REFOCUSING PRIORITIES FOR AT-RISK COMMUNITIES: FIRE MANAGEMENT FOR THE JUST TRANSITION

BY

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Due to a century of disruption in natural fire in ecosystems paired with the rapid growth of the Wildland Urban Interface (WUI), wildland fire has become one of the most pressing issues in forest management because it places millions of people in close proximity to dangerous wildfires. Throughout the American West, forest managers are now facing declining forest health, high fuel loads, and inefficient systems for confronting the wildfire crisis, all while making decisions that dramatically affect the communities that live in the WUI. As policymakers wrestle with containing the dangers of intensifying wildfires, it becomes critically important that solutions consider the needs and desired outcomes of environmental justice communities who bear the consequences of land management decisions.

Forest management decisions concerning federal public lands have long neglected and disregarded the rural communities and Indigenous peoples most directly impacted by wildland fires. With each passing fire season wreaking further devastation on vulnerable communities, it becomes increasingly necessary to develop policy solutions that prioritize the groups with the most at stake. By promoting a just transition for forest-dependent communities, we can seek to rectify previous mismanagement and injustices while working towards a healthier environment.

This Chapter begins by evaluating the history of federal forest management and how policy regimes have created unsustainable conditions for remedying the wildfire crisis, then discusses possible solutions for uplifting rural and tribal communities in the WUI to

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develop better fire policy and restore prosperity to neglected groups. With particular focus on what the Biden administration has done in its first term, the Chapter analyzes what steps the administration has taken towards incorporating environmental justice into fire policy and what other policy initiatives are worth exploring further.

I. INTRODUCTION

In the last two decades, wildfires in the American West have become a symbol of tangible climate disaster and an omen of things to come in a climate changed world. Although a multitude of factors have contributed to the wildfire crisis, much of the blame has been placed on forest management practices that prioritized fire suppression.[1] Forest management in the twentieth century disrupted the natural rhythm of forest ecology by suppressing wildfire in regions where it had been a common presence.[2] Forests in the West have reached a compounding crisis of an over-crowded understory, more ecological competition for water, and hotter and drier conditions, leaving them prone to more destructive fires.[3]

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[1] U.S. FOREST SERV., CONFRONTING THE WILDFIRE CRISIS: A STRATEGY FOR PROTECTING COMMUNITIES AND IMPROVING RESILIENCE IN AMERICA'S FORESTS 14 (2022), https://perma.cc/4WBD-MNVM [hereinafter 2022 WILDFIRE CRISIS STRATEGY].

[2] *Id.* at 20.

[3] *Id.* at 16–21.

These factors have coalesced with dramatic consequences for Western states. Seven of California's ten most destructive fires on record burned within the last eight years.[4] A series of fires in Oregon burned over a million acres and forced 500,000 people to evacuate their homes in 2020 in the midst of the COVID-19 pandemic.[5] Since 2000, wildfires have burned an average of seven million acres each year, more than double the annual average during the 1990s.[6] Over the last ten years, an annual average of 64% of acres burned have been on federal land.[7] As climate change worsens and wildfires intensify with each passing fire season,[8] the critical need to build fire-resilient communities has become increasingly necessary to prevent further loss of life, ecosystems, and property. Exacerbating the crisis is the explosive growth of populations living intermingled with the landscapes at the highest risk of wildfire dangers in the WUI.[9] The WUI is defined as the area where dwellings are in or near wildland vegetation, and this area poses the greatest risk to people due to the proximity of wildfire fuels.[10] There are two types of WUI communities: (1) interface, which are areas with housing in the vicinity of contiguous vegetation, and (2) intermix, where housing and vegetation are overlapping.[11] From 1990 to 2020, the WUI in the conterminous United States has increased in surface area by 30.8%, from 580,831 square kilometers to 759,581 square kilometers.[12] In the West, California (17.1%), Oregon (24.9%), Washington (32.9%), and Idaho (84.9%) have all increased wildland interface and intermix surface area, collectively constructing over 2.1 million houses since 1990.[13] Due to their proximity to wildland fuels, buildings in the WUI can serve as ignition points or be more readily impacted by fires.[14]

WUI communities throughout the West experience significant risk of fire danger, making wildfire a threat to both life and livelihood.[15] In light of the threats to WUI communities, federal, state, tribal, and local governments face the need to improve resiliency and safety while simultaneously balancing economic and conservation interests. Government

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[4] *Top 20 Most Destructive Wildfires*, CAL. DEP'T OF FORESTRY AND FIRE PROT. (Oct. 24, 2022), https://perma.cc/B6JQ-P9RW.

[5] *2020 Oregon Wildfire Spotlight*, OR. OFF. OF EMERGENCY MGMT. (last visited May 3, 2023), https://perma.cc/DKP5-QFNJ.

[6] CONG. RSCH. SERV., IF10244, WILDFIRE STATISTICS 1 (Mar. 1, 2023), https://perma.cc/BKD8-7BSH.

[7] *Id.* at 2.

[8] 2022 WILDFIRE CRISIS STRATEGY, *supra* note 1, at 3.

[9] Volker C. Radeloff et al., *Rapid Growth of the US Wildland-Urban Interface Raises Wildfire Risk*, 115 PROC. NAT'L ACAD. SCI. 3314, 3314–15 (2018).

[10] *Id.* at 3314.

[11] *Id.* at 3316.

[12] SILVIS Lab, *Wildland-Urban Interface Change, 1990–2020*, UNIV. OF WIS.-MADISON, https://perma.cc/RZ8T-F4NN (last visited May 3, 2023) (navigate to "Summary Statistics" and open "State WUI Totals").

[13] *Id.* The percentages shown represent the increase in WUI in each respective state. *Id.*

[14] Radeloff et al., *supra* note 9, at 3314.

[15] *Id.*

actors have more latitude to effectuate programs on public lands but have limited discretion on privately owned land that falls outside the scope of public sector land managers.[16] Although public entities have a number of tools available to incentivize private actors to take wildfire prevention measures, there are considerable obstacles to effective forest management on private lands. Despite these challenges, environmental justice should drive policy choices in fire management,[17] putting the most disadvantaged and impacted communities at the center of any solutions to address the wildfire crisis. By focusing on groups who are most impacted by fire management policy, land managers and policymakers will be able to pursue a "just transition"—a societal and economic shift away from environmentally destructive practices, which elevates the views of historically disadvantaged people—racial minorities and Indigenous peoples—in order to have a socially equitable future alongside a healthy environment.

This Chapter explores how both federal and state actors have managed wildfire prevention projects in the American West to this point and discusses opportunities to incorporate environmental justice into future fire management decisions that prioritize communities who bear both the cost and consequences of forest management policy. Part II will explore the statutory obligations of land managers, previous federal wildfire management strategies, and the current state of regulations. Part III will discuss frontline communities and the contrasting needs and interests of residents of the WUI, rural, and tribal lands. Finally, Part IV of this Chapter will lay out opportunities for incorporating environmental justice and the concept of a just transition into future wildfire management policies, including signs of how the Biden administration will be shaping their own policies through laws passed in the first term of the Biden presidency.

II. FEDERAL WILDFIRE MANAGEMENT

Federal forest management is subject to numerous statutes that regulate public lands and limit how agencies and communities can implement wildfire resiliency planning. The key statutes of focus in this Chapter are the National Environmental Policy Act (NEPA),[18] the National Forest Management Act (NFMA),[19] the Federal Land Policy and

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[16] *See Private Land*, U.S. FOREST SERV., https://perma.cc/FXT9-WQZ2 (last visited May 3, 2023) (illustrating that the majority of forests are privately held and that the Forest Service is relegated to offering advice and suggesting cooperation with their programs).

[17] Environmental justice is a concept that integrates traditional environmental issues (pollution, water quality, deforestation, etc.) with social and economic injustices that place disadvantaged groups at the greatest risk of harm from environmental dangers. *See* Jedediah Purdy, *The Long Environmental Justice Movement*, 44 ECOLOGY L.Q. 809 (2018), for a historical account of the environmental justice movement.

[18] National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321–4370h (2018).

[19] National Forest Management Act of 1976, 16 U.S.C. §§ 472a, 521b, 1600, 1611–1614 (2018) (amending Forest and Rangeland Renewable Resources Planning Act of 1974, Pub. L. No. 93-378, 88 Stat. 476 (1974)).

Management Act (FLPMA),[20] the Healthy Forest Restoration Act (HFRA),[21] and the Endangered Species Act (ESA).[22] Together, these statutes create federal obligations and causes of action to enforce them, while other decisions may be judicially reviewable under the Administrative Procedure Act (APA).[23] The statutes fall into three categories of obligations for land managers: procedural rules, substantive planning, and management strategy.

A. The Procedural Rules: NEPA and ESA

NEPA provides the procedural underpinning of all federal regulatory actions that potentially have an impact on the quality of the environment.[24] While NEPA's implementing regulations are currently being overhauled by the Biden administration,[25] the general requirements of the law remain largely the same: if a federal action may have significant effect on the quality of the environment, the responsible agency must prepare an environmental impact statement (EIS) detailing how the proposed action may change the environmental conditions.[26] Actions can include implementation of federal projects and regulatory programs as well as permitting of private projects.[27] In determining whether an EIS is required, the agency may conduct an environmental assessment (EA) or apply a categorical exclusion (CE or CX) that has been adopted through rulemaking.[28] Although NEPA does not impose any substantive duties on agencies to avoid environmental degradation, it does require

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[20] Federal Land Policy and Management Act of 1976, 43 U.S.C. §§ 1701–1787 (2018).

[21] Healthy Forest Restoration Act of 2003, 16 U.S.C. §§6501–6591(e) (2018) (enacting this chapter and section 2103b of this title and amending sections 6601, 8606, and 8609 of Title 7, Agriculture Pub. L. 108-148, § 1a, Dec. 3, 2003, 117 Stat. 1887).

[22] Endangered Species Act of 1973, 16 U.S.C. §§ 1531–1544 (2018).

[23] Administrative Procedure Act, 5 U.S.C. §§ 551–559, 701–706, 1305, 3105, 3344, 4301, 5335, 5372, 7521 (2018).

[24] NEPA, 42 U.S.C. § 4332 (2018).

