

# ARTICLES

## THE WORLD'S LARGEST ECOSYSTEM MANAGEMENT PLAN: THE NORTHWEST FOREST PLAN AFTER A QUARTER-CENTURY

By

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*For decades, the public forests of the Pacific Northwest were subject to widespread clearcutting of their old-growth trees as part of a federal policy promoting industrial logging. That era came to an end in the early 1990s, due to court injunctions enforcing environmental laws like the National Environmental Policy Act and the National Forest Management Act, as a response to diminishing old-growth dependent species like the northern spotted owl. Fulfilling a campaign promise to resolve the contentious issue by protecting both wildlife habitat and a logging industry important to local communities, President Clinton and his administration conducted a remarkable 1993 symposium on the economics and science of preserving rapidly disappearing habitat for Endangered Species Act-listed species like the northern spotted owl and several salmonids. The result was the 1994 Northwest Forest Plan (the NFP or the Plan), widely recognized as the largest commitment to ecosystem management worldwide. Somewhat surprisingly, the NFP is still in effect over a quarter-century later, despite determined efforts to eviscerate it.*

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*This Article examines the NFP, its antecedents, provisions, court interpretations, and future. In many respects, despite persistent controversy over the legal underpinnings of the NFP, the Plan has provided substantial protection for the Northwest's federal forests, and—although it did not end all public timber harvests—largely ended harvesting of public old-growth forests. Moreover, the Plan's aquatic protection strategy has proved quite effective and worthy of emulation elsewhere. A postscript to this Article considers the effect of the recent Biden Administration executive order concerning old-growth forests on the NFP.*

*Although the Bush administration's repeated efforts to terminate the Plan failed, the Obama administration removed about ten percent of the federal forests subject to the Plan from its reach, substantially undermining its ecological premises. The courts have so far sustained these removals, casting a pall of uncertainty over efforts to update the NFP to reflect current challenges posed by wildfires and climate change. This Article suggests that the goals of a revised NFP should be linked to the role that federal public Pacific Northwest forests can play in the U.S.' international obligations to combat climate change. We recommend a number of changes to the NFP, including ending both post-fire salvage sales and the logging of mature and old-growth forests. To accommodate these changes, we suggest providing a "just transition" for affected rural communities and increased flexibility concerning the boundaries of protective terrestrial reserves in the southern reaches of the Plan. We maintain that despite lingering uncertainty about its scope of coverage, the NFP can and should continue to provide the signature example of landscape planning worldwide.*

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## I. INTRODUCTION

In the 1990s, amid a bitter conflict over the continued industrial harvesting of Northwest forests that had been ongoing for roughly forty years, the federal government launched a remarkable experiment in federal land management planning: the Northwest Forest Plan (the NFP or the Plan).<sup>1</sup> Approved in 1994, the largely science-based Plan was unprecedented in its breathtaking scope—roughly twenty-four million acres of federal lands in the western Cascades of Oregon, Washington, and northern California—about the size of the states of Delaware, Connecticut, New Hampshire, New Jersey, Rhode Island, and Vermont combined.<sup>2</sup>

<sup>1</sup> Thomas A. Spies et al., *Twenty-Five Years of the Northwest Forest Plan: What Have we Learned?*, 17 FRONTIERS IN ECOLOGY & ENV'T 511, 512 (2019).

<sup>2</sup> *Id.* at 511–12; Jes Burns, *Looking Back: The Northwest Forest Plan's New Conservation Paradigm*, OR. PUB. BROAD. (Apr. 6, 2015), <https://perma.cc/9Y34-VUZ9>; see *Inventoried Roadless Area Acreage Categories of NFS Lands Summarized by State*, U.S. FOREST SERV. (Mar. 1996), <https://perma.cc/V85K-G89Q> (Acreage: Delaware, 1,534,000; Connecticut,

Prompted by the listing of the northern spotted owl under the Endangered Species Act<sup>3</sup> (ESA) due to its declining viability under the National Forest Management Act<sup>4</sup> (NFMA), it was also innovative in its protections of old-growth forests, wildlife, and watersheds.<sup>5</sup> The Plan's efforts to fuse the missions of two federal land management agencies—the U.S. Forest Service (the Forest Service) and Bureau of Land Management (BLM)—was also extraordinary, as was the relative lack of congressional involvement in its planning and execution.<sup>6</sup> The fusing of the agencies' missions ended suddenly in 2016, when the Obama administration withdrew most BLM lands from the Plan, undermining the Plan's ecological integrity.<sup>7</sup>

The Plan's expansive scope and pioneering protective provisions should not obscure the fact that the NFP was very much a compromise measure: It did not prohibit all (even most) old-growth forest harvesting or road-building in sensitive ecological areas, and left the federal land management agencies with sufficient discretion that enabled them to increase logging and road building in response to political demands for increased harvests.<sup>8</sup> Although the clearcutting of old-growth forests has now largely (although not completely) ceased on national forestlands within the NFP area, and the Plan's innovative aquatic protection strategy has helped to stabilize salmonids and other riparian species, avian species like ESA-listed spotted owl and marbled murrelet have continued to decline.<sup>9</sup> Moreover, while the Plan audaciously aimed to govern federal forest management for 100 years, it did not anticipate the magnitude of current problems like climate change, wildfire, and invasive species, most of which are beyond the control of federal land managers, and it has lacked funding to effectively monitor rare at-risk species.<sup>10</sup>

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3,548,000; New Hampshire, 5,941,000; New Jersey, 5,258,000; Rhode Island, 788,000; Vermont, 6,154,000).

<sup>3</sup> Endangered Species Act of 1973, 16 U.S.C. §§ 1531–1544 (2018).

<sup>4</sup> 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)).

<sup>5</sup> Spies et al., *supra* note 1, at 511.

<sup>6</sup> U.S. DEP'T OF AGRIC., U.S. DEP'T OF THE INTERIOR, RECORD OF DECISION FOR AMENDMENTS TO FOREST SERV. & BUREAU OF LAND MGMT. PLANNING DOCUMENTS WITHIN THE RANGE OF THE NORTHERN SPOTTED OWL 1 (1994) [hereinafter NFP RECORD OF DECISION].

<sup>7</sup> See *infra* text accompanying notes 125, 257–277.

<sup>8</sup> See, e.g., *Northwest Forest Plan*, OREGON WILD, <https://perma.cc/HWA5-5RUE> (last visited Jan. 28, 2022) (suggesting that “[t]he Plan allows logging and road building in ecologically critical areas” and fails to “protect mature and old-growth forests, roadless areas, municipal watersheds, and complex young forests that are recovering from fire”).

<sup>9</sup> Spies et al., *supra* note 1.

<sup>10</sup> *Id.* at 511–13.

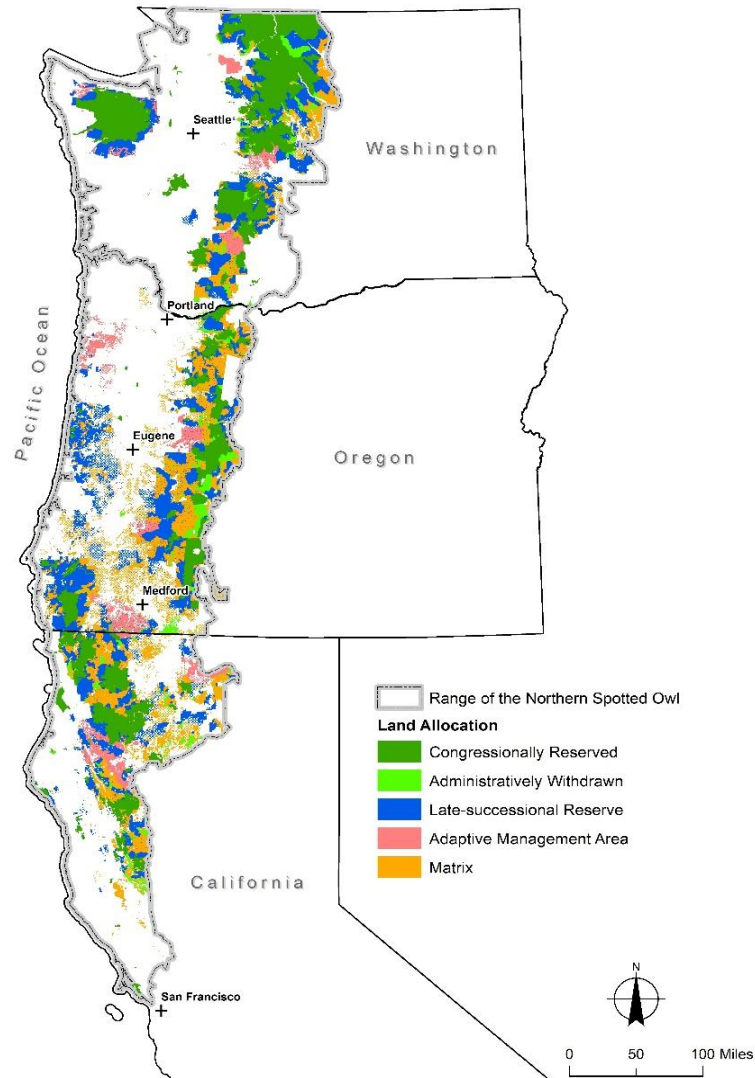


Plate 8.1. Land allocation under the Northwest Forest Plan. Overlap of LSR with Administratively Withdrawn area is shown as LSR. Riparian Reserves are not shown. (Source: Regional Ecosystem Office (REO)—Northwest Forest Plan, <https://perma.cc/EMF9-6DNL>).

When approved in 1994, the NFP amended all national forest and BLM land plans within the range of the northern spotted owl: western Washington, western Oregon, and northwest California.<sup>11</sup> Although the 2016 revised BLM land plans effectively seceded BLM lands from the NFP,

<sup>11</sup> NFP RECORD OF DECISION, *supra* note 6, at 11.

earlier—in 2012—the Forest Service had amended its planning regulations<sup>12</sup> to require for the first time the use of “best available science” and emphasized ecological integrity as the driving multiple use value for national forests.<sup>13</sup> Because NFMA requires land and resource management plans (LRMPs) to be revised every fifteen years,<sup>14</sup> an ongoing review of the NFP aimed at modernizing the Plan must apply the 2012 planning rule when addressing issues such as climate change, wildfire, and invasive species.<sup>15</sup>

One of the chief virtues of the NFP is that over a quarter-century after its promulgation, it still exists. The Plan somehow survived determined political efforts to eliminate or eviscerate it,<sup>16</sup> even under hostile Bush and Trump Administrations that opened up federal public lands to widespread development.<sup>17</sup> The Plan withstood opposition in the face of an ongoing but

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<sup>12</sup> U.S. DEP’T OF THE INTERIOR, BUREAU OF LAND MGMT., NORTHWESTERN AND COASTAL OREGON RECORD OF DECISION AND APPROVED RESOURCE MANAGEMENT PLAN 2 (2016) [hereinafter 2016 RMP]. The national forest planning regulations have been the subject of considerable controversy for years. The Clinton Administration amended the original 1982 regulations in 2000, but the Bush Administration revised the regulations in 2005 and 2008. *Citizens for Better Forestry v. U.S. Dep’t of Agric.*, 341 F.3d 961, 967 (9th Cir. 2003); *Fed. Forest Res. Coal. v. Vilsack*, 100 F. Supp. 3d 21, 28–29 (D.D.C. 2015). The Bush regulations failed to survive judicial review, however, and the reviewing court reinstated the 1982 regulations. *Id.* at 29. The Obama Administration finally revised the regulations in 2012, which did survive a facial challenge. *Id.* at 47.

<sup>13</sup> 36 C.F.R. § 219.3 (2012). The 2012 rule also emphasized biodiversity conservation on an ecosystem basis. *Id.* § 219.9; *see also id.* §§ 219.8, 219.10 (emphasizing consideration of sustainability concerns and integration of multiple uses in planning); Spies et al., *supra* note 1, at 513.

<sup>14</sup> 16 U.S.C. § 1604(f)(5) (2018).

<sup>15</sup> *See The 2012 Planning Rule*, U.S. FOREST SERV., U.S. DEP’T OF AGRIC. (Nov. 30, 2020), <https://perma.cc/PJ7P-RR7D> (describing process for revision of forest plans and explaining impact of the 2012 planning rule). One study called the 2012 planning rule “the most important change in federal forest biodiversity policy nationwide over the past 30 years.” Spies et al., *supra* note 1, at 511.

<sup>16</sup> *See, e.g., infra* text accompanying notes 162–165, 189, 208–217, 223–231, 249–252, 257–259, 269–271 (describing multiple challenges to various aspects of the Plan).

<sup>17</sup> *See, e.g.,* Michael C. Blumm & Olivier Jamin, *The Trump Public Lands Revolution: Redefining “the Public” in Public Land Law*, 48 ENV’T L. 311, 312–14, 367 n.316 (2018) (explaining the Trump Administration’s efforts to dismantle environmental protections of national monuments, landscape federal land planning, and sage grouse habitat, while promoting fossil-fuel development). Somewhat surprisingly, the Trump Administration did not attempt to amend the NFP, although it did substantially weaken regulations implementing the National Environmental Policy Act and ESA. Lisa Friedman, *Trump Weakens Major Conservation Law to Speed Construction Permits*, N.Y. TIMES, <https://perma.cc/95LX-HYME> (last updated Oct. 6, 2021); Lisa Friedman, *U.S. Significantly Weakens Endangered Species Act*, N.Y. TIMES (Aug. 12, 2019), <https://perma.cc/PF52-VWS2>.

The Biden Administration has announced it will revisit both sets of regulations, which can significantly affect implementation of the NFP. *See* Press Release, U.S. White House, Fact Sheet: List of Agency Actions for Review (Jan. 20, 2021), <https://perma.cc/9F97-RGP3> (providing a list of agency actions—including the Trump Administration’s changes to NEPA and ESA regulations—that the administration will review under Executive Order No. 13990 (Jan. 20, 2021), “Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis”); Press Release, Nat. Res. Def. Council, Biden Administration Set

significant decline in regional timber harvest as well as erroneous but widespread claims that it failed to deliver on “guaranteed” minimum harvest levels.<sup>18</sup> This Article explains how the Plan came to be, how it has shaped the management of an enormous amount of federal land, how it has survived, and its uncertain future.

Part II provides background on the evolution of federal forest management in the years before the NFP, focusing on the years before and after World War II. Part III discusses the events leading to the promulgation of the NFP, including ESA-listings of the northern spotted owl and marbled murrelet and ensuing but temporary congressional intervention. Part IV explains the evolution of the NFP, the role of science, economics, and politics in fashioning the Plan, as well as its judicial ratification. Part V examines the chief provisions of the Plan and their effects, while Part VI explores the court interpretations of challenges to the Plan and its provisions. Part VII turns to the lessons the NFP and its implementation may hold for other efforts at landscape planning, a concept that the Republican Congress disavowed in 2017 when BLM attempted to introduce it into its land planning regulations.<sup>19</sup> Part VIII claims that the NFP—remarkable for both its size and substance—is an ecosystem management program worthy of study and emulation in the years ahead, despite ongoing litigation attempting to destroy its ecological underpinnings.<sup>20</sup>

## II. BACKGROUND: THE ANTECEDENTS

The agencies implementing the NFP, the Forest Service and BLM, are quite different in their origins and orientation. The Forest Service has had the longstanding mission to manage national forests, a heritage of expertise dating to the days of Gifford Pinchot, and a longstanding

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to Reverse Trump Efforts to Weaken ESA (June 4, 2021), <https://perma.cc/L7AA-QCHK> (explaining that although the extent of Biden’s revision is unclear, the announcement marks a shift toward stronger protections for endangered species); Elizabeth Diller et al., *President Biden’s Early Actions on Environmental Policy and their Relevance to the National Environmental Policy Act (NEPA)*, ICF (June 2, 2021), <https://perma.cc/XAX3-RXA8> (describing likely effects flowing from Executive Order No. 13990 and other early Biden Administration actions relating to NEPA).

<sup>18</sup> The NFP did not include any promised annual harvests, although it did have anticipated goals. The Plan’s 1.1 billion board feet (bbf) per year target was never met; instead, the total volume of timber offered for sale from the Forest Service and BLM lands in the Plan area averaged 526 million board feet (mmbf) annually between 1995 and 2003. *See infra* text accompanying notes 142–143; U.S. FOREST SERV. ET AL., PNW-GTR-966, SYNTHESIS OF SCIENCE TO INFORM LAND MANAGEMENT WITHIN THE NORTHWEST FOREST PLAN AREA 641 (2018) [hereinafter SYNTHESIS OF SCIENCE].

<sup>19</sup> *See* Blumm & Jamin, *supra* note 17, at 338–41 (discussing Congress’ March 2017 disapproval of BLM’s revised planning regulations under the Congressional Review Act).

