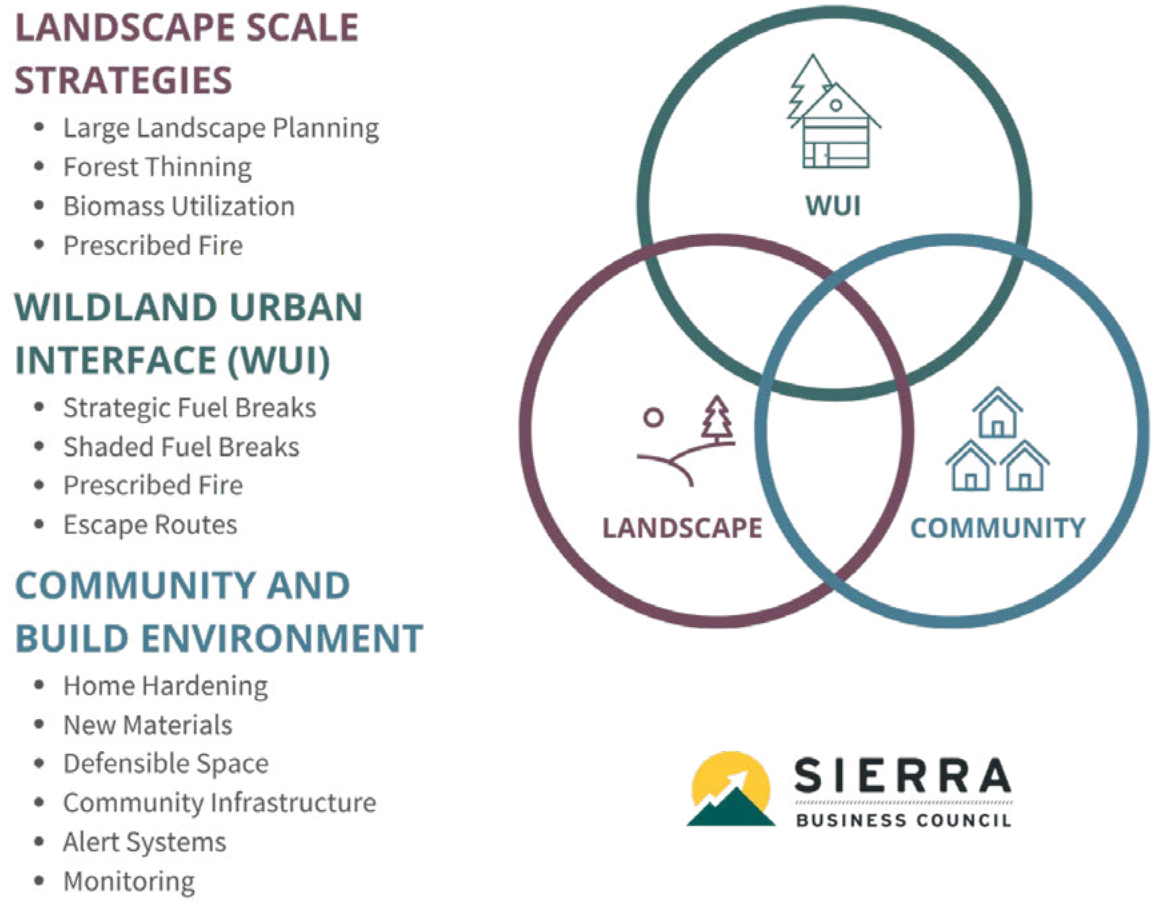
There are multiple strategies for reducing the risk of megafires in the West, while protecting land, communities, and outdoor recreation. The conversation around wildfire can be polarizing, and policymakers sometimes conflate or misapply strategies in a particular situation.

The following three categories describe different types of wildfire mitigation strategies:

1. ***Community-scale strategies***: These include strategies like home-hardening, defensible space, community zoning, and emergency response intended to decrease the risk of direct harm to life or property within or directly adjacent to a developed area.

2. ***Front country and wildland-urban interface (WUI) strategies:*** These include strategies like fuel breaks, mastication, and forest thinning designed to aid fire suppression efforts in preventing a wildfire from entering a community.

