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NOTES

THERE IS NO MORE NEW FRONTIER: ANALYZING WILDFIRE MANAGEMENT EFFORTS IN THE UNITED STATES

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INTRODUCTION

The United States is waging a war against itself and losing.¹ For the last several years, the western United States has seen an increase in the number of severe wildfires that ravage through its forests and prairies.² Wildfires can begin naturally (for example, with a lightning strike), but unlike what their name implies, wildfires are often triggered by human activity.³ The increase in wildfires has prompted a great deal of research aimed at understanding why this is happening. Many scholars have attributed this to changes in climate, vegetation, and increasing population rates.⁴

Severe wildfires raise not only environmental problems but questions of federalism. Because wildfires do not and cannot abide by political boundaries or state lines, they raise major issues that spark sharp political debates. This sometimes causes state governments and the federal government to grapple with whose responsibility it is to suppress the fires, depending on where the fires roam.⁵ It is not like the federal government is ignoring the existence of this problem—in fact, Congress itself is very aware of the issue.⁶ But as the fires continue to spread and rage on, as the firefighters—local, state, and federal—risk their lives to control them, Congress still has yet to pass adequate legislation beyond that of piecemeal measures introduced related to fire suppression, containment, and evacuation measures.⁷

Arguably, high-intensity wildfires are not just an issue for the American West; they are an issue for the United States as a whole. Clearer reform in the realm of wildfire legislation is needed to effectively fight these increasingly disastrous fires. Although land management has been traditionally delegated to the states,⁸ more cooperation, support, and resources are all necessary in order for the local, state, and federal governments to contain and/or extinguish them.

This Note addresses the issue of federalism surrounding high-intensity wildfires in the United States and ultimately proposes potential legislative solutions Congress could enact to help manage the situation more effectively. Part I provides an overview about wildfires in the United States, both past and present, and their environmental, human, and economic impacts. Part II discusses past and present legislative efforts to reduce the impact of wildfires in the United States—from state and local governments to the federal government. Part II also ad-

¹ See, e.g., 16 U.S.C. § 6701(5) (2018).

² *Id.*

³ See *Wildfire Causes and Evaluations*, NAT'L PARK SERV. (Mar. 8, 2022), <https://www.nps.gov/articles/wildfire-causes-and-evaluation.htm> [https://perma.cc/DK3B-QKQU].

⁴ See Fresh Air, *Extreme Heat, Flooding and Wildfires: How Climate Change Supercharged the Weather*, NPR (Sept. 22, 2022, 1:22 PM), <https://www.npr.org/2022/09/22/1124491807/extreme-heat-flooding-and-wildfires-how-climate-change-supercharged-the-weather> [https://perma.cc/WER9-LHRU]; see also 16 U.S.C. § 6701(7).

⁵ See *Wildland Fire Management*, U.S. GOV'T ACCOUNTABILITY OFF., <https://www.gao.gov/wildland-fire-management> [https://perma.cc/U8XZ-BCYE] (last visited Sept. 18, 2022).

⁶ See 16 U.S.C. § 6701(5).

⁷ See, e.g., Southwest Forest Health and Wildfire Prevention Act of 2004, Pub. L. No. 108-317, 118 Stat. 1204 (codified at 16 U.S.C. §§ 6701–6707).

⁸ See U.S. CONST. amend. X.

dresses issues that arise when fires cross state lines, which triggers cooperative efforts from both state and federal governments. Part III discusses how and why the current legislative efforts surrounding wildfires are ineffective at reducing the major impacts wildfires have on the United States. Part III also details fire regulations in other countries and poses possible legislative solutions. The struggle between authorities is a federalism issue that could be suppressed, just like the wildfires, through clear and adequate legislation.

I propose, therefore, that Congress needs to address the major wildfire problem by enacting more legislation that works alongside state governments and their own fire management goals. It is time for Congress to take wildfire suppression legislation more seriously and move it beyond the introductory phase. It is time for Congress and the other branches of the federal government to work together. It is time for everyone—but especially Congress—to fully comprehend the detrimental effects the most severe fires have on the environment, society, and the economy.

I. WILDFIRES IN THE UNITED STATES: A RAGING PROBLEM

A. *The Fiery Impacts of Wildfires in the United States*

The impacts that wildfires have on the environment and thus on humans are substantial. On one hand, wildfires are a natural part of life and help shape ecosystems through its processes of renewal and change.⁹ On the other, regardless of how they begin, a wildfire can be extremely destructive. There are (and will continue to be) more than just environmental, human, and economic effects high-intensity wildfires have on the United States.

Wildfires *do* have positive impacts on the environment. Just as a heavy thunderstorm in August quenches parched Midwest cornfields, wildfires have a cleansing effect on the earth.¹⁰ Not all wildfires are devastating, and there is an interesting dichotomy between fires and the ecosystem. Periodic forest fires help naturally clear away old brush, making room for new growth.¹¹ When allowed to burn naturally, forest fires also provide nutrients to the soil; some types of trees and plants even require occasional burnings to release seeds and reproduce.¹² Unfortunately, in part because of past efforts to suppress and completely eradicate fires, natural processes have been disturbed and research indicates that this fuels highly intense and severe fires while increasing the likelihood they occur.¹³

⁹ *Pacific Northwest Research Station: Fire*, U.S. FOREST SERV., <https://www.fs.usda.gov/research/pnw/fire> [https://perma.cc/N8WN-VX2B] (last visited Dec. 28, 2023).

¹⁰ See *The Ecological Benefits of Fire*, NAT'L GEOGRAPHIC, <https://education.nationalgeographic.org/resource/ecological-benefits-fire> [https://perma.cc/6RKE-N4JD] (last visited July 15, 2022) for a brief and easy-to-understand discussion indicating this is highly dependent on the cause, severity, and location of the fire.

¹¹ Shandra Furtado, *The Important Relationship between Forests and Fire*, AM. FORESTS (Apr. 5, 2016), <https://www.americanforests.org/article/the-important-relationship-between-forests-and-fire/> [https://perma.cc/VLQ3-QN8V].

¹² *Id.*

¹³ *Id.*

Wildfires are a natural part of life and help shape ecosystems through its processes of renewal and change.¹⁴ With the increasing number of fires each year, however, the effects can quickly turn more negative than positive.

Severe wildfires in areas most prone to them are expected to increase exponentially by 2050, due to worsening droughts and other conditions caused by climate change.¹⁵ In these situations, the intense fires run rampant and can be highly destructive to wildlife habitats, timber, and air quality.¹⁶ The dense, lush forests of the Pacific Northwest are typically known for wet conditions and fewer wildfires, but as the climate becomes warmer and drier, those states are experiencing “longer fire seasons, larger burns, and increased wildfire risk.”¹⁷ Even more concerning to scientists is the way wildfires and climate change form a constant “feedback loop.”¹⁸ When wildfires burn, “they release CO₂ and other greenhouse gases stored in soil and organic matter into the atmosphere. This in [turn] contributes to further climate change, which increases wildfire activity.”¹⁹ This cyclical relationship threatens the health and survival of important ecosystems throughout the western region of the United States, since there is often little time for them to recover between fires.²⁰

The impacts of wildfires on human health are extreme and can cause death, sickness, and mental health disorders.²¹ Wildfires affect society in plentiful ways, impacting those who live and work in the areas most prone to fires the greatest. Specifically, in the western United States, extensive wildfire smoke constitutes a great public health concern.²² The high intensity wildfires are drastically affecting the air quality in the states affected but also throughout the United States, as nearly a quarter of Americans’ total exposure to PM_{2.5}—a harmful air particle is caused by wildfires.²³ The poor air quality can both cause and exacerbate health problems, indirectly resulting in death, particularly for children and the elderly.²⁴ Additionally, direct exposure to wildfires has been found to significantly increase the risk for mental health disorders and psychological stress.²⁵ This affects both

¹⁴ *Pacific Northwest Research Station: Fire*, *supra* note 9.

¹⁵ *The Effects of Climate Change*, NASA SCI., <https://science.nasa.gov/climate-change/effect/s/> [<https://perma.cc/KHT3-KURS>] (last visited Mar. 24, 2024).

¹⁶ *Id.*

¹⁷ *Story Map Tells of New Normal for West-Side Fire in Oregon, Washington*, U.S. FOREST SERV. (June 16, 2021), <https://www.fs.usda.gov/inside-fs/delivering-mission/sustain/story-map-tells-new-normal-west-side-fire-oregon-washington> [<https://perma.cc/2JQJ-VXSJ>] [hereinafter *Story Map*].

¹⁸ See Matthew Wibbenmeyer & Anne McDarris, *Wildfires in the United States 101: Context and Consequences*, RES. FOR FUTURE (July 30, 2021), <https://www.rff.org/publications/explainers/wildfires-in-the-united-states-101-context-and-consequences/> [<https://perma.cc/T66J-SBSN>].

¹⁹ *Id.*

²⁰ *Id.*

²¹ *Id.* (describing how “[w]ildfires cause human fatalities both *directly* (when people are unable to escape a blaze, or when firefighters are killed while containing a fire) and *indirectly* (particularly due to the health effects of smoke inhalation)”) (emphasis added).