[25] *See* National Environmental Policy Act Implementing Regulations Revisions, 87 Fed. Reg. 23453 (Apr. 20, 2022) (codified at 40 C.F.R. pts. 1502, 1507, 1508). NEPA's implementing regulations were originally issued in 1978 and were not substantially changed until 2020, when the Trump administration added language that relaxed elements of the NEPA process to be more friendly to developers. *Id.* at 23454–55; Council on Env't Quality, *NEPA Modernization*, WHITE HOUSE, https://perma.cc/YBU2-W3VL (last visited May 15, 2023). In 2022, the Council on Environmental Quality promulgated Phase 1 of its NEPA revisions intended to remedy near-term harm of the 2020 revisions. *Id.* Notice of proposed rulemaking for Phase 2's more comprehensive overhaul of NEPA's implementing regulations is expected in summer of 2023. *CEQ Restores Three Key Community Safeguards during Federal Environmental Reviews*, WHITE HOUSE (Apr. 19, 2022), https://perma.cc/5YAF-XDCQ.

[26] NEPA, 42 U.S.C. § 4332(2)(C) (2018).

[27] *See generally* 40 C.F.R. § 1501 (2023) for more information regarding NEPA regulations of agency actions and significant effects.

[28] *Id.* § 1501.3.

the agency to prepare and assess a range of alternatives to the proposed actions that mitigate impacts.[29]

Each agency maintains its own set of NEPA implementation procedures.[30] Industry advocates and conservative administrations have regarded NEPA as an unnecessary barrier to work on federal lands, so these procedures have avenues to proceed with less environmental review through categorical exclusions and determinations of NEPA adequacy. Within the wildfire context, the U.S. Forest Service (USFS) and the Bureau of Land Management (BLM) have promulgated categorical exclusions to the EIS process governing forest management.[31] Although categorical exclusions are largely reserved for actions known to have no significant impacts on the environment, some have been applied broadly to allow for commercial timber harvest on public lands for "timber stand . . . improvement activities,"[32] which environmental groups have challenged as counter to NEPA's statutory mandate.[33] With the stated purpose of avoiding replication of environmental reviews, the BLM's implementing regulations have determinations of NEPA adequacy that allow the agency to use existing environmental documentation if the proposed action is within the scope of prior analysis and no new information exists.[34] Overall, NEPA has proven to be an important tool for environmental groups to ensure environmental review, but it tends to draw criticism from those who seek to do work on federally managed lands.

Similarly, the ESA creates procedural obligations for land managers to consider when making decisions that may impact species listed

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[29] 42 U.S.C. § 4322(2)(E); 40 C.F.R. § 1500.1(a) ("NEPA does not mandate particular results or substantive outcomes.").

[30] *See generally, e.g.*, 36 C.F.R. § 220.1 (2023) (establishing "procedures for compliance with the National Environmental Policy Act (NEPA)" for the Forest Service); DEP'T OF THE INTERIOR, BUREAU OF LAND MGMT., 516 DM 11, DEPARTMENTAL MANUAL ON THE NATIONAL ENVIRONMENTAL POLICY ACT OF 1969: MANAGING THE NEPA PROCESS—BUREAU OF LAND MANAGEMENT (2020) [hereinafter BLM DEPARTMENTAL MANUAL] (providing supplemental requirements for implementing NEPA within the Bureau of Land Management).

[31] *See* 36 C.F.R. § 220.6 (listing Forest Service Categorical Exclusions); BLM DEPARTMENTAL MANUAL, *supra* note 30, at 516 DM 11.9 (listing actions eligible for BLM Categorical Exclusions); *see also* discussion *infra* Part II(B) (discussing the roles of the BLM and USFS in forest and fire management).

[32] 36 C.F.R. § 220.6(e)(6); *see also id.* § 220.6(c) (noting an exception to the categorical exclusions for actions that the responsible official determines "may have a significant environmental effect").

[33] *See* Mtn. Cmtys. for Fire Safety v. Elliott, 25 F.4th 667, 672–74, 682 (9th Cir. 2022) (holding that the Forest Service did not act arbitrarily or capriciously in interpreting a CE to apply to commercially viable timber harvesting insofar as it was a timber stand improvement project).

[34] BLM DEPARTMENTAL MANUAL, *supra* note 30, at 516 DM 11.4(a), 11.6. The Forest Service implemented a similar rule under the Trump administration, National Environmental Policy Act (NEPA) Compliance, 85 Fed. Reg. 73620 (Nov. 19, 2020) (codified at 36 C.F.R. § 220.4(j)), but the rule is being challenged in a case pending completion of the administrative record under the APA in *Clinch Coalition v. U.S. Forest Service*, 597 F. Supp. 3d 916, 925 (W.D. Va. 2022).

under the Act. After a species is listed under the ESA, the relevant wildlife agency must designate critical habitat that is necessary for species recovery.[35] If an action may affect listed species, or may destroy or adversely modify critical habitat, then the action agency must conduct formal consultation with the applicable wildlife agency.[36] The consultation obligation applies across the spectrum of actions, from site-specific projects to broad scope planning activities.

B. Substantive Rules: NFMA, FLPMA, and the Northwest Forest Plan

As the two primary forestland managers, USFS and BLM are both empowered and restricted by their respective statutes, NFMA and FLPMA, to manage public forests for public benefit. Alongside the Multiple-Use Sustained-Yield Act (MUSYA)[37] and the Oregon and California Lands Act (O&C Act),[38] the agencies are obligated to maintain the forests for sustained multiple use of timber production, recreation, water quality, and wildlife.[39] To achieve this objective, the agencies are required to promulgate Resource Management Plans (RMPs) that inventory resource conditions in managed forests and create restrictions for allowed uses of forestland.[40]

NFMA requires USFS to create a forest plan for each national forest that designates uses for different areas of the forest based on scientific criteria and the suitability for those uses.[41] Every project, along with NEPA and ESA obligations, must comply with the forest plan's land use designations for the project area and the forest plan provisions regulating the uses of forest resources in those areas.[42] The Act requires the Forest Service to calculate a ceiling for the annual timber allowed to be cut within each National Forest and to then establish a probable sale quantity for the likely amount of timber harvested each year.[43] Although NFMA envisioned resource inventories and planning of national forests to occur every five to ten years, many plans have not been revised since their original promulgation and have only been updated through amendments.[44] As such, the plans reflect scientific understanding as it was in 1982 when the original planning regulations were issued and controlled the development of the first generation of forest plans. USFS

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[35] ESA, 16 U.S.C. § 1533(b)(2) (2018).

[36] *Id.* § 1536(a)(2).

[37] Multiple-Use Sustained-Yield Act of 1960, 16 U.S.C. §§ 528–531.

[38] Oregon and California Lands Act of 1937, 43 U.S.C. §§ 2601–2634.

[39] MUSYA, 16 U.S.C. § 528.

[40] NFMA, 16 U.S.C. §§ 1603–1604 (2018); FLPMA, 43 U.S.C. §§ 1711–1712 (2018).

[41] 16 U.S.C. §§ 1603–1604.

[42] *See id.* § 1604(i) ("Resource plans and permits, contracts, and other instruments for the use and occupancy of National Forest System lands shall be consistent with the land management plans.").

[43] *Id.* § 1611.

[44] *Id.* § 1604(k); *see also* U.S. FOREST SERV. & BUREAU OF LAND MGMT., LMP REVISIONS CURRENTLY UNDERWAY, 1 (May 18, 2022), https://perma.cc/7U4G-6NYD.

promulgated new planning regulations in 2012[45] that change how the Service considers factors such as climate change, wildlife surveying, sustainability, and wildfires during the planning process.[46] However, revised plans have been developed slowly, both because they are time-consuming technical documents and because the agency has not made them a high priority.[47] The regulations set forth in NFMA were later amended to provide a pre-decisional review process that requires public notice of actions, the filing of private party objections to agency decisions, informal negotiation with all objecting parties, and dispute resolution before the Record of Decision (ROD) or Finding of No Significant Impact (FONSI) is issued.[48]

It is critical to note that these NFMA regulations also grant USFS the ability to make Emergency Situation Determinations (ESDs) that exempt certain decisions from the pre-decisional review process.[49] Once the Chief of the USFS or the Undersecretary of Natural Resources has declared an emergency, the relevant Service may conduct actions in the area that achieve "[r]elief from hazards threatening human health and safety[,] mitigation of threats to natural resources on N[ational] F[orest] S[ystem] or adjacent lands[,] [or] avoiding a loss of commodity value sufficient to jeopardize the agency's ability to accomplish project objectives directly related to resource protection or restoration."[50] These ESD regulations give USFS wide latitude to conduct salvage sales that have been shown to be detrimental to the environment if it believes that the actions will benefit the agency's pursuit of resource restoration.[51] This discretion has been broadly interpreted and applies to expected commodity value loss from the decay of burned trees.[52] In the wildfire context, if USFS believes the value of the (heavily discounted) timber may be used to fund restoration efforts throughout the project area, these salvage sales fall within its discretion and evade the typical environmental review and pre-decisional objections process.

For BLM's part, its statutory obligations are very similar to those of the Forest Service—FLPMA mandates resource management governed by multiple use principles. Like USFS, BLM is required to inventory resource values, maintain management plans, and ensure that projects within its management districts comply with the plans.[53] Although FLPMA had a similar objections process to NFMA, the Trump admin-

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[45] National Forest System Land Management Planning, 77 Fed. Reg. 21162 (Apr. 9, 2012) (codified at 36 C.F.R. pt. 219).

[46] 36 C.F.R. §§ 219.5–219.6 (2018).

[47] *See 2012 Planning Rule*, U.S. FOREST SERV. (Nov. 30, 2020), https://perma.cc/FT83-6N9L (mapping planning progress of the 154 national forest plans); 36 C.F.R. § 218.1.

[48] 16 U.S.C. § 1612; 36 C.F.R. § 218.

[49] 36 C.F.R. § 218.21.

[50] *Id.* § 218.21(b).

[51] D.C. Donato et al., *Post-Fire Salvage Logging Hinders Regeneration and Increases Fire Risk*, 311 SCI. 352, 352 (2006).

[52] Conservation Cong. v. U.S. Forest Serv., 409 F. Supp. 3d 861, 877–78 (E.D. Cal. 2019).

[53] *Id.* § 1711.

istration eliminated the pre-decisional objection regulations for BLM projects as duplicative of NEPA public comment procedures, thus limiting administrative review of timber projects on public lands to appeals in front of the Interior Board of Land Appeals (IBLA) and repealing the provision issuing an automatic 45-day stay during the appeal process.[54] As a result, the process for public input on BLM projects is significantly more inaccessible.