3. ***Landscape-scale strategies:*** These include strategies like prescribed fire, managed wildfire, and forest thinning designed to moderate fire behavior on a landscape scale.



These three categories help identify the scale and context at which a particular wildfire mitigation strategy will be most appropriate and most effective. For example, the issue of homes burning down in the wildland-urban interface (a community and WUI-scale issue) is different from—but connected to—the issue of old growth forests being lost to high severity wildfire (a landscape-scale issue). In this scenario, investments in home hardening might be the most effective strategy for preventing structure loss in a wildfire, while landscape-scale prescribed burning might be the most effective strategy for protecting old growth forests. A holistic approach to wildfire adaptation in the west requires significant investments at all three levels. The National Cohesive Wildland Fire Management Strategy, a national strategy to address wildfire impacts across all lands, takes a similar approach to identifying wildfire management goals.[63]

Understanding Fuel Treatments

Outdoor Alliance works most closely on policies affecting federal public lands. With this context, we have provided more information on several strategies for *fuel reduction*, or removing trees, shrubs, and other forest biomass that provide fuel for wildfires. This is the primary way land managers like the Forest Service work to address wildfire resilience on federal public lands. As a caveat, explicitly highlighting fuel reduction here is not meant to imply that this is the only effective, or even the most effective way to mitigate the impacts of wildfires on forests and communities. For example, building and retrofitting structures with fire resistant materials, in combination with clearing vegetation from around homes, are among the most effective strategies for preventing structure loss during wildfires.[64–67]

The three strategies listed below, along with other methods like biomass chipping and mastication, are collectively referred to as “fuel treatments.” Addressing wildfire resilience in western U.S. forests will require a substantial increase in the use of all three of these tools.

Successful fuel treatment in the footprint of the 2021 Bootleg Fire in southern OR. The area in the foreground of the photo has been thinned and prescribed burned.

Photo Credit:
John F. Marshal

ECOLOGICAL FOREST THINNING: In many settings, mechanically removing trees is an effective strategy for returning forests to a stand structure that is more reminiscent of historic forests and more resilient to stand replacing fire.[68,69] We use the qualifier "ecological" to differentiate thinning projects that are designed to have a beneficial impact on forest health over industrial forestry practices like clearcutting that are driven primarily by economic considerations. As a general principle, thinning treatments (also called "mechanical treatments") are most effective, long lasting, and ecologically beneficial when they retain larger canopy trees and are designed to mimic natural fire effects, especially when they are coupled with prescribed fire.[70–73] Because of widespread logging that occurred across the West over the past century, and because agency timber management objectives do not always support wildfire resilience goals, forest thinning can be controversial topic.[74,75] In many circumstances, logging slash and other residual materials commonly left on site following thinning projects can contribute to high severity fire. For these reasons, and also because many areas are inaccessible to thinning operations, it is highly unlikely that wildfire resilience in the West can be achieved through mechanical thinning alone.[22,76] Outdoor Alliance is most supportive of thinning projects that are designed to protect or enhance recreational resources and other ecosystem values like clean water. We also strongly support planning efforts such as forest collaboratives and forest plan revisions that help to ensure thinning projects are designed in a way to meet the objectives of multiple stakeholders, including recreationists.

PRESCRIBED FIRE: Prescribed fires are intentionally lit under preplanned conditions in order to meet ecological and cultural objectives like improving wildlife habitat or reducing the risk of high-severity fire. Prescribed fire can remove the surface fuels and smaller ladder fuels that have the greatest influence on fire behavior and can be applied in steeper more remote areas where thinning is not an option.[72,76] Prescribed fire is often done in combination with mechanical thinning and is considered highly effective for reducing fire severity.[72,77,78] When done at scale, prescribed fire can be the most cost-effective forest restoration tool.[79] Prescribed fire is greatly underused, especially in the West, due to a long list of barriers to implementation, which include inadequate workforce capacity, lack of incentives for land managers to plan and implement prescribed burns, lack of dedicated funding for prescribed fire, perceived risk among land managers and the public, issues with permitting for smoke emissions, challenges with weather windows, and more.[80,81]

MANAGED WILDFIRE: Managed wildfire, also called "wildfire managed for resource objectives," is a wildfire response strategy where land managers allow naturally-ignited wildfires to burn within a pre-determined area under pre-evaluated conditions under the close supervision of a qualified fire management team. Like prescribed fire, managed wildfire can make forests more resilient to stand replacing disturbance and can provide other ecological and social benefits.[29,82–84] Managed wildfire has long been used successfully in Wilderness areas and in the National Parks, but it is less common in front country areas, and many older Forest Service land management plans do not explicitly allow for managed wildfires outside of Wilderness.

