

CHAPTERS

WILDFIRE LITIGATION: EFFECTS ON FOREST MANAGEMENT AND WILDFIRE EMERGENCY RESPONSE

BY

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A fifteen-year-old boy recently launched a firework into a dry ravine and torched 48,000 acres of “pristine” forests along the Oregon Columbia River Gorge. The simple narrative follows that, absent this individual’s behavior, the Eagle Creek Fire would never have occurred. The problem with this simple narrative is it does not sufficiently consider the underlying causes of wildfires. The Eagle Creek Fire was not an isolated event. Rather, the fire was one of many increasingly damaging and uncontrollable wildfires fueled by multiple causes. This trend of increasingly damaging wildfires should raise questions about whether litigating after a wildfire, in order to deter careless behavior, can address these underlying causes, or whether some litigation may actually stall improvements to wildfire management. This Chapter suggests that the current litigation model may exacerbate some of the underlying causes of wildfires by deterring preventative fire management and restricting the use of prescribed burning, which is a tool that can mitigate wildfire damage. This Chapter also suggests that the current litigation paradigm negatively affects components of wildfire emergency response.

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I. SUMMARY OF CHAPTER AND FORESTRY TERMS

This Chapter begins with a warning of the growing dangers of Western wildfires and explains that fire suppression¹ has contributed to these growing dangers. The disturbance regimes² of fire are also briefly discussed, as this helps understand the danger of fire suppression and the illusion of viewing forests as “pristine” and static rather than dynamically shaped by recurring disturbances.³ Climate change, decades of fire suppression, and

¹ Used in this Chapter to refer to the practice of extinguishing wildfires as quickly as possible and removing fire from the landscape.

² Used in this Chapter to refer to the natural frequency, intensity, and characteristics of fire within a specific landscape. Fire regimes vary by location. Fire experts consider the natural fire regime for some areas in the west side of the Mt. Hood National Forest and west end of the Columbia River Gorge (the Gorge) to be an intense, stand-replacing fire with a fire return interval of 100–300 years or more. Fire disturbance regimes in the eastern end of the Gorge were historically less intense, with a more frequent fire return interval closer to 5–15 years. E-mail from Roland Rose, Battalion Chief & Fire Fuels Planner, USFS Columbia River Gorge National Scenic Area, to author (Mar. 15, 2018) (on file with author); E-mail and telephone interview with Justin Sharpe, Fire Planner, Mount Hood & Gifford Pinchot National Forests, to author (Mar. 14, 2018) (on file with author).

³ The idea that the forests along the Gorge were “pristine” until the teenager created a fire is incorrect. Fire has always played a role in shaping the landscape, including the Gorge. Photographs from 1930 from the Tanner Creek lookout at an elevation of 4,500 feet show that

the rapid growth of housing development adjacent to forests, commonly referred to as the “Wildland Urban Interface,” altered the natural fire disturbance regimes and have led to increasingly dangerous emergencies.⁴ Part II ends by explaining the need for active, controlled, and preventative fire management, such as prescribed burning.⁵

Part III of this Chapter explores effects of wildfire litigation on wildfire management. This Part addresses tort claims, injunctions to stop forest projects, increasingly large damage awards and settlements resulting from wildfire litigation, and criminal prosecution of wildland firefighters. The litigation analyzed for this Chapter demonstrates that a higher risk of liability exists for prescribed burning when used as a preventative tool rather than as a tool to suppress an active wildfire. This continues to favor fire suppression—a root cause of the increasingly damaging wildfires endured today.

Part IV focuses on the clash between wildfire litigation and wildfire emergency response. The litigation model, and the view that wildfires are the result of individual action, like the teenager who started the Eagle Creek Fire, is a different paradigm than an emergency management model that

the same area in the Gorge had previously burned. *Historical Items*, TRAIL ADVOCATES, <https://perma.cc/W4P5-WWJU> (last visited July 14, 2018) (follow “Photos” tab; then under the heading “Lookouts” follow “Panoramic photos at old lookouts in the Mt Hood National Forest” hyperlink). Similarly, the concept of “virgin” and “pristine” forests has been discredited. *See, e.g.*, CHARLES C. MANN, 1491: NEW REVELATIONS OF THE AMERICAS BEFORE COLUMBUS 354–75 (2nd ed. 2005). Mann demonstrates that active management existed in the Amazon “wilderness,” including farming and frequent prescribed burning. *Id.* A UCLA geographer, living among the Kayapo’, described their use of controlled low biomass fires frequently smoldering the landscape. *Id.* at 357. The researcher stated that our society needs to “get over this whole Bambi syndrome,” referring to how the Bambi movie “taught generations of children that burning wildlands is evil.” *Id.* *See also* Karen Coates, *The Myth of the Virgin Rainforests*, SAPIENS (Apr. 21, 2016), <https://perma.cc/JBB9-6PV5>. *See generally* ALSTON CHASE, IN A DARK WOOD: THE FIGHT OVER FORESTS & THE MYTH OF NATURE (2001) (arguing American preservation and wilderness policies rely on flawed premises about nature and forests that can be counterproductive to ecological objectives like biodiversity).

⁴ KELSIE BRACMORT, CONG. RESEARCH SERV., WILDFIRE PROTECTION IN THE WILDLAND-URBAN INTERFACE 1 (Jan. 30, 2014); Jerry F. Franklin & K. Norman Johnson, *A Restoration Framework for Federal Forests in the Pacific Northwest*, 110 J. FORESTRY 429, 429–31 (2012).

⁵ The analogy of fighting fire with fire is helpful to understand the concept of prescribed burning. The term “prescribed burning” has many applications. *See, e.g.*, Robert H. Palmer III, *A New Era of Federal Prescribed Fire: Defining Terminology and Properly Applying the Discretionary Function Exception*, 2 SEATTLE J. ENVTL. L. 279, 314 (2012). For this Chapter, the term “prescribed burning” refers to igniting a controlled fire to meet management objectives, such as reintroducing fire back onto the landscape for ecological benefits, reducing the amount of flammable material, or burning near an area already on fire to reduce the spread of that active wildfire. This Chapter uses the term “preventative prescribed burning” to distinguish between a prescribed burn that is lit during an active wildfire, such as a “back burn,” with a prescribed burn that is lit before an active wildfire is presently burning. Courts have distinguished between these actions; hence, the need for a common vocabulary throughout the Chapter. *See* State of Fla. Dep’t of Agric. & Consumer Servs. v. United States, No. 4:09-CV-386, 2010 WL 3469353, at *1–3 (N.D. Fla. Aug. 30, 2010); Woodward Stuckart, LLC v. United States, 973 F. Supp. 2d 1210, 1213, 1221–22 (D. Or. 2013), *aff’d*, 650 F. App’x 380 (9th Cir. 2016) (noting the difference between the suppression efforts before the court and prescribed burning conducted before an actual wildfire exists).

views fires akin to floods and other natural disasters. The litigation model threatens to stress elements of the emergency response model.⁶

Part V proposes steps to improve wildfire management. These proposals focus on reducing the litigation that adversely impacts preventative fire management and emergency response. This Part also proposes greater adoption of collaborative and cooperative efforts both between government agencies and between private citizens and government agencies. Such collaboration could reduce adverse impacts of litigation and, hopefully, treat the more complex, underlying causes of increasingly dangerous wildfires.⁷

II. FIRE SUPPRESSION AND INCREASINGLY DANGEROUS WILDFIRES

Current wildfire costs and damages are rising to astoundingly high numbers.⁸ In 2013 alone, wildfires killed thirty-four people.⁹ By early December of 2017, just within California, wildfires killed forty-three people and damaged or destroyed 10,000 structures.¹⁰ After the immediate risks of fire and smoke abate, communities and emergency responders face prolonged post-fire threats, particularly landslides.¹¹

⁶ See *infra* notes 142–43 and accompanying text.

⁷ See *infra* notes 173–76, 179–83 and accompanying text. The focus of this Chapter is limited to litigation involving the United States Forest Service. That focus is not to suggest that similar litigation does not affect other federal agencies, state agencies, and private landowners engaged in active forest management, such as prescribed burning. This Chapter also does not address the important topics of smoke, haze, and air regulations and public perceptions of prescribed burning that shape and arguably limit the use of prescribed burning. See generally Kirsten H. Engel, *Perverse Incentives: The Case of Wildfire Smoke Regulation*, 40 *ECOLOGY L.Q.* 623 (2013) (explaining perverse incentives that exist for prescribed burning compared to wildfires); Karen M. Bradshaw, *A Modern Overview of Wildfire Law*, 21 *FORDHAM ENVTL. L. REV.* 445, 447, 455–56 (2010) (discussing perverse incentives that shift away from preventative actions towards “ex post” activity).

⁸ See STEPHEN G. BADGER, NAT’L FIRE PROTECTION ASS’N, *LARGE-LOSS FIRES IN THE UNITED STATES 2016* 1 (2017), <https://perma.cc/P2X3-BUYZ>; see also Bradshaw, *supra* note 7, at 467–70 (discussing wildfire costs associated with infrastructure, stumpage value, water and soil composition, and tree growth); *Wildfire and Forest Mgmt.: Oversight Hearing Before the Subcomm. on Pub. Lands & Envtl. Regulation of the H. Comm. on Nat. Res.*, 113th Cong. (2013) (detailing the costs of fighting and recovering from wildfires as well as the nonmonetary losses suffered). The Eagle Creek Fire alone cost the United States Forest Service and the Oregon Forest Service over \$19 million. Ericka Cruz Guevarra, *How Much Has the Eagle Creek Fire Cost and Who’s Paying?*, OR. PUB. BROADCASTING (Oct. 20, 2017), <https://perma.cc/E2U7-K58U>. That cost does not include the amounts paid by other agencies, private parties and the costs of secondary effects and long-term recovery. *Id.*

⁹ Daniel H. Owsley, *TrinCo and Actual Necessity: Has the Federal Circuit Provided the Tinder to Burn Down the Public Necessity Defense in Wildfire Takings Cases?*, 48 *COLUM. J.L. & SOC. PROBS.* 373, 374 (2015).

¹⁰ Phillip Reese, *California Wildfires in 2017: A Staggering Toll of Lost Life and Homes*, *SACRAMENTO BEE* (Jan. 2, 2018), <https://perma.cc/CP8R-L772>.

¹¹ See Patrick Mulvihill, *Fire Stalled, Landslide Threat Remains*, *HOOD RIVER NEWS* (Sep. 22, 2017), <https://perma.cc/T9U3-EHPJ>; *Post-Fire Debris Flow*, U.S. GEOLOGICAL SURV., <https://perma.cc/9FMW-ZVCN> (last updated Oct. 16, 2017).

The rising costs are crippling the United States Forest Service's (USFS or Forest Service) budget. The 2017 fire season cost the Forest Service over \$2.4 billion in suppression operations, making it the most expensive fire year on record.¹² For the first time ever in its 110-year existence, the Forest Service now spends more than half of its budget attempting to suppress wildfires.¹³ The growing costs to fight wildfires have forced the Forest Service to repeatedly "shift" staffing and resources "from nonfire to fire-related programs" as well as "borrow" funds from nonfire programs.¹⁴ Spending more on fire suppression may appear to be a logical response to fight wildfires, but continually draining a budget to treat the symptoms prevents remedying the underlying causes.¹⁵ As the Forest Service explains, "Dollars taken from nonfire programs for fire suppression interrupt projects and activities that preemptively reduce the risk of catastrophic fires, restore forest health, protect communities, and deliver a multitude of other values."¹⁶ Wildfire costs are growing, and the agency tasked with fighting these fires "is at a tipping point."¹⁷

A. Decades of Fire Suppression and the Adverse Effects

From around 1910 until the 1970s, U.S. fire policy sought to suppress all fires as quickly as possible.¹⁸ Decades of fire suppression successfully reduced total burnt acreage.¹⁹ Fire suppression, therefore, also supplied an ingredient for larger future fires: fuel, such as dead wood, that would have otherwise burned in the fire, accumulated each time a fire was suppressed.²⁰ Forest growth continues to add additional fuel, another fire is suppressed,

¹² *Forest Service Wildland Suppression Costs Exceed \$2 Billion*, U.S. DEP'T AGRIC. (Sept. 14, 2017), <https://perma.cc/L9MK-PSMB>; *Federal Firefighting Costs (Suppression Only)*, NAT'L INTERAGENCY FIRE CTR., <https://perma.cc/H5HM-2J8N> (last visited July 14, 2018).

¹³ U.S. DEP'T OF AGRIC., *FISCAL YEAR 2017 BUDGET OVERVIEW 6* (2016), <https://perma.cc/26V5-H2UE>.