In 1991, a court ruling enjoined USFS from holding timber sales in the Pacific Northwest until it came into compliance with NFMA regulations concerning preservation of management indicator species in late-successional old growth forests.[55] Acknowledging the ecological and social complexity of this issue, President Bill Clinton convened a national conference to find a solution where interagency collaboration between BLM and USFS would balance economic and conservation interests.[56] That conference resulted in the Northwest Forest Plan (NWFP), a series of amendments to NFMA and FLPMA forest plans across Western Washington, Western Oregon, and Northwestern California, that promised an annual return of one billion board feet of annual timber harvest while adequately protecting fish and wildlife dependent on late-successional forests.[57] The NWFP created reserve areas that restricted timber harvest operations to promote old growth forest development, established "matrix" and "adaptive" management areas for timber production, created an aquatic conservation strategy for watershed protection, and created the survey and management program for wildlife monitoring and protection.[58] As a whole, the NWFP amendments sought to facilitate the recovery of endangered species while ensuring the continued economic stability of the timber industry and associated communities.

In 2005, BLM (under direction from the industry-friendly Bush administration) entered a settlement with the timber industry to ease

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[54] Forest Management Decision Protest Process and Timber Sale Administration, 85 Fed. Reg. 82359, 82360–62 (2020) (codified at 43 C.F.R. pts. 5000, 5400, 5420, 5440, 5450, 5460, 5470, 5500).

[55] Seattle Audubon Soc'y v. Evans, 771 F. Supp. 1081, 1083, 1085, 1088, 1096 (W.D. Wash. 1991). Under the 1982 NFMA planning rules, forest plans required the designation of "management indicator species" that would serve as proxies for the overall health of the forest. *Id.* at 1083. In this case, the northern spotted owl in the Cascades had recently been listed under the ESA and was dependent on late-successional old growth forests (trees generally older than 150 years old) for their structural characteristics. *Id.* at 1084. Because they were an indicator species, the court required that the Service devised a plan for their continued protection and restoration. *Id.* at 1096.

[56] Victor M. Sher, *Travels with Strix: The Spotted Owl's Journey through the Federal Courts*, 14 PUB. LAND & RES. L. REV. Spring 1993, at 41, 75.

[57] U.S. FOREST SERV. & BUREAU OF LAND MGMT., RECORD OF DECISION FOR AMENDMENTS TO FOREST SERVICE AND BUREAU OF LAND MANAGEMENT PLANNING DOCUMENTS WITHIN THE RANGE OF THE NORTHERN SPOTTED OWL 19 tbl.ROD-1, 23–6 (Apr. 13, 1994), https://perma.cc/EY95-2R6G.

[58] *Id.* at 7–11.

the burdens imposed by the NWFP,[59] ultimately resulting in the Western Oregon Planning Revisions (WOPR). While the original WOPR RODs were withdrawn for failure to undertake ESA consultation and attempts to meet the settlement terms are still ongoing, it is unclear which timber quantity obligations remain for BLM.[60] After promulgating another set of RMPs in 2016, the District Court for the District of Columbia found that BLM must manage lands under the O&C Act with a dominant use of timber production and sale, and that any RMPs excluding O&C lands from timber production are facially invalid.[61] While that case is still on appeal, the 2005 WOPR settlement with the industry and other lingering questions about substantive timber volume obligations complicate BLM's ability and willingness to meet conservation and wildfire mitigation objectives where they are at odds with industrial timber interests.[62]

Despite nominally working in concert to maintain public forests for public benefit, USFS and BLM have incongruent management strategies and objectives when it comes to forest conservation. The *de facto* withdrawal from the NWFP by BLM through a settlement agreement, along with the failure to meet conservation, timber, and socioeconomic targets, signals that interagency collaboration was not as successful as the plan envisioned, resulting in more regulatory obligations and less clarity on the future of forest management.

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[59] Settlement Agreement at 7–8, 11, Am. Forest Res. Council v. Clarke, No. 94-1031 (D.D.C. Sept. 24, 2001), https://perma.cc/Q46G-RYWC (agencies agree to offer timber sales in specified amounts).

[60] The original WOPR RODs were issued without ESA consultation at the end of the Bush administration but were withdrawn in a press conference by the Secretary of the Interior. *U.S Interior Throws out Bush Logging Plan*, REUTERS (Jul. 16, 2009), https://perma.cc/ACU5-8GGL. The withdrawal was undone in *Douglas Timber Operators v. Salazar*, 774 F. Supp. 2d 245, 247, 261–62 (D.D.C. 2011), reinstating the WOPR RODs. However, WOPR was vacated in *Pacific Rivers Council v. Shephard* and remanded to BLM. No. 03:11–CV–00442, 2011 WL 7562961, at *2–3, *10 (D. Or. Sept. 29, 2011).

[61] Am. Forest Res. Council v. Hammond, 422 F. Supp. 3d 184, 190 (D.D.C. 2019), *reversed* in Am. Forest Res. Council v. United States, No. 20-5008, 2023 WL 4567578 (D.C. Cir. July 18, 2023), (Author's note: while the D.C. Circuit reversed the district court prior to publication, obligations surrounding timber volumes have not been determined.).

[62] Section 3.2 of the settlement agreement requires BLM "(1) to offer timber sales in an amount equal to the annual [Projected Sale Quantity] (PSQ) in the NWFP, currently estimated at 805 million board feet, for as long as there is a PSQ for the area covered by the NWFP, and (2) to offer thinning sales . . . of approximately 300 million board feet per year to the extent that and for so long as such sales are consistent with the ecological objectives of the NWFP." Settlement Agreement, *supra* note 59, at 11. While the language states that sales will be consistent with ecological objectives, it has not been subsequently clarified how these timber targets can be achieved without sacrificing conservation objectives, especially considering that 250 million board feet were harvested in the O&C lands in FY21 and even that pushes the bounds of BLM's conflicting obligations. ANNE A. RIDDLE, CONG. RSCH. SERV., R45688, TIMBER HARVESTING ON FEDERAL LANDS 14–16 (2022).

C. The Strategies: National Fire Plan, Healthy Forest Initiative, and HFRA

While the fight over the Northwest Forest Plan attempted to balance conservation and economics, the consequences of the fuels built up due to fire suppression policies began to manifest in more damaging wildfires throughout the 1990s.[63] In August 2000, President Clinton issued the National Fire Plan, focusing on funding firefighting efforts, restoring disaster-struck communities, reducing fire risk in the WUI, and fostering community collaboration at a national scale, unlike the regional NWFP.[64] While the Plan did increase the USFS budget for fuels treatments from $71.2 million to $205 million in just one year,[65] wildfire policy was still made on an agency-by-agency basis, which the U.S. General Accounting Office (GAO) warned was insufficient to accomplish the objectives of the Plan.[66] Ultimately, after a change in the political landscape, the National Fire Plan was never fully funded and focus shifted during the Bush administration.[67]

After a particularly devastating fire season in 2002, President George W. Bush laid out the Healthy Forests Initiative (HFI), a policy plan to ostensibly reduce hazardous fuels risk by reducing regulatory barriers to timber projects.[68] In many ways, the HFI was a deregulatory response to the Northwest Forest Plan and identified environmental review as the problem with effective forest management.[69] The key objectives of the HFI were to amend the project administrative appeals process, add NEPA categorical exclusions for timber stand improvement, expedite ESA consultation, create a model environmental assessment for projects, and amend the Northwest Forest Plan.[70] Although some of the objectives of the HFI were frustrated by litigation,[71] it was successful in amending regulations governing the objections to hazardous fuels

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[63] U.S. FOREST SERV., CONFRONTING THE WILDFIRE CRISIS: A CHRONICLE FROM THE NATIONAL FIRE PLAN TO THE WILDFIRE CRISIS PLAN 4 (2022), https://perma.cc/FQ8M-WZNS [hereinafter CONFRONTING THE WILDFIRE CRISIS].

[64] U.S. DEP'T OF INTERIOR & U.S. DEP'T OF AGRIC. JOINT CHIEFS, MANAGING THE IMPACT OF WILDFIRES ON COMMUNITIES AND THE ENVIRONMENT (Sept. 8, 2000), https://perma.cc/B9RR-BNKT.

[65] CONFRONTING THE WILDFIRE CRISIS, *supra* note 63, at 4.

[66] *The National Fire Plan: Federal Agencies Are Not Organized to Effectively and Efficiently Implement the Plan: Hearing Before the Subcomm. on Forests and Forest Health, H. Comm. on Res.*, 106th Cong. 5 (2001) (statement of Barry T. Hill, Director of Natural Resources and Environment).

[67] CONFRONTING THE WILDFIRE CRISIS, *supra* note 63, at 10.

[68] *Healthy Forest: An Initiative for Wildfire Prevention and Stronger Communities: Executive Summary*, WHITE HOUSE, https://perma.cc/66UC-SQD9 (last visited Apr. 18, 2023).

[69] *Id.* ("Yet, needless red tape and lawsuits delay effective implementation of forest health projects.").

[70] *Healthy Forest: An Initiative for Wildfire Prevention and Stronger Communities: The Healthy Forests Initiative*, WHITE HOUSE, https://perma.cc/QH5J-8SPP (last visited Apr. 18, 2023).

[71] *See, e.g.*, Nw. Ecosystem All. v. Rey, 380 F. Supp. 2d 1175, 1181 (W.D. Wash. 2005) (blocking the withdrawal of the Survey and Manage standard from the Northwest Forest Plan).

projects. The HFI concluded with the congressional enactment of the Healthy Forests Restoration Act of 2003 (HFRA),[72] giving direct statutory authority to agencies to conduct hazardous fuel treatments.[73]

Congress enacted HFRA with the intent of reducing wildfire risk by authorizing hazardous fuels reduction projects on or near federal lands,[74] subject to the resource conditions, current and historical fire regimes, and presence of old growth and larger trees at the site.[75] In addition to these federal projects, HFRA creates grant programs for private actors in "at-risk communities" to conduct hazardous fuel reduction projects[76] and the designation of private lands as forest reserves designed to facilitate recovery of ESA-listed species with direct landowner compensation.[77] Critical to HFRA's private actor funding is the definition of "at-risk community," which at present limits funding eligibility to listed municipalities[78] and groups of homes on or adjacent to federal lands.[79] HFRA was subsequently amended to authorize stewardship agreements between agencies and timber contractors to undertake hazardous fuels reduction projects on behalf of agencies in return for the harvested wood.[80] On the ground, these stewardship agreements can serve as a cost-effective way for removing low-value wood products from the forest floor without going through full project implementation procedures.