<sup>20</sup> *See infra* text accompanying notes 276–283 (discussing the litigation over the removal of Oregon and California lands from the NFP).

commitment to multiple uses.<sup>21</sup> Nationally, BLM manages mostly rangelands that were historically not valued sufficiently for private disposal or for public reservation.<sup>22</sup> But the majority of the commercial forest lands managed by BLM for timber production are concentrated in what are known as the Oregon and California (O&C) lands in Oregon, railroad grant lands that were revested in the federal government in the early years of the twentieth century, and which historically were heavily logged for the benefit of local communities.<sup>23</sup>

### *A. Public Forestland Management Prior to World War II*

Congress established the Forest Service in 1905 to manage the federal government's newly created forest reserves to prevent flooding, maintain water flows, and provide a sustainable source of timber.<sup>24</sup> Today, the agency manages nearly 145 million acres of federal forestland, of which twenty million acres are in the Pacific Northwest.<sup>25</sup> Over the decades, the Forest Service's approach to its resource management duties evolved significantly, influenced by both national and local political, economic, social, and environmental conditions.

During most of the first half of the twentieth century, the Forest Service regarded itself as custodian of the national forests.<sup>26</sup> The agency's management practices primarily involved implementing Gifford Pinchot's "conservative use" approach to silviculture, in which conservation meant sustained timber yields and protection of favorable water flow conditions, especially to avoid flooding.<sup>27</sup> National forest boundaries provided large

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<sup>21</sup> See *infra* text accompanying notes 26–28.

<sup>22</sup> See Alexandra Heller, *History and Management of Public Rangelands in the United States: A Case Study from New Mexico*, INQUIRIES JOURNAL, 7 NO. 4 (2015) (explaining that rangelands did not have value for farming or homesteading due to a lack of irrigation); *Opportunity and Challenge: The Story of the BLM*, NATIONAL PARK SERVICE, <https://perma.cc/P33Y-F6M9> (last updated Sept. 8, 2008) (many commentators have described the vacant, unappropriated public lands as "land no one wanted").

<sup>23</sup> See *infra* text accompanying notes 34–39, 50–56.

<sup>24</sup> The Creative Act of 1891 authorized the president to withdraw forestland from the public domain. Act of Mar. 3, 1891, § 24, 26 Stat. 1103, *amended by* 16 U.S.C. § 471 (repealed 1976). The Organic Administration Act provided management standards for these reserves, directing the federal government to manage the forests to "secur[e] favorable conditions of water flows, and to furnish a continuous supply of timber." Act of June 4, 1897, ch. 2, § 1, 30 Stat. 34 (codified at 16 U.S.C. § 475 (2018)). In 1905, Congress granted President Theodore Roosevelt's wish and transferred the reserves from the Department of Interior to the Department of Agriculture's newly established the Forest Service. Charles F. Wilkinson & H. Michael Anderson, *Land and Resource Planning in the National Forests*, 64 OR. L. REV. 1, 18 (1985). For a recent thorough review of public land history, see generally JOHN D. LESHY, *OUR COMMON GROUND: A HISTORY OF AMERICA'S PUBLIC LANDS* (2021).

<sup>25</sup> ANNE A. RIDDLE, CONG. RSCH. SERV., R45688, *TIMBER HARVESTING ON FEDERAL LANDS* 1 (2020).

<sup>26</sup> Wilkinson & Anderson, *supra* note 24, at 135.

<sup>27</sup> *Id.* at 133. Pinchot's utilitarianism aimed to produce "greatest good of the greatest number in the long run," in contrast to the legacy of the cut-and-run practices of private timber, which often flooded downstream towns. *Id.* at 54 n.269; see also GIFFORD PINCHOT,



swaths of forestlands some insulation from an encroaching timber industry that saw the Pacific Northwest as the last frontier after its cut-and-run harvest practices exhausted forests in the U.S. South and Midwest.<sup>28</sup> In the interest of providing recreation opportunities to the public, the agency added recreation to its utilitarian calculus, and in 1924 the Forest Service adopted assistant regional forester Aldo Leopold's<sup>29</sup> pioneering proposal to reserve a wilderness area in New Mexico, and other regions followed suit.<sup>30</sup> By 1939, the agency's administrative wilderness system included fourteen million acres.<sup>31</sup>

In contrast to the Forest Service, BLM—established in 1946 out of a fusion of the Grazing Service and the General Land Office (GLO)—had no forestland management expertise at its creation, and neither did its predecessors.<sup>32</sup> BLM was instead created to manage the leftover public domain lands, mostly rangelands that were too arid for farming or commercial timber production.<sup>33</sup> Today, the agency is responsible for more surface land acreage than any other federal agency, 245 million acres, but

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BREAKING NEW GROUND 322 (1947) (“The forest and its relation to streams and inland navigation, to water power and flood control; to the soil and its erosion; to coal and oil and other minerals; to fish and game; and many another possible use or waste of natural resources. . . . Here were not isolated and separate problems.”).

<sup>28</sup> See DONALD F. FLORA, U.S. DEP'T OF AGRIC. ET AL., PNW-GTR-562 FOREST ECONOMICS RESEARCH AT THE PACIFIC NORTHWEST RESEARCH STATION, TO 2000 3 (2003) (“It was a vicious circle: cut faster to pay for the newer, bigger gear that was acquired to cut faster. Meanwhile, cut-and-get-out timbering was being reconsidered in the Northwest. Timbermen were themselves concerned about overcutting and a long-term future, albeit in a commercial sense.”).

<sup>29</sup> Although Leopold was only an assistant regional forester when he proposed establishing an administrative wilderness in the Gila National Forest, the renowned naturalist later would earn a reputation as the “Father of Wildlife Management” and the “Father of the Wilderness System.” See SUSAN L. FLADER, THINKING LIKE A MOUNTAIN: ALDO LEOPOLD AND THE EVOLUTION OF AN ECOLOGICAL ATTITUDE TOWARD DEER, WOLVES, AND FORESTS 16 n.13, 22 (1974) (“Aldo Leopold is acknowledged as the ‘father’ of the profession of wildlife management in America. One man can hardly establish a profession, but Leopold’s stamp has been on the profession so conspicuously from its beginnings around 1930 to the present that the title is perhaps justified.”).

<sup>30</sup> See Wilkinson & Anderson, *supra* note 24, at 26 (explaining that the time was ripe for Leopold’s vision to take hold, for in the post-war era the Forest Service incorporated recreation as part of its utilitarian calculus). In 1921, the Forest Service manual announced that “[n]o plan of national forest administration would be complete which did not conserve and make [recreation resources] available for public use.” *Id.*

<sup>31</sup> *Id.*

<sup>32</sup> The GLO, an office in the Department of the Interior, encouraged settlement of public land under the Homestead Act of 1862, which granted federal land to settlers looking to farm and live on lands disposed of by the federal government. NATIONAL PARK SERVICE, *supra* note 22. The GLO was responsible for “public land records, sales, grants, and supervision of local land offices.” Joseph Ross, *FLPMA Turns 30: The Bureau of Land Management also Celebrates Its 60<sup>th</sup> Birthday*, SOC’Y FOR RANGE MGMT., Oct. 2006, at 16, 16. The Grazing Service administered the public land grazing permit system established by the 1934 Taylor Grazing Act. Taylor Grazing Act, 43 U.S.C. §§ 315–315o (2018).

<sup>33</sup> NATIONAL PARK SERVICE, *supra* note 22.

only 2.4 million acres—less than one percent of the total—are O&C lands,<sup>34</sup> which the federal government reacquired following the violation of land-grant terms by the Oregon & California Railroad and its successors.<sup>35</sup> It took Congress over twenty years to decide what to do with O&C lands,<sup>36</sup> and then addressed them only in opaque terms:<sup>37</sup> they are now at the center of ongoing litigation.<sup>38</sup> BLM inherited O&C lands at its formation and historically managed them under timber-dominant principles with near-unfettered discretion, at least until the spotted owl injunctions in the 1990s.<sup>39</sup>

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<sup>34</sup> *What We Manage*, U.S. DEP'T OF THE INTERIOR, BUREAU OF LAND MGMT., <https://perma.cc/MB3B-PNWT> (last visited Mar. 24, 2022); *O&C Lands*, U.S. DEP'T OF THE INTERIOR, BUREAU OF LAND MGMT., <https://perma.cc/2EWB-TVWL> (last visited Mar. 26, 2022).

<sup>35</sup> Michael C. Blumm & Tim Wigington, *The Oregon & California Railroad Grant Lands' Sordid Past, Contentious Present, and Uncertain Future: A Century of Conflict*, 40 B.C. ENV'T AFF. L. REV. 1, 3 (2013). In the mid-nineteenth century, in an effort to settle the West, the federal government granted railroad companies approximately 179 million acres of public land for building railroads. *Id.* at 2. These expansive land grants, compensation to the railroads for building the lines for which a cashless Congress could not pay, included provisions requiring the railroads to sell excess land to actual settlers at specified prices, and in tracts no larger than 160 acres (a quarter-section). *Id.* at 2–3. One such grant was to the Oregon and California Railroad, which received a 3.7 million acre land-grant in 1866 to build a line from Portland to Northern California. *Id.* at 2. The ensuing land sales were beset with widespread fraud, as the railroad, including its successor, Southern Pacific, frequently sold land in violation of the land grant provisions, selling timber land to non-settlers, disregarding acre limits, and exceeding specified prices. *Id.* at 3. Numerous prominent individuals, including government officials, were convicted of land fraud. *Id.* at 12–13. The accompanying public outcry induced the federal government to crack down on illegal land disposition; Southern Pacific was prosecuted for violating its land-grant, and eventually forced to return 2.9 million acres of forestland to the federal government. *Id.* at 3. The Supreme Court upheld the reversion in 1915. *Id.*; see also *Or. & Cal. R.R. v. United States*, 238 U.S. 393, 419, 431, 438–39 (1915).

<sup>36</sup> In 1916, shortly after the Supreme Court's decision affirming the federal reversion, Congress funded compensation for Southern Pacific that the Court required and also promised to subsidize local counties for their loss of tax base due to the reversion. Blumm & Wigington, *supra* note 35, at 19–20. Over the years, these payments-in-lieu of taxes were inconsistent—in one 10-year period the counties received no payments, largely because timber sales were few. *Id.* at 20. But the counties organized and became an effective, publicly-funded lobby that succeeded in convincing Congress to enact the Oregon and California Land Act of 1937 (OCLA), 43 U.S.C. §§ 2601–2634 (2018), and then persuaded BLM to adopt a timber-dominant policy for O&C lands for over fifty years. *Id.* at 20–21.

<sup>37</sup> The OCLA called upon BLM to manage O&C lands for five purposes: 1) “permanent forest production,” conducted under “sustained yield” principles to “provid[e] a permanent source of timber supply”; 2) watershed protection; 3) stream flow regulation; 4) “contributing to the economic stability of local communities;” and 5) recreation. 43 U.S.C. § 2601. The Act has been called the first federal codification of multiple use. Paul G. Dodds, *The Oregon and California Lands: A Peculiar History Produces Environmental Problems*, 17 ENV'T L. 739, 755 (1987). But the Ninth Circuit disagreed in its *Headwaters* decision. *Headwaters v. BLM*, 914 F.2d 1174, 1183–84 (9th Cir. 1990). Not until a decade after the OCLA, in the Materials Act of 1947, did Congress give BLM the authority to sell timber. 30 U.S.C. § 601 (1976).

<sup>38</sup> See *infra* text accompanying notes 275–277.

<sup>39</sup> See Deborah Scott & Susan Jane M. Brown, *The Oregon and California Lands Act: Revisiting the Concept of “Dominant Use,”* 21 J. ENV'T L. & LITIG. 259, 260–61, 284 (2006) (discussing 1) how the OCLA gives BLM specific control of forest management, 2) how BLM

*B. Transforming the Pacific Northwest's Federal Forests in the Post-War Years*

World War II drastically altered the trajectory of conservation planning in Pacific Northwest national forests. In 1942, after the federal government declared wood a “critical war material,” the estimated demand for wood products that year exceeded estimated production from national forests by threefold.<sup>40</sup> As a result, the Forest Service collaborated with the War Production Board to rapidly increase timber yield from both private and public lands: timber sales in national forests rose 238 percent between 1939 and 1945.<sup>41</sup> This sudden transition of the Forest Service from caretaker of the national forests to mass provider of raw wood created tension with the agency’s mission to manage for sustained timber yields and favorable water flow conditions. In 1943, the Forest Service Chief Lyle Watts warned that the nation was liquidating its national forests,<sup>42</sup> estimating that wartime timber cutting exceeded annual growth by fifty percent.<sup>43</sup>

In the decades following the war, a national housing boom intensified the demand for timber, and the liquidation of the Pacific Northwest’s forests—particularly its old-growth<sup>44</sup>—accelerated.<sup>45</sup> In the quarter-century after World War II, timber production on national forest lands increased twelve-fold, and most the Forest Service officials wanted to

is using the “dominant use” statute to overcome NFP protections, and 3) the GLO’s 1938 policy statement, which focused on the OCLA’s conservation purposes). Blumm & Wigington, *supra* note 35, at 22 (observing that despite the multiple-use purposes expressed in the OCLA, BLM managed O&C lands for a half-century with the goal of maximum timber harvests, in response to pressure from the O&C counties). Moreover, soon after the enactment of the OCLA, BLM’s predecessor expressed enthusiasm for the statute’s multiple-use directive.

<sup>40</sup> PAUL W. HIRT, A CONSPIRACY OF OPTIMISM: MANAGEMENT OF THE NATIONAL FORESTS SINCE WORLD WAR TWO 45 (1994).

<sup>41</sup> *Id.*

<sup>42</sup> *See id.* at 46 (“More fundamental and far-reaching than the problem of industrial output is the impact of destructive cutting on the growing stock left to produce wood for the future. . . . There can be no doubt that the forest capital and hence forest productivity are being impaired by the war.”).

<sup>43</sup> *Id.*

<sup>44</sup> There is no single definition of “old-growth” forest. In the 1970s, the term described Pacific Northwest forests at least 150 or 200 years old that had complex structure, including the presence of large and old live trees, as well as dead trees—called “snags”—and large logs and downed wood, existing both on the forest floor and in streams. *See* Valerie Rapp, *New Findings About Old-Growth Forests*, PAC. N.W. RES. STATION SCI. UPDATE, U.S. FOREST SERV., June 2003, at 1, 2, 4 (discussing the complexity of old growth forests and the ecological diversity they produce). The number of forest canopy layers, vertical and horizontal diversity in the canopy, species composition, and ecosystem function are also defining features of old-growth. *Id.* at 2. Mature forests that are 80-200 years old and exhibit old-growth characteristics may also be considered old-growth, especially for the purposes of promoting old-growth development. *Id.* at 7.

<sup>45</sup> HIRT, *supra* note 40, at 137. The Forest Service eventually developed a national-scale postwar forest rehabilitation plan that included public regulation of private timber harvesting practices, but Congress never enacted it. *Id.* at 47.

accelerate the pace of harvest.<sup>46</sup> From 1980 to 1989, the Pacific Northwest's forests west of the Cascade Mountains provided about a quarter of the nation's softwood harvest.<sup>47</sup>

By the 1970s, the Forest Service was steeped in controversy for its unsustainable industrial timber harvest practices, especially clearcutting.<sup>48</sup> But the Northwest's federal forests continued to be logged heavily until the early 1990s when judicial injunctions intervened.<sup>49</sup> This intensive timber harvesting, including on BLM lands, wreaked environmental havoc, particularly from the 1960s through the 1980s. Although the Oregon and California Land Act of 1937<sup>50</sup> (OCLA) only required BLM to sell from O&C lands "not less than one-half billion feet board measure, or not less than the annual sustained yield capacity," the agency regularly sold more than one billion board feet (bbf) per year.<sup>51</sup> For example, timber sold from BLM lands rose from 359.8 million board feet (mmbf) in fiscal year 1960 to nearly 1.8 bbf sold in fiscal year 1970,<sup>52</sup> in large part encouraged by the O&C counties, which had become dependent on timber sale revenues.<sup>53</sup> The favorable revenue provisions in the OCLA encouraged the O&C counties to maintain low tax rates, which in recent years has caused intermittent suspension of local services like police, fire, libraries, and mental health services.<sup>54</sup> The O&C counties in effect became

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<sup>46</sup> Miles Burnett & Charles Davis, *Getting Out the Cut: Politics and National Forest Timber Harvests, 1960-1995*, 34 ADMIN. & SOC'Y, 202, 206 (2002) ("Although a few Forest Service officials, such as Aldo Leopold and Bob Marshall, succeeded in pushing the agency to recognize the importance of setting aside some forested lands for recreation or wilderness . . . most higher-ranking administrators were both anxious and willing to accelerate timber harvests.")