Restoring wildfire resilience to western forests will require a dramatic increase in the use of prescribed fire, managed wildfire, and forest thinning, along with other fuel reduction tools. By one estimate, only 45% of Forest Service lands that would have historically burned were treated annually between 2008 and 2012, leaving a substantial backlog of untreated lands and contributing to a fire deficit across national forests.[85] This same data shows that in the western U.S., excluding acres burned by characteristic wildfire, this number is just 16% of historic levels (Nicole Vaillant, Personal Communication). Although the rate of treatment has increased somewhat in recent years, increasing pace and scale of restoration to ecologically significant levels will be a substantial change in the way that public lands forests are managed and will require significant capacity building on the part of federal agencies and partners. These levels of treatment are, however, possible to reach, and in some cases, they already exist in southern states like Florida, where more than a million acres of prescribed fire occur annually.[86,87]

Increasing the use of prescribed fire and managed wildfire is not without risk or controversy, and both have experienced social and political pushback in recent years. The Forest Service's prescribed fire program has a 99.84% success rate, meaning that escaped prescribed fires are extremely rare, but nonetheless, they do happen occasionally and there are examples of escaped prescribed burns becoming destructive wildfires.[88] In 2022, an escaped prescribed burn in New Mexico contributed to the Calf Canyon/Hermits Peak Fire, which became the largest and most destructive wildfire in that state's history. This event resulted in the Forest Service pausing prescribed fire operations nationally and ultimately adopting stricter procedures for prescribed burns.[89] Similarly, political controversy

Forest diversity in the Illilouette Basin, Yosemite National Park, where lightning-ignited wildfire shave been allowed to burn unsuppressed since the 1970s.

Photo Credit: *Scott Stephens, U.C.Berkeley.*

concerning the fire suppression response to the Tamarack Fire near Lake Tahoe in 2021 caused the Forest Service to pause managed wildfire for the remainder of the 2021 fire season, although this fire was not being managed for resource benefits.[90] Outdoor Alliance acknowledges that both of these restoration strategies involve accepting some level of risk, and we support efforts to mitigate these risks. However, we also consider both of these strategies to be vitally important to any long-term effort to build resilience to wildfire in the West, and we strongly support their continued use.

It is also important to acknowledge that fuel treatments are not equally effective or ecologically appropriate in all settings. As is mentioned above, large areas of the West, such as the wetter forests west of the Cascades in the Pacific Northwest, are adapted to infrequent high severity fire.[91] In these areas, fuel treatments designed to mimic low intensity fire effects may not be effective for mitigating wildfire impacts on forests and communities, and other wildfire mitigation strategies, such as an increased emphasis on community planning and structure hardening, may be more appropriate.[92] This is similarly true in other non-forest ecosystems, such as the chaparral shrublands of southern California, where an overabundance of fire has resulted in type conversion of native shrublands to non-native grasslands across broad areas.[93] For these reasons, fuel treatments should not be treated as a panacea for all wildfire-related problems, and it is critical that fuel treatments be designed and located in a way that is informed by the best available science and traditional ecological knowledge.

