6 Ariz. J. Envtl. L. & Pol'y 1081

Arizona Journal of Environmental Law & Policy April 4, 2016

Comment Brian Bona^{a1}

Copyright © 2016 Arizona Journal of Environmental Law & Policy; Brian Bona

*1081 THE WILDFIRE CRISIS: HOW THE FEDERAL GOVERNMENT HAS TRIED TO STOP THE BURN

INTRODUCTION

As of this writing, there are twenty six "large"¹ active wildfires burning in the United States.² To date, 52,785 wildfires have raged this year, which is slightly below normal.³ Over the past decade, by the middle of October an average of 62 thousand fires burned each year.⁴ The real concern however, is the amount of land consumed by wildfire this year. Since 1960, the most land burned in a single year came in 2006,⁵ when wildfires scorched over 9.8 million acres.⁶ Almost 9.4 million acres have burned thus far in 2015 -- the second highest single-year total in history.⁷ This comment will discuss why wildfires are on the rise, how the Federal government attempts to manage them, and a recommendation to improve the Federal government's efforts.

I. HOW DID WE GET HERE?

Wildfires have dramatically increased in both size and severity in recent years.⁸ The root cause is, unsurprisingly, humans. Ironically, our past fire prevention efforts are partially to blame.⁹ Until the late 1970s the US Forest Service sought to prevent all wildfires, regardless of their threat to humanity.¹⁰ Now they are a victim of their own success. Prevention of fires ***1082** increased the amount of combustible fuel in forests that otherwise would have burned.¹¹ That fuel stockpiled over the years and is now contributing to the recent wave of massive wildfires that have ravaged forests nationwide.¹²

Furthermore, the lack of wildfires changed the composition of the forests.¹³ Before the fire suppression policies, many forests consisted of two main levels; the tall old-growth trees that were resistant to fire at their base, and the surface underbrush that would burn away in wildfires.¹⁴ The fires used to stay near the forest's floor without reaching the forest's crown fuels, that is, the forest's combustible canopy.¹⁵ When fire was removed from the ecosystem, the surface fuels were permitted to grow and accumulate instead of being wiped away by flames, which created a new phenomenon in many forests known as ladder fuels.¹⁶ Ladder fuels are vegetation that exists above the forest's floor but beneath the forest's canopy.¹⁷ Now that fire has been reintroduced in the forests, the ladder fuels are doing exactly what their name implies -- serving as a ladder for fire as it makes its way from the surface fuels to the canopy are great fuel for fires, and that fuel is tightly clustered together, crown fires spread rapidly and burn intensely.²⁰ As such, crown fires are particularly difficult to contain and burn massive amounts of land.²¹

Climate change is another factor contributing to the wildfire crisis.²² Rising temperatures lead to both longer fire seasons and drier conditions.²³ Wildfire season for Western forests usually starts within a month of the winter snow melting.²⁴ Due to rising temperatures, the snow is now melting one to four weeks earlier than previous years.²⁵ Thus, the wildfire season is

starting earlier than it used to, resulting in longer fire seasons and more fires.²⁶ Not only is the fire season longer, it is drier too.²⁷ With higher temperatures come higher evaporation rates.²⁸ Hence, the moisture contained in the forests is leaving faster than before, leaving drier conditions that are more conducive to wildfire.²⁹ Global warming has also ***1083** increased the frequency of lightning strikes, which further aggravates the situation by providing more ignition points.³⁰

II. THE FEDERAL GOVERNMENT'S APPROACH TO PREVENTING FOREST FIRES

Given a forest fire's propensity to inflict widespread damage, its management is a responsibility that spans all levels of government. At the Federal level, Congress has addressed the issue a few times. Primarily, the US Forest Service, under direction from the Secretary of Agriculture, is tasked with protecting public and national forests from fire.³¹ Other agencies also assist in preventing and extinguishing wildfires, including the Bureau of Land Management, the U.S. Fish and Wildlife Service, and the U.S. Fire Administration.³²