²² *Id.*

²³ *Id.*

²⁴ *Id.*

²⁵ *Id.*

the residents of regions prone to wildfires as well as those fighting to contain the fires. The following is a critical and emotionally charged first-hand take from sociologist and former wildland firefighter Matthew Desmond on the lack of recognition the rugged profession often gets:

Wildland firefighters do not enjoy the cultural prestige that structural firefighters do. They do not wax their fire engines and cruise down the local parade route, lights flashing; they are not the subject of countless popular books and movies; major politicians do not honor their sacrifices on the Senate floor or from the Rose Garden; they do not have bagpipe bands, fancy equipment, enduring icons, or other signifiers of honor verifying the importance of their activity.²⁶

While Desmond's account evokes a great deal of sympathy for those on the frontlines, the "cultural prestige" he describes as lacking is actively changing since his book was published at the start of the century. As more people become aware of the severe wildfire situation in the United States (most likely in part due to the constant media updates we receive), greater attention and support are given to those who are on the frontlines. For example, National Wildland Firefighter Day was first declared and established on July 2, 2022.²⁷ Set aside by the National Interagency Fire Center, this day seeks to "recognize all federal, state, local, Tribal, contract, and international firefighters, along with support staff, spotlighting their dedication and hard work."²⁸ This day provides many the national recognition that has been lacking and encourages the United States to honor those involved with the often-difficult task of wildland firefighting and management. The National Park Service describes National Wildland Firefighter Day as also providing "an opportunity to unify the wildland fire community and showcase interagency cooperation and collaboration."²⁹ High-intensity wildfires have the ability to literally tear apart communities; nevertheless, through initiatives like this encouraged by the federal government, even disasters can have a remarkable way of bringing out the best of society.

Finally, wildfires affect and threaten the US economy in many ways. In 2020 alone, wildfires "caused approximately \$16.5 billion in damages to structures and management costs."³⁰ Researchers are concerned this will only worsen with time. Environmental commentator and educator Edward Struzik notes that "[i]n 1995, the budget for fighting fire made up [sixteen] percent of the [US] Forest Service's budget. It rose to the [fifty] percent level in 2015 and could reach close

²⁶ MATTHEW DESMOND, *ON THE FIRELINE: LIVING AND DYING WITH WILDLAND FIREFIGHTERS* 130 (University of Chicago Press, 2007).

²⁷ *Interactive Wildfire History Timeline*, NAT'L PARK SERV., <https://www.nps.gov/subjects/fire/wildfire-history-timeline.htm> [<https://perma.cc/DD9P-DZQP>] (last visited July 6, 2022).

²⁸ *Id.*

²⁹ *Id.*

³⁰ Wibbenmeyer & McDarris, *supra* note 18.

to [seventy] percent by 2025.”³¹ Surprisingly enough, even smoke from wildfires has also led to annual declines in productivity throughout the United States.³² As the fires turn more severe and intense each year, more money and economic resources are needed to mitigate the damaging; in fact, “[f]ire suppression costs have almost quadrupled since 1985.”³³ For example, in 2020, when a town in California hired a professional fire chief, officials doubled the annual fire department fee that residents pay to fund the position and upgrade services.³⁴ Though the reaction from residents was initially negative, when a wildfire started a few months later on the far side of town, the “newly professionalized Dammeron Valley Fire Department set up a line between the hill and the town and stopped the fire from reaching homes.”³⁵ Needless to say, complaints lessened from the residents after that, as it dawned on them that the extra amount each year likely outweighed the risk of personal and property destruction.³⁶

B. *Where the Wildfires Roam: Then and Now*

Efforts to control wildfires in the United States can be organized into two distinct periods: fire suppression (beginning as early as the late nineteenth century) and fire acceptance (from the mid-twentieth century to present day).³⁷

In 1905, the Forest Service was established; its main goal was suppressing fires in their entirety.³⁸ Complete fire abolishment then became the only fire policy in place for decades.³⁹ This was solidified in 1910, when the largest wildfire in US history devastated the Northern Rockies; from then on, land managers sought to extinguish any and all flames, no matter how they began, believing (at the time) they were making the best decision for the situation.⁴⁰ Following this and the passing of the Forest Fires Emergency Act in 1908,⁴¹ the Forest Service ensured that no wildfire would be allowed to burn. With the creation of the National Park Service in 1916, the federal government became responsible for the

³¹ See EDWARD STRUZIK, *FIRESTORM: HOW WILDFIRE WILL SHAPE OUR FUTURE* 238 (Island Press, 2017).

³² Wibbenmeyer & McDarris, *supra* note 18.

³³ *Id.*

³⁴ Christopher Flavelle & Nadja Popovich, *Here Are the Wildfire Risks to Homes Across the Lower 48 States*, N.Y. TIMES (May 16, 2022), <https://www.nytimes.com/interactive/2022/05/16/climate/wildfire-risk-map-properties.html> [<https://perma.cc/EBG2-UXQQ>].

³⁵ *Id.*

³⁶ *Id.*

³⁷ NAT'L PARK SERV., NO. CA 8034-2-9003, *A TEST OF ADVERSITY AND STRENGTH: WILDLAND FIRE IN THE NATIONAL PARK SYSTEM*, at iii (2006) [hereinafter *ADVERSITY AND STRENGTH*].

³⁸ Jan W. van Wagtenonk, *The History and Evolution of Wildland Fire Use*, 3 FIRE ECOLOGY 3, 4 (2007).

³⁹ *Id.*

⁴⁰ See *Fighting Wildfires*, PBS, <https://www.pbs.org/wgbh/americanexperience/features/burn-fighting-wildfires/> [<https://perma.cc/Y8US-FVSL>] (last visited Nov. 3, 2022).

⁴¹ See Forest Fires Emergency Act of 1908, ch. 192, 35 Stat. 259 (codified as amended at 16 U.S.C. § 556(d)) (authorizing unlimited spending on fire suppression at the time of its passage).

protection of current and future national parks and monuments.⁴² In the coming years, they continued to work closely with the Department of the Interior and the Forest Service, conducting fire damage studies and working to put out all fires, regardless of origin, by no later than 10 a.m. the morning after initial reports.⁴³

The Forest Service began keeping data and detailed records of wildfires in the early 1960s,⁴⁴ a period where environmental and preservation movements to protect federal public lands began to grow. Beginning in 1967, the National Park Service realized that fires are an important ecological process and suppressing them entirely is nearly impossible.⁴⁵ Thus, wildfire management efforts shifted from suppression to a strategy deftly described by fire historian Stephen J. Pyne as “resource management.”⁴⁶

For the next few decades, the Forest Service focused on battling and suppressing only those fires that “threatened human life and property while permitting naturally occurring fires deep in the wilderness to burn.”⁴⁷ After reviewing fire data and statistics from 1973, Congress passed the Federal Fire Prevention and Control Act of 1974.⁴⁸ This Act sought to reimburse state and local fire departments for any costs they incur while firefighting on federal land.⁴⁹ Fire management reverted back to early twentieth-century approach in June of 1989 when the Bush administration directed the Department of the Interior to fight and extinguish *all* fires, regardless of origin.⁵⁰ Yet by the 1990s, federal agencies were actively developing plans for controlled burnings and implementing more “ecosystem-based fire management programs,”⁵¹ particularly in the most-affected states. Since then, there have been more legislative measures (to be discussed subsequently), though they have been subject to sharp disputes. For example, there continues to be polarizing opinions as to whether controlled, or “prescribed,” burns should be allowed as a fire management technique. Regardless, it still remains an option for Congress and state legislatures to explore and consider.

Wildfires are either caused naturally or by humans.⁵² Those that occur naturally are most frequently caused by lightning strikes; depending on the circumstances, however, wildfires can also occur naturally through volcanic matter,

⁴² *Interactive Wildfire History Timeline*, *supra* note 27.

⁴³ *Id.*; see also *U.S. Forest Service Fire Suppression*, FOREST HIST. SOC., <https://foresthistory.org/research-explore/us-forest-service-history/policy-and-law/fire-u-s-forest-service/u-s-forest-service-fire-suppression/> [<https://perma.cc/GPF9-KZXD>] (last visited Oct. 14, 2022) for an interesting and brief description of the “the so-called 10 a.m. policy.”

⁴⁴ *Fighting Wildfires*, *supra* note 40.

⁴⁵ *Id.*; van Wagendonk, *supra* note 38, at 4–5; ADVERSITY AND STRENGTH, *supra* note 37.

⁴⁶ See STEPHEN J. PYNE, *FIRE IN AMERICA: A CULTURAL HISTORY OF WILDLAND AND RURAL FIRE* 301–02 (1982).

⁴⁷ *Fighting Wildfires*, *supra* note 40.

⁴⁸ Federal Fire Prevention and Control Act of 1974, Pub. L. No. 93-498, 88 Stat. 1535 (codified as amended at 15 U.S.C. § 2225).

⁴⁹ *Id.*; *Interactive Wildfire History Timeline*, *supra* note 27.