Adapting to Smoke

Adapting to more smoke from prescribed fire and managed wildfires is an essential part of building resilience to fire in the west, and doing so will require members of the public, including recreationists, to accept some tradeoffs related to smoke emissions. Prescribed fire smoke carries many of the same health implications as wildfire smoke, but unlike uncontained wildfires, land managers are able to implement prescribed burns during favorable weather conditions where smoke is less likely to affect communities.[94] Prescribed fires are also generally shorter duration and can be spread out through different parts of the year so that smoke emissions are unlikely reach hazardous levels across large regions. One important policy issue related smoke to emissions is that the Clean Air Act (CAA) largely treats wildfires as exceptional events and exempts wildfire smoke from attainment under the act's air quality standards. Meanwhile, prescribed fires and managed wildfires are regulated under the CAA, creating a regulatory environment that discourages the use of beneficial fire, ultimately deferring smoke emissions to a future uncontrolled wildfire.[17,95]

Policy Opportunities

Increasing Pace and Scale of Restoration

Wildfire has received increased attention from policymakers following a series of extreme fire years over the past decade, particularly 2020 and 2021. Congress allocated unprecedented levels of funding to wildfire-related programs through the **Infrastructure Investment and Jobs Act (IIJA**) and the **Inflation Reduction Act (IRA)**, and agencies are just beginning to put these funds into action. These funding bills lay a foundation for addressing wildfire resilience on federal lands and beyond, and both put significant resources behind many of the policy opportunities outlined below.

INCORPORATE RECREATION INTO WILDFIRE PLANNING: As an overarching theme, Outdoor Alliance sees a considerable opportunity to better incorporate outdoor recreation concerns into the design, implementation, and monitoring phases of forest restoration projects, and we are interested in working with land managers and local recreationists to identify these opportunities. Examples include designing projects to enhance scenic resources in popular recreation areas, exploring where trail networks can also serve as holding lines for prescribed burns, implementing thinning projects to enhance backcountry ski terrain, and more. We are highly supportive of efforts like California's Joint Strategy for Sustainable Outdoor Recreation and Wildfire Resilience that explicitly incorporate recreation into wildfire planning.[96]

Prescribed burn on private lands, Nevada County, CA.

Photo Credit: *Jamie Ervin.*

FOREST SERVICE WILDFIRE CRISIS STRATEGY: In early 2022, the Forest Service released a new **10-year Wildfire Crisis Strategy** to address the effects of worsening wildfires on forests and communities.[97] The Strategy calls for treating an additional 50 million acres of federal, state, tribal, and private lands in western states over a period of ten years, while also building a longer-term plan to maintain fuel reduction projects. The strategy prioritizes fuels treatments based on the concept of "firesheds," which represent areas of high community exposure to wildfire. The initial list of projects selected under the strategy overlap with multiple high-value recreation resources in areas including the Colorado Front Range, Central Oregon, the Sierra Nevada, and northern Arizona. There is considerable opportunity for recreationists to inform the design and implementation of these projects to ensure that they support co-benefits for outdoor recreation.

NATIONAL FOREST CLIMATE RESILIENCE RULEMAKING: In April 2023, the Forest Service announced an Advanced Notice of Proposed Rulemaking (ANPR) for National Forest and Grassland Climate Resilience, and released the first ever national inventory of mature and old growth forests.[98] The ANPR asks how the agency can adapt their policies to promote climate resilience, ecological integrity, and economic sustainability, while better integrating traditional ecological knowledge into Forest Service policy. The ANPR is an important opportunity to advance wildfire resilience goals in tandem with forest conservation. Outdoor Alliance encourages the Forest Service to undergo a rulemaking that includes protections for old growth and mature forests, while facilitating fire restoration in these forests where ecologically or culturally appropriate.

COLLABORATIVE FORESTRY: In recent decades, forest collaboratives have successfully increased community buy-in for restoration projects, particularly through the Forest Service Collaborative Forest Restoration Program (CFLRP).[99] Although collaboratives take on different

Area of the Klamath National Forest burned in the 2021 Antelope Fire. This area was thinned in 1998 and then prescribed burned in 2001 and 2010.

Photo Credit: *U.S. Forest Service*

forms, they generally consist of a group of stakeholders—ranging from timber advocates to environmentalists—working together to achieve consensus on where forest restoration projects are most needed, and how they can be designed to meet the multiple objectives of the group. CFLRP projects include landscape scale fuel reduction projects, many of which include considerable overlap with popular trail systems and other recreation resources. Increased participation in forest collaboratives may be an effective strategy for drawing needed attention to recreation issues. For example, Outdoor Alliance member group Winter Wildlands Alliance was successful at incorporating a plan for protecting recreation infrastructure into the **Eastern Sierra Climate & Communities Resilience Project** outside of Mammoth Lakes, California.