¹⁴ *Id.*

¹⁵ The high cost to continually suppress large fires drains the budget for preventative actions. Under the current spending model, where suppression consumes prevention, the Forest Service is never able to get ahead of the problem. See Phil Taylor, *'It's Just Nuts' as Wildfires Drain Budget Yet Again*, E&E NEWS (Oct. 30, 2013), <https://perma.cc/JAW5-GAYR>.

¹⁶ U.S. DEP'T OF AGRIC., *supra* note 13, at 6.

¹⁷ U.S. DEP'T OF AGRIC., *THE RISING COST OF WILDFIRE OPERATIONS: EFFECTS ON THE FOREST SERVICE'S NON-FIRE WORK 2* (2015), <https://perma.cc/7HQB-BJET>. Attempts to fix the budget crisis have failed, such as the Federal Land Assistance Management and Enhancement Act (FLAME). See Taylor, *supra* note 15 (stating "OMB has forced the agencies to implement the FLAME Act in a manner that makes it ineffective").

¹⁸ See Engel, *supra* note 7, at 629–30; see also *U.S. Forest Service Fire Suppression*, FOREST HIST. SOC'Y, <https://perma.cc/ND95-866E> (last visited July 14, 2018).

¹⁹ Jack Cohen, *The Wildland-Urban Interface Fire Problem*, FOREST HIST. TODAY, Fall 2008, at 20–21.

²⁰ *Id.* at 22. See PAUL ROGERS, U.S. DEP'T OF AGRIC., *DISTURBANCE ECOLOGY AND FOREST MANAGEMENT: A REVIEW OF THE LITERATURE 4* (1996), <https://perma.cc/BX7X-PXZR> (discussing fire and ecological disturbance as well as a review of relevant literature); see also CHADWICK D. OLIVER & BRUCE C. LARSON, *FOREST STAND DYNAMICS 145–67* (1996) (explaining forest growth development and following disturbances).

and the cycle continues. Eventually, the accumulated fuel ignites, and the resulting fire is too large to suppress.²¹

Decades of suppression may not yet have altered fire regimes in wetter forests with longer fire disturbance intervals, compared to dryer forests accustomed to more frequent and less severe fires.²² Nonetheless, in many Western forests, fire is the primary natural disturbance²³ and suppressing this disturbance creates negative ecological consequences and enhances the risks of larger wildfires.²⁴ Reduced logging, due to lawsuits that challenge timber sales²⁵ or wilderness reserves that forbid management,²⁶ also allow fuel loads to accumulate.²⁷ In addition, climate change is creating the ingredients for more intense mega-fires.²⁸ This is the current, and frightening, condition of many forests across the West.

B. Shifting Away from Fire Suppression and Using Prescribed Burning

Absolute fire suppression as a national policy began to shift as land managers and scientists realized that suppression is expensive, ecologically damaging, and increases the vulnerability of forests to future wildfires.²⁹ Fire

²¹ See Reed F. Noss et al., *Managing Fire-Prone Forests in the Western United States*, 4 FRONTIERS ECOLOGY & ENV'T 481, 482 (2006). See also OLIVER & LARSON, *supra* note 20, at 91 (explaining the impact of disturbances on forest structures).

²² See Noss et al., *supra* note 21, at 481–84.

²³ *Id.* at 481.

²⁴ *Id.* at 481, 484. See also BURTON V. BARNES ET AL., FOREST ECOLOGY 279–97 (Ellen Schatz et al. eds., 4th ed. 1998) (discussing the big picture concepts of disturbance regimes and fire within forest ecology).

²⁵ See, e.g., All. for the Wild Rockies v. Jim Pena, 865 F.3d 1211, 1215–16 (9th Cir. 2017) (plaintiffs challenged a collaborate forest plan that included fuel reductions to decrease wildfire risks).

²⁶ Wilderness Act, 16 U.S.C. §§ 1131–36 (2012) (designating “federally owned areas” as “wilderness areas” to be protected and preserved for future generations).

²⁷ Scott L. Stephens et al., *The Effects of Forest Fuel-Reduction Treatments in the United States*, 62 BIOSCIENCE 549, 549–50 (2012) (discussing mechanical fuel treatments, such as thinning, and their tendency to reduce wildland fuels).

²⁸ Tania Schoennagel et al., *Adapt to More Wildfire in Western North American Forests as Climate Changes*, 114 PROC. NAT'L ACAD. SCI. U.S. AM. 4582, 4582–83 (2017); Virginia H. Dale et al., *Climate Change and Forest Disturbances*, 51 BIOSCIENCE 723, 725–29, 732 (2001) (explaining how climate change creates conditions that increase the risk of fire); Chelsea Harvey, *Here's What We Know About Wildfires and Climate Change*, SCI. AM. (October 13, 2017), <https://perma.cc/6CRM-PP7V>; Paul Hessburg, *TedxBend, Why Wildfires Have Gotten Worse—and What We Can Do About It* (May 2017), <https://perma.cc/5YEV-X53M> (discussing the current alarming conditions of many western forests due to climate change).

²⁹ See, e.g., HAL K. ROTHMAN, A TEST OF ADVERSITY AND STRENGTH: WILDLAND FIRE IN THE NATIONAL PARK SYSTEM 1–2, <https://perma.cc/7HV3-GVY6> (discussing how fire management strategies have evolved in the National Parks); see also Karen M. Bradshaw, *Backfired! Distorted Incentives in Wildfire Suppression Techniques*, 31 UTAH ENVTL. L. REV. 155, 158 (2011) (challenging suppression efforts as costly and ineffective, such as the amount of chemical flame retardants dropped on fires); Aurora R. Janke, Note, *Beyond the Blaze: Strategies for Improving Forest Service Fire Suppression Policies*, 1 WASH. J. ENVTL. L. & POL'Y 310, 331–35 (2011) (discussing the negative ecological effects of fire retardants used during fire suppression efforts).

suppression is still dominant in fire management today, but a growing consensus realizes that fire must be reintroduced onto many landscapes across the West.³⁰ One method to reintroduce fire is the use of prescribed burning.

Prescribed burning is the planned and controlled use of fire to meet management objectives, such as reducing fuel loads to minimize the size or incidence of wildfires.³¹ Prescribed burning can address the legacy of fire suppression and the growing challenges of climate change.³² It can also reduce wildfire risks and create ecological benefits that “other forest management tools cannot replicate.”³³ The practice, however, is risky because prescribed burns can and do escape control and result in heavy smoke and damaging wildfires.³⁴ The use of prescribed burning, therefore, requires a balancing act. A sufficient amount of fire will restore forest

³⁰ See, e.g., Max A. Moritz et al., *Learning to Coexist With Wildfire*, 515 NATURE 58, 58 (2014); see also STEPHEN J. PYNE, FIRE IN AMERICA 290–94 (1997) (describing how the high cost of suppression led the Forest Service to explore prescribed burnings as a fire management tool); Jonathan Yoder, *Liability, Regulation, and Endogenous Risk: The Incidence and Severity of Escaped Prescribed Fires in the United States*, 51 J.L. & ECON. 297, 298 (2008) (explaining that prescribed fire can reduce the risk of wildfires); Timothy Brown, *Driven by ‘Game-Changing’ Fire, Alum Models Ecosystems Approach to Land Management*, YALE SCH. FORESTRY & ENVTL. STUD. (October 4, 2017), <https://perma.cc/HH5K-E8PX> (explaining that traditional suppression management is outdated).

³¹ See U.S. FOREST SERV., U.S. DEP’T OF AGRIC., *Prescribed Fire*, <https://perma.cc/45U6-7D8G> (last visited July 14, 2018). Prescribed burning is also used to fight active wildfires. For example, wildland firefighters will create a fire line and then light prescribed fires into the wildfire in an effort to stop the wildfire from moving beyond that fire line. See Jessica Leber, *Study Calls for More Prescribed Burns to Reduce Forest Fire Emissions*, N.Y. TIMES (March 18, 2010), <https://perma.cc/Q6NC-JZBH>. See generally James E. Lotan et al., *Role of Fire in Lodgepole Pine Forests*, in LODGEPOLE PINE: THE SPECIES AND ITS MANAGEMENT 133 (David M. Baumgartner et al. eds., 1984) (describing use of prescribed fires in lodgepole pine forests); Mark A. Finney & Jack D. Cohen, *Expectation and Evaluation of Fuel Management Objectives*, in LANDSCAPE PLANNING 353–59 (2003) (explaining the planned and controlled use of prescribed burning to meet the desired management goals).

³² See Jonathan Yoder et al., *Liability, Incentives, and Prescribed Fire for Ecosystem Management*, 2 FRONTIERS ECOLOGY & ENV’T 361, 361 (2004).

³³ *Testimony from the Nature Conservancy to the Colo. Gen. Assembly’s Wildfire Matters Interim Comm.*, 2015 Leg., 70th Gen. Assemb. 1–2 (Colo. 2015) (statement of Paige Lewis, Forest Restoration and Fire Program Director, The Nature Conservancy). Mechanical thinning of fuel loads, without also burning, is an incomplete treatment as the 2010 Four Mile Canyon fire west of Boulder Colorado demonstrated. USFS researchers found that low-intensity prescribed burning could have mitigated pre-fire conditions. *Id.* at 2.

³⁴ See *Anderson v. United States*, 55 F.3d 1379, 1380 (9th Cir. 1995) (discussing a prescribed fire that escaped control in Southern California). Stephen McCullers, while advocating for more use of prescribed fire in Florida, describes the choice to use prescribed fire:

Fire will not be denied its opportunity to burn... [C]itizens... can accept the responsibility of deciding how the forest will burn. Fire can be purposefully ignited under exact weather conditions Or, if Floridians refuse to accept any responsibility in proactively managing forest fire, nature will determine when the forest will burn.

Stephen McCullers, Note, *A Dangerous Servant and a Fearful Master: Why Florida’s Prescribed Fire Statute Should be Amended*, 65 Fla. L. Rev. 587, 587 (2014).

habitat, replicate disturbance regimes, and promote forest health.³⁵ Yet, any reintroduction poses the risk of conflagrating into an uncontrollable fire.

The Wildland Urban Interface complicates this entire balancing act.

C. The Wildland Urban Interface: A Product of Fire Suppression and a Challenge for Forest Management

Decades of fire suppression accommodated the growth of human development in and adjacent to forests, an area commonly referred to as the “Wildland Urban Interface” (WUI).³⁶ Fire suppression policies facilitated property owners living adjacent to forests and enjoying a reduced risk of fire because the government would fight to immediately extinguish any fire.³⁷ Since the 1940s, significant housing growth occurred in and around wildlands.³⁸ Now, over 30% of America’s housing exists in the WUI.³⁹ The majority of this housing is on privately owned land located within high fire severity regimes of the intermountain West.⁴⁰ Increasingly dense populations and the expansion of private property adjacent to public forests are increasing the human and financial cost of wildfire.⁴¹ The WUI also adds fuel to wildfires when homes and flammable objects ignite.⁴² Prescribed burning must navigate this urban interface that borders multi-use forests and designated wilderness zones.

The risk of a prescribed burn escaping and damaging homes, or even taking lives in the WUI, is a major concern.⁴³ The risk that an escaped burn will generate significant litigation further restricts the use of prescribed

³⁵ See Noss, et al., *supra* note 21, at 481–83.

³⁶ See, e.g., U.S. DEP’T OF AGRIC., WILDFIRE, WILDLANDS, AND PEOPLE: UNDERSTANDING AND PREPARING FOR WILDFIRE IN THE WILDLAND-URBAN INTERFACE 1 (2013).

³⁷ See Justin Pidot, *Natural Baselines for Wildfire Takings Claims*, 75 MD. L. REV. 698, 703 (2016); see also Robert B. Keiter, *The Law of Fire: Reshaping Public Land Policy in an Era of Ecology and Litigation*, 36 ENVTL. L. 301, 314–15 (2006).

³⁸ See Volker C. Radeloff et al., *Housing Growth in and near United States Protected Areas Limits Their Conservation Value*, 107 PROC. NAT’L ACAD. SCI. U.S. AM. 940, 941–42 (2010).

³⁹ See Susan I. Steward et al., *Defining the Wildland-Urban Interface*, J. FORESTRY, June 2007, at 201 (citing Volker C. Radeloff et al., *Rural and Suburban Sprawl in the U.S. Midwest From 1940 to 2000 and its Relation to Forest Fragmentation*, 19 CONSERVATION BIOLOGY 793 (2005)); Laura Krantz, *When Prescribed Burns Go Wrong*, OUTSIDE (June 12, 2015), <https://perma.cc/W4ZZ-TW87>.

⁴⁰ David M. Theobald & William H. Romme, *Expansion of the US Wildland-Urban Interface*, 83 LANDSCAPE & URB. PLAN. 340, 350 (2007).

