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To: Interested Parties

From: Teresa Feo, Research Director, Megafire Action; James Campbell, Director of Federal Affairs, Megafire Action

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Subject: Policy Memo - The Fix Our Forests Act and the Environment

Foreword: A Note from Megafire Action

*There is broad agreement among fire scientists and leading conservation groups on what it takes to get our forests back to health. We know we need forests that are diverse and capable of thriving with fire rather than being destroyed by it. Unfortunately, misinformation rooted in the legacy of past commercial logging has clouded this reality, fueling distrust and confusion. **But the science is clear: destructive wildfires are increasing, forest health is declining, and careful restoration work is effective at protecting both our communities and our natural environment.***

*In some places, forests are so overgrown that it isn't safe to use fire yet. In those areas, targeted thinning has to come before much-needed beneficial fire can be returned to the land. But that approach doesn't make sense everywhere. In other places the biggest need is ignition reduction to prevent fires that have become too frequent for the local ecology. And in others still the priority is strengthening communities and homes to ensure they can withstand wildfire when it occurs. **The Fix Our Forests Act isn't about one single solution – it's about having better tools.** FOFA helps match the right wildfire solutions to the specific needs of each place, reducing risk while promoting the outcomes we want and avoiding the ones we don't.*

*Standing back and not acting amid this crisis is not neutral – it is in itself a choice that carries potentially severe consequences for biodiversity, ecosystems, and climate stability. **The status quo is not safe, it's a recipe for catastrophe. The evidence from fire-prone regions is clear: proactive land management paired with community retrofits reduces risk and ensures that both ecosystems and communities can thrive with fire.***

*Critics of the legislation have made clear that only thinning the forest or engaging in commercial logging alone is not building wildfire resilience, and may actually worsen wildfires. **We agree.** This is why Megafire Action strongly supports the Fix Our Forests Act (FOFA). **This bill is a broad and bipartisan set of solutions, not a "logging bill" – it's a modern update to how we manage our land.***

By establishing the Wildfire Intelligence Center, streamlining permitting hangups, implementing key provisions from the National Prescribed Fire Act, and helping us plan across large areas facing wildfire risk, FOFA creates a smart mix of 21st century tools to handle modern megafires. FOFA provides the oversight and the mechanisms to ensure forest management activities such as thinning are done as a step toward returning beneficial fire to



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our forests and building wildfire resilience, not as an end in itself.

There is no "one size fits all" for every ecology, and FOFA doesn't set arbitrary targets – it simply provides the tools we need to apply the right treatment to the right acre of forest. We have to start using those tools now to save the future of our forests, homes, families, and communities.

– Matt Weiner, founder and CEO, Megafire Action

The Fix Our Forests Act (FOFA) represents a significant opportunity to tackle this country's wildfire crisis. As the Senate Agriculture Committee considers the bill, it signals a profound shift in our land management strategy from a narrow focus on individual projects to a more holistic, broader approach for the highest wildfire risk landscapes.

This memo outlines the key environmental and policy implications of FOFA. It includes examples of proactive land management that have improved wildfire outcomes, cases showing the potential for proactive strategies to build more resilient landscapes, and instances of the environmental damage caused by extreme wildfires under the current status quo. Standing back and letting nature burn is not neutral — it is in itself a choice that carries potentially severe consequences for biodiversity, ecosystems, and climate stability.

There is overwhelming scientific evidence that wildfire mitigation treatments are effective and that by choosing to scale up the kind of work enabled by FOFA, we have an opportunity to create a future that is both safer for communities and better for the environment.

There are several provisions in FOFA that establish a framework for managing wildfire risk. Sec 101 of FOFA establishes landscape-scale Fireshed Management Areas (FMA) for firesheds in the top 20% of wildfire risk. Sec 105 establishes the Fireshed Assessment process in which federal agencies in collaboration with state, Tribal, and local entities, and informed by public input, create landscape-level strategies for managing wildfires, natural resources, ecosystem services, and other environmental and cultural values of interest. Sec 106 of FOFA then provides permitting relief to projects that will help realize the goals identified by the



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Fireshed Assessments. The intent of FOFA is to reduce the risk of destructive wildfires while maintaining the integrity of wildfire-dependent ecosystems.

As both wildfires and wildfire management treatments have become more common in recent years, scientists have been afforded more opportunities to study the impacts of extreme wildfires on the environment and the effectiveness of treatments to modify those wildfire impacts. There is now strong scientific consensus that treatments do work to reduce the negative impacts of wildfires and that by choosing to expand such treatments across landscapes we have the opportunity to promote beneficial environmental outcomes. Conversely, there is also ample scientific evidence that extreme wildfires are causing undesired environmental outcomes in today's world and that by maintaining our current land management practices, we risk worsening environmental conditions in the future. Below we review the scientific evidence in support of expanding beneficial fire and other proactive management activities to promote safe and healthy wildfire-dependent ecosystems.