⁵⁰ *Interactive Wildfire History Timeline*, *supra* note 27.

⁵¹ van Wagendonk, *supra* note 38, at 9.

⁵² See CONG. RSCH. SERV., IF10244, *WILDFIRE STATISTICS* (2023).

meteors, and coal matter.⁵³ Throughout the last two decades, nearly eighty-five percent of wildfires within the United States were caused—whether intentionally or unintentionally—by humans.⁵⁴ The causes for these fires range from intentional acts of arson to seemingly harmless campfires left unattended; burning debris, malfunctioning equipment, and negligently discarded cigarettes are also among the top reasons for human-caused fires.⁵⁵ It is important to note that while fires started by utilities (that is, sparked by generators or power lines) do not occur often, they can be disproportionately hazardous. For example, California’s 2018 Camp Fire was ignited by electrical transmission lines and ended up becoming the state’s deadliest and most destructive.⁵⁶ This ends up causing utility companies to be the most common defendants in both state and federal wildfire lawsuits.⁵⁷

In the last decade, you may have noticed milder weather patterns in your state, or you have more than likely thought to yourself: *is it getting warmer?* If either of these situations are applicable, you are in tune with most of Earth’s population. Climate change is literally turning up the heat, fueling more high intensity fires each year, and catalyzing a great deal of research on its causes and effects. Along with the fire suppression attempts of the past, climate change has also been directly attributed as a driving force behind the size and intensity of wildfires in the United States.⁵⁸ It has “intensified summertime droughts; reduced the mountaintop snowpack, making fire seasons longer; and even increased lightning strikes that can trigger big fires in tinder-dry forests.”⁵⁹ Researchers examining data from the 1980s have remarked that climate change has “roughly doubled the area of wildfires in the western [United States].”⁶⁰

⁵³ Division of Wildland Fire Management, *Wildfire Investigations*, U.S. DEP’T OF THE INTERIOR, <https://www.bia.gov/service/wildfire-prevention/wildfire-investigations> [https://perma.cc/88DY-59FP] (last visited Dec. 28, 2022).

⁵⁴ *Wildfire Causes and Evaluations*, *supra* note 3.

⁵⁵ *Id.*

⁵⁶ See Wibbenmeyer & McDarris, *supra* note 18.

⁵⁷ See e.g., Alex Williams, *We’re Falling into a Ring of Fire: Taking Stock of Wildfire Liability Regimes from Varying Perspectives in the United States*, GEO. ENV’T L. REV. ONLINE (Mar. 31, 2021), https://www.law.georgetown.edu/environmental-law-review/blog/were-falling-into-a-ring-of-fire-taking-stock-of-wildfire-liability-regimes-from-varying-perspectives-in-the-united-states/#_ftn49 [https://perma.cc/99SF-ZMUM]; Jeremy Gradwohl, *Electric Utility-Caused Wildfire Damages: Strict Liability Under Article I, Section 19 of the California Constitution*, 92 TEMP. L. REV. 595, 602-03 (2020) (discussing Cal. Const. art. I, §19); Jamie Burch, *Wildfire Lawsuits Centered Around Rotten Utility Pole Mounting Against Energy Provider*, ABC15 NEWS (Mar. 9, 2024 11:20AM), <https://wpde.com/news/nation-world/wildfire-lawsuits-centered-around-rotten-utility-pole-mounting-against-energy-provider-xcel-energy-smokehouse-creek-fire-blaze-canadian-texas-stinnett-largest-wildfire-in-state-history-court-legal-battles> [https://perma.cc/3GP4-DG-MT]; Stewart Yerton, *‘The Wildfire Litigation Industry’ Takes on Hawaiian Electric*, HONOLULU CIV. BEAT (Sept. 20, 2023), <https://www.civilbeat.org/2023/09/the-wildfire-litigation-industry-takes-on-hawaiian-electric/> [https://perma.cc/K4UB-RSXY].

⁵⁸ *3 Reasons Wildfires are Getting More Dangerous—and 3 Ways to Make Things Better*, WILDERNESS SOC’Y (May 21, 2019), <https://www.wilderness.org/articles/blog/3-reasons-wildfires-are-getting-more-dangerous-and-3-ways-make-things-better> [https://perma.cc/5TZD-2EF6] [hereinafter *3 Reasons Wildfires are Getting More Dangerous*].

⁵⁹ *Id.*

⁶⁰ *Id.*

While wildfires can technically develop anywhere, high-intensity ones are more common in the western region of the United States, especially as climate change intensifies. Those areas already prone to extreme weather events are even further exposed to the danger wildfires cause.⁶¹ Fires first need both fuel and a spark to ignite; in the western states, “fuel is plenty, with flammable pine needles, shrubs and grasses that can ignite easily.”⁶² Additionally, the region’s naturally dry vegetation also makes it more prone to fires. Contrast the flammability of those pine needles, dry grasses, and shrubs to the moistness of the foliage found in the east coast’s deciduous forests and it becomes clear how the western landscape of the United States creates suitable conditions for wildfires.⁶³ Not surprisingly, California leads with the most property facing a risk of being consumed by wildfire; however, data released in May of 2022 indicates that Florida has an exceptionally high risk of wildfires.⁶⁴ According to Michele Steinberg, wildfire division director at the National Fire Protection Association, “Florida has thick vegetation that can burn easily, including palmetto and pine trees, when dried out by increasingly hot temperatures tied to climate change.”⁶⁵

Additionally, because the temperature *is* getting warmer, the timing of the spring snowmelt is sooner than usual. This, along with the thinner air at higher altitudes explains why the Northern Rockies have seen the greatest increase in fires—sixty percent—over the last few decades.⁶⁶ Earlier snowmelt also signifies a prolonged summer. The wildfire season has increased by seventy-eight days since the 1980s and the average burn time of individual fires has gone from six days in the 1970s to fifty-two days between 2003 and 2012.⁶⁷

In a span of nearly 40 years, from 1960 to 1999, wildfires in the United States ravaged nearly 141 million acres of land.⁶⁸ From 2000 to 2013, that number increased to nearly 161 million acres—indicating that there were more acres of land affected in only 13 years than in the prior 40 years combined.⁶⁹ In 2022, the wildfire season was extremely severe, culminating in over sixty-six thousand

⁶¹ *Id.*

⁶² Winston Choi-Schagrin & Elena Shao, *Why Does the American West Have So Many Wildfires?*, N.Y. TIMES (Aug. 1, 2022), <https://www.nytimes.com/2022/08/01/climate/wildfire-risk-california-west.html> [<https://perma.cc/2DS6-SVBA>]; see also Flavelle & Popovich, *supra* note 34.

⁶³ Choi-Schagrin & Shao, *supra* note 62.

⁶⁴ James Tutten, *Forest Officials Warn Parts of U.S., Including Central Florida, at High Risk of Wildfires*, WFTV9, (Apr. 21, 2024 8:00 AM), <https://www.wftv.com/news/local/forest-officials-warn-parts-us-including-central-florida-high-risk-wildfires/QO243VYRZFFGFKXGFXL3LIQ4LE/> [<https://perma.cc/AA8V-EPTK>]. See also Flavelle & Popovich, *supra* note 34.

⁶⁵ Flavelle & Popovich, *supra* note 34.

⁶⁶ A.L. Westerling et al., *Warming and Earlier Spring Increase Western U.S. Forest Wildfire Activity*, 313 SCI. 940, 942–43 (2006).

⁶⁷ *Wildfire*, U.S. DEP’T. AGRIC., <https://www.climatehubs.usda.gov/taxonomy/term/398#:~:text=These%20extreme%20events%20are%20common,over%207%20months%20in%20length> [<https://perma.cc/YWN3-FTW9>] (last visited Apr. 30, 2024).

⁶⁸ *Fighting Wildfires*, *supra* note 40.

⁶⁹ *Id.*

wildfires and burning more than 7.3 million acres.⁷⁰ The upward trend in wildfire frequency and severity has primarily been attributed to climate change,⁷¹ though past wildfire management efforts as well as changes in wildfire policy and strategy have also affected the uptick in wildfire statistics.⁷² Research has also indicated that the increasing number of American homes being built on or near land that is prone to wildfires adds fuel, causing fires to burn hotter and more severely.⁷³ Utah, for example, currently has one of the fastest-growing housing markets in the United States but its location in relation to wildfire-prone lands presents major issues, placing an increasing number of both people and properties at risk.⁷⁴ Wildfires can also effectuate ethical dilemmas in relation to booming housing markets; neither the states nor the federal government currently have any obligation to warn potentially unaware homebuyers of the risks associated with moving to regions prone to wildfires.

In August 2023, the United States experienced its deadliest wildfire in over a century when a series of wildfires burned through the island of Maui, destroying the historic town of Lahaina and killing over one-hundred people.⁷⁵ Fueled by environmental conditions such as extreme winds from Hurricane Dora, these wildfires presented another sobering reminder of the need for more adequate preparation, mitigation, evacuation, and response measures on both the state and federal level.