⁴¹ See OFFICE OF THE INSPECTOR GEN., U.S. DEP’T OF AGRIC., AUDIT REPORT: FOREST SERVICE LARGE SUPPRESSION COSTS (2006) (stating that the Forest Service’s “escalating cost to fight fires is largely due to its efforts to protect private property” in the WUI). See generally Thomas Jeffery, *Understanding Wildfire Risk: A Closer Look at the Wildland-Urban Interface*, INS. J. (May 30, 2014), <https://perma.cc/XH8F-7EVA>.

⁴² See *Kimball v. United States*, No. 1:12-CV-00108-EJL, 2014 WL 683702, at *2 (D. Idaho Feb. 20, 2014) (propane tanks around homes ignited and added to the wildfire); Cohen, *supra* note 19, at 22–23.

⁴³ See Yoder et al., *supra* note 32, at 361.

burning.⁴⁴ Taking no action to reduce fuel loads, however, leaves a ticking time bomb for many communities living adjacent to increasingly dense and dry forests. While prescribed burning creates an immediate fire risk to WUI residents and creates smoke that can harm vulnerable populations, not burning allows an arguably larger risk of smoke and future wildfires for the same residents.⁴⁵ Moreover, active fire management allows the advantage of partially controlling some factors and preparing, ahead of time, for a wildfire if the prescribed burn escapes.⁴⁶ Living with fire and conducting cautious and careful burning treatments have become a necessity in many western regions.⁴⁷ Litigation and the current legal paradigm are lagging behind this ecological consensus.

III. WILDFIRE LITIGATION

The Forest Service faces substantial litigation.⁴⁸ Litigation risks are higher for preventative burning than burning for fire suppression, which discourages the use of an active management tool that can treat underlying

⁴⁴ *Id.* at 361–63; *see also* *Testimony from the Nature Conservancy to the Colo. Gen. Assembly's Wildfire Matters Interim Comm.*, *supra* note 33, at 4 (requesting that the committee continue to monitor the issue of liability protection for state firefighters in Colorado to ensure the lack of liability protection does not serve as a barrier to greater use of prescribed burning); Jim Brenner & Dale Wade, *Florida's Revised Prescribed Fire Law: Protection for Responsible Burners*, in *PROCEEDINGS OF FIRE CONFERENCE 2000*, at 133 (Krista E. M. Galley et al. eds. 2000); Yoder, *supra* note 30, at 320 (“[E]scaped prescribed fires and their associated liability are a major concern.”); Morgan Russell et al., *Legal Barriers to Prescribed Burning*, *TEX. A&M AGRILIFE EXTENSION*, July 2016, at 2 (stating that “[u]nfortunately, the liability and risks associated with the practice keep prescribed burning from being used extensively”).

⁴⁵ *See, e.g.*, Laura Sweedo, *Where There is Fire, There is Smoke: Prescribed Burning in Idaho's Forests*, 8 *DICKINSON J. ENVTL. L. & POL'Y* 121, 141 (1999) (explaining prescribed burns emit carbon dioxide and particulate matter posing a serious threat to human health).

⁴⁶ *See* NAT'L WILDFIRE COORDINATION GRP., *NWCG PRESCRIBED FIRE PLAN TEMPLATE* (2018), <https://perma.cc/AZ3D-3TYS>.

⁴⁷ *See* Keiter, *supra* note 37, at 310–12 (describing the “devastation” caused to western states by wildfires and the governmental response calling for “assistance to help in restoring fire-damaged communities and watersheds, [and] additional federal investment in forest-thinning and prescribed burning”).

⁴⁸ Between 1989 and 2008 the Forest Service faced 1,125 lawsuits. Tom Kuglin, *Law of the Land: How Litigation Has Shaped the Forest Service*, *INDEP. REC.* (Nov. 9, 2014), <https://perma.cc/Q3AY-VAR9>. The quantity of litigation varies by Forest Service region. From 2008 to 2013, over seventy projects were litigated in Region One, which includes Montana and Idaho. This is the most of any region for that period. TODD A. MORGAN & JOHN BALDRIDGE, *UNDERSTANDING COSTS AND OTHER IMPACTS OF LITIGATION OF FOREST SERVICE PROJECTS: A REGION ONE CASE STUDY 2* (2015). The Forest Service, like other agencies, also expends substantial resources following requirements set forth in environmental laws to avoid litigation. For example, the average completion time for an Environmental Impact Statement in 2012 was 4.6 years. U.S. GOV'T ACCOUNTABILITY OFFICE, *NATIONAL ENVIRONMENTAL POLICY ACT: LITTLE INFORMATION EXISTS ON NEPA ANALYSES 14* (2014). The National Environmental Policy Act (NEPA) and the National Forest Management Act (NFMA) are the two statutes that generate the most litigation for the Forest Service. Amanda M.A. Miner et al., *Twenty Years of Forest Service Land Management Litigation*, 112 *J. FORESTRY* 32, 34–37 (2014) (discussing forest litigation by statute, region, and outcome).

causes of increasingly dangerous wildfires.⁴⁹ This Part first focuses primarily on wildfire litigation in the United States Court of Appeals for the Ninth Circuit under the Federal Tort Claims Act (FTCA)⁵⁰ and the “discretionary function exception.”⁵¹ Next, the analysis previews injunctions that aim to stop forest management projects. Last, this Part surveys civil and criminal wildfire litigation that targets individuals, property owners, and firefighters.

A. *The Federal Tort Claims Act and the Discretionary Function Exception*

The FTCA waives sovereign immunity for negligence suits involving federal government employees.⁵² The discretionary function exception, however, shields the government from some negligence liability.⁵³ Congress did not specifically define a “discretionary function,”⁵⁴ and courts have employed a two-part test taken from *Berkovitz v. United States*⁵⁵ to determine what actions are discretionary functions.⁵⁶ Part one of the test asks whether the challenged action involves a choice.⁵⁷ Part two asks whether the choice was a public policy decision.⁵⁸ The test intends to limit judicial second guessing of legislative and administrative public policy decisions.⁵⁹

Prescribed burning implicates the FTCA and the discretionary function exception. Courts have assessed, for example, whether the discretionary function exception shields the Forest Service from liability for prescribed burns that escape control and cause property damage.⁶⁰ Application of the

⁴⁹ See *supra* notes 30–35 and accompanying text.

⁵⁰ 28 U.S.C. §§ 1346(b), 2671–2680 (2012). The FTCA became law as Title IV of the Legislative Reorganization Act of 1946, Pub. L. No. 79-601, §§ 401–424, 60 Stat. 812 (1946).

⁵¹ The Ninth Circuit oversees more than 99 million acres of the National Forest System. Miner et al., *supra* note 48, at 35.

⁵² 28 U.S.C. § 1346(b)(1) (The U.S. may be sued “for money damages . . . for injury or loss of property . . . caused by the negligent or wrongful act or omission of any employee of the Government while acting within the scope of his office or employment.”).

⁵³ *Id.* § 2680 (“The provisions of this chapter and section 1346(b) of this title shall not apply to—(a) Any claim based upon an act or omission of the Government, exercising due care, in the execution of a statute or regulation, whether or not such statute or regulation be valid, or based upon the exercise or performance or the failure to exercise or perform a discretionary function or duty on the part of a federal agency or an employee of the Government, whether or not the discretion involved be abused.”); see also *Kennewick Irrigation Dist. v. United States*, 880 F.2d 1018, 1029 (9th Cir. 1989).

⁵⁴ See 28 U.S.C. § 2680.

⁵⁵ 486 U.S. 531 (1988).

⁵⁶ *Id.* at 536–37.

⁵⁷ *Id.* at 536.

⁵⁸ *United States v. Gaubert*, 499 U.S. 315, 322 (1991). Public policy decisions analyze “social, economic, or political concerns, such as employee and public safety, the agency’s goals and duties [and] the agency’s relationship with the public.” *Woodward Stuckart, LLC, et al. v. United States*, 973 F. Supp. 2d 1210, 1218 (citing *McDougal v. U.S. Forest Serv.*, 195 F. Supp. 2d 1229, 1232 (D. Or. 2002)), *aff’d*, 650 F. App’x 380 (9th Cir. 2016).

⁵⁹ *Woodward*, 973 F. Supp. at 1218; *Gaubert*, 499 U.S. at 323; *State of Fla. Dep’t of Agric. & Consumer Services v. United States*, No. 4:09-CV-00386, 2010 WL 3469353 at *2 (N.D. Fla. Aug. 30, 2010).

⁶⁰ See, e.g., *Berkovitz*, 486 U.S. at 546.

discretionary function exception to prescribed burning can present either a “red or green light” for active forest management.⁶¹

B. The Discretionary Function Exception and Prescribed Burning

Courts disagree on whether the discretionary function exception applies to prescribed burning. Generally, the discretionary function exception serves “as a shield to deflect fire-related tort claims” and protect agencies engaged in fire management.⁶² Many courts have indeed found the exception applicable to actions that suppress active fires.⁶³ Courts have also found the exception applicable to the decision of allowing active fires to continue burning.⁶⁴ On the other hand, courts have found that the exception does not apply to specific actions involved with fighting a fire, such as communicating suppression efforts to the public,⁶⁵ or deviating from the

⁶¹ See Daniel Esty, *Red Lights to Green Lights*, 47 ENVTL. L. 1, 3–6 (2017) (arguing for changes in environmental laws that shift from “red light” command and control to also include “green light” incentives for sustainable programs). Similarly, improved fire management should shift some focus away from punishment and deterrence and incentivize sustainable management that mitigates fire risks and improves forest health.

⁶² Keiter, *supra* note 37, at 351.

⁶³ See *Miller v. United States*, 163 F.3d 591, 595 (9th Cir. 1998). Some argument exists, however, on the meaning of *Miller*. Compare *Green v. United States*, 630 F.3d 1245, 1252–54 (9th Cir. 2011) (Fletcher, J., concurring) (arguing that *Miller* does not stand for the proposition that USFS decisions regarding firefighting are always considered policy decisions that would trigger the discretionary exception), with *Kimball v. United States*, No. 1:12-CV-00108-EJL, 2014 WL 683702, at *7–8 (D. Idaho Feb. 20, 2014) (holding that the discretionary function applied because the action involved a choice and the choice turned on policy considerations), *Backfire 2000 v. United States*, 273 Fed. Appx. 661, 662–63 (9th Cir. 2008) (holding that backfires lit to suppress an active wildfire fell under the discretionary function exception), and *Juras v. United States*, No. CV 11-0155-WPL, 2011 WL 13223900, at *3–5 (D. N.M. Oct. 14, 2011) (discretionary function exception applied to prescribed burning conducted to reduce fuel loads of an active fire).

⁶⁴ See *Woodward*, 973 F. Supp. 2d at 1213, 1221–22 (holding that the exception applied because the decision to allow the burn in wilderness areas was a choice and was grounded in policy considerations, but noting the difference between the suppression efforts before the court and prescribed burning conducted before an actual wildfire exists).

⁶⁵ See *Green*, 630 F.3d at 1250–52. In *Green*, a backburn escaped the containment area and burned private property. *Id.* at 1248. The court reasoned that the issue was not whether the exception covered the actual lighting of the backburn. *Id.* at 1250. Rather, the “actions surrounding that decision,” specifically the failure to notify property owners and other firefighters, were at issue. *Id.* These actions fell outside the exception because the failure to notify private landowners was not “susceptible to policy analysis.” *Id.* at 1252. Similarly, in *Kimball*, plaintiffs challenged the Forest Service’s communication with the public regarding the use of fire suppression, rather than the actual fire suppression methods. 2014 WL 683702, at *6. The court found that the discretionary function did not apply to the claims regarding communication with the landowners and that a trial needed to resolve questions of fact relating to negligence. *Id.* Plaintiffs also challenged the use of pumps and hoses to protect private structures. *Id.* at *1. The allegation stated that once USFS determined it would protect private property structures, it breached its duty to properly set up and maintain the pumps and hoses. *Id.* The court held that this issue might not involve the discretionary function and should be resolved at trial. *Id.* at *8.

established fire management plan.⁶⁶ In short, prescribing burning to suppress an active wildfire generally falls under the discretionary function exception, but other uses of prescribed burning, and actions taken in connection to prescribed burning to suppress an active wildfire, may not.