Recently, Congress has responded to the growing wildfire concerns by passing a series of bills.³³ Their first attempt at resolving the issue was the Healthy Forests Restoration Act of 2003.³⁴ The Act authorizes the Secretary of Agriculture to remove much of the combustible fuels that had gathered in the forests due to past fire suppression polices.³⁵ In 2004, Congress again tried to solve the problem by creating the Southwest Forest Health and Wildfire Prevention Act.³⁶ Congress hoped that by implementing newer scientific-based techniques, the Act would improve the overall health of Western forests and reduce wildfire damage.³⁷ The Act also encouraged the Federal agencies to share information about their wildfire management techniques.³⁸

In 2009, Congress enacted the Federal Land Assistance, Management, and Enhancement ("FLAME") Act.³⁹ In so doing, Congress required the Secretaries of the Interior and Agriculture to refine their wildfire fighting strategies.⁴⁰ Namely, the Secretaries were required to: identify cost-effective wildfire management resources, reduce the amount of hazardous fuels in forests, assess the impact of climate change on wildfires, and study how invasive species affect the risk of wildfire.⁴¹ The Act also created the FLAME Fund, which was supposed to cover the emergency costs of fighting wildfires.⁴²

*1084 III. A RECOMMENDATION FOR THE IMPROVEMENT OF EXISTING LAWS

One US Forest Service report argues that since the underlying sources of the current wildfire crisis have been developing for decades, a "solution will not happen overnight."⁴³ This is probably true; humanity can only do so much to reverse the underlying causes. On a macro level, the situation is probably going to have to correct itself. Unfortunately, that correction process seems to unavoidably include lots of wildfires. However, the Federal government can still help ease the problem.

One potential remedy is to fully finance the FLAME Act's FLAME fund. The fund was supposed to aid in preventing wildfires and responding to the emergencies they create, but Congress has not provided enough money to make the fund successful.⁴⁴ As the wildfires get bigger and more intense, the cost of fighting them increases.⁴⁵ However, the President's 2015 budget provided funding for 70 percent of the 10-year average of wildfire suppression costs.⁴⁶ Senator Jeff Flake has criticized this approach for consistently underestimating wildfire suppression costs, which forces Federal agencies to engage in "fire borrowing" when they respond to wildfire suppression activities, and it has created a vicious cycle in wildfire management.⁴⁸ The agencies cannot adequately minimize wildfires using fuel reduction techniques because all their funds go to emergency firefighting.⁴⁹ Since the agencies are unable to fully engage in preventative measures, the wildfires become increasingly worse in subsequent years, which drives up the cost of fighting the fires and forces the agencies to rely further on "fire-borrowing."⁵⁰

Earlier this year, Senator John McCain proposed an amendment to the FLAME Act that sought to break the cycle.⁵¹ Senator McCain's amendment would allow the Secretary of Agriculture to request additional funding from Congress as needed to suppress dangerous wildfires.⁵² That way the agencies would not have to resort to "fire-borrowing" to extinguish wildfires threating human life or property. This would enable them to fully carry out the fuel reduction practices necessary to limit future wildfire damage. Adoption of Senator McCain's amendment is therefore advisable.