HFRA also created an important tool for municipalities as part of its grant program: Community Wildfire Protection Plans (CWPP).[81] Developed by local governments, fire departments, and state forestry agencies in consultation with federal land managers and nonfederal landowners, these plans identify areas for hazardous fuel treatments that protect infrastructure and reduce structural ignitability.[82] While grant availability is a powerful incentive for counties and communities to develop CWPPs, as of 2021, only 30.3% of at-risk communities had an updated CWPP.[83] In practice, these plans can be used to secure funding for fuel reduction projects, establish municipal policy agendas for housing ordinances that reduce structural ignition, and build social capacity for post-wildfire response.[84] Comparative analysis of CWPPs has shown that the statutory vagueness of HFRA's mandate allows for more flexi-

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[72] HFRA, 16 U.S.C. §§ 6501–6591e (2018).

[73] *Id.* § 6501.

[74] *Id.*

[75] *Id.* § 6512.

[76] *Id.* § 6513.

[77] *Id.* §§ 6571–74.

[78] *Id.* § 6511(1)(A)(i).

[79] *Id.* § 6511(1)(A)(ii).

[80] *Id.* § 6591c(d)(4)(A), *amended by* Consolidated Appropriations Act, 2018, Pub. L. No. 115–141, 132 Stat. 348, 1065.

[81] *Id.* § 6511(3).

[82] *Id.*

[83] NAT'L ASS'N OF STATE FORESTERS, COMMUNITIES AT RISK: FISCAL YEAR 2021 2 (2021), https://perma.cc/M5Z5-USK7.

[84] DANIEL WILLIAMS ET AL., COMMUNITY WILDFIRE PROTECTION PLANS: ENHANCING COLLABORATION AND BUILDING SOCIAL CAPACITY 2 (2009).

bility in community planning efforts,[85] and while plans vastly differ in length and detail, they consistently identify similar project actions, like thinning, fuel break construction, and institutional reforms to promote outreach and modify homeowner behaviors.[86]

In the two decades since HFRA was enacted, there have been no significant policy initiatives on the scale of the National Fire Plan or HFI. Despite the increasing intensity of the wildfire crisis, neither the Obama nor Trump administrations articulated an in-depth wildfire policy to the same level as the Bush or Clinton administrations. The only major development in this period was the Federal Land Assistance, Management, and Enhancement Act of 2009 (FLAME Act), which required the creation of the National Cohesive Wildland Fire Management Strategy, an interagency effort to align strategic objectives for wildland fire management.[87] Though the strategy did create planning guidelines for wildfire reduction activities, it did not propose any innovations or new mechanisms beyond those created by HFRA, nor did it create steady funding for these actions.[88] As will be discussed later, the Biden administration has developed its own Wildfire Crisis Strategy, but it offers few novel policy mechanisms.

III. INVOLVED ENVIRONMENTAL JUSTICE COMMUNITIES

Previous strategies for wildfire prevention and forest management were largely made in a vacuum, accounting for economic and conservation interests as independent variables and balancing them against one another. Future strategies would be wise to incorporate principles of environmental justice into implementation and objective setting in order to protect the interests of the most at-risk members of society. As a legal concept, environmental justice serves as a foundation for promoting the legal environmental interests of groups who are socially and/or economically disadvantaged, regardless of race, class, or national origin.[89] The just transition is an essential part of the environmental justice framework—it envisions desired end conditions for both social and economic objectives that improve upon the inequities that currently exist while being conscious of environmental well-being.[90]

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[85] Jesse Abrams et al., *Community Wildfire Protection Planning in the American West: Homogeneity within Diversity?*, 59 J. ENV'T PLANNING & MGMT. 557, 559 (2015).

[86] *Id.* at 564–65.

[87] FLAME Act of 2009, Pub. L. 111-88, § 501–503, 123 Stat. 2968, 2971 (2009); DEP'T OF AGRIC. & DEP'T OF INTERIOR, THE NATIONAL STRATEGY: THE FINAL PHASE OF THE DEVELOPMENT OF THE *NATIONAL COHESIVE WILDLAND FIRE MANAGEMENT STRATEGY* 1 (2014), https://perma.cc/6RMG-3TXB [hereinafter NATIONAL COHESIVE WILDLAND FIRE MANAGEMENT STRATEGY].

[88] *See* FLAME Act of 2009, Pub. L. 111-88, § 501–503, 123 Stat. 2968, 2971 (2009).

[89] *Environmental Justice*, U.S. ENV'T PROT. AGENCY, https://perma.cc/799F-4E6G (last updated Apr. 25, 2023).

[90] Elizabeth J. Kennedy, *Equitable, Sustainable, and Just: A Transition Framework*, 64 ARIZ. L. REV. 1045, 1046–51 (2022) (discussing the importance of a just transition in developing an environmental justice framework).

Before prescribing recommendations and considerations for environmental justice-conscious policy, it is crucial to understand who the relevant stakeholder groups are because they face the most direct and imminent consequences of wildfire policy. Policymakers should craft potential changes around the needs and interests of frontline communities[91] with extensive opportunities for public comment and awareness of socio-cultural connections to the forests.

A. Tribes

As the original stewards of the land, Indigenous tribes maintain a considerable stake in modern wildfire management as responsible managers for both economic sustainability and continued cultural practices. Despite being formally excluded from decisions and actively harmed by the land disposition policy of the United States government that removed tribes from their native lands, tribes maintain strong historical, cultural, socioeconomic, and legal ties to lands managed by federal and state agencies.[92] Relations between the federal government and tribes are undergirded by three foundational concepts: tribal sovereignty, the trust relationship, and treaties.[93] These concepts recognize that tribes are sovereign entities that hold legal authority for land ownership, self-governance, and foreign relations, making them capable of making treaties with other sovereigns.[94] However, within the American legal framework, tribes are subjected to the trust relationship, meaning that the federal government sees them as "domestic, dependent nations" that rely upon the federal government for execution of tribal interests through agencies like the Bureau of Indian Affairs.[95]

While strides have been made by the United States government to recognize more tribes[96] and to attempt to honor more treaty obligations, the available mechanisms have insufficiently acknowledged Indigenous rights in federal land planning, even outright ignoring treaty obligations on federal lands.[97] Agencies have used "tribal consultation" to attempt to incorporate tribal considerations, but consultation has always been a po-

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[91] Tiffany Ganthier et al., *Equitable Adaptation Legal & Policy Toolkit*, GEORGETOWN CLIMATE CTR. (2020), https://perma.cc/Y374-BK6Q ("Frontline communities are those that experience the 'first and worst' consequences of climate change.").

[92] Monte Mills & Martin Nie, *Bridges to a New Era: A Report on the Past, Present, and Potential Future of Tribal Co-Management on Federal Public Lands*, 44 PUB. LAND & RES. L. REV. 49, 54–55 (2021).

[93] *Id.* at 70.

[94] *Id.* at 66.

[95] *Id.* at 69–70 (quoting Cherokee Nation v. Georgia, 30 U.S. 1, 17 (1831)).

[96] The Bureau of Indian Affairs currently recognizes 574 tribal entities, 347 in the contiguous 48 states. Indian Entities Recognized by and Eligible to Receive Services from the United States Bureau of Indian Affairs, 87 Fed. Reg. 4636, 4637 (Jan. 28, 2022).

[97] *See, e.g.*, United States v. Peterson, 121 F. Supp. 2d 1309 (D. Mont. 2000) (interpreting Congressional silence on tribal rights in the designation of Glacier National Park as implicitly prohibiting the Secretary of the Interior from authorizing any hunting in the park, even that authorized by previous treaties with the Blackfeet Tribe).

litically opaque process criticized by tribes as inconsistent, ineffectual, and infrequently conducted where the land implicated is not directly owned by tribes, and often only considered once decisions have already been made.[98]

In the last few decades, reforms have given tribes more of an active role in governing by transferring administration of federal services over to tribes, most notably through the Indian Self-Determination and Education Assistance Act (ISDEAA)[99] and the Tribal Self-Governance Act (TSGA).[100] Through self-governance contracting and compacting, tribal governments have been able to prioritize tribal cultural and socioeconomic interests while utilizing federal trust money.[101] However, federal agencies have been resistant to delegating control over public lands management to tribes, leaving them out of land management policy choices.[102] A number of tribes have increased their landholdings throughout the West, strengthening their legal right to influence land management decisions beyond the typical consultation process. For example, the Yurok Tribe in Northern California has leveraged private and federal grants to acquire 34,000 acres of contiguous forestland.[103] Additionally, recent developments in American environmental practice have begun to recognize the value of Indigenous Traditional Ecological Knowledge (ITEK), which has led the Council on Environmental Quality (CEQ) and the Office of Science and Technology Policy (OSTP) to promulgate official guidance for agencies to incorporate ITEK into decision making and research.[104]

Incorporation of ITEK has led to the recognition of fire as an intrinsic element of how many tribes view their relationship with the land both as a cultural value and as a method of shaping the ecological landscape.[105] Many tribes throughout the West historically managed the forests using fire to promote growth of different material resource conditions, such as berries and herbs for subsistence and medicinal uses, and ecological features like biodiversity and insect regulation.[106] Cultural burning is also a key part of how Indigenous people create a sense of place and promote community well-being in connection with the ecological health of the land.[107] Because fire is itself valuable, any efforts to

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[98] Mills & Nie, *supra* note 92, at 94–95.

[99] ISDEAA, Pub. L. No. 93-638, 88 Stat. 2203 (1975) (codified at 25 U.S.C. § 450 note).

[100] TSGA, Pub. L. No. 103-413, 108 Stat. 4250 (1994) (codified at 25 U.S.C. § 450 note).

[101] Mills & Nie, *supra* note 92, at 106–07.

[102] *Id.* at 111.

[103] Chez Oxendine, *Yurok Tribe Acquires 2,500 Acres of Ancestral Lands, Valuable Carbon Offsets*, TRIBAL BUS. NEWS (May 4, 2021), https://perma.cc/H8TY-CBF6.

[104] *See* ARATI PRABHAKAR & BRENDA MALLORY, WHITE HOUSE OFF. OF SCI. & TECH. POL'Y & COUNCIL ON ENV'T QUALITY, GUIDANCE FOR FEDERAL DEPARTMENTS AND AGENCIES ON INDIGENOUS KNOWLEDGE 1 (2022).

[105] Jonathan M. Long et al., *The Importance of Indigenous Cultural Burning in Forested Regions of the Pacific West, USA*, FOREST ECOLOGY & MGMT. (Sept. 2021), No. 119597 at 2–3.

[106] *Id.* at 6–9.

[107] *Id.* at 4–5.

change the relationship between the landscape and fire must consider its role as a sacred cultural and regenerative force, and in doing so, must aim to achieve conditions that would allow for the restoration of safe cultural burning by practitioners.