Courts disagree more widely on whether the discretionary function exception applies when the government engages in prescribed burning to prevent a future wildfire, rather than to suppress an active wildfire. The emerging legal distinction between prescribed burning for suppression versus preventative treatment fuels part of this disagreement.⁶⁷ In *Florida Department of Agriculture & Consumer Services v. United States*, Forest Service employees ignited a controlled burn that escaped and burned plaintiff's property.⁶⁸ The court distinguished previous Ninth Circuit cases by differentiating between prescribed burning for fire suppression and burning for fire prevention, noting that "[d]efendant's citation of authority generally deals with Forest Service decisions regarding 'fire suppression' of wildfires. . . . Fire suppression, itself, is not at issue here. Rather, the dispute involves management ignited prescribed fires. . . ."⁶⁹ *Florida Department of Agriculture* considered *Anderson v. United States* the most analogous case.⁷⁰ In *Anderson*, the Ninth Circuit held the Forest Service liable under the FTCA

⁶⁶ Fla. Dep't Agric. & Consumer Servs. v. United States, No. 4:09-CV-00386, 2010 WL 3469353, at *2-4 (N.D. Fla. Aug. 30, 2010). The court hesitated to directly answer whether the discretionary function exception applied to prescribed fire. *Id.* at *4. For step one—asking whether the prescribed fire was a choice—the court suggested, but did not hold, that the program of developing and approving wildfire prevention plans created a non-discretionary action. *Id.* at *3. Regarding the second step, the court held that a failure to adequately perform the Burn Plan, as well as "significant deviation" from the plan, did not warrant judicial deference over a policy decision. *Id.* at *4. Therefore, the discretionary exception did not apply. *Id.*

⁶⁷ See *Thune v. United States*, 872 F. Supp. 921, 924 (D. Wyo. 1995) (holding that the prescribed fire fell within the discretionary function exception). In *Taylor v. United States*, a prescribed fire in the Helena National Forest escaped and burned around 300 acres of private property. No. CV 12 59 H CCL, 2015 WL 1299226, at *4 (D. Mont. Mar. 23, 2015). The court concluded that the government did not act negligently under Montana's strict liability standard. *Id.* at *8. Even if it did, the discretionary function exception would apply. *Id.* As noted above, the court in *Anderson* held the Government liable for an escaped prescribed burn under the FTCA, but did not discuss the discretionary function exception. 55 F.3d at 1379, 1383-84. *Anderson* also cited to *Rayonier v. United States*. *Id.* at 1381, 1384. In *Rayonier*, the United States Supreme Court held that the government was liable for negligently suppressing a fire and permitting materials to accumulate that allowed wildfires to start and spread. 352 U.S. 315, 317-19 (1957). The Court, responding in part to the dissent, stated that "it may be that it is 'novel and unprecedented' to hold the United States accountable for the negligence of its fire-fighters, but the very purpose of the Tort Claims Act was to waive the Government's traditional all-encompassing immunity from tort actions and to establish novel and unprecedented governmental liability." *Id.* at 319. The holding in *Rayonier* has been challenged regarding prescribed burning for fire suppression. *Woodward*, 973 F. Supp. 2d at 1232. In *Woodward*, the court stated that *Rayonier* is unpersuasive because the holding predates the discretionary function exception and the two-part test. *Id.* (citing *United States v. Varig Airlines*, 467 U.S. 797, 812 (1984); *United States v. Gaubert*, 499 U.S. 315, 326 (1991)).

⁶⁸ 2010 WL 3469353, at *1.

⁶⁹ *Id.* at *3.

⁷⁰ *Id.* (referencing *Anderson*, 55 F.3d at 1384).

and noted that the prescribed burn in question was not used to fight an active wildfire.⁷¹ Similarly, in *Woodward Stuckart, LLC v. United States*,⁷² the United States District Court for the District of Oregon rested part of its holding—that the discretionary function exception applied—on the distinction between prescribed fires that fight active fires and prescribed fires conducted before an active wildfire is burning.⁷³ A growing number of cases distinguish prescribed burning that aims to suppress “natural” fires, and prescribed burning that does not suppress an active wildfire.⁷⁴

This emerging distinction creates a perverse incentive in wildfire management due to the discretionary function exception. The first step of the *Berkovitz* test considers the level of discretionary choice in the government agent’s decision.⁷⁵ A prescribed burn to fight a wildfire almost inevitably involves discretionary choices made in the moment. But a preventative prescribed burn involves less discretion because the controlled fire is pre-planned to meet management objectives. Guidelines and requirements, that aim to improve the safety of prescribed burning, reduce the discretionary choices of the government agent conducting the burn. For example, templates cover the factors that a burn boss⁷⁶ needs to consider, multiple factors usually dictate whether a burn should occur on a specific day,⁷⁷ and the Prescribed Burn Approval Act of 2016⁷⁸ prohibits authorizing a prescribed burn when the national fire danger rating system indicates an extreme fire danger level.⁷⁹ Such requirements and guidelines reduce the discretionary choices of the government agent conducting the burn. The reduced discretion makes prescribed burning less of a “discretionary function” and, therefore, more liable under the FTCA.⁸⁰

⁷¹ *Anderson*, 55 F.3d at 1380 (stating that “in this case there is some dispute over whether the burns in question were for control or study purposes, or both, but it makes no legal difference.”).

⁷² 973 F. Supp. 2d, 1210 (D. Or. 2013).

⁷³ *Id.* at 1222.

⁷⁴ *Kimball v. United States*, No. 1:12-CV-00108-EJL, 2014 WL 683702, at *9 (D. Idaho Feb. 20, 2014) (emphasizing that the court’s holding was “consistent with other courts reviewing similar forest fire fighting decisions where the fire was one of many fires and was originally started by lightning (not by the federal agency)”; *Green v. United States*, 630 F.3d 1245, 1254 (9th Cir. 2011) (Fletcher, J., concurring) (stating that where the “government creates a danger it must warn the public of that danger”).

⁷⁵ *Berkovitz v. United States*, 486 U.S. 531, 536 (1988).

⁷⁶ Burn boss refers to the person “who directs prescribed fire operations . . . and oversees training and qualifications of prescribed fire staff and volunteers at the local level.” *Fire Management Manual*, THE NATURE CONSERVANCY, <https://perma.cc/W8E9-ZCCP> (last updated July 20, 2017).

⁷⁷ This is often referred to as a go-no-go checklist. An example checklist is available at <https://perma.cc/8F4R-BUUP>. For a sample template that covers requirements to consider before conducting a prescribed burn, see NAT’L WILDFIRE COORDINATION GRP., NWCG PRESCRIBED FIRE PLAN TEMPLATE (2018), <https://perma.cc/AZ3D-3TYS>.

⁷⁸ Pub. L. No. 114–275 (2016).

⁷⁹ *Id.*

⁸⁰ In *Backfire 2000 v. United States*, the court reasoned that the discretionary function exception applied, in part, because, “[n]o statute, regulation, or policy mandates specific

This is a perverse incentive because guidelines and requirements that improve the safety of prescribed burning should create less liability, not more. Commentators have promoted this perverse incentive. Robert H. Palmer III argues that the FTCA should only apply to wildfire claims and not to prescribed fire claims because “[u]nlike the government’s conduct in response to a wildfire, which requires a variety of permissive discretionary choices, the government does not have discretion planning or implementing a prescribed fire.”⁸¹ This distinction favors prescribed burning for fire suppression, which the discretionary function exception shields, over prescribed burning for prevention, which generates more liability under the FTCA. As discussed, fire suppression is a root cause of the damaging wildfires endured today. Continuing to favor fire suppression exacerbates that root cause.

An additional concern with FTCA wildfire litigation is the discretionary function exception’s failure to satisfy the purpose behind the *Berkovitz* test. A goal of the *Berkovitz* test is to reduce “judicial second-guessing” of agency decisions.⁸² This goal fails with prescribed burning. In *Green v. United States*,⁸³ for example, the Forest Service lit a prescribed fire and subsequently faced litigation for not communicating the details with landowners and other fire crews.⁸⁴ Three years later, the Forest Service lit a prescribed fire and faced litigation for too much communication that allegedly stopped landowners from returning to and securing their property.⁸⁵ The Forest Service defended decisions for saying too much and for saying too little. “Hindsight judgement” about fire decisions can be “astronomical”⁸⁶ and the effectiveness of the two-part *Berkovitz* test for “reducing judicial second guessing” is questionable.

If wildfires are viewed as mistakes caused by individuals, then a litigious model that punishes the culpable individual, or agency, makes sense.⁸⁷ Litigation’s punitive focus may deter cavalier actions that could ignite a wildfire, such as the teenager who threw the firecracker in the Gorge. Such litigation serves a vital role. Litigation’s benefits are limited,

conduct in the setting of backfires during the course of firefighting operations.” 273 F.App’x 661, 662 (9th Cir. 2008). This justification invites liability for a prescribed fire conducted pursuant to a statute, regulation, or policy mandate and, therefore, may serve as a perverse incentive against enacting such measures.

⁸¹ See Palmer, *supra* note 5, at 314.

⁸² See *supra* note 59, and accompanying text.

⁸³ 630 F.3d 1245, 1249 (9th Cir. 2011).

⁸⁴ *Id.* at 1250–52.

⁸⁵ In *Kimball*, plaintiffs challenged the Forest Service’s communication with the public regarding the use of fire suppression, rather than the actual fire suppression methods. No. 1:12-CV-00108-EJL, 2014 WL 683702, at *6 (D. Idaho Feb. 20, 2014). The court found that the discretionary function did not apply to the claims regarding communication with the landowners and that a trial needed to resolve questions of fact relating to negligence. *Id.* at *8.

⁸⁶ Charles H. Oldham, *Wildfire Liability and the Federal Government: A Double-Edged Sword*, 48 ARIZ. ST. L.J. 205, 209, 214 (2016).

⁸⁷ See generally Aimee Green, *Public Demands Consequences for 15-year-old Eagle Creek Fire Suspect*, OR. LIVE (Sep. 8, 2017), <https://perma.cc/QYE2-FUZ6> (discussing the next steps for the individual who started the Eagle Creek Fire).

however, when addressing underlying causes of wildfires, such as the high winds that accelerated the Eagle Creek Fire or the amount of fuel that accumulates in a forest before a firecracker or power line sparks the actual ignition.⁸⁸ When fire is properly understood as a natural disturbance that climate change, fuel accumulation, and human housing and development have exacerbated,⁸⁹ the current litigious model appears insufficient to address these challenges.

C. Halting Forest Projects and Effects on Forest Management

The impacts of litigation extend beyond tort claims brought after a wildfire. Fire management plans and forest projects are often halted before they begin.⁹⁰ In one example, the Forest Service planned the Stonewall Vegetation Project on 24,000 acres of forest located four miles from the town of Lincoln, Montana.⁹¹ The fuel reduction and prescribed burning project aimed to create “resilient forest conditions” and fire “protection for the community of Lincoln.”⁹² Dense stands followed by beetle kill had created fire prone conditions, as well as dangerous conditions for fire crews to maneuver in the case of a wildfire.⁹³ Alliance for the Wild Rockies challenged the project under the Endangered Species Act⁹⁴ as a threat to the listed Canada lynx.⁹⁵ Plaintiffs sought declaratory relief and an injunction, which the federal court granted.⁹⁶ In July of 2017, after the injunction, lightning struck the dense forest stand near Lincoln and a wildfire burned in the area

⁸⁸ E-mail and Telephone Interview with Justin Sharpe, Fire Planner for Mt. Hood and Gifford Pinchot National Forests (Mar. 14, 2008) (notes and e-mail on file with author) (explaining that the combination of high winds, canopy characteristics, and topography that played a role in the spread of the Eagle Creek Fire).

⁸⁹ Chelsea Harvey, *Here's What We Know About Wildfires and Climate Change*, SCI. AM. (Oct. 13, 2017), <https://perma.cc/V22G-ZV54>.

⁹⁰ See League of Wilderness Def. Blue Mountains Biodiversity Project v. Allen, 615 F.3d 1122, 1125, 1127 (9th Cir. 2010). In *League of Wilderness Defenders Blue Mountains Biodiversity Project*, the Forest Service planned a thinning and prescribed burn to reduce fuels and improve fire safety. *Id.* at 1127. Plaintiffs challenged the project for failure to comply with NFMA and NEPA. *Id.* at 1125. Similarly, in *Alliance for the Wild Rockies v. Pena*, Plaintiffs challenged a collaborative forest plan that included fuel reductions to decrease wildfire risks. 865 F.3d 1211, 1215–16 (9th Cir. 2017).

⁹¹ See *All. for the Wild Rockies v. Marten*, 253 F. Supp. 3d 1108, 1112 (D. Mont. 2017).

⁹² *Id.*; Tom Kuglin, *Lawsuit Halted Fire Mitigation Work in Area Now Burning Near Lincoln*, IND. REC. (July 27, 2017), <https://perma.cc/M4NF-KCCD>.

⁹³ See Lindsey Ford, *Fires Near Lincoln Have Burned Thousands of Acres*, KPAX NEWS (Jul. 22, 2017), <https://perma.cc/TN3C-PHTR> (stating dead standing trees known as “snags” can create dangers for people working in a close vicinity).