Research shows fuel treatments effectively reduce wildfire severity.

FOFA will increase the pace and scale of proactive forest management by providing regulatory relief to treatment projects intended to reduce wildfire risk while balancing environmental values. Those in opposition to proactive management commonly argue that treatments don't work *in practice* because wildfires rarely encounter a treatment. While this was certainly a true statement in the past when treatments were scarce and nearly all wildfires were quickly suppressed, both wildfires and treatments have become much more common in recent years.

Nowadays wildfires regularly burn into the footprint of past treatments. The State of California and Washington have both launched dashboards to track instances of wildfires encountering treatment footprints and to record observations from firefighters on how the treatments did or did not impact the wildfire.¹ In just the last year alone, 61 wildfires in California burned into 100 treatments and 79% of the treatments were reported to have had a positive

¹ "New CAL FIRE Dashboard Shows Effectiveness of Fuels Treatments." California Wildfire & Forest Resilience Task Force.

<https://wildfiretaskforce.org/new-cal-fire-dashboard-shows-effectiveness-of-fuels-treatments/>



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impact on the wildfire.² Since 2023, 58 wildfires in Washington have burned into 231 treatments with more than 64% of the treatments reporting positive outcomes.³

More wildfires are burning into past treatment footprints more often, providing many opportunities for scientists to rigorously study the real-world effectiveness of wildfire mitigation treatments. There is now an overwhelming amount of peer-reviewed scientific evidence that finds treatments to be very effective at modifying wildfire behavior and reducing the destructiveness of fires.

Examples of proactive management treatments positively changing fires:

- **Reduced severity** – 40 peer-reviewed scientific papers published since 2000 have collectively studied 172 sites where wildfires have burned into the footprint of forest management treatments. A meta-analysis of their results found that when wildfires burned into areas previously treated with a combination of selective thinning + prescribed fire, the severity of those subsequent wildfires were reduced by up to 70% in conifer forests across the Western US ([Davis et. al., 2024, Forest Ecology and Management](#)).

² “Fuels Treatment Effectiveness Reporting.” CAL FIRE.

<https://experience.arcgis.com/experience/91ab6b7f0b414d0ea06bf269a4632e15/page/Treatment-Reporting-Overview/>

³ Washington State Wildfire Interactions with Treatments and Suppression (WTIS) dashboard.
<https://wadnr.maps.arcgis.com/apps/dashboards/d8cc37e4909f405fa4015f310de00fb1>



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Figure 7 from Davis et. al. (2024) showing how thinning + prescribed fire treatments dramatically reduced the severity of the Oregon's 2021 Bootleg Fire

- **Less smoke** – When wildfires burned into areas recently treated with prescribed fire during the 2020 California wildfire season, the severity of those wildfires dropped by 16% resulting in a net reduction of 14% in smoke emissions when also accounting for the emissions from the original prescribed fire treatments. ([Kelp et. al., 2025, AGU Advances](#)).
- **Stable carbon stores** – When the Caldor, Dixie and North Complex fires burned into areas of the Central Sierras that had previously been treated with mechanical thinning in 2016 the prevalence of high-severity fire decreased by 88%. By 2023, nearly 75% of treated areas had higher carbon stores compared to untreated areas, with an average benefit of $12.8 \pm 4.7 \text{ Mg C ha}^{-1}$ per treatment when also accounting for the loss of carbon from the removal of biomass during the original thinning treatment. ([Yackulic, et. al. 2025, Frontiers in Forests and Global Change](#)).



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We can use proactive management to create a better environmental future.

FOFA will create Fireshed Assessments, the Wildfire Intelligence Center, and other tools that will help us thoughtfully deploy more beneficial fire and active management projects to promote the environmental outcomes we want while avoiding harmful outcomes we don't want. If we choose to expand this proactive management approach, we can create a better environmental future than would be expected if we don't change the current status quo. Many studies modeling likely future conditions under a changing climate have found that expanding the use of beneficial fire and active management over the next few decades could provide for better environmental outcomes – including for water, wildfire, and endangered species – than would be expected if we continued with our current status quo of practices.