B. Rural Communities

Rural communities in the West, and especially in the timber-rich Northwest, have significant economic and social investment in the well-being of American forests. A general policy to transfer ownership to private landowners marked the first generations of American land policy.[108] But after Western expansion slowed and desires for conservation grew, the federal government began to revest lands back into the public domain that it had previously disposed, leaving Western states saddled with disproportionate amounts of untaxable federal lands.[109] Because federal lands are not taxable by states, counties were left with a shortfall in property taxes.[110] Beginning in 1908, Congress began sending payments to compensate counties and states for lost tax revenue through Payments in Lieu of Taxes (PILT) and timber receipt sharing.[111] In O&C Act counties, the profits from timber sales were shared equally between the federal government and the county.[112] For these municipalities, the receipts were their primary source of revenue, funding infrastructure and schools in rural communities. However, timber harvest returns dropped drastically throughout the 1990s,[113] leading Congress to enact the Secure Rural Schools and Community Self-Determination Act of 2000 (SRS).[114]

Attempting to solve the problem of reduced revenue for rural communities, the Secure Rural Schools program decouples the relationship between actual timber proceeds and payments to counties, instead using

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[108] Paul W. Gates, *An Overview of American Land Policy*, 50 AGRIC. HIST. 213, 213 (1976).

[109] *Id.* at 226–27.

[110] *See* McCulloch v. Maryland, 17 U.S. 316 (1819) (holding that States cannot tax instrumentalities of the federal government).

[111] Act of May 23, 1908, Pub. L. 110-343, 35 Stat. 260 (establishing a payment to counties for 25% of timber receipts on a seven-year annual average for the benefit of public schools and roads); Payments in Lieu of Taxes Act of 1976, Pub. L. 94-565, 90 Stat. 2662 (codified at 31 U.S.C. §§ 6901–6907 (2018)).

[112] O&C Act, 43 U.S.C. §§ 2601–2634 (2018). As originally enacted, the O&C Act gave 50% of proceeds the counties, 25% to the federal government for reimbursement for railroad grants that would divert to the counties after repayment, and 25% for federal administrative costs. *Id.* § 2605. After the railroad grants were repaid in 1952, Congress amended the Act through a rider for an even split for capital improvements. CONG. RSCH. SERV., R42951, THE OREGON AND CALIFORNIA RAILROAD LANDS (O&C LANDS): ISSUES FOR CONGRESS 8–9 (2015). In 1981, the Congress amended the Act again with 50% going to both the county and the U.S. Treasury. *Id.*

[113] KATIE HOOVER, CONG. RSCH. SERV., R41303, SECURE RURAL SCHOOLS AND COMMUNITY SELF-DETERMINATION ACT: BACKGROUND AND ISSUES 5 (2020).

[114] Secure Rural Schools and Community Self-Determination Act of 2000, Pub. L. No. 106-393, 112 Stat. 1607 (codified at 16 U.S.C. §§ 7101–7153 (2018)).

a payment formula to calculate the shortfall and tie the amount to expected returns from timber receipts.[115] As a result, timber-rich states receive millions of dollars each year to distribute to counties for schools and infrastructure.[116] However, SRS was originally only authorized for five years until 2006 and was not envisioned as a long-term solution to the economic rebalancing needed in these rural communities.[117] It has since been reauthorized through 2023, but any lapse in its reauthorization would return payments to 25% of annual timber receipts.[118] SRS funding makes up a sizeable portion of tax revenue for Western communities. In 2021, Western counties received the largest share of the available $250.8 million, with Oregon ($53.4 million), California ($27.9 million), Idaho ($26.2 million), Washington ($18.1 million), and Montana ($16.3 million) claiming the highest totals of funding.[119]

One of the central pillars of the Northwest Forest Plan was to ensure economic opportunities for communities that were losing jobs due to timbering restrictions. Thus, the planning included the Northwest Economic Adjustment Initiative (NEAI).[120] NEAI was established to provide economic assistance and job retraining for workers in rural communities, as well as funding for new development projects.[121] NEAI stood up Community Economic Revitalization Teams (CERTs) at the federal, regional, and state levels to identify and fund necessary projects that resulted in infrastructure improvements.[122] The program never gained much traction; it created few long-term jobs and was plagued by inequitable distribution of funds by states and localities.[123] Between 1990 and 2000, the socioeconomic monitoring program revealed that only one-third of communities experienced improved economic well-being, while another third experienced a decline in well-being, with job losses in the wood-products industry contributing to an economic transformation in the region.[124] The NEAI was never formally terminated by the Bush administration but functionally became a dead-letter as funding ceased.[125]

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[115] SRS, 16 U.S.C. §§ 7111–12 (2018).

[116] HOOVER, *supra* note 113, at 7, 12, 24–25.

[117] *Secure Rural Schools—The Act*, U.S. FOREST SERV., https://perma.cc/CTK7-UW26 (last visited May 4, 2023).

[118] *Id.*

[119] U.S. FOREST SERV., ALL SERVICE RECEIPTS (ASR) (2021), https://perma.cc/9M32-DAFS (choose "Secure Rural Schools payments: By State & County: 2021").

[120] U.S. FOREST SERV., GENERAL TECHNICAL REPORT, PNW-GTR-484, NORTHWEST FOREST PLAN: OUTCOMES AND LESSONS LEARNED FROM THE NORTHWEST ECONOMIC ADJUSTMENT INITIATIVE 2 (1999), https://perma.cc/XY53-KRRN.

[121] *Id.* at 2–3.

[122] *Id.* at 4.

[123] Michael C. Blumm et al., *The World's Largest Ecosystem Management Plan: The Northwest Forest Plan after a Quarter-Century*, 52 ENV'T L. 151, 181 (2022).

[124] Keith Routman, *Forest Communities and the Northwest Forest Plan: What Socioeconomic Monitoring Can Tell Us*, PAC. NW. RES. STATION: SCI. FINDINGS, Aug. 2007, at 3–4; Blumm et al., *supra* note 123, at 182–83.

[125] Blumm et al., *supra* note 123, at 182 n.189.

Closely entwined with the problems facing existing local communities, labor issues surrounding the wildfire crisis also affect migrant workers. Use of migrant labor in forest work has become more commonplace, with employers taking advantage of both seasonal visa programs (such as H-2B[126] non-resident work permits) and undocumented workers.[127] These workers conduct much of the groundwork, such as replanting and seed collection.[128] The use of migrant labor has undermined the bargaining position of local workers for fair wages while subjecting a more transient and unprotected workforce to unsafe working conditions and often subpar living conditions.[129] In developing economic and labor policy solutions to wildfire recovery and forest health efforts, policymakers must consider the impacts on both local and migrant workers, which adds an additional layer of complexity to an already tenuous balance of conservation concerns.

IV. RURAL INVESTMENT PROGRAMS AND THE JUST TRANSITION

When considering proposals, policymakers should prioritize sustainable programs that establish positive economic and social outcomes for frontline communities.[130] Once frontline communities have been centered in decision-making, there are a few distinct policy solutions that stand out as potential areas for improvement in light of the last 30 years of forest management: (1) targeted, direct investment in communities for long-term ecological and socioeconomic planning, (2) collaborative redefinition of the wildland-urban interface at the highest risk of wildfires, and (3) tribal co-management of federal forest lands.

A. Direct Investment in Communities

More so than other policies, direct investments are discrete actions that federal land managers and local stakeholders can advocate for and implement. Although the infusion of money into agencies that have traditionally run at the edges of their appropriations does not completely solve the issue of adequate prevention and remediation of wildfire dam-

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[126] Agricultural employers who anticipate a shortage of domestic laborers can apply to bring in non-immigrant seasonal labor if they can certify that (1) there are insufficient able, willing, and qualified domestic workers for the desired services, and (2) the employment of H-2A workers will not adversely affect wages and working conditions of similarly employed domestic workers. 20 C.F.R. § 655.100 (2019).

[127] The U.S. Department of Agriculture estimates that, from 2018–2020, 64% of agricultural workers in the United States were non-citizen laborers. U.S.D.A. ECON. RSCH. SERV., GENERAL TECHNICAL REPORT PNW-GTR-484, FARM LABOR (2020), https://perma.cc/V6JQ-R98G.

[128] *H-2B Workers: Essential to the Forest Products Industry*, ARBOR CUSTOM ANALYTICS (Nov. 13, 2021), https://perma.cc/846K-ABYM.

[129] Daniel Costa, *Second-Class Workers: Assessing H-2 Visa Programs' Impact on Workers*, ECON. POL'Y INST., (July 20, 2022), https://perma.cc/2YNX-ZM6M.

[130] Gabrielle Gundry, *What is a Frontline Community?*, CARE ABOUT CLIMATE, (Feb. 11, 2021) https://perma.cc/8666-VPE3.

age, it can serve as a base for informed policy choices that develop staying power with consistent funding. As seen with previous wildfire management schemes like the National Fire Plan and Healthy Forests Initiative, strategies are only as successful as they are funded, so fulfilling the investment promise to WUI communities to staff and implement projects is an important first step.[131] Throughout the first term of the Biden administration, there have been some significant investments in the long-term funding of wildfire reduction efforts, but further investments are necessary to ensure sustainable economic outcomes for at-risk communities.

1. Infrastructure Investment and Jobs Act and Inflation Reduction Act

In November 2021, Congress passed the Infrastructure Investment and Jobs Act of 2021 (IIJA), a broad-scope law that provides funding for many infrastructural issues.[132] In its forestry and wildfire section, the IIJA appropriated $5.5 billion for USFS to implement various wildfire-focused programs.[133] Also referred to as the Bipartisan Infrastructure Law, the IIJA marked the first opportunity for the Biden administration to articulate its own wildfire management strategy through funding and various riders attached to appropriations. While the political nature of the appropriations process never guarantees continued funding, the IIJA shows a sizeable statement of intent to answer the long-standing funding requests by land management agencies.

As an initial matter, USFS issued a new ten-year strategy to guide its fire management decisions,[134] while BLM operates under the 2014 National Cohesive Wildland Fire Management Strategy.[135] With IIJA funding, USFS was able to identify ten initial landscapes in need of hazardous fuels treatment, compile a list of prepared projects, and promptly begin work throughout Arizona, California, Colorado, Idaho,

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[131] CONFRONTING THE WILDFIRE CRISIS, *supra* note 63, at 10 ("[A]llocated funds [for the National Fire Plan] fell consistently short of estimated needs for suppression, partnership programs, fuels treatments, and more."); ALEXANDER EVANS & GEORGE MCKINLEY, FOREST GUILD, AN EVALUATION OF FUEL REDUCTION PROJECTS AND THE HEALTHY FORESTS INITIATIVE (2007), https://perma.cc/KS2T-69NZ (Healthy Forests Initiative was focused on administrative goals such as "reducing 'red tape,' … reducing organizational and legal impediments to fuel reduction projects," and minimizing "legal impediments to fuel reduction."); CONFRONTING THE WILDFIRE CRISIS, *supra* note 63, at 10 ("[T]he new legislation added categorical exclusions to make it easier to treat Federal lands in the West . . . . Nevertheless, record fires continued to mount during worsening fire years in the West.").