⁹⁴ Endangered Species Act of 1973, 16 U.S.C. §§ 1531–1544 (2012).

⁹⁵ *All. for the Wild Rockies*, 253 F. Supp. 3d at 1110–11.

⁹⁶ *Id.* at 1110–12 (noting that mitigating fire risk is a valid public interest, but that “without evidence of an imminent threat it would be difficult to say that the inability to mitigate such risks for a temporary period outweighs the public’s interest in maintaining the environment and requiring that agencies follow proper procedures”).

previously selected for treatment.⁹⁷ The Forest Service sent hotshot crews that were fighting multiple fires across the West to suppress the fire that would have received preventative thinning and controlled burning treatments.⁹⁸

This pattern of halting prevention and then relying on suppression underscores the perverse legal incentives that currently exist. The law couples a distaste for active management with greater leeway for suppression efforts that are more expensive and often more ecologically damaging. For example, significant leeway is granted for the application of ecologically harmful fire-retardant chemicals used to suppress active wildfires compared to the practice of fuel reductions and prescribed burning to prevent future fires.⁹⁹ This model perpetuates the damaging legacy of fire suppression.¹⁰⁰

Divergent views on the purpose of public lands add to the large amount of land management and forestry litigation.¹⁰¹ The Forest Service, embattled by the crippling costs of fighting wildfires and diminished public trust in the agency, is in the middle of these litigious conflicts.¹⁰² This Chapter does not purport to have a solution to solve these entrenched conflicts, but calls attention to how the current model may adversely affect all sides and that all sides could benefit from a different approach.

D. Aggressive Government Wildfire Litigation

The federal government is pursuing aggressive civil and criminal penalties for wildfires. Elements of this litigation may create positive environmental effects, such as new damage calculations that respect the

⁹⁷ *Park Creek Fire*, INCIWEB, <https://perma.cc/2TFF-LP4G> (last updated Oct. 10, 2017); *Arrastra Creek Fire*, INCIWEB, <https://perma.cc/J7ME-S5CR> (last updated Aug. 31, 2017).

⁹⁸ See *UPDATED: Arrastra Creek Fire Near Lincoln Grows 'Exponentially' Thursday*, IND. REC. (Jul. 21 2017), <https://perma.cc/7A5M-FR6P>; see also *All. for Wild Rockies*, 253 F. Supp. 3d at 1113. Areas treated with thinning and prescribed burning would have also provided a refuge during suppression efforts. See *Testimony from the Nature Conservancy to the Colo. Gen. Assembly's Wildfire Matters Interim Comm.*, *supra* note 33, at 1 (explaining the benefits of thinning combined with prescribed burning).

⁹⁹ Fire retardant chemicals, used to suppress wildfires, are costly and ecologically harmful. See Aurora R. Janke, Note, *Beyond the Blaze: Strategies for Improving Forest Service Fire Suppression Policies*, 1 WASH. J. ENV'T. L. & POL'Y 310, 331–36 (2011) (discussing the amount of chemicals used in fire suppression, their ecological damage, and the lack of legal scrutiny applied to such suppression efforts).

¹⁰⁰ In the Lincoln, Montana case, for example, active management was halted and the end result was an expensive and damaging fire. The goals of species protection and fire mitigation both suffered. *All. for the Wild Rockies*, 253 F. Supp. 3d at 1110–11.

¹⁰¹ NFMA embraces concepts of “multiple use” and “sustained yield of products and services,” obligating the Forest Service to “balance competing demands on national forests, including timber harvesting, recreational use, and environmental preservation.” *Nat. Res. Def. Council v. U.S. Forest Serv.*, 421 F.3d 797, 801 (9th Cir. 2005). In the past, the Forest Service was second only to the Marine Corps in public affection. Today, public admiration has diminished. See Jim Petersen, *Embracing Forest Collaboration: Mary Farnsworth Part 2*, EVERGREEN MAGAZINE (Jun. 4, 2015), <https://perma.cc/Z7NY-U8W5>.

¹⁰² See Petersen, *supra* note 101.

value of ecosystems and environmental services.¹⁰³ The government should proceed cautiously, however, due to potential impacts that aggressive litigation could have on obstructing preventative wildfire practices and wildfire emergency response.

The Department of Justice (DOJ) has successfully pursued increasing damage awards from wildfire litigation. In 2006, Southern California Edison paid \$14 million for its role in the 1994 Big Creek fire in the Sierra National Forest.¹⁰⁴ In 2009, DOJ sought an award of \$790 million in *United States v. Sierra Pacific Industries, Inc.*¹⁰⁵ Three days before trial, the parties entered a settlement where the logging company agreed to pay \$7 million and Sierra Pacific Industries agreed to pay \$47 million.¹⁰⁶ The company also conveyed 22,500 acres directly to the government.¹⁰⁷ The largest recovery in Forest Service history, of \$102 million, came from a forest fire that Union Pacific Railroad sparked in northern California in 2006.¹⁰⁸

DOJ pursued new damage arguments to achieve these high values. DOJ argued that damages should compensate the public's deprivation of future access to the burnt lands.¹⁰⁹ For example, throughout litigation with Union Pacific, DOJ emphasized the public's loss of pristine forests and enjoyment of the forested areas.¹¹⁰ The United States District Court for the Eastern District of California ruled that the people of the United States are "entitled to compensation for the unique aspects of the damaged forests, above and beyond the fair market value of the timber destroyed."¹¹¹ Similarly, in 2012, the federal government recovered from CB & I Constructors for "intangible, non-economic environmental damages" due to a negligently set wildfire.¹¹² These damages increased the recoverable amount from wildfires, which means wildfire litigation now offers more lucrative damage calculations for other plaintiffs.

Previous damage calculations assessed the lesser of either the reduction in value of land and timber consumed by the fire, or the cost to

¹⁰³ See, e.g., DAVID EVANS ET AL., COMPARATIVE VALUATION OF ECOSYSTEM SERVICES: LENTS PROJECT CASE STUDY 1 (2004) (report commissioned by the City of Portland, Oregon, explicitly engaging in the valuation of "ecosystem services").

¹⁰⁴ See David Pierson, *Cost of Fire Goes Beyond Timber*, L.A. TIMES (July 23, 2008) <https://perma.cc/ZP7U-KTEA>.

¹⁰⁵ 100 F. Supp. 3d 948, 953 (E.D. Cal. 2015). The federal government sued the property owner, the logging company, and the contractor when logging equipment started a fire on private property and eventually burned 46,000 acres of the Plumas National Forest in California. *Id.*

¹⁰⁶ *Id.*

¹⁰⁷ *Id.*

¹⁰⁸ See Press Release, U.S. Dep't of Justice, Eastern District of California, Largest Settlement Ever in a Forest Fire Case 1 (July 22, 2008), <https://perma.cc/VU9C-FUPS>. The U.S. alleged that Union Pacific Railroad Company employees started a fire while conducting midday repairs and that the employees failed to take necessary precautions to prevent the fire. *Id.* Union Pacific agreed to pay \$102 million to settle the lawsuit. *Id.*

¹⁰⁹ Oldham, *supra* note 86, at 214.

¹¹⁰ See *United States v. Union Pac. R.R. Co.*, 565 F. Supp. 2d 1136 (E.D. Cal. 2008); see also Press Release, U.S. Dep't of Justice, *supra* note 108, at 3.

¹¹¹ Press Release, U.S. Dep't of Justice, *supra* note 108, at 2.

¹¹² *United States v. CB & I Constructors, Inc.*, 685 F.3d 827, 837 (9th Cir. 2012).

repair.¹¹³ New damage calculations, that incorporate factors like the public's loss of "pristine" forests, are six to seven times the fair market value.¹¹⁴ Specialized litigation teams¹¹⁵ and the growth of more lucrative settlements suggest that DOJ will continue to advance the litigious model of wildfire litigation.¹¹⁶ While this will result in recoveries for the United States Treasury, rather than go directly to fire prevention or suppression efforts, and might hopefully increase caution that limits human induced wildfire ignitions, the long-term impact of such litigation on addressing forest health, fuel suppression, the WUI, and climate change is doubtful. In fact, adverse effects could result from such wildfire litigation and the increasing damages awards calculations.

Perhaps the most direct consequence is that higher damage calculations will inflate other wildfire litigation claims, including actions that target prescribed burning. A property owner seeking high damages formerly unprecedented has new precedent to rely on where DOJ and courts calculated damages at six to seven times the fair market value.¹¹⁷ A timber company that allows public access, or grants hunting permits, might use a "loss of public access" argument against a fire crew that attempted to control a wildfire with prescribed burning.¹¹⁸ Increasing damages could further restrict preventative prescribed burns¹¹⁹ that pose short-term risks, but are vital for long-term improvements to forest health.¹²⁰

Higher damages awards could also increase the likelihood that a court would find the discretionary function exception of the FTCA inapplicable to more fire management decisions. The government, pushing for larger wildfire damage awards on one hand, while arguing for a complete exception to negligence on the other hand, appears insincere. Indeed, the court in *Anderson* found the government liable under the FTCA and scolded

¹¹³ *Wildfire Liability Fact Sheet*, CAL. FORESTRY ASS'N (June 2012), <https://perma.cc/BB22-VJDV>.

¹¹⁴ *Id.*

¹¹⁵ *Id.*

¹¹⁶ "The Fire Recovery Litigation Teams will enable the U.S. Attorney's Offices . . . to hire additional attorneys and support staff to focus solely on fire recovery cases." Press Release, U.S. DEP'T OF JUSTICE, *supra* note 108, at 4.

¹¹⁷ *See Wildfire Liability Fact Sheet*, *supra* note 113.

¹¹⁸ Oregon already has state laws that encourage private landowners to open their property to the public. *See* OR. REV. STAT. §§ 105.672–676 (2017) (limiting liability for private landowners and stating that "it is the public policy of the State of Oregon to encourage owners of land to make their land available to the public for recreational purposes"). Increasing wildfire litigation could open other types of damages that were formerly sealed. For example, emotional distress claims due to damages caused from prescribed burning have been rejected, but if wildfire litigation continues to grow, such claims could become accepted. *See* *Robinson v. United States*, 175 F. Supp. 2d 1215, 1223–24, 1227–28 (E.D. Cal. 2001) (concluding property owners could not recover emotional distress damages for an action brought against the government under the FTCA for negligently allowing a prescribed fire to escape onto private property and that the value of the property lost or destroyed is determined by its market value).

¹¹⁹ *See supra* notes 68–69 and accompanying text.

¹²⁰ *See supra* notes 29–30 and accompanying text.

the government's double standard in wildfire tort litigation.¹²¹ Other courts that may dislike this double standard could read the discretionary function exception narrowly, such as the *Florida Department of Agriculture* court.¹²² In turn, DOJ may not even risk arguing the exception at all, leaving the Forest Service more exposed to liability on fire management decisions.¹²³ Extracting increasingly high damages from landowners and companies could very well backfire and hurt the agency tasked with preventing and suppressing wildfires.

E. Litigating the Wildland Urban Interface

The government's litigation strategy and push for increasingly high damages might be an attempt to address challenges the WUI creates for fire management. Aggressive wildfire litigation may seek to minimize new housing growth in a comparable way that some states have required expensive flood insurance in flood zones in an attempt to limit rebuilding after floods.¹²⁴ By increasing the risks and payments of litigation, insurance rates in the WUI increase, which would drive down housing development and housing reconstruction after wildfires.¹²⁵

¹²¹ *Anderson v. United States*, 55 F.3d 1379, 1384 (1995) (“For many years, the United States has bridled at the notion that it can be held liable for negligent fire setting and firefighting activities on its lands while state entities cannot be. . . . Now the United States invites us to hold that all landowners in California are immune because it hopes to ride those coattails to victory. . . . [W]e cannot give substance to the eidolon that the United States continues to chase. It must answer for its negligent acts.”).

¹²² *Florida v. United States*, No. 4:09-CV-00386, 2010 WL 3469353, at *2 (N.D. Fla. Aug. 30, 2010) (holding that communication regarding prescribed burning did not fall under the exception). That holding opens actions that were previously likely defensible under the discretionary function exception.

¹²³ The Forest Service offers input but ultimately does not decide whether or not to invoke the discretionary function exception during litigation because DOJ determines the litigation strategy. *See* 28 U.S.C. § 516 (2012) (“Except as otherwise authorized by law, the conduct of litigation in which the United States, an agency, or officer thereof is a party, or is interested, and securing evidence therefor, is reserved to officers of the Department of Justice, under the direction of the Attorney General.”). DOJ’s legal defense of the Forest Service weighs the risk of any one case setting bad case law for all agencies. *See id.* In *Anderson*, for example, the court did not mention the exception. 55 F.3d 1379. A relevant factor for DOJ’s decision is how the discretionary function will apply to all agencies, not just the Forest Service. *See* 28 U.S.C. 2680(a) (2012) (barring a claim “based upon the exercise or performance or the failure to exercise or perform a discretionary function or duty on the part of a federal agency or an employee of the Government, whether or not the discretion involved be abused”).