II. LEGISLATIVE EFFORTS REGARDING WILDFIRES FROM THE 1990S TO PRESENT DAY

Since the 1990s, legislative efforts to contain and suppress the devastating effects of wildfires have not been lacking at neither the local nor national level. Regardless, wildfires in the United States continue to burn hotter and longer each year, doing more harm than good. But when a fire is on federally designated public

⁷⁰ Dinah Voyles Pulver, *Another Above-Average Wildfire Season for 2022. How Climate Change is Making Fires Harder to Predict and Fight*, USA TODAY (Jan. 3, 2023, 1:37 PM), <https://www.usatoday.com/story/news/2022/12/24/us-wildfire-season-2022-again-above-average-amid-climate-change/10811014002/> [<https://perma.cc/WA2S-ST69>]. See also *Statistics*, NAT'L INTERAGENCY FIRE CTR., <https://www.nifc.gov/fire-information/statistics> [<https://perma.cc/5RVE-6NJU>], (Apr. 5, 2024, 8:35 AM) (providing detailed information and statistics, including current years, regarding wildfires in the United States).

⁷¹ Pulver, *supra* note 70.

⁷² Jiaying Hai et al., *How Does Fire Suppression Alter the Wildfire Regime? A Systematic Review*, 6 FIRE 424 (2023).

⁷³ *Wildfire Causes and Evaluations*, *supra* note 3.

⁷⁴ Flavelle & Popovich, *supra* note 34.

⁷⁵ STEVE KERBER & DEREK ALKONIS, LAHAINA FIRE COMPREHENSIVE TIMELINE REPORT, FIRE SAFETY RSCH. INST. (2013) https://s3.documentcloud.org/documents/24554404/fsri_lahaina_fire-comprehensive_timeline_report_04_17_2024_redacted_final_0.pdf [<https://perma.cc/4THY-YS4C>]; see also MAUI WILDFIRES OF AUGUST 8, 2023 PRELIMINARY AFTER-ACTION REPORT, MAUI POLICE DEP'T. (2023) https://www.maui.police.com/uploads/1/3/1/2/131209824/pre_aar_master_copy_final_draft_1.23.24.pdf [<https://perma.cc/54M3-7QDP>] (detailing the Maui Police Department's preliminary yet comprehensive after-action report on the deadly fires).

lands, the question of whose job—state or federal agencies—it is to suppress it becomes complicated.⁷⁶

For decades, the United States has long been aware of the detrimental effects that wildfires can have on society. Links to almost all state emergency management websites can be neatly found on a federal government website.⁷⁷ Nearly all state legislatures have also enacted disaster-prevention efforts and plans.⁷⁸ These kinds of programs and plans encourage cooperation with federal agencies.⁷⁹ Cooperation between the states and the federal government is present at times; but it is up to the federal government to lead wildfire management efforts in the United States.⁸⁰

When wildfires occur, the wildfire investigators—both local and federal—sometimes work together to contain and manage the fires, though this is not mandated. They assess the threats to people and property within the areas affected by the fires and eventually determine whether it is appropriate to let certain fires burn their course.⁸¹ Letting a wildfire burn is most often done if it is one that began naturally and is in a large remote area that poses no threat to people or their property, such as an unpopulated area within a National Park or mountainous region; however, “[w]here people and property are threatened, all efforts are made to extinguish the fire.”⁸²

Because wildfires are natural disasters that predominantly occur on both state and federal land, it difficult for states to use their police powers to legislate wildfire prevention and relief efforts because their laws may become preempted by outdated or inadequate federal legislation and policies.⁸³ It therefore remains up to the federal government to enact adequate legislation to combat this issue. In *Massachusetts v. EPA*, the Supreme Court emphasized preemption of state law as reason to allow states to challenge a federal agency’s failure to regulate.⁸⁴ Even if states continue to lack power to compel federal enforcement, at the very least, fe-

⁷⁶ For an extensive explanation of federal funding of wildfires, and agency effects on state governments, see ROSS W. GORTE, CONG. RSCH. SERV., RL33990, FEDERAL FUNDING FOR WILDFIRE CONTROL & MANAGEMENT 20 (2010).

⁷⁷ See *State Emergency Management Agencies*, USAGOV, <https://www.usa.gov/state-emergency-management> [<https://perma.cc/T9S2-YG9P>] (last visited Dec. 19, 2022).

⁷⁸ *Id.*; for more information regarding some of the states’ individual plans, see also *Wildland Fire Management*, NEV. DIV. OF FORESTRY, <https://forestry.nv.gov/wildland-fire-management> [<https://perma.cc/E9WL-Z7SQ>] (last visited Dec. 28, 2022); *Wildland Fire Management*, COLO. DIV. OF FIRE PREVENTION & CONTROL, <https://dfpc.colorado.gov/wildlandfire> [<https://perma.cc/WMR7-NWRB>] (last visited Dec. 28, 2022); *Wildfire Protection*, OFFICE OF STATE FIRE MARSHALL, <https://osfm.fire.ca.gov/divisions/code-development-and-analysis/wildfire-protection/> [<https://perma.cc/3S23-F3PE>] (last visited Dec. 28, 2022); and *Cal Fire*, CAL. DEPT. FORESTRY & FIRE PROTECTION, <https://www.readyforwildfire.org/> [<https://perma.cc/SQ97-N9TQ>] (last visited Dec. 28, 2022).

⁷⁹ See *State Emergency Management Agencies*, *supra* note 77.

⁸⁰ See *Wildland Fire Management*, *supra* note 78.

⁸¹ *Wildfire Causes and Evaluations*, *supra* note 3.

⁸² *Id.*

⁸³ Reality Check, *US West Coast Fires: Is Trump Right to Blame Forest Management?*, BBC NEWS (Oct. 14, 2020), <https://www.bbc.com/news/world-us-canada-46183690> [<https://perma.cc/8SR8-TZBN>].

⁸⁴ 549 U.S. 497, 519 (2007).

deral policy makers and Congress should recognize that state policies and enforcement of wildfire management methods may accomplish more than those allowed in federal plans.⁸⁵

Almost fifty percent of all land area—the area most prone to wildfires—throughout the eleven western states is owned and managed by the federal government.⁸⁶ Because wildfires disproportionately burn on federal lands, the federal government has a significant role in managing them.⁸⁷ There are five primary federal agencies that are responsible for managing wildfires in the United States: the Department of Agriculture’s Forest Service (“Forest Service”); the Department of the Interior’s Bureaus of Indian Affairs (BIA) and Land Management (BLM), Fish and Wildlife Service (FWS), and National Park Service (NPS).⁸⁸ From 2011 to 2020, these federal agencies were collectively provided \$5.5 billion dollars to help “reduce overgrown vegetation on public lands, which can fuel wildfires.”⁸⁹ The problem remains that there are significant amounts of high-risk acres that the federal agencies are unable to tend to, exacerbating the situation.⁹⁰ These agencies have now started focusing more on using controlled wildfires to reduce excess vegetation which ultimately helps “improve the ecological health of forests and grasslands and . . . reduce the intensity of future wildland fires.”⁹¹

While the risk of wildfires, despite disagreements in fire management approaches, is clearly a bipartisan concern, federalism issues have posed problems for years.⁹² Since 1924, the federal government has been authorized to financially help states with wildfires. In 1995, the priority for private land over federal was altered to be equal.⁹³ In fact, throughout the 1980s up until the Clinton administration, the White House attempted to cut funding for states. Because there is an uncertainty about how much power their local governments have, citizens end up relying more on the federal government, which creates a dependency, and higher federal spending.⁹⁴

A. Various Administrative Approaches to Wildfires

⁸⁵ Margaret H. Lemos, *State Enforcement of Federal Law*, 86 N.Y.U. L. REV. 698, 719–21 (2011) (“Divergent approaches to the exercise of enforcement discretion are not just possible, they are likely. [S]tate enforcement tends to ramp up precisely when—and because—federal enforcers have determined to cut back on enforcement.”).

⁸⁶ See Wibbenmeyer & McDarris, *supra* note 18.

⁸⁷ *Id.*

⁸⁸ *Wildland Fire Management*, *supra* note 5.

⁸⁹ *Id.*

⁹⁰ This is not only seen in areas of legislative action, but enforcement and judicial jurisdictional issues. Lemos, *supra* note 85, at 732–34. See Williams, *supra* note 57.

⁹¹ *Id.*

⁹² Interestingly, most of the affected timberland is owned by industrial entities that are neither private citizens nor government. Karen M. Bradshaw, *A Modern Overview of Wildfire Law*, 21 FORDHAM ENV’T L. REV. 455, 465 (2010).

⁹³ GORTE, *supra* note 76, at 20.

⁹⁴ GORTE, *supra* note 76, at 14.