Examples of the potential for proactive management to create a better outcomes:

- **More water** – Increasing the scale of thinning and prescribed fire treatments to restore pre-colonial conditions in the Sierra Nevada is expected to provide watershed co-benefits by increasing streamflows by as much as 14% compared to the current status quo, providing a potential hedge against drought in a hotter, drier future climate ([Boardman et. al. 2025. *Water Resources Research*](#)).
- **Fewer extreme fires** – Future climate warming is expected to increase high intensity wildfires by 25% under current status quo management practices. Scaling up fuel reduction treatments across California to meet current state policy goals has the potential to fully offset the expected increase in wildfire intensity due to climate change ([Brown et. al. 2025. *Environmental Research Letters*](#)).
- **More critical habitat for endangered species** – A complete loss of mature and old-growth forest habitat critical for the endangered Sierra Nevada fisher is expected by 2100 under a continuation of the status quo. Expanding the use of beneficial fire and thinning is expected to save at least half of the currently available fisher habitat in the Sierra Nevada ([Jones et al. 2025. *Biological Conservation*](#)).



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- **Less smoke** – Scaling up prescribed fire in California to treat one million acres annually, as outlined in California's Wildfire and Forest Resilience Action Plan, could reduce smoke PM_{2.5} emissions by 655,000 metric tons over the next 5 years ([Kelp et. al., 2025, AGU Advances](#)).

The status-quo of extreme wildfires is causing environmental problems.

FOFA represents a fundamental change to how we manage our natural lands over the current status-quo. Some critics of proactive forest management argue that fire is “natural” and management efforts interfere with ecological balance. While it is true that many wildfires, including high-severity fires, do burn in ways that are ecologically appropriate, current conditions in many landscapes are creating uncharacteristically extreme wildfires that are causing profound undesired changes to our natural environment. Scientific studies find that inaction in the face of rapidly deteriorating conditions carries immense risk of escalating environmental costs. Standing back and letting nature burn is not neutral — it is in itself a choice that carries potentially severe consequences for biodiversity, ecosystems, and climate stability.

Examples undesired environmental outcomes from extreme wildfires:

1. Loss of Biodiversity – Extreme wildfires are driving biodiversity loss.

- Worldwide, more than 4,400 terrestrial and freshwater species face threats associated with ecologically inappropriate fire regimes. ([Kelly et al. 2020, Science](#))
- High-severity wildfires in California have killed an estimated 13-19% of the world's giant sequoias since 2015. Such unusually high rates of mortality could lead to a loss of mature sequoia groves. ([Stephenson et al., 2024, Fire Ecology](#))
- The already endangered spotted owl is at risk of further declines due to habitat loss from high-severity megafires. A 2025 study showed that areas burned by high-severity fire were largely abandoned by owls for at least two decades ([McGinn et al., 2025, Ecological Applications](#))



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2. Loss of Forests – Unnaturally intense and frequent fires are causing forests to fail to regrow after extreme wildfires, leading to long-term type conversion to non-forested ecosystems.

- Increasing high-severity fire activity across the southwestern US is triggering vegetative type conversion where burned forests do not grow back as forest and are instead transformed into shrublands or non-native grasslands. ([Guiterman et al. 2022, *Fire Ecology*](#)).

3. Degradation of Air and Water – Large-scale wildfires release smoke and pollutants that cause widespread harm to air quality and water resources.

- Wildfire smoke PM2.5 pollution has stalled or reversed the trend of air quality improvements across most of the US in the past several decades ([Burke et al., *Nature*, 2023](#)).
- Post-fire runoff has severely degraded drinking water systems due to increased sediment, nutrients, and heavy metals, affecting fish populations and requiring massive filtration costs ([Belongia et al., 2023, *Science Advances*](#)).

4. Loss of Forest Carbon – Extreme wildfires are burning forests faster than they can grow back, turning forested lands from carbon sinks into carbon sources and undermining decades of climate progress.

- Boreal forests, once stable carbon sinks, are now releasing more carbon than they store, in part due to longer fire seasons and more extreme burns ([Phillips et al., 2022, *Science Advances*](#)).

Conclusion: Inaction Is an Environmental Decision

In summary, the scientific record overwhelmingly shows that failing to act — to reduce fuel loads, restore low-intensity fire, and increase resilience — could result in long-term, large-scale ecological degradation. There is also overwhelming scientific evidence that wildfire mitigation treatments do work in practice and that by choosing to scale up the kind of work enabled by FOFA, we have an opportunity to create a future that is safer and better for the environment.



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While the Fix Our Forests Act must be carefully implemented to avoid misuse, the status quo of inaction is far from benign. It's a path toward forest collapse, species extinction, and irreversible ecological shifts. The situation demands that we respond — not only to protect human communities, but to preserve biodiversity and climate stability for the future.



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Note that many scientific papers are behind a paywall, contact Megafire Action for help with accessing any of these papers.

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