¹²⁴ *See* David Chen, *In New York, Drawing Maps Is a Game of Inches*, N.Y. TIMES (Jan. 7, 2017), <https://perma.cc/F8QV-JPGQ> (discussing changing flood insurance policies in New York after storms); *see also* Justin Gillis & Felicity Barringer, *As Costs Rebuild and U.S. Pays, Repeatedly, the Critics Ask Why*, N.Y. TIMES (Nov. 18, 2012), <https://perma.cc/C3RL-Y3W3>.

¹²⁵ *See generally* Kevin Ramakrishna, *Subduing the Ceaseless Storm: Breaking the Build-Destroy-Rebuild Cycle Following Major Catastrophes Through Taxation and Responsibility*, 2 ALB. GOV’T L. REV. 328, 335 (2009) (discussing the “build-destroy-rebuild cycle” in high disaster areas created and perpetuated by the National Flood Insurance Program); Richenda Connell et al., *Evaluating the Private Sector Perspective on the Financial Risks of Climate Change*, 15 HASTINGS W.-N.W. J. ENVTL. L. & POL’Y 133, 138–39 (2009) (discussing the lack of incentives for

Fire management needs to address housing in the WUI, but litigating to shrink the WUI is problematic. One unintended consequence of increasing the cost of owning land in the WUI is pushing out private forestry owners who would sell to the highest best value—thus, replacing forested buffer zones with housing or commercial development and exacerbating the WUI.¹²⁶ A second unintended consequence would be that homeowners on the margin would not be able to afford living in the WUI. More expensive vacation homes might then replace the permanent residents. The lack of fire-proofed properties is one of the problems housing in the WUI creates.¹²⁷ Seasonal vacation housing replacing more permanent homes could therefore further exacerbate fires in the WUI because permanent residents are more likely to fire proof their properties than residents who may not even be near their properties during fire seasons. More expensive vacation homes also incur higher damages after a fire.¹²⁸ These scenarios are a few of the problematic consequences that could result from attempting to address complex challenges of the WUI through litigation.

The government may contend that aggressive litigation deters private parties from negligently igniting fires and that this outweighs potential unintended consequences. That argument makes sense if wildfires are principally due to individual mistakes that can be treated by deterring those individual mistakes—like deterring the teenager who ignited the fire in the Gorge from throwing a firecracker.¹²⁹ Many litigated fires, however, are not caused or ignited by individual mistakes.¹³⁰ Even when individual mistakes do ignite a wildfire, as in the Eagle Creek Fire, a similar fire—fueled by the underlying causes of wildfire—could have ignited at any other time in the near future. Lightning could have struck the same ravine in the Gorge the following summer and created a similar fire as the Eagle Creek Fire if that

insurance companies to adjust premiums and coverage due to available federal disaster funding).

¹²⁶ See *Wildfire Liability Fact Sheet*, *supra* note 113 (explaining that some advocates of local forestry worry that “the current tactics of the U.S. Attorneys are likely to cause many [forest owners] to consider closing up shop and/or fragmenting their forestlands”).

¹²⁷ See Melissa Mylchreest, *Why Homes Are Lost to Wildfire*, HIGH COUNTRY NEWS (Apr. 4, 2014), <https://perma.cc/ZNJ4-EJWN>.

¹²⁸ See David Lazarus, *As California Burns, Here's What You Need to Know About Fire Insurance*, L.A. TIMES (Oct. 11, 2017, 12:10 PM), <https://perma.cc/NEP7-MGYN> (discussing the importance of having homeowners' insurance reflect the rising costs for materials, labor, and consumer goods).

¹²⁹ *Contra* Aimee Green, *Public Demands Consequences for 15-year-old Eagle Creek Fire Suspect*, OR. LIVE (Sep. 8, 2017), <https://perma.cc/9TFB-4DV7> (illustrating the lack of deterrent effect on the behavior of a 15-year old boy suspected of igniting a fire).

¹³⁰ In *United States v. Sierra Pacific Industries, Inc.*, the fire ignition started from routine operations. 100 F. Supp. 3d 948, 953 (E.D. Cal. 2015). The Bridge Creek Fire in *Woodward Stuckart, LLC v. United States*, which spread to private property, started when lightning struck in a wilderness zone with limited human activity. 973 F. Supp. 2d. 1210, 1214–15 (D. Or. 2013). The Park Creek Fire in *Alliance for the Wild Rockies v. Leanne Martin*, also started from lightning in an area the Forest Service was concerned posed a fire risk. 200 F. Supp. 3d 1110, 1112 (D. Mont. 2016). In *Cary v. United States*, the Cedar Fire was ignited by a lost hunter who lit a signal; the threat of any litigation fee may be futile to someone in a life-threatening position who lights a signal to aid his rescue. See 552 F.3d 1373, 1375 (Fed. Cir. 2009).

area was not previously burned in 2017. Fire prevention by seeking to deter individual actions is distinct from fire prevention through active prophylactic forest management.

F. Charging Firefighters for Mistakes Made Fighting Fires

The federal government has brought criminal charges for arson leading to fines, prison sentences, and even the death penalty.¹³¹ The federal government has also brought criminal charges against wildland firefighters, not for arson, but for decisions made while fighting a wildfire.¹³² The government argued, after the fact, that the decisions made while fighting the fire were mistakes.

Criminal charges against wildland firefighters began after the Thirty Mile Fire trapped and killed four firefighters in 2001.¹³³ After their deaths, Congress passed Public Law 107-203, which established the Department of Agriculture Inspector General (IG) to conduct “an independent investigation of Forest Service firefighter deaths that are caused by wildfire entrapment or burnover.”¹³⁴ In 2003, the IG, pursuant to Public Law 107-203, investigated firefighter deaths caused by the Cramer Fire in Idaho and concluded that deaths “may have been prevented” absent poor judgement in following Forest Service suppression policies and tactics “in a prudent manner.”¹³⁵ Subsequently, federal prosecutors brought criminal charges against the Incident Commander for his mistakes made during the Cramer Fire.¹³⁶ The Commander entered a plea bargain.¹³⁷ In 2006, the government also charged the Thirty Mile Incident Commander with an eleven-count complaint.¹³⁸ This was the first time the government filed criminal charges against an Incident Commander “absent malice.”¹³⁹

The practice of criminally charging firefighters for “mistakes” appears to have subsided. Nonetheless, the statute still exists and the charges display a willingness to second-guess emergency response decisions made under extreme stress.

¹³¹ See John Maclean, *Start a Wildfire, Go to Jail – or Worse*, HIGH COUNTRY NEWS (Aug. 30, 2012), <https://perma.cc/64FA-P4E8> (discussing escalating sentencing for forest fires including a case where a forest fire led to first-degree murder charges).

¹³² *Id.*

¹³³ Bill Gabbert, *Thirtymile Fire, 10 Years Ago Today, and the Consequences*, WILDFIRE TODAY (July 10, 2011), <https://perma.cc/3CWV-9XDF>.

¹³⁴ 7 U.S.C. §§ 2270(b)–(c) (2002).

¹³⁵ Letter from U.S. Dep’t of Agric., Office of Inspector Gen., to the Hon. J. Dennis Hastert, Speaker of the House of Representatives 4, 8 (Feb 8, 2005), <https://perma.cc/RXX9-EN83>.

¹³⁶ Oldham, *supra* note 86, at 217.

¹³⁷ *Id.*

¹³⁸ David Bowermaster et al., *Thirty Mile Crew Boss Charged in Four Fire Deaths*, SEATTLE TIMES (Dec. 21, 2006, 12:00 AM), <https://perma.cc/49WC-3WR3>.

¹³⁹ Oldham, *supra* note 86, at 218. The Incident Commander ended up serving house arrest and probation for his perceived mistakes. *Id.* For an in-depth discussion of the Thirty Mile Fire and its aftermath for the firefighters, see JOHN N. MACLEAN, *THE THIRTY MILE FIRE: A CHRONICLE OF BRAVERY AND BETRAYAL* (1st ed. 2007).

IV. WILDFIRE LITIGATION AND EMERGENCY MANAGEMENT

Criminally charging firefighters already appears to have negatively impacted wildfire emergency management. Litigation could further stress additional components of wildfire emergency response. These impacts include closing off the dialogue and open communication that seeks to improve future emergency responses, deterring recruitment and retention of wildland firefighters, adding stress to individual decisions made while fighting wildfires, and adding costs and delays to both the Forest Service's responses to wildfires and to the National Incident Management System.

Litigation is interfering with communication processes that serve to improve wildfire emergency responses. The "hot wash" is an integral part of emergency response where debriefing assesses mistakes made and areas to improve upon in the future.¹⁴⁰ Reassessing and reevaluating decisions, through open communication, is critical to the federal emergency response and preparedness decision making model.¹⁴¹ Using this communication as evidence in court for criminal liability threatens to close off these open communicative processes. Fear of criminal liability has already decreased cooperation, such as when the Forest Service refused to participate in investigations after the Yarnell Hill Fire in Arizona.¹⁴² Individual firefighters also fear that their communications could result in criminal sanctions and firefighters feel compelled to hire attorneys.¹⁴³ Many firefighters even

¹⁴⁰ See DEP'T OF HOMELAND SEC., HOMELAND SECURITY EXERCISE AND EVALUATION PROGRAM (HSEEP) 3-19 (Apr. 2013), <https://perma.cc/P6HX-4G8H> ("Information collected from feedback forms contributes to the issues, observations, recommendations, and corrective actions in the After-Action Report/Improvement Plan. Feedback forms can be supplemented by the conduct of a Hot Wash immediately following the exercise, during which facilitators, controllers, and evaluators capture participant perspectives on the key strengths and areas for improvement identified during the exercise.").

¹⁴¹ See FED. EMERGENCY MGMT. AGENCY, EMERGENCY PLANNING: INDEPENDENT STUDY 235.b 35 (Dec. 2011) ("Preparedness involves an integrated combination of assessment; planning; procedures and protocols; training and exercises; personnel qualifications, licensure, and certification; equipment certification; and evaluation and revision."). The Federal Emergency Management Agency (FEMA) considers evaluation and improvement in the preparedness cycle as the step preceding planning. *Preparedness Cycle*, FED. EMERGENCY MGMT. AGENCY (Feb. 02, 2016), <https://perma.cc/M9G3-ZZG4>. FEMA models five steps in the basic emergency response process: determine the problem, list alternative solutions, choose one alternative, implement the solution, and evaluate the solution. See Terry Boes, *Decision Making in Emergency Response*, DISASTER.COM (Nov 13, 2014), <https://perma.cc/BR9N-EMJH>.

¹⁴² See JOHN N. MACLEAN, *THE ESPERANZA FIRE: ARSON, MURDER, AND THE AGONY OF ENGINE FIFTY-SEVEN* 135-36 (2013). USFS refused to cooperate with the Arizona Division of Occupational Safety and Health interviewers following the Yarnell Hill Fire, which killed nineteen hotshot firefighters. See Oldham *supra* note 86, at 219. Public Law 107-203 may have "made the USFS so fearful of criminal charges and lawsuits that they . . . refus[ed] to cooperate with fire investigations." *Id.* (quoting Bill Gabbert, *New Guide for Accident Reports Requires Conclusions and Recommendations to Be Kept Secret*, WILDFIRE TODAY (Sept. 21, 2013), <https://perma.cc/MN88-C2LM>).

¹⁴³ Becky Bohrer, *Fire Crews Face Possible Liability After Deadly Blazes*, THE SPOKESMAN REVIEW (July 9, 2006), <https://perma.cc/P6CJ-HV5A>.

purchase individual liability insurance.¹⁴⁴ A fear of liability and litigation is not conducive to promote open communication that aims to identify mistakes and make future improvements.