[132] Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, 135 Stat. 429 (2021) (to be codified in scattered sections of the U.S.C.).

[133] *Id.* 1406–10.

[134] *See* 2022 WILDFIRE CRISIS STRATEGY, *supra* note 1.

[135] NATIONAL COHESIVE WILDLAND FIRE MANAGEMENT STRATEGY, *supra* note 87, at 70–71.

Montana, New Mexico, Oregon, and Washington.[136] As of early 2023, USFS had spent $94.3 million of the IIJA appropriations in the initial landscapes, treating 380,443 acres in FY22.[137] To supplement these aims, Congress made another large investment with the Inflation Reduction Act of 2022 (IRA), with an additional $5 billion in appropriations for USFS, including $2.15 billion for hazardous fuels reduction and watershed protections.[138] With this additional funding, USFS has identified eleven more landscapes throughout the West for priority fuels treatments, bringing the total to twenty-one areas with over two million acres of planned treatments.[139]

Aside from listed projects in key landscapes, one of the key investments within the IIJA is the creation of the Community Wildfire Defense Grant program, which invites WUI communities to apply for grants up to $10 million for CWPP project implementation and planning.[140] To be eligible for the program, applicants must show that they are (1) a local government, tribe, non-profit, or Alaska Native corporation, (2) in a HFRA at-risk community, (3) with a roof ordinance, and (4) that the project is in a CWPP from the last ten years.[141] Crucially, priority is expressly given to projects in low-income communities and those that have been impacted by severe disasters in the last ten years.[142] By giving priority to communities that have been adversely affected by environmental disasters and do not have the private capital to spend on prevention projects, the program provides vital investment for communities that have fewer opportunities for ensuring long-term safety from future wildfires. The CWPP has been a part of approving HFRA projects since its inception, but the Defense Grant's enhanced funding for both CWPP planning and implementation signals an intent to increase local community input into wildfire reduction.[143] In March 2023, USFS announced the first round of Defense Grant funding, committing $197 million to 100 projects in twenty-two states and seven tribal landscapes.[144]

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[136] U.S. FOREST SERV., CONFRONTING THE WILDFIRE CRISIS: INITIAL LANDSCAPE INVESTMENTS TO PROTECT COMMUNITIES AND IMPROVE RESILIENCE IN AMERICA'S FORESTS 2–4 (2022), https://perma.cc/6BLX-Z238.

[137] U.S. FOREST SERV., THE WILDFIRE CRISIS STRATEGY: INITIAL LANDSCAPE INVESTMENTS (Apr. 10, 2023), https://perma.cc/BY89-EBZM [hereinafter WILDFIRE CRISIS: INITIAL LANDSCAPE INVESTMENTS].

[138] Inflation Reduction Act of 2022, Pub. L. No. 117-169, § 23001, 136 Stat. 1818 (2023).

[139] WILDFIRE CRISIS: INITIAL LANDSCAPE INVESTMENTS, *supra* note 137.

[140] *Community Wildfire Defense Grant Program*, U.S. FOREST SERV., https://perma.cc/M4B4-GW9D (last visited Apr. 16, 2023) [hereinafter *Community Wildfire Defense Grant*].

[141] *Id.*

[142] U.S. FOREST SERV., STATE AND PRIVATE FORESTRY FISCAL YEAR 2022 COMMUNITY WILDFIRE DEFENSE GRANT NOTICE OF FUNDING OPPORTUNITY INSTRUCTIONS 5 (2022), https://perma.cc/5ANE-48T6.

[143] *Id.* at 11–13.

[144] *Biden-Harris Administration Invests Nearly $200M from the Bipartisan Infrastructure Law to Reduce Wildfire Risk to Communities across State, Private and Tribal Lands*, U.S. DEP'T OF AGRIC. (Mar. 20, 2023), https://perma.cc/7EK9-Y4W7.

However, the IIJA imposes a local matching requirement for 60% of the appropriated funds, including a 10% capital match for Defense Grant projects.[145] While cost-sharing policies can increase available capital for projects and ensure local buy-in for competitive grant schemes, research shows that they become barriers to entry for communities.[146] For areas that are already experiencing economic depression, denying resilience funding to applicants for their inability to dedicate enough of their municipal budget only serves to entrench the inequalities between wealthy and impoverished WUI communities.

The IIJA and IRA did not dedicate all of their forestry provisions to investment for risk reduction projects. The IIJA also expanded USFS's discretion to make ESDs for hazardous fuels projects, further exempting the procedures designed to incorporate public feedback.[147] While the 2018 regulations applied mainly to post-fire emergencies, the IIJA expands the use of ESD authority for less imminent dangers, allowing agencies to declare emergencies for hazardous fuel removal when areas are not immediately at risk of fire.[148] If an authorized ESD requires an EA or EIS, the agency is only required to offer two alternatives: action or no action.[149] Additionally, a rider in IIJA dictates that a court may not issue a preliminary injunction against an authorized emergency action if the plaintiff is unable to demonstrate that they are likely to succeed on the merits.[150] By expanding the authorized uses of ESDs, Congress signaled a clear intent to circumvent public litigation in the interest of project expediency.

Overall, the two landmark bills signed by President Biden in his first term make extensive progress towards meeting the fundamental financing problems that undermined previous fire management platforms. The IIJA and IRA provide an important opportunity for federal land managers to demonstrate whether the current statutory tools available to them are sufficient for effectively addressing wildfire needs.

2. Reforming Secure Rural Schools

Due to the temporary and tenuous nature of the Secure Rural Schools program, a lifeline for rural communities becomes a budgetary political football requiring consistent lobbying for further extension. While the IIJA did reauthorize SRS, it is only guaranteed for 2023,[151] putting it back on the bargaining table in the upcoming budgetary cycle. Although SRS was intended to be a temporary stop-gap measure to ensure rural infrastructure is maintained until the community could tran-

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[145] *Match requirements prevent rural and low-capacity communities from accessing climate resilience funding*, HEADWATER ECON. (Jan. 2023), https://perma.cc/9U4S-WX9G.

[146] *Id.*

[147] IIJA, Pub. L. No. 117-58, § 40807(b)(2)(F), 135 Stat. 1112 (2021).

[148] *Id.* §§ 40807(b)(2)(A)–(I).

[149] *Id.* § 40807(c)(1).

[150] *Id.* § 40807(e).

[151] *Id.* § 41202(b).

sition away from timber-dependency towards other industries, it has become increasingly clear that without a long-term solution, rural communities will continue to need federal support. While this dependency is partially due to policy choices by states and counties to keep property taxes low because the shortfall can be covered by the PILT and SRS payments, reliance on a temporary program without pathways for new economic development has entrenched community investment in an unsustainable timber market instead of new industries, resulting in an overall budgetary loss.[152] Without some type of county payment program, municipal governments would have to make significant budget cuts that must balance cost-sharing schemes for hazardous fuel reduction grants against other necessary infrastructure.

In reforming county payments, a few policy suggestions have been proposed: returning to revenue sharing agency proceeds, long-term reauthorization of SRS (at full or partial payment levels), or the establishment of a county payment endowment trust program.[153] The least desirable outcome for long-term community well-being would be returning to pre-SRS revenue sharing schemes as it would expose county budgets to the instability of the timber market and once again place timber communities at odds with conservation and restoration interests.[154]

The reauthorization of SRS would mean a continuation of the status quo for many counties. Although it would keep them solvent and allow for some wildfire resiliency measures to be taken, breaking out of the economic depression cycle would require counties to take affirmative steps, like raising property taxes, to make ends meet, an unlikely proposition for areas that skew politically conservative.[155] Alternatively, the federal and state governments could pursue an endowment scheme that redirects the natural resource royalties and timber receipts currently going to counties into an investment trust for longer term security, much like Alaska and Wyoming have done.[156] Although such a program would have higher capitalization costs and temporary continuance of direct appropriations from the federal government in the first ten years, it would provide a more stable and diversified revenue stream for rural communities and would eliminate the need for continued appropriations by the federal government.[157] By creating a sturdier budgetary foundation, local policymakers would have greater latitude to commit additional resources to resilience efforts that would reduce the risk of wildfire.

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[152] Mark N. Haggerty, *Rethinking the Fiscal Relationship Between Public Lands and Public Land Counties: County Payments 4.0*, HUMBOLDT J. SOC. RELATIONS., 2018, at 116, 124–25.

[153] *Id.* at 127.

[154] *Id.* at 127–30.

[155] *Id.* at 125.

[156] *Id.* at 130.

[157] *Id.*

3. Increasing Economic Retention from Wildfire Recovery

Wildfires exact tremendous economic losses on many rural communities, forcing them to spend significant amounts on suppression, recovery, and mitigation. For many areas, these losses in timber, tourism, and recreation can detract from already challenging economic circumstances, but immediate wildfire needs pose an opportunity for short-term stability and recovery. The National Interagency Fire Center estimates that the Department of the Interior (DOI) and USFS spent an average of $2.8 billion per year on fire suppression from 2016 to 2021.[158] Studies have shown that wildfire suppression and repair spending can have positive regional and local impacts due to increased economic circulation.[159] The degree of recovery is highly dependent on the existing local capacity to meet wildfire-related needs and preexisting natural resource management contracting with federal agencies.[160] State and federal land managers use procurement contracts for restoration project implementation, and while forest management of the twentieth century was great at localizing the economic benefits of forestry, ecosystem-based management has been less successful in retaining local benefits of work in the woods.[161] In areas with lower management capacity and less extensive contracting histories with USFS and BLM, this can lead to economic benefits of wildfire recovery spending going to non-local contracting firms.[162]

In order to combat the compounding losses sustained by communities struck by wildfires, USFS and BLM should continually update contractor bidding pools and give priority to local firms that demonstrate capacity to conduct post-fire management and hazardous fuels projects. In its 2024 proposed budget, the U.S. Department of Agriculture (USDA) stated that it seeks to find a permanent fix for firefighting pay and well-being issues.[163] Additionally, state and local governments can contribute to solving this issue by creating initiatives to develop rural timber management contracting businesses through tax incentives and other mechanisms to promote local retention of wildfire suppression funding.