<sup>47</sup> TERRY L. RAETTIG & HARRIET H. CHRISTENSEN, U.S. DEP'T OF AGRIC. ET AL., PNW-GTR-465, TIMBER HARVESTING, PROCESSING, AND EMPLOYMENT IN THE NORTHWEST ECONOMIC ADJUSTMENT INITIATIVE REGION: CHANGES AND ECONOMIC ASSISTANCE 1, 3 (1999) [hereinafter TIMBER HARVESTING].

<sup>48</sup> *Clearcutting Issues on the National Forests in the 1970s*, FOREST HIST. SOC'Y, <https://perma.cc/UGY3-LCRN> (last visited Jan. 30, 2022); see *infra* text accompanying note 63.

<sup>49</sup> RIDDLE, *supra* note 25, at 8; see also *infra* text accompanying note 90 (describing the injunctions that halted timber harvests in the region in the early 1990s).

<sup>50</sup> 43 U.S.C. §§ 2601–2634 (2018).

<sup>51</sup> Scott & Brown, *supra* note 39, at 276, 279. The harvest levels on O&C lands are the subject of ongoing litigation. See *infra* text accompanying notes 260–283.

<sup>52</sup> RIDDLE, *supra* note 25, at 14. Nearly all of BLM's timber harvest occurs on O&C lands. *Id.* at 15.

<sup>53</sup> Congress shared timber revenue from O&C lands with local communities at a higher rate than it did with revenue generated through timber harvest on neighboring the Forest Service lands. Blumm & Wigington, *supra* note 35, at 4.

<sup>54</sup> See, e.g., Gillian Flaccus, *Oregon Timber Counties Struggle to Provide Services as Aid Dries Up*, DENVER POST (May 14, 2017), <https://perma.cc/8SM8-4DZH> (discussing Oregon counties who have rejected raising taxes for public services and buildings). Arguably, tax breaks for the timber industry have cost O&C county budgets more than reduced harvests. See Tony Schick & Rob Davis, *Oregon Lawmakers Set Out to Increase the Timber Industry's Tax Bill. Instead, They Cut it Again*, OR. PUB. BROAD. (June 29, 2021), <https://perma.cc/LN7M-VXCC> (discussing the effects of the Oregon Senate eliminating \$9 million from a proposed \$15 million annual harvest tax on the timber industry).

a permanent, taxpayer-supported lobby for high timber harvests.<sup>55</sup> The timber lobby, consisting of not only timber companies but also the O&C counties (with the tacit support of BLM), was highly successful in its persistent push for high harvest levels that enjoyed local citizen support.<sup>56</sup>

### III. CHANGE COMES TO THE PACIFIC NORTHWEST

In the 1980s, both the Forest Service and BLM were forced to reckon with public sentiment surrounding their resource management priorities when the plight of the northern spotted owl, a bird endemic to the Pacific Northwest's disappearing old-growth forests, gained national attention.<sup>57</sup> The northern spotted owl is the very definition of an "indicator species,"<sup>58</sup> since its existence is dependent on the old-growth forest habitat<sup>59</sup> that the timber industry and its allies were quickly liquating.<sup>60</sup> The "timber wars" that ensued included a flurry of lawsuits, court-ordered injunctions against timber harvests, civil disobedience, and species listings under ESA, as the long history of industrial harvesting of the Northwest's public forests came to an end.<sup>61</sup> But not before Congress resisted with two temporary salvage riders that authorized specific timber harvests.<sup>62</sup>

#### A. *The Northern Spotted Owl as an Indicator Species*

By the 1980s, the public had become aware of the environmental consequences of the industrial logging of public forests, thrusting the harvest methods of BLM and the Forest Service into the spotlight.<sup>63</sup> The

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<sup>55</sup> BLM efforts to exempt O&C lands from the NFP can be seen as a result of the O&C counties' successful lobbying. *See infra* text accompanying notes 256–277 (discussing the 2016 BLM RMPs and the ensuing litigation).

<sup>56</sup> *See infra* text accompanying notes 256–277 (discussing the 2016 BLM RMPs and the ensuing litigation).

<sup>57</sup> *See infra* text accompanying notes 64–66, 69–71.

<sup>58</sup> 36 C.F.R. § 219.19(a)(1)(1982).

<sup>59</sup> CHARLES F. WILKINSON, *CROSSING THE NEXT MERIDIAN: LAND, WATER, AND THE FUTURE OF THE WEST* 160 (1992).

<sup>60</sup> *See infra* text accompanying notes 67–71.

<sup>61</sup> *See infra* text accompanying notes 74–81.

<sup>62</sup> *See infra* text accompanying notes 82–86, 198–202.

<sup>63</sup> The post-war timber boom coincided with a recreation boom. For example, total recreational visits to national forests skyrocketed from less than ten million in 1948 to 190 million in 1976. WILKINSON, *supra* note 59, at 137. As a result, public opposition to the Forest Service's silviculture practices—particularly clearcutting—created a heated coalescence of competing values among the agency, recreationalists, and environmentalists. *Id.* The controversy eventually produced litigation, which resulted in a moratorium on clearcutting imposed by *W. Va. Div. of Izaak Walton League of Am. v. Butz*, 367 F. Supp. 422, 433–34 (N.D. W.Va. 1973), *aff'd*, 522 F.2d 945 (4th Cir. 1975). The injunction prompted Congress to enact NFMA. *See supra* text accompanying note 24. BLM also experienced rising competition among its public land users, and thirty years after creating the agency, Congress responded to calls for public land law reform by enacting the Federal Land Management and Policy Act of 1976 (FLPMA), 43 U.S.C §§ 1701–1782 (1976). WILKINSON, *supra* note 59, at 95, 98. FLPMA, BLM's primary governing statute, officially ended the land disposal policies that historically

timber industry was politically dominant in the 1980s in the Pacific Northwest, so those concerned about what they viewed as continued overharvests on federal lands theorized that they could best protect old-growth forests (remaining in significant amounts only on the Forest Service and BLM lands) by publicly campaigning for the preservation of an animal that depended on them for its survival.<sup>64</sup> The northern spotted owl, a small bird endemic to Pacific Northwest's old-growth forests, is an archetypical "indicator species"<sup>65</sup> for old-growth ecosystems because the health of the bird's populations reflects the health of the ancient forests on which it relies.<sup>66</sup>

As the number of remaining old-growth acres continued to plummet, the bird's plight gained public attention in 1986 when the Forest Service proposed "management guidelines" that articulated conservation measures for the species, as required by NFMA and its implementing regulations.<sup>67</sup> The timber industry considered the proposal, which called for a significant reduction of harvests in spotted owl habitat, to be economically

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dominated public land law and codified the agency's multiple-use and sustained-yield missions. *Id.* at 98. However, FLPMA contains a clause stating that should a conflict arise between FLPMA and the OCLA with respect to timber management, the OCLA would prevail, sowing confusion about the limits of FLPMA and the OCLA, although several Interior Solicitor opinions have interpreted the OCLA to be consistent with other laws prescribing multiple use for O&C lands. *E.g.*, Memorandum from Assoc. Solic., Div. Energy & Res., to Dir., Bureau Land Mgmt. (Aug. 27, 1979); Memorandum from Solic., Dep't Interior, to Dir., Bureau Land Mgmt. (Sept. 8, 1981); Memorandum from Dir., Bureau Land Mgmt., to Solic., Dep't Interior (May 14, 1981). But pursuit of multiple-use management on O&C lands conflicted with the financial incentives for the O&C counties to continually endorse high levels of timber harvest on BLM lands. *See supra* text accompanying notes 39, 50–52.

<sup>64</sup> *See* Aaron Scott, *Timber Wars' Episode 3: The Owl*, OR. PUB. BROAD, <https://perma.cc/E7X4-2LY4> (last updated Jan. 19, 2021) (documenting the creation of "the spotted owl theory" that was used to protect old growth forest from unsustainable logging practices on the Forest Service and BLM lands).

<sup>65</sup> *See* 36 C.F.R. § 219.19(a)(1) (1983) ("In order to estimate the effects of each alternative on fish and wildlife populations, certain vertebrate and/or invertebrate species present in the area shall be identified and selected as management *indicator species* and the reasons for their selection will be stated. These species shall be selected because their population changes are believed to indicate the effects of management activities.") (emphasis added).

<sup>66</sup> *See* WILKINSON, *supra* note 59 (explaining that "the spotted owl is the best lens we have through which to view the food chain, which in turn allows us to view and understand the whole old-growth system").

<sup>67</sup> The 1983 NFMA planning rule required the Forest Service to 1) maintain a "viable population" of existing species, 2) select indicator species for which forest plans would establish objectives for the maintenance and improvement of habitat, and 3) identify habitats critical to threatened or endangered species and prescribe measures to prevent their adverse modification. 36 C.F.R. § 219.19 (1983); *see* Seattle Audubon Soc'y v. Evans, 952 F.2d 297, 300 (9th Cir. 1991) (affirming in part and reversing and remanding in part an injunction by the district court against the sale of logging rights in northern spotted owl habitat until the Forest Service complied with NFMA). The "management guidelines" called for 550 spotted owl habitat areas, each including up to 2,200 acres of old-growth forest, but the logging of old-growth was permitted to continue rapidly at the rate of 60,000 acres per year. WILKINSON, *supra* note 59, at 161.

devastating.<sup>68</sup> On the other hand, environmentalists maintained that the proposal was insufficient because, even using conservative estimates, the conservation measures would have resulted in a nearly fifty percent reduction of the bird's remaining habitat within fifty years.<sup>69</sup> The proposal generated some 40,000 letters from the public from proponents and critics alike.<sup>70</sup> During administrative appeals, new scientific evidence emerged that supported the environmentalists' position that the federal government needed to protect significantly more old-growth if the spotted owl was to remain viable as a species.<sup>71</sup>

### *B. The Endangered Species Act Listings and the Zilly Decisions*

Spotted owl advocates were at first reluctant to use the ESA to protect the owl and old-growth forests due to concerns that the political and economic implications of listing the owl would cause Congress to amend or repeal ESA.<sup>72</sup> But after the Forest Service released its spotted owl management guidelines in 1986,<sup>73</sup> it became clear that NFMA would not adequately protect the bird or its habitat. Consequently, in 1987 environmental groups petitioned the U.S. Fish and Wildlife Service (FWS or the Service) to list the spotted owl under ESA.<sup>74</sup>

Under pressure from the timber lobby, the Service denied the petition.<sup>75</sup> Environmentalists challenged the denial in court, and in 1988 in a scathing decision Judge Thomas Zilly declared the decision not to list the bird was arbitrary and ordered the Service to reconsider.<sup>76</sup> The agency

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<sup>68</sup> See WILKINSON, *supra* note 59, at 166 (explaining that loggers' frustrations, while understandable because of the serious social implications of widespread job loss, were misplaced. As the old-growth disappeared, many timber companies had already relocated to the South—taking jobs with them. Also, production became more efficient through mechanization long before concerns about the spotted owl emerged, resulting in thousands of job layoffs. Moreover, allowing the export of unprocessed logs to Asia, instead of requiring processing in the U.S., cost far more jobs than environmental protections).

<sup>69</sup> U.S. DEP'T OF AGRIC., U.S. FOREST SERV., DRAFT SUPPLEMENT TO THE ENVIRONMENTAL IMPACT STATEMENT FOR AN AMENDMENT TO THE PACIFIC NORTHWEST REGIONAL GUIDE: VOL. 1, SPOTTED OWL GUIDELINES at S-10 (1986).

<sup>70</sup> WILKINSON, *supra* note 59, at 161.

<sup>71</sup> *Id.*

<sup>72</sup> See Scott, *Timber Wars' Episode 3: The Owl*, *supra* note 64 (documenting the creation of "the spotted owl theory" that was used to protect old growth forest from unsustainable logging practices on the Forest Service and BLM lands).

<sup>73</sup> U.S. DEP'T OF AGRIC., *supra* note 69, at S-7 to S-8.

<sup>74</sup> See GEORGE C. COGGINS ET AL., FEDERAL PUBLIC LAND AND RESOURCES LAW 714 (7th ed. 2014) (describing the spotted owl's "surge[] into the public consciousness" leading to a petition to list the owl under ESA) (quoting WILKINSON, *supra* note 59, at 161); U.S. GEN. ACCT. OFF., RES., CMTY. AND ECON. DEV. DIV., GAO/RCED-89-79, ENDANGERED SPECIES: SPOTTED OWL PETITION EVALUATION BESET BY PROBLEMS 1 (1989).

<sup>75</sup> COGGINS ET AL., *supra* note 74.

<sup>76</sup> *N. Spotted Owl v. Hodel*, 716 F. Supp. 479, 483 (W.D. Wash. 1988) ("The Court will reject conclusory assertions of agency 'expertise' where the agency spurns un rebutted expert opinions without itself offering a credible alternative explanation. . . . Here, the Service disregarded all the expert opinion on population viability, including that of its own expert,

responded by announcing it would list the bird as threatened and did so in June 1990,<sup>77</sup> although it did not designate critical habitat for the species until 1991, also under court order by Judge Zilly.<sup>78</sup>

### C. The Section 318 Rider: Congressional Intervention

In 1989, the same year that Judge Zilly overturned the Service's denial of the petition to list the spotted owl under ESA, another federal judge sided with environmentalists in a challenge to the Forest Service's failure to protect the species under NFMA and the National Environmental Policy Act of 1969<sup>79</sup> (NEPA).<sup>80</sup> In March 1989, U.S. District Judge William Dwyer preliminarily enjoined all timber sales in western Oregon and Washington national forests until the Forest Service created adequate management guidelines to ensure the owl's viability, complete with NEPA analysis.<sup>81</sup> This judicial victory was soon eclipsed by a congressional backlash.

In October 1989, Congress enacted section 318 of the Department of the Interior and Related Agencies Appropriations Act of Fiscal Year 1990,<sup>82</sup> a timber industry-supported appropriations rider.<sup>83</sup> Section 318—also known as the Hatfield-Adams Northwest Timber Compromise—extended some spotted owl protections,<sup>84</sup> but it also expressly overrode

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that the owl is facing extinction, and instead merely asserted its expertise in support of its conclusions.”).

<sup>77</sup> 50 C.F.R. § 17.11(h) (2020).

<sup>78</sup> 50 C.F.R. § 17.95(b); *N. Spotted Owl v. Lujan*, 758 F. Supp. 621, 629–30 (W.D. Wash. 1991); STEVEN LEWIS YAFFEE, *THE WISDOM OF THE SPOTTED OWL: POLICY LESSONS FOR A NEW CENTURY* 132 (1994); see WILKINSON, *supra* note 59, at 163 (outlining Judge Zilly's rulings leading to proposed critical habitat of 11.6 million acres which was eventually reduced to a final critical habitat designation of 6.9 million acres in 1992).

<sup>79</sup> 42 U.S.C. §§ 4321–4370h (2018).

<sup>80</sup> See *Seattle Audubon Soc'y v. Evans (SAS II)*, 771 F. Supp. 1081, 1083–86, 1096 (W.D. Wash. 1991), *aff'd*, 952 F.2d 297 (9th Cir. 1991) (providing a chronology of the spotted owl litigation that led to Judge Dwyer's region-wide injunction in 1991).

<sup>81</sup> *SAS II*, 771 F. Supp. at 1084; KATHIE DURBIN, *TREE HUGGERS: VICTORY, DEFEAT, & RENEWAL IN THE NORTHWEST ANCIENT FOREST CAMPAIGN* 93 (Mary Anne Stewart ed., 1996).

<sup>82</sup> Act of Oct. 23, 1989, Pub. L. No. 101-121, § 318, 103 Stat. 701, 745–50 (1989).

<sup>83</sup> Congress passed the first of these appropriations riders in December 1987 as part of the Department of Interior appropriations act, Department of the Interior and Related Agencies Appropriations Act of Fiscal Year 1988, Pub. L. No. 100-202, § 314, 101 Stat. 1329, 1329-254 (1987). In response to the near-constant release of new spotted owl studies that indicated a need for more habitat protection, the 1989 rider prohibited judicial review of land management plans for legal challenges based on new information. *Id.* This provision was the subject of numerous court actions, with the District Court concluding that the rider barred NEPA challenges not only to BLM and the Forest Service land management plans, but also to individual timber sales. The Ninth Circuit reversed, but the Supreme Court reversed the appellate court, holding that section 318 did not violate the separation of powers doctrine. *Robertson v. Seattle Audubon Soc'y*, 503 U.S. 429 (1992). See Michael C. Blumm, *Ancient Forests and the Supreme Court: Issuing a Blank Check for Appropriation Riders*, 43 Wash. Univ. J. Urb. & Contemp. L. 35, 41 (1993).