FOREST PLANNING: The Forest Service land management plan revision process is an opportunity to modernize and improve wildfire management on national forests. New forest plans need to set bold targets for fuel reduction and also include science-driven tools like wildfire risk assessments to help inform wildfire management.[100] New forest plans should explicitly allow land managers to manage naturally-ignited wildfires for resource objectives outside of designated Wilderness areas, where appropriate. The Forest Service plans to initiate more than 30 plan revisions over the next four years, creating an opportunity to better integrate recreation and fire management across these forest landscapes.

FARM BILL: Congress passes a Farm Bill approximately every five years, and the current Farm Bill is up for renewal in 2023. The Farm Bill addresses wildfire-related programs via its forestry title, which covers issues related to national forests as well as forestry programs on private lands. The 2023 Farm Bill can address wildfire and outdoor recreation in a number of ways, including by establishing a process for reopening Forest Service lands to recreation following wildfire closures, promoting prescribed fire, and incentivizing land managers to incorporate recreation concerns into forest health projects.[101]

POST-FIRE MANAGEMENT: Following wildfires, federal land managers undergo a process called Burned Area Emergency Response that involves assessing the impacts of wildfire on soils and other resources, and making a plan for stabilizing disturbed areas. Agencies also undergo a related process called Burned Area Rehabilitation meant to help landscapes recover over the longer term through actions like reestablishing native vegetation. Land managers already assess impacts to recreation resources like campgrounds during post-fire management, but there is considerable opportunity to more thoroughly address impacts to other recreation sites like river put-ins, climbing areas, and trails. Agency capacity and funding are often inadequate to support the full restoration of impacted recreation sites, and it is common for partner organizations to play a lead role in restoration efforts. Outdoor Alliance supports additional funding for post-fire management and encourages agencies to consider where IRA and IIJA funds can help rehabilitate recreation sites after wildfires.

OTHER LEGISLATION: Outside of the IRA and the IIJA, the 117th Congress made considerable progress on a number of wildfire-related bills that would provide benefits to the outdoor recreation

community. Some of these have already been reintroduced in the 118th Congress and could form the components of a larger wildfire package in 2023 or 2024. These bills include:

- ***Wildfire Emergency Act (S. 188/ H.R.3439 in the 118th Congress):*** Creates a new funding source for large-scale forest restoration projects. Creates a new grant program to protect critical infrastructure during wildfires. Establishes one or more prescribed fire training centers in the West and invests in restoration workforce training.

- ***National Prescribed Fire Act of 2021 (S. 1732/ H.R. 3442, 117th Congress):*** Establishes prescribed fire accounts at DOI and USDA. Invests in prescribed fire workforce capacity. Improves working conditions for prescribed burners. Provides funds for local governments to facilitate large prescribed fires. Several funding portions of this bill passed as part of the IIJA.

- ***Wildfire-Resilient Communities Act (S. 2650, 117th Congress):*** Permanently re-authorizes the Collaborative Forest Restoration Program. Creates new funding sources for fuel reduction projects and for community planning.

- ***Smoke-Ready Communities Act of 2021 (S. 2661, 117th Congress):*** Improves information sharing and provides funding to help communities adapt to hazardous wildfire smoke emissions.

- ***Save our Forests Act (H.R. 5341, 117th Congress):*** Requires USFS to fill recreation and planning staff vacancies.

- ***Tim Hart Wildland Firefighter Classification and Pay Parity Act (S. 1505/ H.R. 3108, 118th Congress)*** Improves pay and job benefits for wildland firefighters.

- ***Wildfire Response and Drought Resiliency Act (H.R. 5118, 117th Congress):*** Package of wildfire bills that passed the House of Representatives in the summer of 2022, including several bills noted above.

Other Policy Considerations for Recreationists

Wildfire and fuels management intersects with Outdoor Alliance's other policy work in a variety of ways. This section outlines our perspective on a few key areas, with the intent of maximizing the benefits of wildfire mitigation for both forest resilience and outdoor recreation.