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[158] *Suppression Costs*, NAT'L INTERAGENCY FIRE CTR., https://perma.cc/J88P-4KB6 (last visited Apr. 18, 2023).

[159] Danny Politoski et al., *Assessing the Absorption and Economic Impact of Suppression and Repair Spending of the 2017 Eagle Creek Fire, Oregon*, 120 J. FORESTRY 491, 492 (2022).

[160] Max Nielsen-Pincus et al., *Local Capacity to Engage in Federal Wildfire Suppression Efforts: An Explanation of Variability in Local Capture of Suppression Contracts*, 64 FOREST SCI. 480, 485–87 (2018).

[161] Cassandra Moseley & Yolanda Reyes, *Forest Restoration and Forest Communities: Have Local Communities Benefited from Forest Service Contracting of Ecosystem Management?*, 42 ENVTL MGMT. 327, 329 (2008).

[162] Politoski, *supra* note 159, at 500.

[163] *Fact Sheet: Supporting the Wildland Firefighting Workforce*, U.S. DEP'T OF AGRIC., https://perma.cc/YW4M-HEQ3 (last visited Apr. 19, 2023).

B. Collaboratively Redefining the Wildland-Urban Interface

One obstacle to implementation of direct investment and other regulatory schemes is an important threshold question with strong countervailing interests on both sides: how does society define the Wildland-Urban Interface and designate "at-risk" communities? Because every community has a different level of entanglement with forest vegetation and carries its own risks based on forest ecology and past management, the definition tends to be more flexible. However, if Congress makes direct funding opportunities available to WUI communities, a vague definition may fail to adequately prioritize projects and affected interests that are the most in need of assistance. The process of redefining at-risk interface communities carries heavy implications, with the risk of disproportionate distribution of benefits and the potential to disadvantage property owners in outlying areas that do not qualify for federal aid.

The current federal definition of "at-risk" consists of two parts: first, a Federal Register list of communities that has not been substantively updated since 2003[164] and, second, groups of four or more homes and structures within or adjacent to federal lands.[165] This definition currently excludes structures and homes that are at risk of wildfire on private forestland. Considering private landowners hold approximately 60% of forestland in the United States,[166] the existing definition leaves many former timber communities surrounded by commercial forests out of wildfire prevention funding opportunities. Additionally, "adjacent to federal lands" does not have further definition within the statute, so it is unclear how close a community must be to qualify as adjacent. Recognizing this problem, legislators have made some efforts to change the definition of "at-risk" to remove the federal land adjacency requirement.[167]

Defining the WUI broadly to encompass private lands poses the risk of private industrial timber companies accessing an additional subsidy pathway. Despite recent attempts to change this definition,[168] the pool of communities eligible for funding is restricted to those near federally managed forests or grasslands, leaving many communities surrounded by equally vulnerable private forestlands without federal assistance. Under the Feinstein-Daines proposal, one such legislative attempt to change the definition of "at-risk," if companies can satisfy the minimal criteria of "at-risk," they would be able to use hazardous fuels reduction dollars for subsidized timber harvest away from public comment and oversight. Although industrial timber has a role in developing sustainable forest management practices by providing needed economic opportunities for rural areas and maintaining a healthy supply of timber for the

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[164] HFRA, 16 U.S.C. § 6511(1) (2018).

[165] *Id.*

[166] BRETT J. BUTLER ET AL., U.S. DEP'T OF AGRIC., NRS-199, FAMILY FOREST OWNERSHIPS OF THE UNITED STATES, 2018: RESULTS FROM THE USDA FOREST SERVICE, NATIONAL WOODLAND OWNER SURVEY 20 (2021).

[167] Community Wildfire Protection Act, S. 21, 118th Cong. sec. 2, § 101(1)(A) (2023).

[168] *Id.*

American and international construction markets, there is potential for an unbalanced distribution of federal funding going to larger, wealthier corporate landowners rather than to the communities themselves.

In redefining what qualifies as an interface community most in need of federal assistance, federal policymakers would be wise to examine state-level efforts to map interface communities. In 1981, California enacted a law that required the State Fire Marshal to create Fire Hazard Severity Zone (FHSZ) maps that identify State Responsibility Areas for fire reduction and defines three categories of risk: moderate, high, and very high.[169] The FHSZ maps only show fire risk and do not attempt to map the WUI specifically, and the higher risk classifications impose stricter building standards for home hardening and defensibility for new constructions and major retrofits under Chapter 7A of California's building code.[170] All areas designated "very high" risk must follow these heightened restrictions, but up until 2019, local governments were able accept or reject very high risk status and the accompanying building codes.[171] Because decisions about risk allocation only impose stricter building codes in localities at higher risk, the public opposition to the scheme is focused at local government zoning laws generally.

More recently, Oregon passed Senate Bill 762 (S.B. 762) with a mandate to map the WUI and establish risk classifications for different communities in the state along with other wildfire preparedness actions.[172] In passing S.B. 762, the State Legislature required the Board of Forestry to develop a substantive definition of the wildland-urban interface through administrative rulemaking.[173] Under Section 7 of the bill, the Oregon Department of Forestry (ODF) and Oregon State University were tasked with creating a science-based approach for assigning risk classifications (extreme, high, moderate, low, or no risk) to individual tax lots.[174] Based on these risk classifications, the law imposes new obligations on landowners to comply with regulations prescribing minimum amounts of defensible space near structures and building codes for new structures in extreme or high risk areas.[175]

In order to promulgate this map, the crafters used state surveys of structural blueprints to create a rough map of tax lots that met minimum density requirements (one building per forty acres), then refined it by overlaying vegetation to show proximity to fuels.[176] The map was issued in June 2022, but after over 1,600 appeals of risk designations, the

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[169] Cal. Pub. Res. Code §§ 4201–04 (2023).

[170] Cal. Building Code § 701A.3 (2023).

[171] Rebecca K. Miller et al., *Factors Influencing Adoption and Rejection of Fire Hazard Severity Zone Maps in California*, INT'L J. DISASTER RISK REDUCTION, Nov. 2020, No. 101686 at 4.

[172] S.B. 762, 81st Leg. Assemb., Reg. Sess. § 7 (Or. 2021).

[173] *Id.* § 33.

[174] *Id.* § 7.

[175] *Id.* § 8, 11, 12.

[176] *Mapping the Wildland-Urban Interface*, OR. STATE UNIV. COLL. OF FORESTRY, https://perma.cc/XYK6-73ZU (last visited July 21, 2023).

map was promptly withdrawn and associated rulemaking was postponed.[177] Many property owners expressed concern that the designation would diminish property values and increase insurance rates.[178] Other appeals raised issue with the map's failure to account for mitigation that had already occurred, leaving some homeowners who had preemptively established defensible space around their property in the extreme or high risk designations.[179] Because the map was withdrawn and regulations were postponed until after the 2023 Oregon Legislative Session, it is unclear what the actual economic burden may amount to, but legal designation as extreme or high risk may have impacts on insurance policy cost and coverage for rural and interface property owners.

Comparing the Oregon and California experiences, a few key differences provide insights into what policymakers should consider in mapping the WUI. First, the Oregon scheme assigns individual risk to tax lots that carry statutory risk mitigation measures, while the California maps have a mechanism for involving local governments in establishing building codes on a local level. Although the difference may appear insubstantial, the California approach routes community feedback through local governments that are already involved in the stakeholder engagement process, allowing them to appropriately raise their community's concerns collectively. Meanwhile, the Oregon approach breaks landowner risk allocation down to the individual level, skipping the preexisting democratic avenue for voicing dissatisfaction over land use regulations. Secondly, the California system predates the Oregon efforts, with the original plan completed in 1981 and subsequent planning in 2007, which allows the state to leverage the maps as an existing tool to address present challenges without defending the validity of the regulations.[180]

Mapping the WUI is fraught with economic implications for homeowners throughout the West. A federal risk-mapping scheme that follows the state efforts would inevitably draw constitutional regulatory takings objection because they impose burdens on private property not involved in interstate commerce.[181] Federal land managers implementing potential risk maps would have to defend their constitutional authority by arguing that any diminution in value due to regulations is insufficient to merit compensation,[182] and to a lesser extent, could argue

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[177] Cassandra Profita, *Oregon Postpones Wildfire Risk Mapping and Rulemaking Plans After Public Backlash*, OR. PUB. BROAD. (Sept. 26, 2022, 4:12 PM), https://perma.cc/Y4X9-Y9QD.

[178] *Id.*

[179] *Id.*

[180] Cal Fire TV, *The History of Fire Hazard Severity Zone Maps*, YOUTUBE (Dec. 14, 2022), https://perma.cc/P4PD-UV62.

[181] *See infra* note 187 (discussing economic burdens on private property and takings under the Fifth Amendment).

[182] *See* Lucas v. S.C. Coastal Council, 505 U.S. 1003, 1031 (1992) (holding that a regulation that deprives an owner of all economic benefit of a property is a *per se* taking under the Fifth Amendment and requires compensation).

the regulations confer the property owners a benefit in the form of funding opportunities for home hardening and improvements.

As the Oregon effort indicates, assigning risk classifications to individual properties will always be a controversial strategy, no matter how impending or obvious the risk of destruction by wildfire is to a reasonable observer. In the eyes of interface property owners, the legal designation of extreme or high wildfire risk is a strong deterrent for investors and insurers, closing off opportunities for rural and interface communities to start and sustain non-extractive businesses like recreation, lodging, and tourism. These worries have some merit as insurers are increasingly worried about wildfire losses and are pushing to account for climate risks when issuing policies, for instance, dropping 212,000 California policies in 2020, leaving some with no options for private home insurance.[183] Because of these concerns, national or regional scale regulatory planning for creating a WUI map should explore avenues for gathering as many stakeholders as possible before releasing a draft map to frontload the public comment period. As seen with Oregon's wildfire risk map, engaging landowners only after the map is promulgated can lead to a poor public response and can alienate potential partners by announcing pre-judgments without consideration of the tangible financial effects of designation.

While the legislative process is perhaps incongruous with individual stakeholder engagement, any agencies charged with creating a wildfire risk map should take advantage of collaborative processes available to them, including the Federal Advisory Committee Act (FACA)[184] and the incorporation of local entities charged with land use restrictions. Given the broad scope of the WUI, it would be logistically impossible to include every landowner in the mapping process, so it is important to do initial outreach to promote self-organization into collaboratives who can appropriately advocate for non-commercial interests in the risk-mapping process. Though a non-exhaustive list, potential stakeholders should include private forest owner corporations, family forestry operations, tribal leadership, state-level land management agencies and lawmakers, municipalities, members of the insurance and lending industries, and local forestry collaboratives that include residents in the WUI who rent.