<sup>84</sup> Blumm, *supra* note 83, at 42. Section 318(b)(1) and (2) of the appropriations rider instructed the Forest Service to avoid fragmenting “the most ecologically significant old growth forest stands,” and to minimize fragmentation if harvesting in such areas is necessary



environmental laws and court-ordered injunctions, and ordered the federal land management agencies to sell 7.7 bbf of timber in the next fiscal year.<sup>85</sup> Of the resulting sales, ninety-five percent were in old-growth spotted owl habitat.<sup>86</sup>

#### IV. THE BIRTH OF THE NORTHWEST FOREST PLAN

The spotted owl controversy raged into the 1990s. In 1991, after the expiration of the section 318 rider, Judge Dwyer permanently enjoined timber sales in spotted owl habitat until the Forest Service developed and implemented a legally sound conservation plan.<sup>87</sup> Additional court actions against BLM,<sup>88</sup> the Forest Service, and FWS were mounting while Congress debated old-growth forest protection, economic assistance for displaced workers, and the ESA reauthorization bills.<sup>89</sup> Courts had halted most timber harvest in the Pacific Northwest indefinitely<sup>90</sup> when, in 1993, the new Clinton Administration pledged to resolve the controversy it inherited.<sup>91</sup>

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to meet the required 7.7 bbf timber yield. Pub. L. No. 101-121, § 318, 103 Stat. at 745–46; Blumm, *supra* note 83, at 43. Section 318(b)(6)(B) ordered the Forest Service “to review and revise as appropriate” a supplemental EIS and accompanying record of decision examining the effects of timber sales on the spotted owl in light of new information, and to make any necessary changes by September 30, 1990. Pub. L. No. 101-121, § 318(b)(6)(B), 103 Stat. at 747. Section 318(b)(5) also protected spotted owl habitat on the Forest Service and BLM lands identified in the EIS. *Id.* § 318(b)(5), 103 Stat. at 746–47.

<sup>85</sup> Blumm, *supra* note 83, at 43. Section 318 survived numerous court challenges, after a trip to the Supreme Court, because of the provision that 1) “disclaimed any intent to judge the ‘legal and factual adequacy’ of the Forest Service and the BLM spotted owl plans,” and 2) asserted that the Hatfield-Adams compromise was consistent with the statutory requirements at issue in the ongoing spotted owl cases. *Id.* The Supreme Court upheld the provision, barring further judicial review of the spotted owl plans and causing judges to dismiss multiple ongoing cases. *Robertson v. Seattle Audubon Soc’y*, 503 U.S. 429, 441 (1992). See Blumm, *supra* note 83, at 42–47 (explaining section 318 and the legal actions challenging it).

<sup>86</sup> DURBIN, *supra* note 81, at 110. Some of the sales were so egregious that the agencies themselves withdrew them, but the withdrawn sales returned to relevance five years later when Congress passed another timber rider. *Id.* at 109.

<sup>87</sup> *SAS II*, 771 F. Supp. 1081, 1096 (W.D. Wash. 1991).

<sup>88</sup> *E.g.*, *Portland Audubon Soc’y v. Lujan*, 795 F. Supp. 1489, 1510–11 (D. Or. 1992); *Portland Audubon Soc’y v. Babbitt*, 998 F.2d 705, 707–08 (9th Cir. 1993); *Lane Cnty. Audubon Soc’y v. Jamison*, 958 F.2d 290, 295 (9th Cir. 1992).

<sup>89</sup> YAFFEE, *supra* note 78, at 139–40.

<sup>90</sup> Court injunctions in effect at the time included: *SAS II*, 771 F. Supp. at 1096 (enjoining the Forest Service timber sales region-wide); *Seattle Audubon Soc’y v. Moseley (SAS III)*, 798 F. Supp. 1473, 1484 (W.D. Wash. 1992) (finding unlawful the final environmental impact statement and record of decision on timber sales required by *SAS II* and continuing the region-wide injunction); *Portland Audubon Soc’y v. Lujan*, 795 F. Supp. 1489, 1510–11 (D. Or. 1992); *Portland Audubon Soc’y v. Babbitt*, 998 F.2d 705, 707–08 (9th Cir. 1993) (enjoining BLM from logging operations on land with spotted owl habitat on NEPA grounds); *Lane Cnty. Audubon Soc’y v. Jamison*, 958 F.2d 290, 295 (9th Cir. 1992) (enjoining BLM’s spotted owl management plan and future timber sales pending completion of ESA’s consultation process).

<sup>91</sup> See YAFFEE, *supra* note 78, at 140–41 (“Clinton pledged to convene a multiparty working group to resolve the controversy within the first 100 days of his administration.”).

Those on both sides of the old-growth conflict realized that the status quo could not continue. Environmentalists and timber interests had been embroiled in a cycle of litigation for years and, while battles were won and lost in the courtroom, it seemed that both the spotted owl and loggers were losing outside of the courthouse doors. For the first time in American history, a regionally focused environmental conflict became a flashpoint in a presidential campaign, bringing candidates George H. W. Bush and Bill Clinton to the Pacific Northwest, espousing dueling promises of ending the timber wars.<sup>92</sup> As part of his reelection bid, President Bush told applauding lumber towns that he would solve what many called the “spotted owl problem” by dismantling ESA.<sup>93</sup> Clinton, on the other hand, took no public position on the matter, but assured Pacific Northwest voters that he would hold a summit meeting to achieve comity between economic growth and protecting the environment.<sup>94</sup>

On January 20, 1993, Bill Clinton became the forty-second President of the U.S. True to his word, months later the newly elected President convened a summit in Portland, Oregon, to negotiate a solution to the spotted owl controversy.<sup>95</sup> Clinton established five principles to guide the interagency effort to protect old-growth forest while ensuring continued federal timber harvests: 1) “never forget the human and the economic dimensions of the[] problem[];” 2) “protect the long-term health of [the region’s] forests,” which are a public trust; 3) create a plan that is science-based, ecologically sound, and legally tenable; 4) craft a strategy that provides for a “predictable and sustainable level of timber sales” without “degrade[ing] or destroy[ing] the environment;” and 5) “make the federal government work together and work for you.”<sup>96</sup>

#### A. The Portland Timber Summit

President Clinton’s “Timber Summit” was held in Portland, Oregon just months after his inauguration.<sup>97</sup> The summit was remarkable in that the attendees included the president himself, Vice President Al Gore, Interior Secretary Bruce Babbitt, Agriculture Secretary Mike Espy, Labor

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<sup>92</sup> See Timothy J. McNulty & Carol Jouzaitis, *Bush, Clinton Try to Balance the Environment and Economy*, CHI. TRIB. (Sept. 15, 1992), <https://perma.cc/2ZF5-U5N9> (“Bush, called for a sweeping rewrite of [ESA], under which the northern spotted owl is being protected at the cost of thousands of logging jobs, and held out a threat to veto Interior Department funding unless new provisions protect lumber interests. Clinton, campaigning in Oregon, did not take a position on the owl controversy, but said the government should pursue policies that result in no net loss of logging jobs and help retrain those who have lost their jobs.”).

<sup>93</sup> See *id.* (noting that Bush told supporters he would not extend the ESA unless it addressed job prospects).

<sup>94</sup> *Id.*

<sup>95</sup> YAFFEE, *supra* note 78, at 141.

<sup>96</sup> See NFP RECORD OF DECISION, *supra* note 6, at 3.

<sup>97</sup> YAFFEE, *supra* note 78, at 141.

Secretary Robert Reich, and several other cabinet members.<sup>98</sup> With the nation watching on television, these top level officials convened around a “conference table with scientists, environmentalists, economists, timber industry executives,” loggers, labor union representatives, local officials, and tribal leaders:<sup>99</sup> there were perhaps more cabinet members in one room than any time outside of a State of the Union address. Holding an event of this magnitude for a seemingly local issue<sup>100</sup> was unprecedented.<sup>101</sup>

*B. Forest Ecosystem Management Assessment Team: Science versus Economics and Politics*

At the end of the day-long Timber Summit, President Clinton called for three interagency working groups to devise a workable solution within sixty days.<sup>102</sup> One of them, the Forest Ecosystem Management Assessment Team (FEMAT), led by respected Forest Service biologist Jack Ward Thomas,<sup>103</sup> focused on science-based land management strategies.<sup>104</sup> The other two teams addressed economics, labor and community assistance, and interagency coordination.<sup>105</sup> The three groups had their work cut out

<sup>98</sup> DURBIN, *supra* note 81, at 195.

<sup>99</sup> *Id.*; see YAFFEE, *supra* note 78, at 142. (“The handpicked panelists included twenty-one representatives of timber . . . four fisheries groups, nine environmentalists, six scientists, a handful of local and state government representatives, two economists, two sociologists, one vocational counselor, and the Archbishop of Seattle.”). To reduce political grandstanding, notably absent from the guest list were the Forest Service and BLM officials and the Northwest congressional delegation. DURBIN, *supra* note 81, at 195; see YAFFEE, *supra* note 78, at 142 (“This approach reduced the amount of grandstanding at the conference, offset the need for many participants to defend past actions, and focused many of the presentations on the kind of personal stories cherished by the President and loved by the media.”).

<sup>100</sup> See YAFFEE, *supra* note 78, at 142. (discussing how many viewed the spotted owl controversy narrowly—as an environmentalists versus loggers problem—but President Clinton reframed the issue as about more than the spotted owl, defining the problem as “how to protect a broad range of environmental values within the old-growth ecosystem while dealing humanely within a regional economy that was undergoing a normal process of transformation.”).

<sup>101</sup> Aaron Scott, ‘Timber Wars’ Episode 5: The Plan, OR. PUB. BROAD., <https://perma.cc/7E35-23TB> (last updated Jan. 19, 2021) (explaining that an event that included the president, his or her top officials and myriad stakeholders convening to solve a region-specific problem had never before taken place, nor has the country seen anything like it since).

<sup>102</sup> YAFFEE, *supra* note 78, at 143.

<sup>103</sup> Jack Ward Thomas was an elk biologist, not an ornithologist, but the Forest Service requested that he work on the spotted owl issue because of his expertise in population dynamics. DURBIN, *supra* note 81, at 47. He worked alongside fellow researchers Eric Forsman and Jerry Franklin since the conflict’s inception. YAFFEE, *supra* note 78, at 27, 59. Thomas and Franklin produced pioneering studies on old-growth ecosystems, and Forsman conducted some of the first research on the northern spotted owl for his master’s thesis in 1975, which identified the size and status of its population and named the bird an indicator species. *Id.*; see *infra* text accompanying note 112 (identifying the so-called “Gang of Four” consisting of Jack Ward Thomas, Jerry Franklin, Norm Johnson, and John Gordon).

<sup>104</sup> YAFFEE, *supra* note 78, at 144.

<sup>105</sup> *Id.*

for them: Clinton called for the Plan to 1) address the needs of loggers and their communities, 2) protect forest health, 3) rely on sound science, and 4) provide a sustainable and predictable level of timber consistent with the other principles.<sup>106</sup>

Clinton directed FEMAT, which he called “the centerpiece of the post-conference effort,” to pursue an ecosystem-scale approach to forest management, preserve biodiversity beyond maintaining the viability of the spotted owl, accounting for the connections between various ecosystem segments.<sup>107</sup> Significantly, the president also required that FEMAT address the marbled murrelet,<sup>108</sup> anadromous fish,<sup>109</sup> and other old-growth dependent species.<sup>110</sup> Finally, the Plan had to be economically and politically viable.<sup>111</sup> The team relied heavily on prior analyses produced by the Interagency Scientific Committee (ISC) and the so-called “Gang of Four,” a previously established working group that included several soon-to-be FEMAT appointees.<sup>112</sup> The ensuing FEMAT report identified ten strategies, and President Clinton selected “Option 9” for implementation in

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<sup>106</sup> *Id.* at 143. Any plan constructed by the working groups also had to conform to federal administrative and environmental laws. *Id.* BLM and the Forest Service formed a working group to examine FEMAT options and ensure they were legally sound so they would not be rejected by Judge Dwyer. *Id.* at 144.

<sup>107</sup> *Id.*

<sup>108</sup> In 1992, FWS listed the marbled murrelet, an old-growth dependent seabird that nests in the tops of ancient coastal redwoods, as a threatened species under ESA. Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for the Washington, Oregon, and California Population of the Marbled Murrelet, 57 Fed. Reg. 45,328 (Oct. 1, 1992) (codified at 50 C.F.R. pt. 17).

<sup>109</sup> In pre-conference negotiations, the Northwest congressional delegation tried to keep salmon issues off the Summit’s agenda, “but presentations at the conference made the very logical connection that one segment of the economy may well benefit from changes in other segments of the economy: Salmon stocks could improve as logging declined and management practices changed.” YAFFEE, *supra* note 78, at 142–43.

<sup>110</sup> *Id.* at 144.

<sup>111</sup> As FEMAT’s deliberations began, Clinton’s biodiversity preservation goals quickly proved to conflict with economic and political viability. See DURBIN, *supra* note 81, at 203 (evaluating the growing discontent surrounding Clinton’s goals concerning the Pacific Northwest forests from both political and economic actors leading up to the release of the details of the government report).

<sup>112</sup> In July 1991, a congressional panel, including Thomas and Franklin, Dean of Yale Forestry School, John Gordon, and Norm Johnson, a professor of forest management at Oregon State University—dubbed the “Gang of Four”—examined possible solutions to the controversy. YAFFEE, *supra* note 78, at 145 & 397–99 nn.53 & 82. The “Gang of Four’s” report indicated that nothing less than the protections proposed previously by ISC would keep the spotted owl from going extinct. *Id.* at 397 n.53. Earlier, in 1989, the Forest Service established ISC to help the agency “regain the high ground of technical credibility,” charging the committee with studying spotted owl management strategies. *Id.* at 123. Thomas and Forsman were both members of the committee. *Id.* at 123–24. Its final report called for high levels of habitat protection and was not well received by the agencies. The Bush administration asked government scientists to discredit it, but they could not. *Id.* at 124; WILLIAM DIETRICH, THE FINAL FOREST: THE BATTLE FOR THE LAST GREAT TREES OF THE PACIFIC NORTHWEST 224 (1992). Although Congress never enacted the NFP as legislation, ISC’s recommendations lent legitimacy to scientists’ calls for preservation and to the Service’s decision to list the spotted owl in 1990. YAFFEE, *supra* note 78, at 126.

July 1993.<sup>113</sup> “Option 9” was the only strategy predicted to provide an annual timber yield greater than 1.0 bbf, while appearing to satisfy ecological objectives.<sup>114</sup>

Over one hundred researchers—including biologists, social scientists, and economists—worked tirelessly for ninety days to carry out President Clinton’s promise to end the timber wars.<sup>115</sup> The result was the NFP: the world’s first large-scale ecosystem management plan.<sup>116</sup> Before he announced his strategy, Clinton stated, “I will try to be fair to the people whose livelihoods depend on this, and fair to the environment that we are all obligated to maintain.”<sup>117</sup> But he predicted that neither side would be happy with the solution.<sup>118</sup> He was right.

### C. The Dwyer Decision

The Portland Timber Summit produced a landscape-scale ecosystem management plan that covered 24.4 million acres of federal land and aimed to preserve and restore the biodiversity of federal forests, while establishing a goal of 1.1 bbf of timber annually for harvest.<sup>119</sup> The NFP attempted to accomplish these goals through land allocations, an Aquatic Conservation Strategy (ACS), requirements to survey forests for certain rare wildlife species before harvest, and a monitoring program.<sup>120</sup> But, as President Clinton foresaw, neither environmentalists nor the timber industry were satisfied with it.

The NFP met its judicial fate in December 1994 in the courtroom of Judge William Dwyer.<sup>121</sup> Judge Dwyer marveled at the unparalleled effort

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<sup>113</sup> See YAFFEE, *supra* note 78, at 145–47, 149 (explaining that most of the ten options were based largely on strategies identified by the “Gang of Four,” and only options one through five and nine would satisfy the objective of protecting old-growth dependent species. “Option 9” was projected to cost the least amount of jobs and was constructed at the end of the FEMAT process).

<sup>114</sup> “Option 9’s” harvest levels were not the maximum harvest levels considered, but they were the highest that also met viability concerns. *Id.* at 146. The FEMAT report predicted that “Option 9” could supply over 1.0 bbf of timber annually if the strategy incorporated adaptive management. *Id.*; U.S. DEP’T OF AGRIC. ET AL., FOREST ECOSYSTEM MANAGEMENT: AN ECOLOGICAL, ECONOMIC, AND SOCIAL ASSESSMENT, REPORT OF THE FOREST ECOSYSTEM MANAGEMENT ASSESSMENT TEAM 29–30, 52 (July 1993) [hereinafter FEMAT REPORT].