In August of 2000, after a particularly devastating wildfire season, the National Fire Plan (NFP) was developed.⁹⁵ The NFP's intent was to analyze and actively respond to severe wildfires and their impacts as well as ensure sufficient firefighting resources for the future.⁹⁶ In response to the 2000 wildfire season, the NFP addressed five major points: Firefighting, Rehabilitation, Hazardous Fuels Reduction, Community Assistance, and Accountability.⁹⁷ The plan is still highly relevant today; it offers “invaluable technical, financial, and resource guidance and support for wildland fire management” throughout the United States.⁹⁸ In fact, the Forest Service and the Department of the Interior continue to work collaboratively by taking steps to ensure a successful National Fire Plan.⁹⁹ Once the NFP came into effect, federal funding for “wildfire costs” tripled to \$91 million.¹⁰⁰

In 2003, President Bush signed into law the Healthy Forests Restoration Act (HFRA).¹⁰¹ It was Congress's first response to new data regarding the increasing size and intensity of wildfires occurring in the western United States. This Act sought to reduce the growing threat of wildfires by sustaining environmental standards and encouraging public input on possible solutions.¹⁰² Joined by the support of various environmental conservation groups, the federal government also received bipartisan congressional support that enabled this legislation.¹⁰³

Throughout President Obama's eight years as head of state, he supported many land protection initiatives and federal funding for public lands.¹⁰⁴ In 2016, he hosted a roundtable discussion that took place in collaboration with the Departments of the Interior, Homeland Security, and Agriculture, where “[s]enior Federal agency officials; State, local, and Tribal government leaders; and representatives of national organizations dedicated to firefighter safety and to community resilience” also participated.¹⁰⁵ At that meeting, President Obama signed an

⁹⁵ *Previous Wildland Fire Management Initiatives*, FORESTS & RANGELANDS, <https://www.foresandsrangelands.gov/resources/overview> [<https://perma.cc/U32H-PLKA>] (last visited Jan. 3, 2023).

⁹⁶ *Id.*

⁹⁷ *Id.*

⁹⁸ *Id.*

⁹⁹ *Id.*

¹⁰⁰ GORTE, *supra* note 76, at 20.

¹⁰¹ Healthy Forests Restoration Act of 2003, Pub. L. No. 108-148, 117 Stat. 1887 (codified at 16 U.S.C. § 6501).

¹⁰² *Id.*; see also *President Bush Signs Healthy Forests Restoration Act into Law*, THE WHITE HOUSE, <https://georgewbush-whitehouse.archives.gov/infocus/healthyforests/> [<https://perma.cc/NRU5-LWZA>] (last visited Oct. 27, 2022) (describing how then-President Bush was pushing for “common-sense forest legislation”).

¹⁰³ Healthy Forests Restoration Act of 2003.

¹⁰⁴ See, e.g., Department of the Interior, Environment, and Related Agencies Appropriations Act of 2009, Pub. L. No. 111-8, 123 Stat. 524, 701 (codified as amended in scattered sections of 30 U.S.C. and 43 U.S.C.) (increasing funding for public lands); Omnibus Public Land Management Act of 2009, Pub. L. No. 111-11, 123 Stat. 991 (codified as amended in multiple sections throughout the U.S. Code) (designating millions of acres as “new wilderness areas” in order to be protected for future generations).

¹⁰⁵ See *FACT SHEET: Mitigating the Risk of Wildfires in the Wildland-Urban Interface*, THE WHITE HOUSE (May 18, 2016), <https://obamawhitehouse.archives.gov/the-press-office/2016/05>

Executive Order on *Wildland-Urban Interface Federal Risk Mitigation*, directing federal agencies to mitigate wildfire risks to people and property as much as possible.¹⁰⁶ He then released a statement to the public concerning his actions and the data regarding the then-increasing threat and continuing risks of wildfires.¹⁰⁷

In 2018, the Trump administration passed the Wildfire Suppression Funding and Forest Management Activities Act which created a multi-billion-dollar disaster fund for federal agencies to use exclusively for firefighting efforts.¹⁰⁸ This provided huge financial relief from the federal government to these agencies to use in addition to their annually allocated budgets.¹⁰⁹ During his term, President Trump was publicly and highly critical of federal land management efforts regarding wildfires. Despite research suggesting that rising global temperatures were affecting the frequency of fires, President Trump blamed “forest management rather than climate change” as being the key factor for wildfires burning across [the western states].¹¹⁰ He criticized California’s approach to fighting the fires, pointing to Finland’s approach, which clears forests with rakes to prevent fires.¹¹¹ Furthermore, in 2020, while the government and Congress were grappling with the COVID-19 pandemic, the wildfire situation worsened. During that year alone, over seventy percent of all area burned by wildfires was on federal land.¹¹²

After another egregiously devastating wildfire season in 2021, President Biden signed the Bipartisan Infrastructure Law (BIL) into law.¹¹³ This Law allocated over three billion dollars to wildland fire management.¹¹⁴ Most notably, it “appropriated funds... [for] the creation of a wildland firefighter occupational series” as well as “significant increase[s] in firefighter salaries.”¹¹⁵ It also “developed strategies to minimize wildland firefighter exposure to line-of-duty environ-

/18/fact-sheet-mitigating-risk-wildfires-wildland-urban-interface [https://perma.cc/9L4C-X6WV] [hereinafter *FACT SHEET*].

¹⁰⁶ *Id.*

¹⁰⁷ *Id.*

¹⁰⁸ See Wildfire Suppression Funding and Forest Management Activities Act, Pub. L. No. 115-141, § 102, 132 Stat. 348, 1059 (2018) (codified as amended at 2 U.S.C. § 901(b)(2)) (enforcing discretionary spending limits).

¹⁰⁹ *Id.*

¹¹⁰ Reality Check, *supra* note 83.

¹¹¹ *Id.* But—as the article points out—differences in climate, land use, and vegetation do not allow for a fair comparison of Finland and California’s needs with regards to wildfire prevention efforts; thus, a directly comparable approach to Finland is more than likely not a viable solution for the US wildfire crisis. See also Kirk Siegler, *West Coast Fires: Climate, Forest Management, Lax Rules, Plenty of Blame to Go Around*, NPR (Sept. 15, 2020, 3:15 PM), <https://www.npr.org/2020/09/15/913128020/west-coast-fires-climate-forest-management-lax-rules-plenty-of-blame-to-go-around> [https://perma.cc/YPG3-YXQG].

¹¹² Wibbenmeyer & McDarris, *supra* note 18.

¹¹³ *Interactive Wildfire History Timeline*, *supra* note 27. The Law is also known as the Infrastructure Investment and Jobs Act. See Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, 135 Stat. 429 (2021) (codified as amended at 23 U.S.C. § 117).

¹¹⁴ *Interactive Wildfire History Timeline*, *supra* note 27.

¹¹⁵ *Id.* The bill promises “significant increases” in that it ensures federal wildland firefighters receive a minimum \$15 an hour and a base salary increase of up to \$20,000 per year. See 135 Stat. at 1100–01. However, it is important to remember that this does not apply to public or local firefighters working (and often volunteering) to contain wildfires. Nevertheless, these reforms indicate great moves in the right direction for wildland management workers.

mental hazards, and [...] sought] to recognize and address mental health needs.”¹¹⁶

With the prospect of more funding from the BIL, some federal agents were eager to develop new approaches to deal with the wildfire situation. By the beginning of 2022—just months after the BIL was passed—Secretary of Agriculture Tom Vilsack announced a ten-year strategy for dealing with the country’s wildfire crisis.¹¹⁷ At the core of the new strategy is the need for the federal agencies to “[ramp] up fuels and forest health treatments to match the scale of wildfire risk.”¹¹⁸ The need for a cohesive strategy combined with collaborative approaches to wildland fire management is emphasized throughout the report.¹¹⁹ Then, in July 2022, the Biden administration released a detailed statement regarding the entire federal government’s goals and efforts in terms of the growing threat of wildfires.¹²⁰ Providing essential background information as clearly and directly as possible, it describes how “the Biden-Harris Administration has launched multiple simultaneous initiatives to enhance prevention, preparedness, and response by strengthening [the federal government’s] wildfire response capabilities, increasing pay and support for [the] wildland firefighting workforce[,]” and more in order to “keep Americans safe.”¹²¹ Additionally, President Biden has directed federal government officials to build on these goals and strategies in order to ensure that “wildfire prevention, preparedness, and response” remains a top priority throughout the entire federal government.¹²² While it can be lofty and idealistic in its tone at times, the statement does in fact provide a detailed summary of the administration’s actions taken in 2022 as well as plans for the future.¹²³

The BIL also promulgated the Wildland Fire Mitigation and Management Commission, which is comprised of fifty representatives from agencies, and state, local, and Tribal governments Commission is to recommend improved federal policies surrounding the mitigation, suppression, and management of wildfires, as well as the rehabilitation of effected lands.¹²⁴ The Commission meets monthly and is composed of fifty representatives from federal agencies as well as state, local,

¹¹⁶ *Interactive Wildfire History Timeline*, *supra* note 27.

¹¹⁷ U.S. FOREST SERV., FS-1187C, CONFRONTING THE WILDFIRE CRISIS: A CHRONICLE FROM THE NATIONAL FIRE PLAN TO THE WILDFIRE CRISIS STRATEGY (2022), <https://www.fs.usda.gov/sites/default/files/WCS-CommunicationAid.pdf> [<https://perma.cc/3GCW-QJP7>] [hereinafter FS-1187C]; *see also* *Confronting the Wildfire Crisis*, U.S. FOREST SERV., <https://www.fs.usda.gov/managing-land/wildfire-crisis> [<https://perma.cc/LZJ7-UEKC>] (last visited Oct. 27, 2022).