Criminal and civil liability has also deterred some wildland firefighters from continuing their service or seeking leadership positions.¹⁴⁵ This thins the quantity and quality of leaders willing to risk their own and their crew's lives to fight wildfires.¹⁴⁶

Litigation also adversely affects decision making by increasing stress. Fighting massive wildland fires is already a high-stress task¹⁴⁷ and stress interferes with making decisions.¹⁴⁸ Some training processes aim to improve decision making under stressful conditions by repeatedly exposing individuals to unique situations to develop experiential learning.¹⁴⁹ Experience, reassessment, and perhaps mistakes build the experiential learning needed to navigate stressful decision making. Conversely, litigation does not provide any experiential learning or neural shortcuts that are relevant for those who are responding to wildfire emergencies. Removing a decision maker from duty because of litigation, such as the Incident Commander of the Cramer Fire, or deterring experienced firefighters from leadership roles due to fear of litigation, removes the individuals with the experiential learning helpful for navigating the future stressful situation. The

¹⁴⁴ Private liability insurance is growing. One insurance provider explains that, "in a serious accident or tragedy, good firefighting tactics will not protect you from the scope of federal investigations, and/or potential criminal prosecutions and personal capacity lawsuits. Fire management decisions are made in a compressed time frame and only with the information available at the time of the occurring incident. The decisions made at the time of the occurrence, however, are scrutinized with the benefit of 20/20 hindsight." *Liability Spotlight: Wildland Firefighters*, FED. EMP. DEF. SERVICES, <https://perma.cc/L2A6-Y79S> (last visited July 14, 2018); see also Oldham, *supra* note 86 at 219 & n. 12; E-mail from Anonymous Source, former wildland firefighter and smokejumper, current federal employee working in land management, to author (Feb. 11, 2018) (on file with author) [hereinafter Wildland Firefighter E-mail] (explaining that "the threat of litigation is real for incident commanders and fire overheard. . . . Many carry professional liability insurance").

¹⁴⁵ See Bohrer, *supra* note 143 (reporting Firefighter Kenneth Jordan explained that criminal liability changed his goals of attaining a firefighting leadership position).

¹⁴⁶ See *id.*; *Washington Crew Boss' Criminal Charges Worry Wildland Fire Groups*, FIREHOUSE (Jan. 12, 2007), <https://perma.cc/K5NE-6XH9>.

¹⁴⁷ Fire crews face physically demanding conditions coupled with low sleep. A fourteen day firefighting shift is common. Telephone Interview with Justin Sharpe, Fire Planner for Mt. Hood and Gifford Nat'l Forest (Mar. 14, 2018) (notes on file with author).

¹⁴⁸ *Kimball* demonstrates how litigation can add stress to an already stressful position. No. 1:12-CV-00108-EJL, 2014 WL 683702 (D. Idaho Feb. 20, 2014). There, the Incident Commander was sued for decisions made while overseeing multiple hotshot teams and fighting concurrent fires across multiple states. *Id.* at *1.

¹⁴⁹ This process intends to "create neural shortcuts and facilitate decisive action." WILLIAM A. NORRIS & TERRY N. WOLLERT, *STRESS AND DECISION MAKING* 1-12 (Jul. 11, 2011). Repeated exposure to similar situations with limited information facilitates rapid assessment. *Id.* Conversely, when the decision maker "face[s] a unique situation and the number of mental associations stored in memory are limited, then little or no transfer will take place leading to a delayed or inappropriate decision." *Id.*

threat of litigation could add more stress to the initial decisions during a wildfire response, thereby worsening the ability to assess the decisions.¹⁵⁰

Threats of litigation may also add costs and delays to the National Incident Management System¹⁵¹ and to Forest Service responses.¹⁵² In a Unified Command for large emergencies, like the Eagle Creek Fire, the structure matures into a highly detailed chain of command where Incident Command still leads.¹⁵³ Costs and delays to decision making could multiply alongside the growth of the organizational structure. Similarly, threats of litigation could delay the Unified National Response system that seeks to improve coordination and cooperation between public and private entities in a variety of incident management activities.¹⁵⁴ Rather than swift unitary action, parties to a decision might withdraw to create distance from high risk actions or may expend resources documenting a decision to guard for later hindsight review and litigation.

The same concern applies to the Forest Service, which is cognizant of the agency's resource restraints on firefighting and the subsequent resources that litigation requires.¹⁵⁵ Decisions that risk litigation will further strain the

¹⁵⁰ Fire crews and Incident Commanders who are sued over these decisions, are already in high stress and physically demanding conditions. Telephone Interview with Justin Sharpe, Fire Planner for Mt. Hood and Gifford Nat'l Forest (Mar. 14, 2018) (notes on file with author) (discussing the physical rigors of a typical fourteen day firefighting work shift); *see also* Wildland Firefighter E-mail, *supra* note 144 ("Many times fire-line supervisors are faced with decisions that are not win-win. This decision making has become more of a reality on more fires because of a few factors. The expansion of the wildland urban interface is a constant issue. Many times, actions are planned to minimize loss to life and property; which is always the top priority over natural resources, and decisions are made by fire managers that could be letting one house burn to save other houses. I think this weighs heavy at times on your mind because now your decisions are changing peoples' lives or living situations. I guess my thoughts are, here is an example of a decision that may come back and be questioned by the public, did you make the 'right' decision?").

¹⁵¹ Under the National Incident Management System, an Incident Commander oversees the safety officer, an operations section, a planning section, a logistic section, and a finance section. DEP'T OF HOMELAND SECURITY, INCIDENT COMMAND TRAINING 6-7 (2008), <https://perma.cc/6YGG-P7SD>.

¹⁵² This includes delays to decisions made while fighting a fire. For example, when weighing the consequences of litigation "Incident Commanders may be a little more hesitant to put firefighters in a situation that may be looked at, with hindsight, and determined to be 'not safe' (for lack of a better term)." Wildland Firefighter E-mail, *supra* note 144.

¹⁵³ *See* Michael S. Terwilliger, *Unified Command at Wildfires*, FIRE ENGINEERING (Feb. 1, 2004), <https://perma.cc/FAS8-LW3C> (discussing a personal anecdote that illustrates how incident commanders are the point of leadership for the Incident Command System).

¹⁵⁴ *National Incident Management System*, FED. EMERGENCY MGMT. AGENCY, <https://perma.cc/YD4Q-QGZ4> (last updated Mar. 15, 2018).

¹⁵⁵ The Forest Service and other federal agencies are thought to "make substantial efforts to defend themselves against adverse court review." MORGAN & BALDRIDGE, *supra* note 48, at 2 (citation omitted). An estimate for the sum of attorney fees paid by Forest Service Region 1 under the Equal Access to Justice Act between 2003-13 was \$1,086,668. *Id.* at 12. This is less than Region 5 which was estimated at \$1,847,782 and Region 6 at \$1,743,300. *Id.* Procedures established by statutes to avoid litigation also add substantial costs for the Forest Service operations. Concerns have also been raised on the time and financial commitment involved in implementing NEPA and the consequences of those costs on managing natural environments.

agency's resources, particularly when the agency pays the plaintiffs' attorney fees.¹⁵⁶ If the risk of litigation quells decisions that are otherwise the better course of action, or stalls decisions when speed is vital, then the deterrent effect of litigation is stalling the efficiency of wildfire responses.

Litigation provides distributive and retributive justice for individuals who suffer from wildfires, such as family members who grieve the loss of a firefighter. Few indications exist, however, that litigation alone will address the underlying causes fueling wildfires. To the contrary, aggressive litigation may further restrict preventative fire management and disrupt core aspects of emergency management response. A different strategy is needed to adequately address the complexities of Western wildfires.

V. LIVING WITH FIRE: DECREASING LITIGATION AND EXPANDING COLLABORATION

Few would expect the National Oceanic and Atmospheric Administration (NOAA) to fortify sand bags along the shoreline during hurricane season as part of the agency's focus on oceans, storms, and the atmosphere. A growing expectation, however, seems to be that the Forest Service, a land management agency, will suppress mega-fires across the West.¹⁵⁷ Meanwhile, litigation will assist fire suppression by deterring individuals from making mistakes that ignite fires. This approach is failing to mitigate wildfires, as the upcoming fire seasons will likely, and unfortunately, demonstrate. Changes are needed to better address wildfires.

Subpart A offers proposals to mitigate problematic components of wildfire litigation. Subpart B proposes expanding collaborative infrastructure between government agencies as well as between governmental agencies and private entities.

See generally Neil E. West, *History of Rangeland Monitoring in the U.S.A.*, 17 ARID LAND RES. & MGMT. 495 (2003).

¹⁵⁶ The Forest Service, at times, covers judgment fees from its own budget. The judgement fund, established under 31 U.S.C. § 1304 (2012) is available to cover damages only when "payment is not otherwise provided for." The Equal Access to Justice Act directs that a fee award "be paid by any agency over which the party prevails from any funds made available to the agency by appropriation or otherwise." 28 U.S.C. § 2412(d)(4) (2012).

¹⁵⁷ This analogy to NOAA fighting floods and the Forest Service came from Tania Schoennagel. *See* E-mail from Tania Schoennagel, Professor of Geography, Univ. of Colo., Boulder (Nov. 13, 2017) (on file with author). The public wants Forest Service firefighters to suppress mega-fires and protect private homes, even when fires are killing fire crews. *See* Washington Post, *Arizona Hotshot Firefighters Died Protecting Empty Homes*, DENVER POST (Apr. 29, 2016) <https://perma.cc/2QZ2-QUJ8>. This expectation on the Forest Service to protect private property exists even though the agency has no jurisdiction over private homes and is limited in what actions they can legally take. *See Private Land*, U.S. DEP'T OF AGRIC. <https://perma.cc/8M7Q-BSLU> (last visited July 14, 2018) (illustrating programs USFS has implemented to assist private landowner in preventing wildfires).

A. Decrease Areas of Litigation that Deter Fire Prevention and Emergency Response

Specific legal barriers interfere with active fire management. Multiple approaches can address these barriers and facilitate proactive management. These approaches address the perverse incentive against improving the guidance and restrictions of prescribed burning, the discretionary function exception favoring prescribed burning for fire suppression over fire prevention, and softening aggressive government litigation that adversely interferes with emergency response.

Under the FTCA and the discretionary function exception, increasing guidance and safety restrictions can create more, rather than less, liability for prescribed burning. The main argument courts can employ to counter these perverse incentives is that preventative prescribed burning still involves discretion as part of the overall decisions aimed at mitigating wildfire damage. This argument draws from *Miller v. United States*.¹⁵⁸ In *Miller*, the Ninth Circuit acknowledged that mandatory language exists within firefighting duties, but such language does not eliminate the overall discretion of specific firefighting duties.¹⁵⁹ Similarly, the individual actions conducted on the specific day of a prescribed burn may lack discretionary choices, but the larger policy of managing certain landscapes with controlled burning involves discretionary decisions that comprise overall firefighting duties.¹⁶⁰ Courts should view decisions made while conducting a burn in the larger context of the many discretionary choices that comprise overall wildfire management.

Miller did, admittedly not deal with prescribed burning for wildfire prevention.¹⁶¹ That is not controlling, however, because *Miller* did not address the question whether prescribed preventative burning is a discretionary function.¹⁶² Courts could read *Miller* narrowly as the discretionary function exception only applies to fire suppression efforts, which would perpetuate the emerging perverse incentives. Or, courts could draw on the underlying reasoning and policy in *Miller* and *Juras*¹⁶³ to consider preventative prescribed burning a discretionary function, which would remedy these perverse incentives. If these perverse incentives are corrected, the federal government could employ more preventative prophylactic prescribed burning with less threat of liability. The government could also set more safety controls on the use of prescribed burning, without running the risk that those measures would actually increase liability.

¹⁵⁸ 163 F.3d 591 (9th Cir. 1998).

¹⁵⁹ *Id.* at 595.

¹⁶⁰ In *Juras v. United States* the court rejected the idea that fire policy guidelines eliminate discretion. No. CV 11-0155 WPL/GBW, 2011 WL 13223900, at *3 (D. N.M. Oct. 14, 2011). The court reasoned that a decision maker still balances competing interest when following policies per agency guidelines. *Id.*

¹⁶¹ *See Miller*, 163 F.3d at 592–93.

¹⁶² *Id.* at 595 (discussing the application of the discretionary function exception to fire suppression decisions made by the Forest Service).

¹⁶³ *See Juras*, 2011 WL 13223900, at *3.

The current legal structure also makes prescribed burning to prevent or mitigate wildfires legally riskier than prescribed burning to suppress an active wildfire. To remedy this distinction, ecological factors should inform the legal framework. Specifically, courts hearing a wildfire claim that resulted from a prescribed burn should consider the temporal and spatial scales of the fire disturbance regime of the location at issue. Longer temporal and spatial scales blur the somewhat artificial line between a prescribed burn to suppress an active fire and a prescribed burn to prevent a future wildfire. The risk of wildfires occurring in a discrete location within a narrow timeframe is not likely, but when wildfires are viewed as part of a larger geographical and temporal system, then preventative measures appear more necessary and less distinguishable from a prescribed burn lit to suppress an active wildfire.¹⁶⁴

An additional approach to address problems with the FTCA and discretionary function exception is for Western states to modify their negligence standards relating to prescribed burning.¹⁶⁵ When the discretionary function exception is not triggered, the FTCA applies state negligence laws.¹⁶⁶ The state law where the fire occurred is therefore relevant when a court finds that the exception is not applicable.¹⁶⁷

Last, DOJ should reconsider whether its aggressive litigation and high damage amounts will backfire and restrict preventative actions that treat underlying causes of wildfires. Criminal penalties against wildland firefighters already appear to have adversely affected emergency responses.¹⁶⁸ This practice should end, absent extraordinary circumstances.