<sup>115</sup> FEMAT REPORT, *supra* note 114, at i, v–xi.

<sup>116</sup> See *infra* text accompanying notes 130–133.

<sup>117</sup> Timothy Egan, *Clinton, Planning Forest Conference, Hope to Free Logjam in Northwest*, N.Y. TIMES (Mar. 27, 1993), <https://perma.cc/54U5-R9WX>.

<sup>118</sup> *Id.*; Scott, ‘Timber Wars’ Episode 5: The Plan, *supra* note 101.

<sup>119</sup> See Lauren M. Rule, *Enforcing Ecosystem Management under the Northwest Forest Plan: The Judicial Role*, 12 FORDHAM ENV’T L. J. 211, 222–23 (2000) (detailing the scope of land usage and expected timber harvests in the NFP); YAFFEE, *supra* note 78, at 58–59 (explaining the basic principles of conservation biology, and how the relatively young discipline provided land managers with a new understanding of how to manage forests for biodiversity).

<sup>120</sup> Rule, *supra* note 119, at 222; see discussion *infra* Part V (detailing the NFP’s provisions).

<sup>121</sup> Judge William Dwyer (1929–2002) had a reputation for intelligence, fairness, and integrity. John Caldbick, *Dwyer, William L. (1929–2002)*, HISTORYLINK.ORG (Jan. 31, 2013),

of the Administration to resolve such a complex problem, and he upheld the Plan as consistent with ESA, NEPA, and NFMA.<sup>122</sup> Timber industry lawyers challenged the agencies' authority to create an ecosystem management plan,<sup>123</sup> but Judge Dwyer observed that nothing short of an ecosystem-scale approach to the issue would comply with applicable environmental laws.<sup>124</sup> He remarked that relevant statutes and prior court orders required BLM, the Forest Service, and FWS to work collaboratively to meet environmental and resource-use objectives.<sup>125</sup> He also stressed that despite the unknowns inherent in forecasting the myriad effects of a landscape-scale plan, the Plan appeared to be the best vehicle to meet the legal and scientific needs of contemporary forest management.<sup>126</sup>

Dwyer was satisfied by the efforts of the federal agencies he castigated in previous years for what he perceived to be a gross mishandling of a complex social issue.<sup>127</sup> He had noted in prior litigation that no individual

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<https://perma.cc/2WDU-EZZ8>. He was nominated for a seat on the federal District Court for the Western District of Washington by President Ronald Reagan in 1987. *Id.* As an attorney, Dwyer—who was born and raised in Washington state—had represented a wide variety of clients, including a state representative who had been defamed by right wing propaganda, a Black Panther captain, wrongful eviction victims, and even King County in a suit that is primarily the reason that Seattle has maintained a professional baseball team. *Id.* Many of the cases he took as an attorney set important precedents and informed policy decisions, and the same was true for his decisions as a judge. Notable cases tried in Judge Dwyer's courtroom included “[t]he nation’s first murder trial under a federal law [that] ma[de] product tampering a crime,” a suit that settled ownership rights of the late rock n’ roll legend Jimi Hendrix’s music, an employment class action against tech giant Microsoft that resulted in a \$97 million settlement, and an appeal in which he set aside the death penalty for a defendant whose counsel performed too poorly to satisfy his Sixth Amendment right to counsel. *Id.* Judge Dwyer was searching and exacting, and did not shy away from complex environmental cases. He presided over much of the spotted owl litigation that led to the NFP, as well as the subsequent litigation challenging it. *Id.*; see *supra* text accompanying notes 81, 106.

<sup>122</sup> *Seattle Audubon Soc’y v. Lyons (SAS IV)*, 871 F. Supp. 1291, 1300 (W. D. Wash. 1994), *aff’d*, 80 F.3d 1401 (9th Cir. 1996).

<sup>123</sup> *Id.* at 1310–11. A plaintiff in the case, the Northwest Forest Resource Council, is a trade association representing loggers, mill owners, and others in the timber industry, now known as the American Forest Resources Council (AFRC). *Id.* at 1300. AFRC is involved in the ongoing litigation over timber harvests on O&C lands. See *infra* text accompanying notes 275–283.

<sup>124</sup> *SAS IV*, 871 F. Supp. at 1310–11. Environmentalists contended that the Plan was not protective enough and asked the court to remand the matter to the agencies and in the meantime to enjoin all timber sales in spotted owl habitat. *Id.* at 1300.

<sup>125</sup> *Id.* at 1311. In 2016, BLM revised its governing RMPs to remove most O&C lands from the obligations of the NFP. 2016 RMP, *supra* note 12, at 2, 28. See *infra* text accompanying notes 257–277 (discussing the revised RMPs and the ensuing litigation).

<sup>126</sup> *SAS IV*, 871 F. Supp. at 1303.

<sup>127</sup> *Id.* at 1300. Judge Dwyer warned, however, that “any more logging sales than the plan contemplates would probably violate the laws” and “[w]hether the plan and its implementation w[ould] remain legal depend[ed] on future events and conditions.” *Id.* Concerning the allegations that the agencies violated NEPA, Dwyer stated that “[c]areful monitoring will be needed to assure that the plan, as implemented, maintains owl viability. New information may require that timber sales be ended or curtailed. But on the present record, the F[inal Supplemental] EIS adequately discloses the risks and confronts the criticisms as required by NEPA.” *Id.* at 1321.

species caused the timber industry's decline: long before the small reclusive spotted owl took the national stage, loggers lost jobs due to mechanization and the nation's increased export of raw logs.<sup>128</sup> To Judge Dwyer, the question was when—not if—the industry would need to respond to changed societal conditions and values.<sup>129</sup> He concluded that the NFP was a lawful step in the right direction.

## V. THE NORTHWEST FOREST PLAN'S PROVISIONS

The NFP allocates federal land in seventeen national forests and six national parks<sup>130</sup> into seven categories, each imposing different management standards.<sup>131</sup> The Plan includes the ACS for managing aquatic processes and habitat as well as a survey and management (S&M) program requiring land managers to conduct regular surveys, buffer, and monitor for rare wildlife before going forward with potentially harmful activities.<sup>132</sup> The Plan also incorporates principles of adaptive management and a regional monitoring program.<sup>133</sup>

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<sup>128</sup> *SAS II*, 771 F. Supp. 1081, 1095 (W.D. Wash. 1991).

<sup>129</sup> See *supra* text accompanying notes 87, 128.

<sup>130</sup> But see *supra* text accompanying note 125, *infra* text accompanying notes 255–257 (explaining that BLM removed four out of its seven districts in the plan area from the NFP's requirements in its 2016 RMPs). The NFP called for interagency coordination, but it did not expressly require coordination with counties. NFP RECORD OF DECISION, *supra* note 6, at 53–54. See Michael C. Blumm & James A. Fraser, “Coordinating” with the Federal Government: Assessing County Efforts to Control Decisionmaking on Public Lands, PUB. LAND & RESOURCES L. REV., Sept. 2017, at 1, 4 (explaining that county directives that conflict with federal land management plans are preempted by federal law and unenforceable while producing increased hostility between rural residents and the federal government).

<sup>131</sup> NFP RECORD OF DECISION, *supra* note 6, at 6–7. The NFP applied to BLM lands managed under the OCLA until 2016, when BLM revised its governing RMPs to remove itself from the NFP's obligations. See *supra* text accompanying note 125. Although in *Headwaters*, 914 F.2d 1174, 1184 (9th Cir. 1990), the Ninth Circuit interpreted the OCLA as a dominant-use statute prioritizing timber production, more recent case law and a review of the legislative history reveals that the OCLA is in fact a multiple-use statute. See Blumm & Wigington, *supra* note 35, at 22 (noting that the OCLA “articulated ‘multiple use’ and sustained yield themes”); Scott & Brown, *supra* note 39, at 295 (“*Headwaters* is the high-water mark, establishing the most conservative interpretation of the OCLA, and curtailing—erroneously—the BLM's authority to manage O&C lands for non-timber purposes. The courts also have not allowed the BLM or the timber industry to use the OCLA to avoid following NEPA, the E[SA], and other federal environmental statutes, thus limiting the effect of *Headwaters*. Because the courts have not reexamined the assumptions upon which *Headwaters* is based, the underlying fallacy regarding the OCLA's ‘dominant use’ prescription remains”); see also *infra* text accompanying notes 388–390.

<sup>132</sup> NFP RECORD OF DECISION, *supra* note 6, at 9–11.

<sup>133</sup> U.S. DEP'T OF AGRIC. ET AL., STANDARDS AND GUIDELINES FOR MANAGEMENT OF HABITAT FOR LATE-SUCCESSIONAL AND OLD-GROWTH FOREST RELATED SPECIES WITHIN THE RANGE OF THE NORTHERN SPOTTED OWL E-1, E-12 (1994) [hereinafter NFP STANDARDS & GUIDELINES].

*A. Land Allocations*

Congressionally-reserved allocations comprise over 7.3 million acres (thirty percent of the federal land in the NFP); the Plan prohibits timber harvests in these areas, which include wild and scenic river corridors, wilderness areas, and national parks and monuments.<sup>134</sup> Late-successional reserves (LSRs) amount to slightly more than 7.4 million acres (thirty percent of the federal land in the NFP), which are reserved from most programmed timber harvest.<sup>135</sup> The Plan generally restricts management activities in LSRs unless the purpose is to enhance the development of old-growth forest characteristics.<sup>136</sup> Managed LSRs comprise over 102,000 acres (one percent), which are dedicated to forest restoration and maintenance to achieve optimum levels of late-successional and old-growth stands where regular wildfire occurs.<sup>137</sup> Administratively-withdrawn areas amount to over 1.47 million acres (six percent), including lands previously removed from timber harvest for recreation, visual protection, backcountry uses, or because timber harvest is infeasible.<sup>138</sup> Riparian reserves comprise roughly 2.6 million acres (eleven percent), providing buffers along waterways to enhance habitat for riparian species and provide protected dispersal corridors for terrestrial species.<sup>139</sup> Adaptive management areas (AMAs) include over 1.5 million acres (six percent), allowing for testing new management strategies and integration of ecological, economic, and other social and community objectives.<sup>140</sup> The Plan envisioned that most of the timber harvest would occur outside of these reserved areas in “matrix lands,” which include about four million acres (sixteen percent).<sup>141</sup>

When implemented in 1994, the land management agencies estimated that the NFP could result in the harvest of roughly 1.1 bbf of timber annually, although meeting that goal quickly proved unrealistic.<sup>142</sup> Timber interests subsequently labeled the Plan a “broken promise,” construing the

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<sup>134</sup> NFP RECORD OF DECISION, *supra* note 6, at 6. The percentages provided above reflect approximate acreages for each allocation after BLM removed itself from the Plan. *See supra* text accompanying note 125 (explaining BLM’s withdrawal from the Plan).

<sup>135</sup> NFP RECORD OF DECISION, *supra* note 6, at 6.

<sup>136</sup> *Id.*; *see supra* text accompanying note 44 (describing old-growth characteristics).

<sup>137</sup> NFP RECORD OF DECISION, *supra* note 6, at 6. Managed LSRs possess known spotted owl activity centers and unmapped protection buffers designed to protect rare species. Silviculture and fire-hazard reduction treatments are permissible uses on these acres. *Id.* at 68.

<sup>138</sup> *Id.* at 7.

<sup>139</sup> *Id.*

<sup>140</sup> *Id.* at 6. The Plan did authorize some commercial timber harvests in AMAs, but with an emphasis on ecological objectives. *Id.*; *see also infra* text accompanying notes 173–174 (explaining that forest managers eventually treated AMAs similarly to matrix lands, the allocation that prioritizes timber harvest).

<sup>141</sup> NFP RECORD OF DECISION, *supra* note 6, at 7.

<sup>142</sup> *Id.* at 24. *See COGGINS ET AL.*, *supra* note 74, at 726 (“From the beginning, the timber harvest, which had averaged about four b[bf] annually during the 1980s, failed to meet the plan’s annual goal of one b[bf] . . . much less than Interior Secretary Babbitt’s estimate of two b[bf] in the first year.”).



1.1 bbf estimate as a firm commitment instead of an estimate of potential production.<sup>143</sup>

### *B. The Aquatic Conservation Strategy*

The ACS is a science-based inquiry into the effect of proposed management activities on the riparian environment.<sup>144</sup> Its goal is to restore and maintain the health of aquatic ecosystems within the range of the spotted owl and of Pacific Ocean anadromy by continuously monitoring watershed conditions and protecting riparian areas from the effects of management activities.<sup>145</sup> The provision applies to all federal lands within the Plan area,<sup>146</sup> even those protected from logging.<sup>147</sup> The ACS is concerned with more than site-specific effects of proposed actions, focusing on four spatial scales—region, river basin, watershed, and individual sites—and contains four main components: riparian reserves, key watersheds, watershed analysis, and watershed restoration.<sup>148</sup>

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<sup>143</sup> COGGINS ET AL., *supra* note 74, at 727; *see also* Spies et al., *supra* note 1, at 516 (“[P]lanners of timber outputs under the plan ‘expected much of it to come from old-growth trees using methods somewhat similar to clearcutting . . . They based their calculations on assumptions about public acceptability that didn’t hold up.’”). Notably, the Plan relied heavily on adaptive management to accomplish its harvest goals, but the agencies did not implement adaptive management as FEMAT had envisioned. *See infra* text accompanying notes 166–174.

<sup>144</sup> U.S. DEP’T OF AGRIC. ET AL., FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT ON MANAGEMENT OF HABITAT FOR LATE-SUCCESSIONAL AND OLD-GROWTH FOREST RELATED SPECIES WITHIN THE RANGE OF THE NORTHERN SPOTTED OWL, at B-81 (1994) [hereinafter FSEIS].

<sup>145</sup> The ACS seeks to both maintain and restore 1) “distribution, diversity, and complexity of watershed and landscape-scale features to ensure protection of the aquatic systems to which species” are adapted; 2) “spatial and temporal connectivity within and between watersheds;” 3) “physical integrity;” 4) “[w]ater quality;” 5) “sediment input, storage, and transport;” 6) “instream flows;” 7) “timing, variability, and duration of floodplain inundation and water table elevation in meadows and wetlands;” 8) riparian plant-species “composition and structural diversity;” and 9) “habitat to support well-distributed populations of native,” aquatic and riparian-dependent species of plants, invertebrates, and vertebrates. *Id.* at B-82 to B-83. FEMAT emphasized that the affected aquatic ecosystems could show improvements in ten to twenty years, but that it might take up to a century to meet all objectives because the approach is based on natural disturbance processes that operate on very long time-frames. *Id.* at B-82.

<sup>146</sup> When BLM revised its Western Oregon land management plans in 2016, which effectively removed those lands from the NFP’s jurisdiction, the agency included in those revisions significant reductions in watershed protections on BLM lands. BLM asserted that the revised plans “address[] all four components of the A[CS] . . . but ha[ve] modified and updated several components,” including reducing buffer widths along streams to make more land available for timber harvest. The modified ACS applies only instream: it does not apply across the watershed to larger watershed processes, such as maintaining peak flows that are influenced by upland vegetation manipulation. 2016 RMP, *supra* note 12, at 25; U.S. DEP’T OF THE INTERIOR, BUREAU OF LAND MGMT., SOUTHWESTERN OREGON RECORD OF DECISION AND RESOURCE MANAGEMENT PLAN 24, 25 (2016).

<sup>147</sup> FSEIS, *supra* note 144.

<sup>148</sup> NFP RECORD OF DECISION, *supra* note 6, at 9; FSEIS, *supra* note 144, at B-82.