Once stakeholders have been convened, rough approximation of the WUI (much like the first step of the Oregon approach) can be refined through multiple rounds of drafting and direct outreach to affected property owners. Where the Oregon map and designations were issued first and then subject to appeals, a more collaborative approach would have a mechanism for property owners to self-declare prior mitigation (clearing of defensible space, fire-safe building modifications, etc.) before the map was published. Additionally, the WUI mapping process pro-

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[183] Debra Kahn, *California Continues to Face Wildfire Risks. Insurers Think They Have an Answer.*, POLITICO (Dec. 30, 2021, 8:53 PM), https://perma.cc/E8JS-YQR3.

[184] FACA, 5 U.S.C. §§ 1–3, 16 (1972).

vides an opportunity to incorporate preexisting planning into the refining process. By using past and proposed project information included in CWPPs, policymakers can revise risk assessments based on community developed priorities.

C. Tribal Co-Management

As key stakeholders who have long been excluded from federal land management decisions, Indigenous people have a clear role to play in the future management of federal lands to ensure the continuation of environmental and sociocultural values. However, previous consultation mechanisms have proven ineffective and are largely non-binding on federal agencies.[185] Because of the long-standing investment of tribal communities in public lands, it is necessary to incorporate tribal engagement into the available procedural and substantive mechanisms through the use of co-management principles. As an initial matter, tribal co-management is not a legal realignment of federal-tribal jurisdiction for public lands, but rather a suite of policies and practices that change the dynamics of sovereign-to-sovereign relations to promote more effective collaboration.[186] As articulated by Mills and Nie, tribal co-management can be characterized as an approach rooted in (1) recognition of tribes as sovereign governments, (2) incorporation of the federal government's trust responsibilities to tribes, (3) establishment of legitimation structures for tribal involvement, (4) meaningful integration of tribes into decision making, (5) recognition and incorporation of tribal expertise, and (6) development of dispute resolution mechanisms.[187]

In 2021, USDA and the DOI issued Joint Secretarial Order 3403[188] as a formal statement of intent to identify, engage, and collaborate with tribes in co-management stewardship agreements on federal lands adjacent to tribal holdings.[189] Rooted in executive powers developed through executive orders, this interagency effort recognizes co-management principles and their import for meeting treaty and trust obligations.[190] In Section 6 of the Order, the Departments affirm their support for consolidation of tribal landholdings in reservations, private ownership, and within conservation and treaty trusts,[191] which is the mandate the Forest Service has used in establishing the first co-management Memoran-

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[185] Mills & Nie, *supra* note 92, at 57 (explaining that tribal consultation has historically been unenforceable, discretionary, and variable).

[186] *See generally id.* at 83 (detailing the historical, legal, cultural, and political roots of tribal co-management and how it has been incorporated into U.S. trust obligations and sovereign-to-sovereign relations).

[187] *Id.* at 55.

[188] U.S. DEP'T OF AGRIC. & U.S. DEP'T OF INTERIOR, ORDER NO. 3403, JOINT SECRETARIAL ON FULFILLING THE TRUST RESPONSIBILITY TO INDIAN TRIBES IN THE STEWARDSHIP OF FEDERAL LANDS AND WATERS (2021), https://perma.cc/4BMU-GSRA [hereinafter JOINT SECRETARIAL CO-MANAGEMENT ORDER].

[189] *Id.* at 4.

[190] *Id.* at 1.

[191] *Id.* at 5.

dums of Understanding (MOUs). As of the end of 2022, USFS has entered into eleven agreements with thirteen different tribes and stated that negotiations were ongoing for sixty more agreements with a further forty-five tribes.[192] Through these agreements, USDA and DOI have focused efforts on maintaining cultural sites on public lands, enabling ceremonial traditional activities and food security, and incorporating ITEK into wildfire and watershed management strategies.[193] Although agencies have changed their guidelines to enable easier access to public lands for ceremonial practices,[194] it is still unclear how the tribes and agencies have prioritized the return of cultural burns to various landscapes where the fuel loads remain extremely high.

In fulfilling the promises of the Joint Secretarial Order, USFS issued an action plan for strengthening tribal consultation, directly answering the calls for better nation-to-nation relations with concrete actions for improving the consultation process.[195] The action plan provides for a series of internal revisions of the provisions within USFS Handbook and Manual to facilitate better consultation,[196] as well as expanded use of the Tribal Forest Protection Act (TFPA)[197] to provide legal and substantive backing for funding training programs on tribal lands.[198] Using appropriations from the IIJA, TFPA projects have been funded to undertake Good Neighbor Agreements[199] for cross-jurisdictional cooperation between USFS staff and tribes, tribal wildfire crew training, cultural property inventories, and hazardous fuels treatments.[200] Given how recent these investments and revisions are, it is too early to tell what impact they will have on wildfire prevention, but they lay a foundation for increased tribal direction on management objectives and project prioritization.

One iteration of how co-management implementation operates in practice is the Southeast Alaska Sustainability Strategy (SASS), where co-management principles have been applied to improve the ecological, economic, social, and cultural well-being of the region.[201] Since the Clin-

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[192] U.S. DEP'T OF AGRIC., FIRST ANNUAL REPORT ON TRIBAL CO-STEWARDSHIP 4 (2022), https://perma.cc/9Y6X-3WRC.

[193] *Id.*

[194] *Id.* at 7.

[195] U.S. FOREST SERV., STRENGTHENING TRIBAL CONSULTATIONS AND NATION-TO-NATION RELATIONSHIPS: A USDA FOREST SERVICE ACTION PLAN (2023), https://perma.cc/6VDE-LLT4 [hereinafter FOREST SERVICE ACTION PLAN].

[196] *Id.* at 5–8.

[197] Tribal Forest Protection Act of 2004, Pub. L. No. 108-278, 118. Stat. 868.

[198] FOREST SERVICE ACTION PLAN, *supra* note 195, at 19–20.

[199] Good Neighbor Agreements are cross-jurisdictional cooperation agreements between agencies and tribes. U.S. FOREST SERV., GOOD NEIGHBOR AND STEWARDSHIP AGREEMENTS (last visited July 1, 2023), https://perma.cc/V8JT-U6GS.

[200] *Biden-Harris Administration Invests More Than $12 Million In Support of the Tribal Forest Protection Act*, U.S. DEP'T OF AGRIC. (Mar. 10, 2023), https://perma.cc/2E4G-DPH7.

[201] U.S. FOREST SERV., SOUTHEAST ALASKA SUSTAINABILITY STRATEGY 1 (2022), https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd1060642.pdf [hereinafter SOUTHEAST ALASKA SUSTAINABILITY STRATEGY].

ton administration enacted the rule in 2001, the Tongass National Forest has been at the center of the Roadless Rule controversy after most of the forest was designated off-limits to motorized use and development,[202] and whether or not the Tongass has been exempted from the rule has changed based on politics.[203] Similar to Western forest communities, tribes adjacent to the Tongass primarily found work in old growth harvests and unsustainable forestry, so any conservation protections would come at the cost of local communities.[204] In 2021, USDA announced the SASS initiative, committing $25 million to be spent on infrastructure and community capacity, forest restoration activities, natural resources, and tribal interests.[205] Since the program began, projects have progressed rapidly with tribal community groups developing young growth harvesting capacity, workforce training, and the prioritization of subsistence and food security.[206] While USFS has signed co-management agreements with other tribes, the SASS is a model for how tribal-agency cooperation can create positive community outcomes on a region-wide scale, promoting both tribal sovereignty and forest health.

Beyond contracting and compacting, another avenue for tribal input on wildfire management is through NFMA's forest planning process because it serves as the base for designating permitted uses and priority areas for resource improvement.[207] Under the 2012 NFMA planning regulations, USFS is required to engage in tribal consultation and encourages tribes to seek cooperating agency status during the planning process.[208] While efforts to take advantage of the 2012 planning rule's increased focus on tribal engagement have had some success in incorporating tribal interests into the desired conditions element of forest plans, binding USFS to substantive obligations has been more difficult.[209] However, future substantive forest plan revisions may take the form of use restrictions (barring mineral extraction, recreation, etc.) in areas of tribal importance, tribal consent requirements for changing use designations, and cultural restoration funding. When paired with the Joint Secretarial Order's focus on improving consultation procedures,

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[202] Special Areas; Roadless Area Conservation, 66 Fed. Reg. 3254 (Jan. 12, 2001) (codified at 36 C.F.R. pt. 294).

[203] A settlement with the State of Alaska exempted the Tongass from the rule under President Bush, but this exemption was found unlawful in *Organized Vill. of Kake v. U.S. Dep't of Agric.*, 795 F.3d 956 (9th Cir. 2015), which reinstated the Clinton-era rule. *Id.* at 959. In 2020, President Trump granted Alaska's APA petition to exempt the Tongass, but the Biden administration rescinded that rule in 2021. Press Release, Biden-Harris Administration Finalizes Protections for Tongass National Forest, USDA Release No. 0016.23 (Jan. 25, 2023).

[204] SOUTHEAST ALASKA SUSTAINABILITY STRATEGY, *supra* note 201, at 4.

[205] *USDA Announces Southeast Alaska Sustainability Strategy, Initiates Action to Work with Tribes, Partners and Communities*, U.S. FOREST SERV. (July 15, 2021), https://perma.cc/5ZLN-SE3L.

[206] *Southeast Alaska Sustainability Strategy*, U.S. FOREST SERV., https://perma.cc/E22S-PXJ7 (last visited April 19, 2023).

[207] Mills & Nie, *supra* note 92, at 85, 163.

[208] 36 C.F.R. § 219.4 (2020).

[209] Mills & Nie, *supra* note 92, at 128–31.

these forest plan revisions would likely provide more opportunities for tribes to influence the development of forest and wildfire management policies and to ensure those policies work for Indigenous groups.

V. CONCLUSION

The pressing challenges posed by the wildfire crisis force land managers to make a series of difficult decisions about public lands in the American West that have broad implications for the communities who live near and depend on the forests. In shaping the future of wildfire policy, legislators and federal agencies must consider the impacts of policy choices and aim to ensure positive community outcomes for the most vulnerable. To pursue socially just and environmentally responsible wildfire policy, land managers should use every budgetary and programmatic tool available to encourage direct investment and development of affected communities, collaboratively define what qualifies as at-risk, and prioritize tribal co-management of federal lands. Although these policies alone will not solve the wildfire crisis, they can serve as a strong foundation for handling the groundwork needed to protect our most vulnerable communities and preserve precious ecosystems from destruction by more frequent and intense fires.