¹¹⁸ FS-1187C, *supra* note 117, at 2.

¹¹⁹ *Id.*

¹²⁰ *See* THE WHITE HOUSE, FACT SHEET: THE BIDEN-HARRIS ADMINISTRATION CONTINUES EFFORTS TO ADDRESS GROWING WILDFIRE THREAT (2022), <https://www.whitehouse.gov/briefing-room/statements-releases/2022/07/28/fact-sheet-the-biden-harris-administration-continues-efforts-to-address-growing-wildfire-threat/> [<https://perma.cc/TYD4-DGMS>].

¹²¹ *Id.*

¹²² *Id.*

¹²³ *Id.*

¹²⁴ Wildland Fire Mitigation and Management Commission Act of 2021, Pub. L. No. 117-58, 135 Stat. 429, 1250 (codified as amended at scattered sections of 42 U.S.C.).

and Tribal governments, indicating the importance of collaboration across political boundaries.¹²⁵

One month after wildfires destroyed over 2,000 acres of land in Maui, the Commission released its report addressing Congress and outlining a more comprehensive set of recommendations on how to handle the US wildfire crisis.¹²⁶ These recommendations provide holistic strategies on how Congress can better implement both reactive and proactive, sustainable solutions that transcend jurisdictions. Seven key themes emerge from the recommendations:

Urgent New Approaches: Historically and institutionally addressed as a land management problem, wildfire—and the crisis it has become—spans jurisdictions and ecosystems and threatens critical infrastructure, built environment, public health, and public safety. As such, collective, holistic, cross-boundary action is critical to address the present challenges. Some of the report’s suggestions in this theme include: establishing a Community Wildfire Risk Reduction Program to proactively address risk, change financial incentives and change agency metrics to better focus on performance of ecological health over acres treated.

Supporting Collaboration: Successfully meeting the challenge of wildfire mitigation and management requires approaches that better involve all relevant entities and every scale of society.

Shifting from Reactive to Proactive: Only by putting significantly more focus and resources toward proactive pre-fire and post-fire planning and mitigation can we break the current cycle of increasingly severe wildfire risk, damages, and losses.

Enabling Beneficial Fire: The need to expand beneficial fire, such as prescribed and cultural burning, must be balanced with the public health threats associated with smoke and reduced air quality produced through beneficial fire and implemented through pre-fire planning that helps share decision-making, enable mutual understanding, and facilitate the consideration of tradeoffs associated with various fire response and management decisions.

Supporting and Expanding the Workforce: Federal investment is urgently needed to create a cross-trained year-round workforce that is focused on and tailored to mitigation, planning, and post-

¹²⁵ Press Release, *Biden-Harris Administration’s Wildland Fire Mitigation and Management Commission Releases Report Outlining Comprehensive Recommendations to Change the Nation’s Relationship with Wildfire*, U.S. DEP’T. INTERIOR, <https://www.doi.gov/pressreleases/biden-harris-administrations-wildland-fire-mitigation-and-management-commission> [<https://perma.cc/TFA7-DLTH>] (Nov. 29, 2023).

¹²⁶ *Id.*

fire response and recovery, with strategies in place for recruitment and retention.

Modernizing Tools for Informed Decision-making: The Commission recommends a number of measures that would better coordinate, integrate, and strategically align fire-related science, data and technology.

Investing in Resilience: There is a need for increased funding that is more sustained and predictable, keeps pace with the escalating crisis, and includes a focus on the mitigation of risk and impacts both before and after wildfire is critical and will reduce costs in the long run.¹²⁷

While these recommendations are arguably the most comprehensive and cohesive in years, time will tell if Congress decides to heed the urgency in this report and take federal legislative action. The Biden-Harris administration has remarked that they will continue to pursue an “all-of-government approach” to mitigating the risks of wildfires.¹²⁸ Regardless, the landscape is changing—literally and figuratively—on how the federal, local, state, and Tribal governments seek to address the impact of wildfires on the United States. Recommendations like those outlined above address the urgent need for continuous, collaborative, and cohesive legislative efforts.

B. Cooperative Efforts Between the States and Federal Agencies

Though the Commission promotes joint efforts, exactly how does that work on the ground?

In 2022, some federal agencies assessed the benefits of working more closely with state and local communities. For example, the Forest Service released a new collaboration strategy to manage the fires, as “the scale, pace, and methods of work on the ground [has] not matched the need” for assistance.¹²⁹ The Forest Service began actively working together with the states, Tribal and local communities, as well as willing volunteers “to protect communities, critical infrastructure, watersheds, habitats, and recreational areas.”¹³⁰ More specifically, one of the main goals of the Forest Service’s 2022 strategy was to collaborate with those efforts above in order “to focus fuels and forest health treatments more strategically and at the scale of the problem, using the best available science as a guide.”¹³¹ This strategy is the result of years of research and collaboration. In 2021, the Forest Service and the National Forest Foundation held “roundtable events” in order to develop its 2022 wildfire strategy and figure out how to best implement

¹²⁷ *Id.*

¹²⁸ *Id.*

¹²⁹ *Confronting the Wildfire Crisis*, U.S. FOREST SERV., <https://www.fs.usda.gov/managing-land/wildfire-crisis> [<https://perma.cc/R7DB-R5E6>] (last visited Oct. 27, 2022).

¹³⁰ *Id.*

¹³¹ *Id.*

it.¹³² These virtual roundtables were highly successful and fostered a great deal of conversation from both the public as well as federal employees. The Forest Service and the National Forest Foundation then expertly narrowed down thousands of recommendations from around the United States to the following ten centralized focus areas on how to best confront the wildfire crisis:

- (1) Embrace changes to Forest Service business practices and shifts in agency culture
- (2) Improve internal and external communication related to the [wildfire] crisis and what is necessary for success
- (3) Recruit and maintain a workforce capable of meeting the necessary pace and scale of restoration
- (4) Update partnership mechanisms and requirements for cross-boundary funding and implementation
- (5) Honor Tribal sovereignty and history; leverage learning, priorities, and capacity; and incorporate indigenous traditional ecological knowledge
- (6) Build equity and resilience into planning and implementation
- (7) Expand markets and forest materials processing infrastructure
- (8) Build shared understanding and support for the use of fire as an essential tool for ecosystem resilience
- (9) Invest in open and transparent information sharing and use of shared data and models
- (10) Help decision makers and [the public] understand tradeoffs and benefits of management for forest resiliency¹³³

Assuming it is properly implemented by Congress, this highly collaborative plan between the federal agencies in charge of wildfire management could alleviate the stress on both federal and private wildland management officials as well as lessen the overall impacts wildfires have on the United States.

Additionally, as fire seasons intensify each year, more money is required to manage them, from both the state and federal levels.¹³⁴ For example, “[s]tates are responsible for managing and responding to fires that begin on state, local, and private lands,” which amounted to about thirty percent of acres burned in 2020.¹³⁵ Conversely, the federal government is responsible “for wildfires that begin on federal lands,” or approximately seventy percent of the affected areas.¹³⁶ The following data clearly indicates an ever-increasing upward trend in costs of fire suppression for both federal and state budgets: “U.S. Forest Service fire suppression expenditures had increased from about [fifteen] percent of the agen-

¹³² See *Confronting the Wildfire Crisis*, *supra* note 129.

¹³³ *Id.*

¹³⁴ Matthew Wibbenmeyer & Lauren Dunlap, *Wildfires in the United States 102: Policy and Solutions*, RES. FOR THE FUTURE, <https://www.rff.org/publications/explainers/wildfires-in-the-united-states-102-policy-and-solutions/> [https://perma.cc/P4ND-LKC3] (Dec. 12, 2022); see also Wibbenmeyer & McDarris, *supra* note 18.

¹³⁵ Wibbenmeyer & Dunlap, *supra* note 134.

¹³⁶ *Id.*

cy's appropriated budget to more than [fifty] percent in 2017. Nationwide suppression costs in 2017 and 2018 ballooned to \$2.9 billion and \$3.1 billion respectively, while state wildfire expenditures have also increased substantially."¹³⁷

While these costly conflagrations grow in severity and size each year, so too does the need for human resources.¹³⁸ The collaborative efforts of local and federal wildfire managers combine with willing volunteers from around the United States every year. Any federal government employee can also take on short-term assignments on wildfires "without abandoning their current job or career path."¹³⁹ As long as the employee undergoes proper training and receives the qualifications required, there are many opportunities for volunteering in key support roles within wildfire management.¹⁴⁰ However, even if people cannot commit to full-time career opportunities within wildland fire management, there remain ample ways to provide help and support to those dealing with the fires.¹⁴¹

III. LISTEN UP, CONGRESS: PROPOSING THE FUTURE OF WILDFIRE LEGISLATION

Although the federal government and past presidential administrations have literally shown decades of interest in better understanding how to handle wildfires, there are still gaps in federal actions and opportunities to lessen the impact of future fire seasons. Congress has proposed laws regarding high-intensity wildfires; however, they are nothing more than just piecemeal legislative efforts that have yet to pass the House and Senate after over a year.¹⁴² It is time for Congress to work more urgently and more closely with the federal agencies as well as state and local governments to develop a coherent set of laws and regulations to help remedy this worsening situation.