- ^{a1} Brian is a second-year law student at the James E. Rogers College of Law, where he serves an Associate Editor on the Arizona Journal of Environmental Law & Policy. He graduated from the University of Miami in 2010 with a Bachelor of Science in Business Administration. Prior to starting law school, Brian served as a volunteer firefighter for five years.
- ¹ A "large" wildfire is one that spans more than 100,000 acres; *Current Large Incidents*, USDA FOREST SERV., http://activefiremaps.fs.fed.us/ (last visited Oct. 23, 2015).
- ² *Id.*
- ³ NATIONAL INTERAGENCY FIRE CENTER, https://www.nifc.gov/fireInfo/nfn.htm (last visited Oct. 23, 2015).
- ⁴ *Id.*
- ⁵ *Fire Information*, NATIONAL INTERAGENCY FIRE CENTER, https://www.nifc.gov/fireInfo/fireInfo_main.html.
- ⁶ National Report of Wildland Fires and Acres Burned by State, at 76 (2006), http://www.predictiveservices.nifc.gov/intelligence/2006_statssumm/fires_acres.pdf.
- ⁷ Supra note 3.
- ⁸ 16 U.S.C. § 6701(5).
- ⁹ Influence of Forest Structure on Wildfire Behavior and the Severity of Its Effects, USDA FOREST SERV., at 1 (2003), http://www.fs.fed.us/projects/hfi/docs/forest_structure_wildfire.pdf.
- ¹⁰ U.S. Forest Service Fire Suppression, FOREST HISTORY SOCIETY, http://www.foresthistory.org/ASPNET/Policy/Fire/Suppression/Suppression.aspx (last updated March 17, 2015).
- ¹¹ *Supra* note 9, at 1-2.
- ¹² *Id.*
- ¹³ *Id.* at 2-3.
- 14 Id.
- ¹⁵ *Id.*
- ¹⁶ *Id.* at 3.
- ¹⁷ *Id.*

- ¹⁸ *Id.*
- ¹⁹ *Id.* at 1.
- ²⁰ *Id.*
- ²¹ *Id.*

| 22 | Increased | Risk of | ^c Catastrophic | Wildfires: | Global | Warming's | Wake-Up | Call fo | or the | Western | United | States, | NATIONAL |
|----|--|---------|---------------------------|------------|--------|-----------|---------|---------|--------|---------|--------|---------|----------|
| | WILDLIFE FEDERATION, at 2 (2008), https://www.nwf.org/pdf/Global-Warming/NWF_WildFiresFinal.pdf. | | | | | | | | | | | | |

- ²³ *Id.*
- ²⁴ *Id.*
- ²⁵ *Id.*
- ²⁶ *Id.*
- ²⁷ Id.
- ²⁸ *Id.*
- ²⁹ *Id.*
- ³⁰ *Id.*
- ³¹ 16 U.S.C. § 551.
- ³² *Partners*, NATIONAL INTERAGENCY FIRE CENTER, https://www.nifc.gov/partners/partners_main.html.
- ³³ 16 U.S.C. § 6701(1).
- ³⁴ 16 U.S.C. § 6512.
- ³⁵ *Id.*
- ³⁶ 16 U.S.C. § 6702.
- ³⁷ *Id.*
- ³⁸ 16 U.S.C. § 6705.

- ³⁹ 43 U.S.C. § 1748a.
- ⁴⁰ 43 U.S.C. § 1748b.
- ⁴¹ 43 U.S.C. § 1748b(b).
- ⁴² 43 U.S.C. § 1748a.
- ⁴³ *Supra* note 11.
- ⁴⁴ John McCain, Senators McCain, Barrasso and Flake Reintroduce Legislation to Fully Fund Wildfire Suppression and boost Proactive Forest Management (Feb. 13, 2015), http://www.mccain.senate.gov/public/index.cfm/2015/2/senators-mccain-barrasso-and-flake-reintroduce-legislation-to-fully-fundwildfire-suppression-and-boost-proactive-forest-management.
- ⁴⁵ Fiscal Year 2015 Budget Overview, USDA FOREST SERV., at 33 (2014), http://www.fs.fed.us/aboutus/budget/2015/FY15-FS-Budget-Overview.pdf.
- ⁴⁶ *Id.* at 2.
- ⁴⁷ *Supra* note 44.
- ⁴⁸ *Supra* note 46.
- ⁴⁹ *Id.* at 33.
- ⁵⁰ *Id.*
- ⁵¹ S. 508, 114th Cong. (2015).
- ⁵² *Id.*