The ACS imposes buffers around water features to protect them from adverse effects of management activities within “riparian reserves.”<sup>149</sup> In these reserves, agencies must meet specific requirements for timber harvesting, “road construction and maintenance, grazing, recreation, minerals management, fire/fuels management, research, and restoration activities.”<sup>150</sup> Designated “key watersheds” primarily serve as refugia “for at-risk anadromous salmonids, bull trout, . . . resident fish,” and other aquatic species.<sup>151</sup> “Watershed analysis” requires characterization of “aquatic, riparian, and terrestrial features within a watershed,” and is used to refine riparian “boundaries, prescribe land management activities, . . . and develop monitoring programs.”<sup>152</sup> “Watershed restoration” is a long-term program designed to restore degraded watershed habitat.<sup>153</sup>

Watershed analysis is a key component of the ACS because it establishes a baseline of existing conditions and physical and biological processes in watershed ecosystems upon which land managers must base watershed restoration efforts.<sup>154</sup> Watershed analysis supplements the

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<sup>149</sup> Buffer width and management requirements vary depending on the nature of the waterway. NFP RECORD OF DECISION, *supra* note 6, at 9. Categories include “[f]ish-bearing streams,” “[p]ermanently flowing nonfish-bearing streams,” “[l]akes and natural ponds,” “[c]onstructed ponds and reservoirs and wetlands greater than one acre,” “[s]easonally flowing or intermittent streams,” “[w]etlands less than one acre and . . . unstable areas.” *Id.*

<sup>150</sup> *Id.* Specific requirements for land management in riparian reserves include allowing timber harvest only in “catastrophic events such as fire, flooding, volcanic, wind, or insect damage,” and allowing salvage and fuelwood cutting only if required to attain the ACS objectives. NFP STANDARDS & GUIDELINES, *supra* note 133, at C-31 to C-32. Silviculture practices may be applied “to control stocking, reestablish and manage stands, and [to attain] vegetation characteristics” required to meet the ACS objectives. *Id.* at C-32. Requirements for road management include minimizing road construction in riparian reserves and meeting criteria to ensure that reaching the ACS objectives will not be adversely affected. *Id.* at C-32 to C-33. Managers must also provide fish passage at all fish-bearing or potentially fish-bearing streams and maintain road culverts. *Id.* at C-33. Grazing practices must be adjusted or eliminated for consistency with the ACS, and minerals operations require reclamation plans. *Id.* at C-33 to C-34.

<sup>151</sup> NFP RECORD OF DECISION, *supra* note 6, at 10. The Plan classified key watersheds as Tier 1, Tier 2, or non-key. *Id.* Tier 1 watersheds prioritize at-risk species and Tier 2 watersheds contain no at-risk fish but have high water quality. *Id.*; see Michael C. Blumm, *The Amphibious Salmon: The Evolution of Ecosystem Management in the Columbia River Basin*, 24 *ECOLOGY L. Q.* 653, 669–70 (1997) (describing the ACS provisions).

<sup>152</sup> NFP RECORD OF DECISION, *supra* note 6, at 10.

<sup>153</sup> *Id.*

<sup>154</sup> See Blumm, *supra* note 151, at 670 (calling watershed analysis “the linchpin in the N[FP]”). Like NEPA’s requirement that federal land managers follow specific procedures to evaluate and disclose the environmental effects of proposed actions, the ACS prescribes procedures land managers must follow when planning projects in aquatic areas. NFP RECORD OF DECISION, *supra* note 6, at 9–11. The ACS requires land managers to evaluate existing and proposed projects in light of habitat maintenance and improvement objectives. Further, a proposed or existing action cannot “retard or prevent attainment of [those] objectives.” FSEIS, *supra* note 144, at 3&4-68. Therefore, the ACS amounts to a kind of substantive NEPA, requiring not only process, but also environmentally beneficial results. *Id.* at B-83 to B-84 *but cf.* 40 C.F.R. § 1500.1 (2019) (NEPA does not require particular results but instead environmental analysis and public disclosure); see Rule, *supra* note 119, at 223–24 (citing to the NFP Record of Decision, the Rule article states that “[w]hile the FEMAT report stated

NEPA process because it often provides the data used in site-specific NEPA analyses.<sup>155</sup>

### C. Survey and Manage

The S&M requirement applies to all ground-disturbing activities within all land allocations—whether a timber harvest on matrix land or a restoration project in a LSR aiming to promote the health of at-risk wildlife populations.<sup>156</sup> When S&M species may be present in an area in which management activities will occur, land managers must conduct on-the-ground, site-specific surveys for hundreds of rare species,<sup>157</sup> as well as create protective buffers around wildlife habitat when management recommendations for the species so require.<sup>158</sup> In addition to conducting surveys prior to ground-disturbing activities, managers also must conduct regular “strategic surveys” to gather information at the landscape, population, or site-specific scale for each S&M species.<sup>159</sup>

The S&M provisions proved quite consequential because of the expense of the surveys it required and the limitations the program placed

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that the most comprehensive analyses are conducted at the watershed level, the report stressed that ‘information collected at the finer scales provides early warning of likely future problems at the broader scales.’”). Watershed analysis would seem to be such an integral part of the NEPA process that it should be included when the Biden administration revises the NEPA regulations. See Kelsey Brugger, *CEQ Postpones Agency Deadline for Trump NEPA Rules*, GREENWIRE (June 28, 2021), <https://perma.cc/XSK3-W7GK> (the CEQ announced that revising the regulations implementing NEPA was a priority).

<sup>155</sup> See Blumm, *supra* note 151, at 670 (describing the interaction between watershed analyses and NEPA and noting that “[t]he plan also authorizes public participation, although the degree of public involvement will vary depending on the issue”).

<sup>156</sup> NFP STANDARDS & GUIDELINES, *supra* note 133, at C-4 (including populations of mammals, amphibians, “bryophytes, mollusks, vascular plants, fungi, lichen, and arthropods”). Species protected by the S&M provision must meet three criteria: 1) occur within or “close to the NFP area and have potentially suitable habitat within [it];” 2) “be closely associated with late-successional or old-growth forest[s];” and 3) appear that the reserve system and other provisions of the NFP will be insufficient to protect the species. U.S. DEPT OF AGRIC. ET AL., RECORD OF DECISION AND STANDARDS AND GUIDELINES FOR AMENDMENTS TO THE SURVEY AND MANAGE, PROTECTION BUFFER, AND OTHER MITIGATION MEASURES STANDARDS AND GUIDELINES 3 (2001) [hereinafter 2001 AMENDMENTS ROD].

<sup>157</sup> NFP STANDARDS & GUIDELINES, *supra* note 133, at C-5. The Plan placed species into three different categories: 1) “[p]re-[d]isturbance [s]urveys [p]ractical,” 2) “[p]re-[d]isturbance [s]urveys [n]ot [p]ractical,” and 3) “[s]tatus [u]ndetermined.” Survey prescriptions aim to ascertain whether a species is rare or uncommon. 2001 AMENDMENTS ROD, *supra* note 156, at 7.

<sup>158</sup> The Plan’s protective buffers seek to mitigate the effects of timber harvests on specified rare species located outside of reserves by creating no-harvest zones in areas where “protection buffer . . . species” are found. U.S. DEPT OF AGRIC. ET AL., FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT FOR AMENDMENT TO THE SURVEY & MANAGE, PROTECTION BUFFER, AND OTHER MITIGATION MEASURES STANDARDS AND GUIDELINES, at vii (2000) [hereinafter S&M AMENDMENT FSEIS]; FSEIS, *supra* note 144, at B-63.

<sup>159</sup> 2001 AMENDMENTS ROD, *supra* note 156, at 9–10; S&M AMENDMENT FSEIS, *supra* note 158, at 50.

on timber harvests.<sup>160</sup> In 2001, BLM and the Forest Service amended the provision because of numerous legal challenges<sup>161</sup> and implementation difficulties,<sup>162</sup> which encouraged the recently elected Bush Administration to attempt to increase timber harvests.<sup>163</sup> The amendment sought to reduce the administrative burden of the S&M program by removing seventy-two species from the rare species list, while endorsing the agencies' authority to add and remove species from the list,<sup>164</sup> in another attempt to amend the S&M program to "streamline" its implementation.<sup>165</sup>

#### *D. Adaptive Management and Monitoring*

The NFP incorporated adaptive management in order to provide flexibility and encourage land managers to develop new management approaches.<sup>166</sup> "The Plan calls for agencies to monitor their actions, provid[e] feedback to land managers" and the public, and use the information acquired to inform whether individual management plans should be revised to meet the NFP's objectives.<sup>167</sup> As part of its adaptive management strategy, the NFP established ten AMAs: a land allocation designed to encourage land managers to experiment with non-traditional approaches to achieve the Plan's ecological, economic, and social

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<sup>160</sup> See Blumm & Wigington, *supra* note 35, at 33 ("Largely due to the S&M requirements, the amount of timber available for commercial harvest plummeted from 4.5 b[bf] per year in the late 1980s to approximately 0.96 b[bf] per year in the 2000s.").

<sup>161</sup> See *infra* text accompanying notes 205–222 (discussing the legal challenges to the S&M provision).

<sup>162</sup> For example, in some instances the agencies simply lacked the resources required to conduct S&M, which are time- and cost-intensive. Spies et al., *supra* note 1, at 512–13.

<sup>163</sup> The agencies first attempted to eliminate the S&M provision altogether, which drew lawsuits from conservationists and the timber industry. Complaint, Douglas Timber Operators v. Sec'y of Agric., No. 6:01-06378-AA (D. Or. 2001); Complaint, Oregon Nat. Res. Council Fund v. Link, No. 6:02-3051-AA (D. Or. 2002). The Bush administration settled the litigation by agreeing to prepare a revised supplemental EIS on removing or modifying the S&M provisions. See COGGINS et al., *supra* note 74, at 727; *Regional Ecosystem Office (REO) - Northwest Forest Plan: Survey and Manage*, U.S. FOREST SERV., REGIONAL ECOSYSTEM OFFICE (REO), <https://perma.cc/95F3-BLNF> (last visited Jan. 31, 2021) (providing a brief history of S&M amendments and links to associated planning documents); see also *infra* text accompanying notes 156–61, 166–68, 202–09, 214–18, 223–27, 235–239 (describing legal challenges to the NFP and to BLM's withdrawal from the Plan).

<sup>164</sup> S&M AMENDMENTS ROD, *supra* note 156, at 6. The annual species-review process amendment applied information from strategic surveys and confirmed the agencies' ability to add or remove species from the S&M list. *Id.* at 7–8. Even before the S&M amendments, the agencies removed species from S&M. NFP STANDARDS & GUIDELINES, *supra* note 133, at C-6.

<sup>165</sup> See *infra* text accompanying notes 204–222 (explaining attempts to change the S&M program).

<sup>166</sup> NFP STANDARDS & GUIDELINES, *supra* note 133, at C-21, E-12.

<sup>167</sup> Rule, *supra* note 119, at 227; see NFP STANDARDS & GUIDELINES, *supra* note 133, at E-15 (explaining that if agencies decide that plan adjustments are needed, revisions will often "be within the realm of administrative change," but others may need to satisfy NEPA requirements, and some may require statutory changes).

objectives.<sup>168</sup> FEMAT envisioned that managers would test nontraditional forest management strategies by implementing innovative forest management practices, such as pursuing different silviculture treatments and rotation ages to increase late-successional forest characteristics important to wildlife, experimenting with habitat restoration techniques, and assessing the environmental and economic sustainability of various harvest levels and methods.<sup>169</sup>

The agencies ultimately discontinued active adaptive management: although the FEMAT report considered the program the cornerstone of the Plan's strategy, it acknowledged that much of its success relied on forest managers pursuing voluntary measures that the agencies lacked the resources—or even the motivation—to undertake.<sup>170</sup> In 2006, the Forest Service released a ten-year review of the NFP, identifying four main factors contributing to the agencies' decision to discontinue the program, particularly in AMAs: 1) forest manager autonomy was limited, making experimentation difficult; 2) some forest managers saw adaptive management as a public participation process only to test the Plan's collaborative goals, rather than as an important strategy for meeting the NFP's overarching objectives; 3) managers were risk-averse, leading to excessive caution in testing nontraditional methods; and 4) sufficient resources were not available to implement adaptive management as the NFP envisioned.<sup>171</sup>

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<sup>168</sup> NFP STANDARDS & GUIDELINES, *supra* note 133, at C-21 to C-22; NFP RECORD OF DECISION, *supra* note 6, at 28. FEMAT also designed AMAs as an avenue for testing wildfire and fuels management strategies and established most AMAs in parts of the region affected by reduced timber harvest on federal lands. NFP STANDARDS & GUIDELINES, *supra* note 133, at C-21. This allocation aimed to encourage managers to engage with those forest communities in the hope that the AMAs would be managed collaboratively through extensive public participation to increase community resiliency in the face of reduced harvests. *See id.* at D-5 to D-6, D-8 to D-9 (inferring that jobs in the forest industry and forest education will increase economic resilience).

<sup>169</sup> *See* FSEIS, *supra* note 144, at 2-61 (“It is hoped that localized, idiosyncratic approaches that may achieve the conservation objectives of the selected alternative can be pursued. These approaches rely on the experience and ingenuity of resource managers and communities rather than traditionally derived prescriptive approaches that are generally applied in managing the federal forests.”); *see also* NFP RECORD OF DECISION, *supra* note 6, at 28 (describing one of the approaches land managers could take under AMAs guidelines).

<sup>170</sup> *See* NFP RECORD OF DECISION, *supra* note 6, at 28 (“These AMAs offer the opportunity for creative, voluntary participation in forest management activities by willing participants. We recognize that this will take time, effort, and a good-faith commitment to the goal of improved forest management. Many of the potentially participating communities and agencies have different capabilities for joining this effort. Our approach to implementing this initiative will recognize and reflect these differences as we seek to encourage and support the broadest possible participation.”) (emphasis added).

<sup>171</sup> The review suggested that “regulatory agencies could have been more thoughtfully engaged in the learning efforts.” U.S. DEP’T OF AGRIC. ET AL., PNW-GTR-651, NORTHWEST FOREST PLAN: THE FIRST 10 YEARS (1994-2003): A SYNTHESIS OF MONITORING AND RESEARCH RESULTS xii (2006) [hereinafter THE FIRST 10 YEARS]; *see id.* at xiii (explaining that the program had some successes both in AMAs and outside of them, and asserting that “[m]ost evolved from successful researcher-manager partnerships, and some involved areas with a history of collaboration”); George H. Stankey et al., *Adaptive Management and the Northwest*

Although a basic purpose of adaptive management is to foster the knowledge needed to manage a complex ecosystem, a lack of ecological and socioeconomic baseline knowledge led to technical restraints that significantly stymied the NFP implementation process.<sup>172</sup> By 2006, the agencies were managing a majority of AMAs like they managed matrix land,<sup>173</sup> the Plan's land allocation that prioritizes timber harvest.<sup>174</sup> Still, the agencies continued to implement other formal and informal forms of adaptive management, such as through the S&M annual species review process and the Plan's overarching monitoring requirements.<sup>175</sup>

The NFP's monitoring program is perhaps the largest of its kind in the world,<sup>176</sup> and FEMAT considered the program essential to the Plan's success.<sup>177</sup> Agencies conduct monitoring at multiple levels and scales, from site-specific monitoring related to particular projects to region-wide monitoring, and the resulting information helps to indicate whether managers are implementing the NFP's standards and guidelines.<sup>178</sup> Monitoring is part of every NFP provision, and is particularly important to track ecological conditions and the Plan's adaptive management scheme.<sup>179</sup> FEMAT warned that, if not carefully planned, monitoring could become cost-prohibitive,<sup>180</sup> and perhaps not always successful.<sup>181</sup>

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*Forest Plan: Rhetoric and Reality*, J. FORESTRY, Jan. 2003, at 40, 43–44 (detailing the confusion surrounding how managers should manage AMAs and citing lack of funding for the program). In part because of a lack of trust between the Forest Service and environmental groups, when the agency did attempt to engage with communities for meaningful collaboration, success was limited. Community members often cited frustrations that both timber interests and environmental groups dominated the public process and had disproportionate influence over decision makers, and some individuals also expressed concerns that the Forest Service was not sincerely interested in public involvement, lamenting that the agency made little effort to translate complex technical language or to build relationships with the community. U.S. DEP'T OF AGRIC. ET AL., PNW-RP-567, LEARNING TO MANAGE A COMPLEX ECOSYSTEM: ADAPTIVE MANAGEMENT AND THE NORTHWEST FOREST PLAN 113–18 (2006) [hereinafter LEARNING TO MANAGE].

<sup>172</sup> LEARNING TO MANAGE, *supra* note 171, at 33–34.

<sup>173</sup> See Jack Ward Thomas et al., *The Northwest Forest Plan: Origins, Components, Implementation Experience, and Suggestions for Change*, 20 CONSERVATION BIOLOGY 277, 283 (2006) (showing that the matrix's sixteen percent of NWFP land is greater than the AMA's six percent of land. This means that matrix land was primarily where timber harvests occurred). LEARNING TO MANAGE, *supra* note 171, at 177–78.

<sup>174</sup> Thomas et al., *supra* note 173.

<sup>175</sup> THE FIRST 10 YEARS, *supra* note 171, at 221–22.

<sup>176</sup> Spies et al., *supra* note 1, at 517.

<sup>177</sup> NFP STANDARDS & GUIDELINES, *supra* note 133, at E-1.

<sup>178</sup> *Id.* at E-1, E-3. The agencies also used adaptive management to determine whether the underlying assumptions used in developing the NFP were sound. *Id.* at E-3.

<sup>179</sup> *Id.* at E-3.

<sup>180</sup> The Plan sought to avoid excessive costs by focusing on key monitoring questions and proper sampling methods. *Id.* at E-2.