¹⁶⁴ In addition to the effect this proposal would have on torts and injunctions, takings claims and the necessity doctrine are implicated. In *Trin-Co Inv. Co. v. United States*, Trin-Co brought a takings claim due to damage caused by USFS backburns during suppression efforts. 130 Fed. Cl. 592, 594 (2017). The government argued that the doctrine of necessity absolved any liability. *Id.* at 595. The court held that questions of material fact, such as whether or not an actual emergency excused the damages caused by the back burns and whether imminent danger from wildfires actually threatened life and property, precluded summary judgment. *Id.* at 601–04. Under this analysis, a preventative prescribed burn would never trigger the necessity doctrine. *See id.* at 601. Such reasoning grants a legal defense for waiting for an emergency, or not having the emergency response system in place to respond as quickly, rather than taking preventative steps before the emergency unfolds.

¹⁶⁵ States currently have different liability laws. California applies simple negligence. CAL. HEALTH & SAFETY CODE §§ 13007–08 (2018); *see Anderson v. United States*, 55 F.3d 1379, 1381 (9th Cir. 1995). Oregon and Montana use strict liability. OR. REV. STAT. §§ 477.066(1), 477.740 (2017); MONT. CODE ANN. § 45-6-102 (2018).

¹⁶⁶ Federal Tort Claims Act, 28 U.S.C. § 1346(b) (2012).

¹⁶⁷ *See Yoder, supra* note 30, at 321. This point may be slightly overlooked or analyzed improperly in the research. Yoder, for example, states that his modeling may support the notion that “[b]ecause state liability laws do not directly affect federal employees . . . there should be no systematic effect of state laws on the incidence and severity of escaped fires started by federal employees.” *Id.* The potential error with Yoder’s modeling is that it may rest on a flawed premise—namely, state liability laws do affect federal employees when the discretionary function exception is not employed. *See Rayonier v. United States*, 352 U.S. 315, 318–19 (1957); *Anderson*, 55 F.3d at 1381.

¹⁶⁸ *See Bohrer, supra* note 143.

Repealing or modifying Public Law 107-203 provides a starting point to shift from wildfire litigation that punishes firefighters.

B. Expand Collaboration Between Public and Private Entities

President Donald Trump recently pardoned the Hammonds, who were catalysts for the Bundy occupation.¹⁶⁹ The Hammonds lit prescribed fires for a range of purposes, including a backburn to stop an encroaching wildfire.¹⁷⁰ The District Court of Oregon had sentenced the Hammonds to five years in prison for arson.¹⁷¹ Their story is one of many examples of the deep divides in the West around land management. The Hammonds took actions that are the antithesis of what a collaborative approach that improves the safety of WUI residents and forest health would look like, but their story raises an interesting question of whether future collaboration on prescribed fires with private land owners could address forest management needs and bridge some gaps between federal agencies and rural communities. A collaborative model, rather than the litigious approach, could bridge some of these gaps, as well as encourage agencies and private entities to work on proactive and preventative fire management.¹⁷²

Collaborative models would share roles and responsibilities with the goal of preventing and responding to wildfires. This approach would be particularly helpful in the WUI. Private parties that reside in the WUI have attempted to participate in fire management and have suffered from escaped burns. For example, the Forest Service lit a prescribed burn in South Dakota that escaped and burned 7,160 acres of private property.¹⁷³ Community members stated that their input on fire precautions was ignored.¹⁷⁴ The United States Department of Agriculture denied \$50 million in claims after the fire and stated that the Forest Service has neither the ability to settle tort claims or the authority to accept responsibility.¹⁷⁵ Taking no prophylactic measures to mitigate wildfires has become a less viable option, but

¹⁶⁹ See Eileen Sullivan & Julie Turkewitz, *Trump Pardons Ranchers Whose Case Inspired Wildlife Refuge Takeover*, N.Y. TIMES (July 10, 2018), <https://perma.cc/G4YL-RDCH>; see also, Nick Baumann, et al., *Gunmen Seize Federal Building in Oregon*, HUFFINGTON POST (Jan. 3, 2016), <https://perma.cc/5H9D-ATHY>; Les Zaitz, *Militia Takes Over Malheur National Wildlife Refuge Headquarters*, OR. LIVE (Feb. 22, 2016), <https://perma.cc/HUN8-8DGW>.

¹⁷⁰ *Eastern Oregon Ranchers Convicted of Arson Resentenced to Five Years in Prison*, U.S. DEP'T JUST. (Oct. 7, 2015), <https://perma.cc/L5ER-C4WU>.

¹⁷¹ *Id.*

¹⁷² To repeat, this Chapter is not endorsing or approving the arson the Hammonds committed nor President Trump's pardoning of the Hammonds.

¹⁷³ Bill Gabbert, *\$50 Million in Claims Over Escaped Prescribed Fire Reportedly Denied*, WILDFIRE TODAY (June 30, 2015), <https://perma.cc/WS75-55AS>. A prescribed fire also escaped in 2012 in Colorado and tragically burned twenty-two homes and killed three people. See Bill Gabbert, *Victims of Escaped Prescribed Fire in Colorado Receiving Settlement Checks*, WILDFIRE TODAY (Jul. 29, 2014), <https://perma.cc/V2GQ-79KB>.

¹⁷⁴ Daniel Simmons-Ritchie, *Ranchers Blame Forest Service for Fire that Devastated 14,000 Acres in South Dakota*, RAPID CITY J. (Apr. 5, 2013), <https://perma.cc/E86Z-V972>.

¹⁷⁵ Carrie Stadheim, *Federal Government Denies Liability on U.S. Forest Service-Lit Pautre Fire*, TRI-STATE LIVESTOCK NEWS (June 30, 2015), <https://perma.cc/D7M9-3H43>.

increasing prescribed burns and the short-term risk of increased smoke and escaped fire, without addressing those risks to WUI residents, also fails to adequately treat the growing threat of wildfires. Collaborative models would envision the Forest Service conducting wildfire management in joint efforts with private entities.

Collaborative models between private parties and federal agencies would involve tradeoffs of rights and responsibilities. For one, private property owners could take greater steps to fireproof their homes.¹⁷⁶ In return, compensation funds could assist private parties that suffer from escaped burns. This approach could model after the National Flood Insurance Program that provides compensation to property owners after a flood, but also encourages prevention by requiring communities to pursue land use control measures.¹⁷⁷ Comparatively, California has been experimenting with the Disaster Assistance Act and a Wildfire Relief Fund.¹⁷⁸ Parameters could set permissible preventative action and a federal wildfire fund could offer payments when actions deviate from those parameters and cause damage. Collaborative networks could agree to pre-conditional measures and waivers of liability in return for the establishment of land use controls and payments in the case of fire damages. As explained below, collaborative structures and shared funding already exist—to a limited degree—between government agencies.

C. Expand Collaboration Between Government Agencies

The expansion of intra-agency collaboration with the Forest Service could assist firefighting and preventative fire management. Regulatory schemes are already in place that offer foundations from which collaboration could expand. For example, 42 U.S.C. § 1856 authorizes reciprocal agreements and mutual aid for fire protection.¹⁷⁹ The legislative history of this Act shows a desire to increase reciprocal actions between

¹⁷⁶ See Mylchreest, *supra* note 127.

¹⁷⁷ See *About Us*, FLOODSMART.GOV, <https://www.floodsmart.gov/about> (last visited Apr. 15, 2018); see also Keiter, *supra* note 37, at 357 (discussing similar proposals, federalism regarding wildfire responses, and FEMA's Flood Insurance program).

¹⁷⁸ See *California Disaster Assistance Act, Cal OES Divisions, Public Assistance*, CAL. GOVERNOR'S OFF. FOR EMERGENCY SERV., <https://perma.cc/PU8C-6CAX> (last visited July 14, 2018); *Wildfire Relief Fund*, CAL. COMMUNITY FOUND., <https://perma.cc/T5C9-333Q> (last visited July 14, 2018). In a similar vein, but clearly less related, the Price-Anderson Nuclear Industries Indemnity Act established \$10 billion in liability insurance in case of a non-military nuclear meltdown. See AM. NUCLEAR SOC'Y, *THE PRICE- ANDERSON ACT: BACKGROUND INFORMATION* (Nov. 2005), <https://perma.cc/4REY-D2DW>.

¹⁷⁹ 42 U.S.C. § 1856(a) (2012) (“Each agency head charged with the duty of providing fire protection for any property of the United States is authorized to enter into a reciprocal agreement, with any fire organization maintaining fire protection facilities in the vicinity of such property, for mutual aid in furnishing fire protection for such property and for other property for which such organization normally provides fire protection. Each such agreement shall include a waiver by each party of all claims against every other party for compensation for any loss, damage, personal injury, or death occurring in consequence of the performance of such agreement.”).

federal, state, and private entities to decrease cost and maximize fire protection.¹⁸⁰ Regarding prescribed preventative burns, the Bureau of Land Management entered partnerships for coordination, planning, and execution of prescribed burning in the Willamette Valley of Oregon.¹⁸¹ Some inter-agency collaboration already exists. Expanding the tools available for agencies to enter into these agreements could improve wildfire management.

Collaborative models are no panacea, however. A major concern is that conflicting tensions could lead to disarray. Government firefighting agencies are especially useful in “quelling tensions” between diverse interests.¹⁸² “Having a unitary actor invested with full authority to make decisions is helpful.”¹⁸³ Collaborative models may reduce some litigation, but they do not prevent it.¹⁸⁴ Nonetheless, the mere process of collaborating, rather than litigating, may assist the needed transition away from the simple narrative that a culpable individual created a destructive wildfire that ruined “pristine” forests towards a more mature strategy that engages with forest ecology to control and mitigate, yet live with, fire disturbance regimes.

VI. CONCLUSION

Wildfire suppression has adversely impacted forest ecosystems and created a growing threat to WUI residents. Living with fire, such as through the use of prescribed burning, needs to replace the former policy of fire suppression—both for the health of forest ecosystems and the long-term safety of communities living in the WUI. Litigation as a primary vehicle to address these forest management challenges is proving inadequate, if not counterproductive, in some situations. Steps to reduce litigation, while

¹⁸⁰ See S. REP. NO. 84-274, at 1–3 (1955).

¹⁸¹ U.S. ARMY CORPS OF ENG'RS, DETERMINATION AND FINDINGS FOR AN INTERAGENCY ACQUISITION UNDER THE ECONOMY ACT FAR 17.502-2: 2017 PRESCRIBED FIRE IN SUPPORT OF RARE AND ENDANGERED SPECIES (2017). Authority to collaborate on a prescribed burn occurred pursuant to 31 U.S.C. § 1535 and Federal Acquisition Regulation 17.502-2. See 31 U.S.C. § 1535 (2012); 48 C.F.R. § 17.502-2 (2017).

¹⁸² Karen M. Bradshaw, *A Modern Overview of Wildfire Law*, 21 FORDHAM ENVTL. L. REV. 3, 445, 478 (2010).

¹⁸³ *Id.*

¹⁸⁴ *Id.* at 475–78. In the decision for *Alliance for the Wild Rockies v. Jim Pena*, the Ninth Circuit noted the defendants' multi-year collaboration among “elected officials, environmental organizations, Native American tribes, the timber industry, and community organizations.” 865 F.3d 1211, 1215–16 (2017). During the oral argument, the Ninth Circuit stated that it was “impressed” by the “extensive outreach that took place,” and asked whether environmental groups, as well as Alliance for the Wild Rockies, took place in the collaborative coalition. United States Court of Appeals for the Ninth Circuit, *16-35856 Alliance for the Wild Rockies v. Jim Pena*, YOUTUBE (June 13, 2017), https://www.youtube.com/watch?v=H-LH_Pt-x0. Nonetheless, one group—Alliance for the Wild Rockies—did not participate in the collaboration, that did include other environmental and community groups, and created a lawsuit that went all the way to the Court of Appeals. See *All. for the Wild Rockies*, 865 F.3d at 1211. This case demonstrates that collaboration can create consensus from B to Y, but often fails to bridge A to Z. Interview with Lawson Fite, General Counsel, American Forest Resource Council (Nov. 27, 2017) (notes on file with author).

concurrently expanding collaborative models, could facilitate more effective fire management. A more cooperative and less litigious model might prove better suited to treat wildfire as part of the Western landscape that can be managed and mitigated, rather than suppressed and litigated.