PROTECTED AREAS AND FIRE MANAGEMENT: Protected public lands and waters, including Wilderness, Inventoried Roadless Areas, Wild & Scenic Rivers, National Recreation Areas, and other protections, provide numerous benefits to the outdoor recreation community, including outstanding

opportunities for backcountry recreation and wide-ranging conservation benefits. Advocating for protected areas has been a core part of Outdoor Alliance's platform since our coalition's formation, and the recreation community has been an active partner in many of America's most successful conservation campaigns.

Although some stakeholders and policymakers frequently express concerns that land protections impede effective fire and fuels management, fire resilience and land protection goals can be pursued in harmony. The Wilderness Act, the Roadless Rule, and the Wild & Scenic Rivers Act all allow for fire suppression, although fire managers are encouraged to use a lighter touch in some of these areas where possible. All of these conservation laws can also allow for prescribed fire and managed wildfire, and in some limited circumstances targeted mechanical removal of smaller trees.[102, 103]

Outdoor Alliance supports efforts to restore beneficial fire to fire-adapted ecosystems within protected areas. Some of America's most successful ecological fire management programs exist within wilderness areas managed by the National Park Service in areas like Yosemite where reintroduction of managed wildfire over the past fifty years has increased forests' resilience to wildfire and drought.[104] These areas can serve as a model for how restoration and land protection goals can be achieved simultaneously in other areas of the country. For example, the current effort by the Forest Service (noted above) to inventory and protect old growth and mature forests provides an opportunity to synchronize wildfire and conservation policy while simultaneously providing benefits for outdoor recreation.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): There is a significant contingent within the forest stakeholder community, and among policymakers on both sides of the aisle, that identifies the NEPA process as a barrier to the forest restoration work needed to achieve fire resilience goals in western forests. Outdoor Alliance generally supports efforts to make the NEPA process more efficient and responsive to modern restoration needs; however, this needs to be done in a way that is protective of NEPA's core values around science-based decision making, transparency, and robust public input. In our experience, most NEPA-related delays result from issues related to agency culture and capacity, rather than from the law itself. This experience is also borne out by data showing that from 2005-2018, the median Forest Service NEPA project took less than 5 months to complete and that few analyses were litigated.[105] With this context in mind, we strongly oppose proposals such as the Resilient Federal Forests Act (H.R. 4614) introduced in the 117th Congress, which would exempt many federal forestry projects from the NEPA process altogether. At the same time, we support practices like landscape-level and programmatic NEPA that facilitate efficient environmental analysis across large landscapes, including by incorporating input from recreation stakeholders.

TRIBALLY-LED RESTORATION: The removal of Indigenous fire stewardship from western ecosystems is a primary driver of the modern wildfire crisis. Outdoor Alliance strongly supports efforts to build Tribes' capacity to implement land stewardship practices, including cultural fire, and to increase Tribes' role in the decision-making process on public lands through tribal co-management

and shared stewardship.

FUNDING AND AGENCY CAPACITY: As mentioned above, the federal government spent an average of $2.5 billion each year on wildfire suppression from 2016-2020,[4] and these costs are expected to grow. The outdoor recreation community strongly supported the "fire funding fix," which Congress passed in 2018 to help prevent funds from non-fire accounts at the Forest Service from being used for fire suppression-related purposes during wildfire events. Despite the fire fix, wildfire continues to strain agency capacity as wildfire seasons become more prolonged and intense due to climate change.[106] As an example, Forest Service staff are commonly pulled away from non-fire work such as recreation management during wildfire season. Additionally, there is a need for Congress to extend the fire fix beyond 2027 (when it currently expires) and to increase funding to account for the rising costs of fire suppression.[107] Opportunities exist to address these capacity challenges through implementation of funding bills like the IRA and IIJA, and through the appropriations process.

Conclusion

The effects of wildfire on outdoor recreation will likely become more pronounced over the coming years as the climate continues to warm and participation in outdoor recreation continues to grow. Recreationists may also notice larger fuel treatments altering the appearance of trail systems and other recreation resources as land managers work to increase the pace and scale of forest restoration. As these trends progress, the recreation community will become an increasingly important voice for informing wildfire management in the West.