<sup>181</sup> See Spies et al., *supra* note 1, at 517 (“[A] biodiversity monitoring program initially called for in the N[FP] was not created . . . and socioeconomic monitoring was reduced to a minimum owing to limited funding and competing priorities.”).

*E. Socioeconomic Considerations*

The NFP sought to study and reduce its economic effect on rural, timber-dependent communities in the planning area<sup>182</sup> by establishing the Northwest Economic Adjustment Initiative (NEAI) and a socioeconomic monitoring program as part of the economic measures outlined in the Plan.<sup>183</sup> Congress authorized implementation of NEAI and called for funding the program with \$1.2 billion over the course of five years beginning in 1994<sup>184</sup> to support the local economies that the NFP planners anticipated would decline as a result of reduced timber harvests.<sup>185</sup> Those funds were distributed to forest communities by a variety of federal agencies, including the Forest Service and BLM, the Department of Labor (DOL), and the Economic Development Administration.<sup>186</sup>

For the most part, NEAI failed to deliver on its promises because some states and localities failed to distribute the funds equitably, some communities lacked the infrastructure to apply for financial support, and few sustainable local jobs resulted due to a disconnect between the available workforce and the scope of work now required of forest workers.<sup>187</sup>

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<sup>182</sup> See Keith Routman, *Forest Communities and the Northwest Forest Plan: What Socioeconomic Monitoring Can Tell Us*, PAC. N.W. RES. STATION SCIENCE FINDINGS, Aug. 2007, at 1, 2 (detailing the plan to protect old forest ecosystems with mitigation of impacts on rural communities and economies).

<sup>183</sup> *Id.* at 3–4; see Jonathan Kusel et al., *Institutional Analysis in the Evaluation of the Northwest Economic Adjustment Initiative*, 10 INT. J. ORG. THEORY & BEHAVIOR 476, 478 (2007) (noting other economic measures outlined in the NFP); see generally U.S. DEP'T AGRIC. ET AL., NORTHWEST FOREST PLAN: OUTCOMES AND LESSONS LEARNED FROM THE NORTHWEST ECONOMIC ADJUSTMENT INITIATIVE (1999) (describing the goals and methods of NEAI and providing perspectives and socioeconomic data from each affected state).

<sup>184</sup> U.S. DEP'T OF AGRIC. ET AL., THE NORTHWEST FOREST PLAN: A REPORT TO THE PRESIDENT AND CONGRESS 249 (1996) [hereinafter NFP: A REPORT TO THE PRESIDENT AND CONGRESS]. The Clinton administration announced the plan “eight months into fiscal year 1993” and sought appropriations for that year be modified in light of the Plan’s funding needs. *Id.* The administration proposed that \$280 million be added, and Congress approved a lesser amount of \$256 million through various modifications of existing appropriations bills. *Id.* Fiscal year 1995 saw \$268 million go to NEAI, and Congress approved \$210 million of the \$267 million proposed for 1997. *Id.*

<sup>185</sup> Congress intended financial support to provide small business loans, grants to develop local infrastructure, programs to retrain timber workers, and new jobs relating to ecosystem management and restoration on federal lands. Routman, *supra* note 182, at 4; see Kusel et al., *supra* note 183 (“Other parts of the NFP’s economic relief package focused on payments to counties to compensate for the loss of revenue traditionally tied to federal timber receipts; removal of incentives for the export of raw logs; and assistance to encourage growth and investment of small businesses and secondary manufacturers in the woods-products industry”). The NFP proposed \$13 million in additional funding for economic adjustment, but Congress never appropriated the money. *Id.*

<sup>186</sup> See NFP: A REPORT TO THE PRESIDENT AND CONGRESS, *supra* note 184, at 158–73 (providing a detailed account of how NEAI was funded from 1994 to 1996 and describing the participating agencies and departments, their approaches, and where their funds came from); see also TIMBER HARVESTING, *supra* note 47, at 13 (providing a table of total NEAI expenditures by state, Small Business Administration, category of assistance, and fiscal year).

<sup>187</sup> Routman, *supra* note 182, at 4.

Compounding the problem were persistent congressional cuts to the Forest Service's budget: The agency had to close or consolidate twenty-three percent of NFP-area offices between 1990 and the early 2000s because it lacked the resources to expand recreation opportunities in the region's national forests while keeping the Forest Service workers employed, as Congress also required.<sup>188</sup> The Bush administration effectively terminated the program early in its tenure for opaque reasons.<sup>189</sup>

The NFP's social monitoring program did reveal "that about a third of [NFP] communities [experienced a] decrease[] in socioeconomic well-being between 1990 and 2000[,] while another third [experienced] an increase."<sup>190</sup> During that decade, employment in the primary wood-products industries declined by about 30,000 jobs in the Plan area, but most of those job losses were not due to the NFP's harvest restrictions; instead, they were due to external factors such as international market forces and technological

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<sup>188</sup> *Id.* BLM did not close any field offices; the agency's budget is less reliant on federal timber sales, and it appeared to have provided expanded recreation opportunities in its plan-area forests, whereas the Forest Service did not. *See id.* (stating that while the Forest Service was forced to close offices, BLM districts fared better); Susan Charnley, *The Northwest Forest Plan as a Model for Broad-Scale Ecosystem Management: A Social Perspective*, 20 CONSERVATION BIOLOGY 330, 333 (2006) (stating that BLM "expanded recreation opportunities" while "USFS had difficulty maintaining some of its recreation infrastructure").

<sup>189</sup> NEAI had no identifiable, official termination date or publicly-expressed rationale, but certain events assist in identifying the initiative's end. For instance, the Coordination Office in Portland that acted as the link between the White House and the program closed with the end of the Clinton administration, and under the new Bush administration, meetings of the Community Economic Revitalization Team ceased. E-mail from Jonathan Kusel, Executive Director, Sierra Institute, to Chelsea Stewart-Fusek (Jul. 21, 2021) (on file with authors). The Bush administration also ended the dynamic role of the office of State and Private Forestry in the Forest Service, despite its leaders' effective role in assisting impoverished communities. *Id.* These closures were not preceded by an announcement from the administration. *Id.* It is also unclear when exactly NEAI funding ended because drawing a distinct line between what was and was not funding for the program seems impossible. For example, Congress appropriated to the Department of Commerce a substantial amount of money for economic development, so Commerce continued to fund aspects of NEAI even after its termination. *Id.*

Beginning in 1991, Congress enacted measures to mitigate lost revenues to timber communities by using new formulas to calculate payments to states and counties to make them less reliant on timber sale receipts. *See* SYNTHESIS OF SCIENCE, *supra* note 18, at 629 (discussing Congress's decision to pass multiple acts to accomplish this goal). The most recent of these in-lieu programs is the Secure Rural Schools and Community Self-Determination Act of 2000, which has been reauthorized several times and is still in effect today. *Id.*; *see also* Press Release, Ron Wyden, United States Senator for Oregon, Oregon Delegation: 31 Counties in State Receive More Than \$39 Million in Secure Rural School Funding (Apr. 5, 2021), <https://perma.cc/X43C-HVAS> ("31 Oregon counties will receive about \$39.3 million in Secure Rural Schools (SRS) payments for schools, roads, law enforcement and other essential services. These payments to Oregon counties are the last ones under the SRS program's current authorization"). Moreover, beginning in the 2000s, Congress provided appropriations language authorizing the Forest Service and BLM to take the needs of communities into consideration when awarding contracts for restoration work. SYNTHESIS OF SCIENCE, *supra* note 18, at 629.

<sup>190</sup> Routman, *supra* note 182, at 1.



improvements in milling infrastructure.<sup>191</sup> Moreover, about a third of those job losses took place before the Plan became effective but after the ESA listing of the spotted owl and the ensuing court injunctions.<sup>192</sup> Of the roughly 11,000 jobs lost after the NFP took effect, just 400 losses were the result of reduced federal harvests, as the vast majority were due to mill closures before timber supply declines, largely a result of increased mill efficiency and continued investment in mechanization.<sup>193</sup>

The NFP contemplated a “jobs-in-the-woods” program and, while the program never effectively employed displaced millworkers,<sup>194</sup> many communities adopted other ways to respond to the loss of mill jobs. Some successfully responded to reduced harvest levels by focusing on agriculture, tourism, and recreation infrastructure to attract amenity seekers.<sup>195</sup> Although NEAI did not help many of the small communities hit hardest by reduced timber harvest on federal lands, the socioeconomic well-being of most communities turned out to be not as timber-dependent as the Plan expected, especially in terms of declining federal harvests.<sup>196</sup> This result

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<sup>191</sup> See Charnley, *supra* note 188, at 334 (discussing the various factors that decreased jobs in this field); SYNTHESIS OF SCIENCE, *supra* note 18, at 636 (“Even when timber supply changes are happening, mill employment remains influenced by technological improvements to mill operations. For instance . . . 38 percent of the decline in employment at sawmills between 1988 and 1994 (when federal timber harvests declined precipitously) can be attributed to technological change that reduced labor requirements.”).

<sup>192</sup> See Charnley, *supra* note 188, at 334 (explaining that of 30,000 jobs lost, roughly 11,000 lost jobs could be attributed to the ESA listing and injunctions).

<sup>193</sup> *Id.* Despite job losses in the timber industry, the effect on the regional economy was insignificant because the region as a whole gained 1.3 million jobs across all industries, a “majority of which were in the trade and services sectors.” *Id.*

<sup>194</sup> The NFP created the jobs-in-the-woods program—separate from NEAI—to retrain and employ displaced lumber workers for restoration, research, and forest stewardship work. CHRISTOPHER DEFOREST, U.S. DEP’T OF AGRIC. ET AL., PNW-GTR-449, WATERSHED RESTORATION, JOBS-IN-THE-WOODS, AND COMMUNITY ASSISTANCE: REDWOOD NATIONAL PARK AND THE NORTHWEST FOREST PLAN 18 (1999). At least one Plan area national park was able to pinpoint some reasons for the program’s ineffectiveness:

Redwood National Park scientists quickly found . . . that hiring dozens of former mill workers and saw hands to do manual labor restoring roads and streams was problematic and inefficient. Because Congress had granted generous unemployment benefits to a broad class of displaced workers, with no requirement for seeking or accepting work . . . it proved difficult to recruit enough labor for the work crews, and more skilled jobs within the park failed to materialize. It is not clear how well the Jobs-in-the-Woods (JITW) Program worked, because the state DOL did not track displaced timber workers long term to see if retraining, relocation money, and hiring on at the National Park Service had worked.

*Id.* at 12. Additionally, heavy equipment proved to be more efficient for restoration work than manual labor. *Id.* Another issue with the Jobs-in-the-Woods program was a lack of clear guidelines and objectives. *Id.* at 18, 19; see also Charnley, *supra* note 188, at 334 (“The dwindling contract money that was available [from local jobs tied to ecosystem management] was not targeted to local communities that had experienced the greatest impacts from the plan.”).

<sup>195</sup> Routman, *supra* note 182.

<sup>196</sup> SYNTHESIS OF SCIENCE, *supra* note 18, at 628–29.

was due in part because of communities' ability to adapt to changed conditions, and in part because numerous external factors other than federal timber harvest levels affect the economic stability of forest communities, including national economic conditions, regional economic diversification, influxes of retirees, and a significant growth of tribal businesses and services.<sup>197</sup>

#### VI. COURT INTERPRETATIONS OF THE NORTHWEST FOREST PLAN

The ink on the NFP and Judge Dwyer's decision to uphold it was barely dry before Congress made another attempt to increase federal timber harvests in the Pacific Northwest. In response to the domestic terrorism bombing of a federal building in Oklahoma City and the 1994 California wildfires, in July 1995 Congress enacted a supplemental appropriations act.<sup>198</sup> Section 2001 of that must-pass legislation, advanced by the timber industry, echoed the 1989 section 318 salvage rider in content and scope, purporting to exempt timber sales across the country—but particularly in the Pacific Northwest—from the operation of environmental and other laws, including the recently-approved NFP.<sup>199</sup> The rider lasted only through the end of Fiscal Year 1995, but it facilitated the logging of millions of board feet of ancient forest unaffected by wildfire without the benefit of environmental analysis, public involvement, or the ESA compliance.<sup>200</sup> Although challenged in court by a number of parties, the 1995 rider largely survived judicial review.<sup>201</sup> The 1995 salvage rider would undermine

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<sup>197</sup> *Id.*; Routman, *supra* note 182, at 4; Charnley, *supra* note 188, at 335–36.

<sup>198</sup> Emergency Supplemental Appropriations for Additional Disaster Assistance, for Anti-terrorism Initiatives, for Assistance in the Recovery from the Tragedy that Occurred at Oklahoma City, and Rescissions Act (Fiscal Year 1995 Rescissions Act), Pub. L. No. 104-19, § 2001, 109 Stat. 194, 240-47 (1995) (codified at 16 U.S.C. § 1611).

<sup>199</sup> 16 U.S.C. § 1611(d) (1999).

<sup>200</sup> See U.S. Forest Serv., FY 1905-2020 National Summary Cut and Sold Data and Graphs (2021) (national forest system harvest data); RIDDLE, *supra* note 25, at 15 (BLM harvest data).

<sup>201</sup> *E.g.*, *Inland Empire Pub. Lands Council v. Glickman*, 88 F.3d 697, 701–02 (9th Cir. 1996) (applying the arbitrary and capricious standard of judicial review to actions implementing the 1995 salvage rider, and deciding that the Forest Service did not act arbitrarily when it declined to consider the effects of a timber sale on grizzly bears); *Idaho Conservation League v. Thomas*, 917 F. Supp. 1458, 1465–67 (D. Idaho 1995), *aff'd*, 91 F.3d 1345 (9th Cir. 1996) (upholding the Forest Service analysis of a timber sale's effects on listed fish under that standard of review); *Sw. Ctr. for Biological Diversity v. Forest Serv.*, 100 F.3d 1443, 1449 (9th Cir. 1996) (upholding the Forest Service's ability to "ignore the views of other agencies" concerning the effects of timber sales on Mexican spotted owls); *Or. Nat. Res. Council v. Thomas*, 92 F.3d 792, 797 (9th Cir. 1996) (ruling that the rider's language of "notwithstanding any other provision of law" precluded judicial review of all NFP timber sales because it left no law to apply); *Idaho Sporting Cong. v. Forest Serv.*, 92 F.3d 922, 924–25, 927 (9th Cir. 1996) (rejecting challenges to salvage timber sales on several grounds, including a lack any law to apply); *but see*, *Klamath Tribe v. United States*, No. 96-381-HA, 1996 WL 924509, at \*9 (D. Or. Oct. 2, 1996) (ruling that section 2001 did not abrogate Native American treaty rights).

conservationists' faith in the Clinton Administration. Vice President Al Gore called it the "biggest mistake" of the administration.<sup>202</sup>

### *A. Implementing the Survey and Manage Program*

The NFP's S&M program required surveys for hundreds of at-risk or rare species and the establishment of no-harvest buffers around "known sites" of those species before all ground-disturbing activities.<sup>203</sup> As the extent of the program became known to the agencies—surveys often required several years to complete at substantial cost, and the buffers amounted to unharvestable acres—the agencies sought creative ways to avoid triggering the program.<sup>204</sup> For example, in 1997, the Forest Service and BLM issued a memorandum interpreting the S&M program to apply only to timber sale decisions issued after September 1996, exempting at least forty proposed sales from the survey requirements.<sup>205</sup> Conservation groups challenged this interpretation as inconsistent with the NFP, and Judge Dwyer agreed.<sup>206</sup> He issued an NFP-wide injunction until the agencies complied with the S&M requirements.<sup>207</sup>

Undaunted, the incoming Bush Administration issued a supplemental EIS in 2001 justifying changes to the S&M requirement.<sup>208</sup> Challenges by both conservationists and the timber industry resulted in another settlement agreement, requiring the Forest Service and BLM to prepare a second supplemental EIS on the proposed changes to the program.<sup>209</sup> That EIS, released in 2004, chose not to expressly eliminate the program but instead created a new "special status" species program that required no surveys or established no-harvest buffers.<sup>210</sup> Litigation ensued, and Judge Marsha Pechman ruled that the EIS was deficient for neglecting to sufficiently analyze the effect of transferring species to the new "sensitive species" list and the lack of protections for them.<sup>211</sup> The court emphasized the government's failure to explain why it thought the S&M requirement was necessary in 1994 but was not ten years later.<sup>212</sup> Although the agencies

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<sup>202</sup> Scott Sonner, *Gore Calls Salvage Logging 'Biggest Mistake' Admission Comes In TV Interview Scheduled To Air Tonight*, SPOKESMAN-REVIEW, (Sept. 27, 1996), <https://perma.cc/4S3L-DEW2>.