¹³⁷ *Wildfires and Climate Change*, CTR. FOR CLIMATE & ENERGY SOLS., <https://www.c2es.org/content/wildfires-and-climate-change/> [https://perma.cc/22SW-2QKH] (last visited Sept. 23, 2022) (citing Press Release, *Forest Service Wildland Fire Suppression Costs Exceed \$2 Billion*, U.S. DEP'T OF AGRIC. (Sept. 24, 2017) <https://www.usda.gov/media/press-releases/2017/09/14/forest-service-wildland-fire-suppression-costs-exceed-2-billion#:~:text=WASHINGTON%2C%20D.C.%2C%20September%2014%2C,most%20expensive%20year%20on%20record> [https://perma.cc/X6PJ-24MF]); see also Wibbenmeyer & Dunlap, *supra* note 134 (describing how the federal government allocated money to both fuel treatments for controlled burnings and fire suppression measures).

¹³⁸ Wibbenmeyer & Dunlap, *supra* note 134.

¹³⁹ See *Working in Wildland Fire*, U.S. DEP'T OF THE INTERIOR, <https://www.doi.gov/wildlandfire/working-in-wildland-fire> [https://perma.cc/MJ28-QTUF] (last visited Jan. 3, 2023).

¹⁴⁰ *Id.*

¹⁴¹ See Jena Casas, *How Can I Support Wildland Firefighters?*, NEV. TODAY (Sept. 16, 2021), <https://www.unr.edu/nevada-today/news/2021/atp-support-firefighters> [https://perma.cc/P3HP-HBTZ] (discussing various ways to help support the wildland firefighters such as writing thank you letters to firefighters; reaching out to local fire departments for volunteer or donation opportunities; and donating to organizations that directly help the individuals, lands, and animals impacted by fires).

¹⁴² See, e.g., Western Wildlife Support Act of 2023, H.R. 482, 118th Cong. (2023). It was introduced in January 2023, and in the span of one month, referred to five different committees. It went to the Senate in May 2023, where it has not been touched since. See S. 1764, 118th Cong. (2023).

A. Look to Wildfire Suppression Outside of the United States

Although the western states see some of the worst wildfires on earth each year, high-intensity fires are not uncommon in other parts of the world.¹⁴³ Despite slight variances in the contributing factors, in each example, the underlying theme remains the same: “[h]otter, drier seasons, driven by the burning of fossil fuels, have made the world more prone to erupt in flames.”¹⁴⁴ For this reason, it could be possible to look to other countries that are affected to see how they approach the situation.

This is true in Spain, which boasts a Mediterranean climate perfect for wildfire conditions.¹⁴⁵ Just as the wildfires have worsened in the United States, southern European countries are also seeing a major increase in the frequency and impact; this has been attributed to both land-use and socio-economic changes.¹⁴⁶ Some argue that a return to more traditional rural activities—such as collecting firewood and allowing livestock to graze freely—would help remedy the current dry landscapes and accumulation of forest matter, greatly increasing the fire hazards.¹⁴⁷ A Spanish researcher and activist for “pastoralism” remarks:

The management of fire breaks by grazing has been widely applied in south-eastern France over the past [twenty-five] years, providing the most important reference point for the region. Other Mediterranean countries have also run [similar] tests, but only a few of these have developed into permanent management programmes [*sic*]. . . . The usual pattern is that the farmers that take part in these programmes [*sic*] graze their livestock intensively in fire break areas defined by forest services, thereby reducing vegetation fuel loads. In exchange for this service, [the farmers] receive monetary and/or in-kind remuneration, for example, animal housing, fences, or water troughs.¹⁴⁸

¹⁴³ See Veronica Penney, *It's not Just the West. These Places Are Also on Fire.*, N.Y. TIMES (Sept. 16, 2020), <https://www.nytimes.com/2020/09/16/climate/wildfires-globally.html> [<https://perma.cc/VP4Z-46T6>] (citing Stephen J. Pyne, a fire historian and emeritus professor at Arizona State University, discussing the Earth's “many fire problems”); see also PYNE, *supra* note 46.

¹⁴⁴ See Penney, *supra* note 143. For a look at the devastating effects wildfires have had on the Brazilian Amazon in the last few years, see *2020 Amazon Fire Season*, RAINFOREST FOUND. U.S., <https://rainforestfoundation.org/our-work/special-initiatives/2020-amazon-fires/> [<https://perma.cc/82GL-TTMX>] (last visited Jan. 3, 2023).

¹⁴⁵ See *Wildfire Prevention: A Reason for Promoting Pastoralism in Spain*, EUR. F. ON NATURE CONSERVATION & PASTORALISM, <https://www.efncp.org/projects/projects-spain-navarra/wildfire-prevention/> [<https://perma.cc/Z79G-CVP4>] (last visited Jan. 3, 2023) [hereinafter *Pastoralism in Spain*]; see also Gerry Hadden, *‘Fire Flocks’ of Sheep and Goats Get Deployed to Help Battle Forest Fires in Spain*, THE WORLD (June 14, 2022, 2:00 PM), <https://theworld.org/stories/2022-06-14/fire-flocks-sheep-and-goats-get-deployed-help-battle-forest-fires-spain> [<https://perma.cc/2CUI-WFNV>] (describing how shepherding is gaining in popularity as a profession to assist these out-of-control fires).

¹⁴⁶ See *Pastoralism in Spain*, *supra* note 145.

¹⁴⁷ *Id.*

¹⁴⁸ *Id.*

Implementing something of this sort in the United States would undoubtedly be difficult—but not impossible. Examining this unique European solution to wildfire management provides a different perspective, but one that matters and could effectuate change all the same.

The pattern of high-intensity wildfires in the United States is also seen in the southern hemisphere. At the beginning of 2020, Australia’s worst fire season on record finally subsided, leaving behind unimaginable destruction.¹⁴⁹ “Thousands of homes were lost and millions of acres burned. At least [thirty] people died. Estimates of the number of animals killed range between a few hundred million and a billion.”¹⁵⁰ These staggering statistics have been studied by researchers, who found that one of the significant causes of these bushfires was human-caused climate change.¹⁵¹ One way Australia now braces itself for more blazing fires is simply by having the homeowners clear away excess shrubs and weeds; fire management officials also complete prescribed burns.¹⁵² Interestingly enough, the federal government has had a longstanding partnership with Australia (as well as New Zealand, Canada, and Mexico) regarding fire suppression efforts.¹⁵³ After a division of the Australian national government requested US support and manpower, firefighters and other personnel were deployed from multiple federal land management agencies in the United States.¹⁵⁴ “It was humbling to observe the Australians’ resilience, the response in Australia, and level of support from our agency,” remarked the United States Forest Service Director of Fire and Aviation Management, who further said “[w]e will continue to learn from each other in this complex fire environment.”¹⁵⁵

Fire knows no boundaries; it blazes on without regard to anything in its way, including jurisdictional lines denoting public or private land. It is thus important to help other countries and offer whatever support we can, in addition to understanding how other countries manage wildfires. Mutually beneficial relationships—like the one between Australia and the United States or between livestock farmers and the Mediterranean landscape—offer insight to federal agencies here within the United States. Looking to other wildland fire management approaches and comparing them to current ones in America would likely help the United States develop a more cohesive plan to adequately battle these blazes.

B. Utilize Prescribed Burns and Let Some Fires Burn Their Course

The phrase “fight fire with fire” is not just an old adage but, as research indicates, is clearly a highly relevant and helpful approach. While it is unfortuna-

¹⁴⁹ See Penney, *supra* note 143.

¹⁵⁰ *Id.*

¹⁵¹ *Id.*

¹⁵² *Id.*

¹⁵³ See Imani Lester, *Partnership Efforts to Address Australia Wildfires*, U.S. DEP’T OF AGRIC. (Feb. 4, 2020), <https://www.usda.gov/media/blog/2020/02/04/partnership-efforts-address-aust-ralia-wildfires> [https://perma.cc/8HDD-2BM7].