Increasing megafires are not an unsolvable problem. Decades of fire science and thousands of years of Indigenous knowledge tell us how we can, and must, learn to live with fire. The recreation community can be an important partner for building the political and social support needed to ensure that wildfire management in the West meets the scale of the challenge, and incorporates these critical scientific and cultural perspectives. By harnessing our collective power, we can inspire the cultural and political change needed to protect the West's forests and communities.

Image Credit: James Fitzgerald

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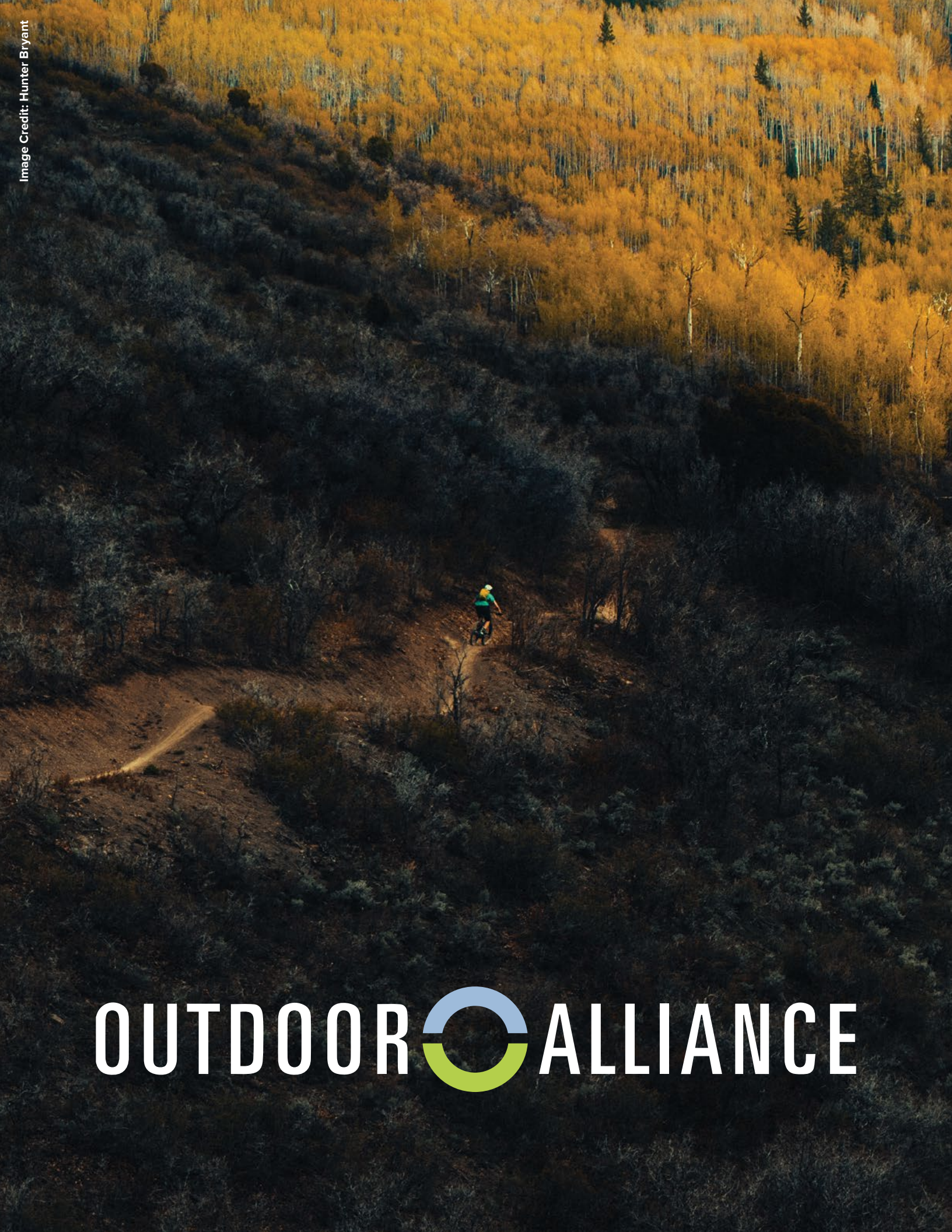
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