¹⁵⁴ *Id.*

¹⁵⁵ *Id.*

tely too late to go back in time and educate wildland managers about the benefits of letting some fires burn, we can use prescribed burns to help clear excess forest cover.¹⁵⁶ Of course, vigilance in monitoring each wildfire is needed, but there may be times where it is acceptable to let the fire continue to burn. “[M]anagement-ignited prescribed fires can be used to complement naturally occurring fires.”¹⁵⁷ That said, great care must be taken by the federal and state agencies to ensure that the prescribed fires mimic naturally occurring fires as much as possible.¹⁵⁸ Regardless, this solution helps remedy the situation, and Congress should address it, for “[d]ecades of research show an intentionally set, carefully planned and managed prescribed fire can reduce the risk of catastrophic wildfires.”¹⁵⁹ Allowing some fires to run their courses literally creates fire “speed bumps” that protect the most at-risk regions from devastation. These prescribed burns have a list of positive side effects for the environment in that they “reduce debris buildup in forests, add nutrients to the landscape, minimize pests, improve wildlife habitat and promote wildflower blooming.”¹⁶⁰

Controlled burns have been proven to help reduce the likelihood of severe and intense wildfires.¹⁶¹ Although the National Park Service has been encouraging and using this approach for a few decades, it is just now nearing acceptance with the other federal agencies, like the Forest Service.¹⁶² The Forest Service has indicated that 99.8% of all prescribed fires go according to plan,¹⁶³ thus reiterating that Congress should encourage these agencies to consider prescribing regular burns in order to mitigate the effects of naturally occurring wildfires. Furthermore, state representatives should be well-informed regarding the data on wildfires and how the federal agencies seek to handle them. This would allow them to persuade their state legislatures to consider these approaches. Before implementing prescribed burns, it is first necessary to have a “well-informed fire management plan . . . [that] carefully considers all the factors present in an area” to determine whether this approach is possible or desirable.¹⁶⁴ These factors include fire history, invasive plants, threatened and endangered species, human developments, cultural sites, and more.¹⁶⁵ Federal agencies are actively seeking to implement new fire management strategies;¹⁶⁶ the strategies have a lot of promise but require Congress’s wholehearted support. Congress and the states need to work together in developing these kinds of fire management plans for each area within the United States. Thus, taking action to protect people and minimize

¹⁵⁶ See Wibbenmeyer & Dunlap, *supra* note 134 (emphasizing that “[p]olicymakers can reduce the barriers to fuels management projects by educating the public about prescribed fire, allocating more funds for burns, and changing burn regulations and permit restrictions.”).

¹⁵⁷ van Wagtendonk, *supra* note 38, at 15.

¹⁵⁸ *Id.*

¹⁵⁹ Pulver, *supra* note 70.

¹⁶⁰ *Id.*

¹⁶¹ van Wagtendonk, *supra* note 38, at 15.

¹⁶² *Id.*

¹⁶³ Pulver, *supra* note 70.

¹⁶⁴ van Wagtendonk, *supra* note 38, at 15.

¹⁶⁵ *Id.*

¹⁶⁶ See *FACT SHEET*, *supra* note 105 (indicating that support from policy and lawmakers is essential to handle this “forest health crisis”).

danger while also “incorporating the knowledge that some fire is normal, healthy and necessary” can no longer be *just* a recommendation; it is essential and backed by decades of scientific data and research.¹⁶⁷

C. Foster Greater Collaboration Between Federal and Nonfederal Authorities

Furthermore, Congress should continue to encourage collaboration between federal and nonfederal organizations (that is, local, state, and Tribal governments as well as nongovernmental partners and the public at large). This is important in educating everyone about the risks of wildfires and reducing their overall impact on the environment, society, and the economy.¹⁶⁸ If and when a particularly devastating wildfire occurs, Congress needs to be ready to authorize FEMA’s disaster relief efforts and assistance, such as “ensuring that eligible survivors have access to recovery funds.”¹⁶⁹ Firefighters—both state and federal—have a tremendous job managing and containing the fires each year. These firefighters are also often volunteers from all over the United States, reiterating that this is a nationwide issue (often on federal public land) that Congress needs to take charge of as soon as possible. Everyone is clearly doing the best they can; however, the western states and the men and women working on the frontlines to battle these fires clearly need additional resources each year to manage clean-up and prevention of disastrous fires.¹⁷⁰ “Wildland firefighters work long hours in stressful conditions, often for relatively little pay. Many federal firefighters are also considered ‘temporary’ workers and do not have access to federal employee health care and other benefits.”¹⁷¹ The interest in helping communities deal with these fires is undoubtedly there. However, a lack of dedicated funding from the federal government leads to local, state, and Tribal governments having to apply for competitive grants and budget themselves for each fire season without knowing exactly how intense it will be or what the federal government will provide.

Therefore, policy changes are necessary, especially those that provide more resources and support, including financial. If Congress implements these efforts, it would likely reduce turnover and improve the mental health of those working on the front lines.¹⁷² Funding these efforts could come through federal budget allocations and—though not ideal—higher property taxes on lands that are more prone to wildfires. Of course, taxing public lands at increased rates affects all US taxpayers; and while this is also not a popular opinion, it remains a viable solution. Clear research indicates the devastating impacts of wildfires are not confined to one region of the United States.¹⁷³ At the very least, Congress can encourage communities, property developers, homeowners, and forest managers

¹⁶⁷ 3 Reasons Wildfires are Getting More Dangerous, *supra* note 58.

¹⁶⁸ *Wildland Fire Management*, *supra* note 5.

¹⁶⁹ *Id.*

¹⁷⁰ Wibbenmeyer & Dunlap, *supra* note 134.

¹⁷¹ *Id.*

¹⁷² *Id.* (describing that such policy changes could also increase the overall effectiveness of the wildland fire management teams).

¹⁷³ See *supra* Section I.A.; see also *Story Map*, *supra* note 17.

to educate themselves in order to reduce the likelihood and impacts of wildfires. By understanding them more fully, Congress, the states, and land managers can plan more effectively for the potentially destructive effects of these higher-intensity fires.

D. Update Short- and Long-Term Wildfire Management Plans Each Year

Finally, it is critical that the local communities, states, land management agencies, and federal government maintain the dialogue and discussion surrounding wildfire management efforts. Although this has wavered in the past, it seems to be improving despite the worsening fires each year. Wildfires have been an issue in the United States for decades; it is clear that short-term plans to handle them—especially the disastrous ones—are inadequate. Instead, Congress should strive to sustain a commitment each year to evaluating and monitoring wildfire management plans. The following steps have been proposed by the Forest Service, and if successfully implemented by Congress, they would provide a great deal of resources and coherent guidance to wildfire management efforts:

- (1) [Assure] that necessary firefighting resources and personnel are available to respond to wildland fires that threaten lives and property
- (2) [Conduct] emergency stabilization and rehabilitation activities on landscapes and communities affected by wildland fire
- (3) [Reduce] hazardous fuels (dry brush and trees that have accumulated and increase the likelihood of unusually large fires) in the country's forests and rangelands
- (4) [Commit] to the Wildland Fire Leadership Council, an interagency team created to set and maintain high standards for wildland fire management on public lands¹⁷⁴

Congress needs to provide more specific guidance to the federal agencies and states battling these high-intensity wildfires. They may not literally be on the frontlines fighting the flames, but Congress is arguably the one in charge of budgeting and planning for these types of national disasters. It has been proven through research that “[d]eveloping recovery plans before a fire hits, and implementing plans quickly after a fire [may] reduce erosion, limit flooding, and minimize habitat damage.”¹⁷⁵ Implementing steps like these and working more closely with the federal agencies in charge of wildfire management would ensure it remains a priority.

E. Take Charge of Climate Change

The research and data on climate change are all available to Congress, but they have continued to cast it aside as a secondary issue. Perhaps it is too large an issue for them to address all at once; regardless, making excuses will not solve

¹⁷⁴ *Previous Wildland Fire Management Initiatives*, *supra* note 95.

¹⁷⁵ *See Wildfires and Climate Change*, *supra* note 137.

anything. Climate change and its detrimental effects on the planet must be made a priority. Congress may begin by addressing the “unchecked use of fossil fuels like oil and coal”¹⁷⁶ by advocating for different sources of energy. Therefore, taking decisive steps to reduce the excessive reliance on fossil fuels as well as plan to transition to renewable energy should be of the utmost importance.¹⁷⁷ If Congress provides a cohesive plan, this will become more of a priority.

The increasing severity and frequency of wildfires is—without a doubt—a bipartisan issue that requires a coherent set of federal laws and regulations. It is time for Congress to take action. It is time for everyone in the United States to understand the gravity of the situation and work together in order to reduce the more devastating impacts of wildfires in the United States—especially those with the ability to enact laws and promote change. After all, as former Idaho Senator Frank Church correctly identified: without the presence of American wilderness and preservation of its resources, “this country will become a cage.”¹⁷⁸

CONCLUSION

The US war on high-intensity wildfires continues to this day, but it does not have to be like this. Through the examination of historical and modern accounts of wildfires, we are better equipped to understand the importance of adequate legislation and support for those directly affected by them. There is little to argue anymore about the causes of these fires; the effects of past fire suppression techniques in addition to rising global temperatures literally create the perfect firestorm. What needs to happen now is action by both the federal and state governments regardless of federalism concerns.

Time may be running out. Congress must act and push forward legislation before more irreparable harm is done due to mismanagement of wildland fires. We may not have started the fires, but through effective and adequate legislation as well as increased cooperative efforts between the states and federal government perhaps we can improve the situation—especially for future generations.

¹⁷⁶ *3 Reasons Wildfires are Getting More Dangerous*, *supra* note 58 (offering three reasons and three possible solutions for the wildfire crisis in the West).

¹⁷⁷ *Id.*

¹⁷⁸ *See* 107 CONG. REC. 18365 (1961) (statement of Sen. Frank Church).