<sup>203</sup> NFP STANDARDS & GUIDELINES, *supra* note 133, at C-4 to C-5, C-19.

<sup>204</sup> *Id.* at C-5 to C-6, C-20 to C-21.

<sup>205</sup> *Or. Nat. Res. Council Action v. Forest Serv.*, 59 F. Supp. 2d 1085, 1092 (W.D. Wash. 1999).

<sup>206</sup> *Id.* at 1093.

<sup>207</sup> *Id.* at 1097.

<sup>208</sup> *Survey and Manage History and Update*, U.S. BUREAU OF LAND MGMT., <https://perma.cc/55RR-LYVW> (last visited Jan. 23, 2022).

<sup>209</sup> *Douglas Timber Operators v. Secretary of Agric.*, No. 6:01-6378-AA (D. Or. 2001); *Or. Nat. Res. Council Action v. Veneman*, No. 6:02-983-AA (D. Or. 2001).

<sup>210</sup> *Survey and Manage History and Update*, *supra* note 208.

<sup>211</sup> *Nw. Ecosystem All. v. Rey (Survey and Manage II)*, 380 F. Supp. 2d 1175, 1181, 1190 (W.D. Wash. 2005).

<sup>212</sup> *Id.* at 1192–93.

could amend the NFP, they had to rationally explain their reasons for doing so, a recurring problem with the Bush administration's persistent efforts to eviscerate the Plan.

Although Judge Pechman ruled in favor of the conservationists, she did not issue an NFP-wide injunction, as Judge Dwyer had in the past.<sup>213</sup> Instead, she ordered the parties, including the intervening timber industry, to enter into settlement discussions concerning the proper scope of the remedy.<sup>214</sup> The resulting settlement retained the original S&M program but created several exemptions from the survey and buffer requirements, the most significant of which was an exemption from the requirements for projects that thinned existing forest plantations (i.e., recent clearcuts) and/or undertook hazardous fuels reduction in forest stands less than eighty years old.<sup>215</sup> These provisions, the so-called "Pechman exemptions," allowed thousands of acres of logging of federal forests without adhering to the letter of the S&M requirements.<sup>216</sup>

In 2007, the Bush administration took another shot at ending the S&M program, proposing to terminate it because of its high cost, interference with management flexibility, and alleged ineffectiveness.<sup>217</sup> This effort, too, was challenged by conservationists, and the reviewing court again found a NEPA violation for failing to adequately justify its decision to eliminate the program.<sup>218</sup> Yet another settlement between conservationists and the government recognized additional exemptions from the S&M program outside of spotted owl old-growth habitat, making additional timber available for harvest.<sup>219</sup> Nevertheless, the timber industry appealed that settlement agreement on the ground that it changed the NFP without adequate NEPA documentation or public involvement as required by NFMA and the Federal Land Management and Policy Act of 1976<sup>220</sup> (FLPMA).<sup>221</sup> Agreeing with industry that the settlement did not comply with NFMA, FLPMA, and NEPA, the Ninth Circuit vacated the district court's approval of the settlement, ironically eschewing the additional

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<sup>213</sup> *Id.* at 1197–98; see Timothy Egan, *William Dwyer Dies at 72; A Judge of Vast Influence*, N.Y. TIMES (Feb. 15, 2002), <https://perma.cc/DWR7-44M4> (describing how Dwyer's decision blocked logging permitting for up to 60,000 acres of forest on public land per year).

<sup>214</sup> *Survey and Manage II*, 380 F. Supp. 2d at 1197–98.

<sup>215</sup> *Regional Ecosystem Office (REO) - Northwest Forest Plan, Survey and Manage*, *supra* note 163.

<sup>216</sup> E. THOMAS TUCHMANN & CHAD T. DAVIS, O&C LANDS REPORT 30 (2013).

<sup>217</sup> U.S. DEP'T OF AGRIC., RECORD OF DECISION TO REMOVE THE SURVEY AND MANAGE MITIGATION MEASURE STANDARDS AND GUIDELINES FROM FOREST SERVICE LAND AND RESOURCE MANAGEMENT PLANS WITHIN THE RANGE OF THE NORTHERN SPOTTED OWL 27 (2007).

<sup>218</sup> *Conservation Nw. v. Rey*, 674 F. Supp. 2d 1232, 1247–49 (W.D. Wash. 2009).

<sup>219</sup> See BLM-Instruction Memorandum No. OR-2011-063 to Bureau of Land Mgmt. Dist. Managers, Field Managers, and Forest Serv. Nat'l Forest Supervisors and Columbia River Gorge Nat'l Scenic Area Manager within the Northwest Forest Plan Area (July 21, 2011), <https://perma.cc/W6D2-5JEB> (outlining seven additional exemption categories in addition to the Pechman Exemptions).

<sup>220</sup> 43 U.S.C. §§ 1701–1787 (2018).

<sup>221</sup> *Conservation Nw. v. Sherman*, 715 F.3d 1181, 1185 (9th Cir. 2013).

timber volume that the agreement would have made available for harvest.<sup>222</sup>

### *B. Implementing the Aquatic Conservation Strategy*

Attempts to evade the aquatic protections of the ACS were no more successful than the agencies' attempts to avoid the S&M requirements for terrestrial species. In 1998, fishing and conservation interests challenged a programmatic biological opinion issued by the National Marine Fisheries Service (NMFS) on timber harvests under the NFP in the Umpqua River Basin, arguing that NMFS improperly assumed that compliance with the NFP's ACS was sufficient to demonstrate compliance with ESA.<sup>223</sup> However, the district court upheld the biological opinion on the ground that NMFS reasonably assumed that the land management agencies would faithfully implement all aspects of the ACS at all temporal and spatial scales.<sup>224</sup>

This decision, which conservationists did not appeal, turned out to be consequential because NMFS—having equated its ESA duty to ensure against “no jeopardy” to listed species with the action agency's ACS compliance—would now be required to look into whether the Forest Service or BLM in fact complied with the ACS on site-specific timber sales, including whether those agencies analyzed both short- and long-term effects and site-specific waterway and watershed-level effects of timber harvest.<sup>225</sup> In a subsequent challenge to NMFS timber sale biological opinions, the district court enjoined planned timber harvests because the Forest Service failed to demonstrate that the timber sales complied with the ACS, making NMFS's reliance on land managers' assurances of compliance arbitrary and capricious.<sup>226</sup>

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<sup>222</sup> *Id.* at 1189.

<sup>223</sup> *Pac. Coast Fed'n of Fishermen's Ass'n v. NMFS*, No. 97-CV-775, 1998 WL 1988556, at \*6 (W.D. Wash. May 29, 1998).

<sup>224</sup> *Id.* at \*12.

<sup>225</sup> *See id.* (stating that NMFS could not have rationally concluded that proposed actions were consistent with the ACS's mandate that agencies maintain and restore systems on the project level because it failed to ensure or verify agency compliance).

<sup>226</sup> *Pac. Coast Fed'n of Fishermen's Ass'n v. NMFS*, 71 F. Supp. 2d 1063, 1073 (W.D. Wash. 1999), *aff'd in part, vacated in part sub nom.*, 253 F.3d 1137 (9th Cir. 2001), *opinion amended and superseded on denial of reh'g sub nom.*, 265 F.3d 1028 (9th Cir. 2001). NMFS's argument, which would be the premise of the Bush administration's next effort to amend the ACS, Clarification of Language in the 1994 Record of Decision for the Northwest Plan, 68 Fed. Reg. 18,253, 18,254 (Apr. 15, 2003), was that the action agencies should be allowed to conduct timber harvest that may have site-specific adverse effects at the time of project implementation, but in the long term and at the watershed scale, was not likely to jeopardize listed species. In short, dilution would be the solution to aquatic pollution. However, because the listed species were in critical condition in the short term and in individual stream reaches, the court decided that such an approach was unreasonable. *Pac. Coast Fed'n of Fishermen's Ass'n* 253 F.3d at 1146.

The Bush administration's next effort to increase logging was another attempt to amend the NFP, this time by "clarifying" the ACS.<sup>227</sup> As part of the government's 2003 settlement agreement with the timber industry,<sup>228</sup> the Forest Service and BLM proposed to amend the ACS in 2003, so that it would apply only at the watershed scale and in the distant future, while exempting individual projects from the ACS provisions.<sup>229</sup> This proposal engendered another suit and another court injunction because the proposal again failed to explain, in either its accompanying NEPA or ESA analysis, why the agencies were departing from an essential element of the NFP.<sup>230</sup> The court also faulted the agencies' failure to disclose and discuss dissenting scientific views and remanded the issue to the Forest Service and BLM.<sup>231</sup> The agencies took no further action.

### C. *Managing for Owls After Wildfire*

A basic premise of the NFP was that timber harvests were not the only threats to the persistence of the northern spotted owl: natural disturbances, particularly wildfire, also represented cognizable threats.<sup>232</sup> In the case of wildfire, although not much was then known about spotted owls' use of burned forests, scientists recognized that post-fire logging—also called "salvage logging"—often removed substantial quantities of older forests important to not only the owl, but other late-successional-associated species.<sup>233</sup> Land managers often want to harvest burned trees as quickly as possible, since insects invade burned areas immediately after the flames are extinguished and begin to consume the burned wood.<sup>234</sup> Although the structural integrity of the wood is not usually affected so much as to prohibit commercial logging, especially of larger trees, insect activity does cause the wood to take on a blue hue undesirable in some building trades

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<sup>227</sup> 68 Fed. Reg. at 18,254.

<sup>228</sup> See *infra* text accompanying note 249 (recounting how the Bush administration entered into frequent settlements with regulated industries like the timber industry).

<sup>229</sup> 68 Fed. Reg. at 18,254.

<sup>230</sup> Pac. Coast Fed'n of Fishermen's Ass'n v. NMFS (*PCFFA III*), 482 F. Supp. 2d 1248, 1252–53, 1270 (W.D. Wash. 2007) ("[W]here an agency has previously made a policy choice to conform to a particular standard, and now seeks to amend that standard, 'the Agencies have an obligation under NEPA to disclose and explain on what basis they deemed the standard necessary before but assume it is not now.' Under this reasoning, the 2003 [EIS[s] assessment of the impact of the ACS amendment is inadequate and fails to conform to NEPA standards." (quoting *Survey and Manage II*, 380 F. Supp. 2d 1175, 1193 (W.D. Wash. 2005))).

<sup>231</sup> *PCFFA III*, 482 F. Supp. 2d at 1253, 1255.

<sup>232</sup> See NFP STANDARDS & GUIDELINES, *supra* note 133, at B-1 (explaining that one objective of the standards and guidelines is to protect LSRs from natural disturbances such as disease epidemics and wildfires).

<sup>233</sup> See *id.* at B-8 (describing the importance of diseased and damaged trees to habitat quality).

<sup>234</sup> Amanda Arden, *Oregon Timber Owners Work Feverishly to Salvage Burned Wood*, KOIS (Dec. 29, 2020) <https://perma.cc/57B6-6CEH>.

(but coveted by others).<sup>235</sup> Therefore, after a wildfire, managers often seek to expedite the logging of burned forests.

The drafters of the NFP consequently included rather detailed directives regarding the management of forests affected by wildfire, particularly forests located in LSRs. The NFP requires land management agencies to manage LSRs “to protect and enhance conditions of late-successional and old-growth forest ecosystems, which serve as habitat for late-successional and old-growth related species.”<sup>236</sup> Although the Plan permits post-fire logging in LSRs, it restricts the timing, location, type, and amount of salvage logging in several ways.<sup>237</sup> According to Dr. Jerry Franklin, one of the drafters of the NFP, the Plan envisioned LSRs “as a robust system of ecological reserves, which could accommodate large intense natural disturbances and the [ensuing] natural recovery processes;” consequently, the Plan recommended only “very limited” salvage logging in LSRs because it would interfere with natural recovery processes.<sup>238</sup>

In the wake of western wildfires in 2002 that burned millions of acres of public forests within the range of the northern spotted owl, conservationists sought to curtail post-fire logging efforts within the

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<sup>235</sup> See, e.g., *Blue Stain*, GEN. BLDG. MATERIALS, <https://perma.cc/74ZS-H9HG> (last visited Jan. 31, 2022) (explaining the structural integrity, coloring, and specialty market value of blue-stained wood).

<sup>236</sup> NFP STANDARDS & GUIDELINES, *supra* note 133, at C-11.

<sup>237</sup> First, the NFP requires salvage logging within LSRs to be consistent with LSR objectives, including the “development of old-growth forest characteristics including snags” (standing dead trees that often serve as wildlife habitat). *Id.* at B-5. Second, the NFP states that within LSRs, “[w]hile priority should be given to salvage in areas where it will have a positive effect on late-successional forest habitat, salvage operations should not diminish habitat suitability now or in the future.” *Id.* at C-13. Third, following stand-replacing events such as wildfire, land managers must “focus on retaining snags that are likely to persist until late-successional conditions have developed and the new stand is again producing large snags.” *Id.* at C-14. In general, the larger the snag, the longer it will remain standing in a forest affected by fire. See *id.* at C-46 (explaining that snags in the matrix areas above 20 inches in diameter at breast height should not be logged). Finally, the NFP states that within LSRs, “[s]alvage will not be driven by economic or timber sale program factors.” FSEIS, *supra* note 144, at F-21.

<sup>238</sup> Letter from Jerry F. Franklin, Professor of Ecosystem Analysis, Univ. of Wash., to Patricia A. Grantham, Forest Supervisor, Klamath Nat’l Forest, at 1 (Apr. 6, 2015) (on file with authors). According to Dr. Franklin,

The team that designed the LSR system knew that large stand replacing disturbances would impact LSRs and, therefore, that the LSR network needed to be able to accommodate such disturbances. . . . Hence, the team built sufficient redundancy into the LSR system so that it could accommodate large disturbances and still remain viable as a regional network. This redundancy would also allow for natural recovery processes within impacted LSRs. Building reserve systems that will accommodate natural disturbance regimes is, of course, a first principle in conservation biology. . . . One could say that the LSR system was overbuilt in terms of immediate habitat needs. A major reason for doing this was the FEMAT planners [sic] belief that natural recovery processes could and should be accommodated following major disturbances to LSRs.

*Id.* at 3–4.

footprint of the NFP.<sup>239</sup> In what was the first test of the NFP's post-fire logging direction for LSRs, they challenged BLM's offering of about 800 acres of commercial timber burned by the Timbered Rock Fire, located almost entirely within the Elk Creek LSR in southern Oregon, arguing that BLM's planned removal of large diameter snags (old-growth trees prior to the fire) in post-fire logging sales violated the NFP because the project's purpose was to recover the economic value of the burned timber, and the NFP expressly precluded salvage logging in LSRs for this purpose.<sup>240</sup> The district court agreed,<sup>241</sup> and the Ninth Circuit upheld the district court.<sup>242</sup> The appeals court made clear that if post-fire logging occurs within LSRs, in order to meet the NFP's objectives of developing old-growth forest characteristics in post-fire LSRs and to maintain late-successional forest habitat, post-fire logging must retain the largest snags likely to persist until the stand is again producing snags (about eighty years in the future).<sup>243</sup> Since permissible logging would necessarily be limited to removing smaller snags, the economic viability of such harvests was questionable.

Although the drafters of the NFP clearly understood that wildfire would alter LSRs, they also intended fire to play its natural role, and therefore restricted most post-fire logging.<sup>244</sup> As wildfire continues to affect old-growth forests within the range of the northern spotted owl, if the government continues to convince courts not to enjoin salvage sales on the

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<sup>239</sup> Or. Nat. Res. Council Fund v. Brong, No. 04-693-AA, 2004 WL 2554575, at \*1–\*2 (D. Or. Nov. 8, 2004).

<sup>240</sup> *Id.* at \*1, \*5–\*8.

<sup>241</sup> *Id.* at \*8, \*19.

<sup>242</sup> Or. Nat. Res. Council Fund v. Brong, 492 F.3d 1120, 1123 (9th Cir. 2007).

<sup>243</sup> *Id.* at 1128. The *Brong* decision proved to be the high-water mark for post-fire logging projects within LSRs, as its precedential value was overlooked by ensuing decisions. *See, e.g.,* Cascadia Wildlands v. Thraikill, 806 F.3d 1234, 1236 (9th Cir. 2015) (affirming district court's authorization of a salvage sale of 1,200 acres from LSRs affected by the Douglas Complex fires, including the incidental take of 24 spotted owls); Karuk Tribe v. Stelle, 671 F. App'x 507, 508–09 (9th Cir. 2016) (affirming district court's authorization of a salvage sale of 5,500 acres from LSRs affected by the Westside Complex fires, including the incidental take of 103 spotted owls). Courts appeared reluctant to authorize injunctive relief in post-fire salvage logging cases after *Brong* due to an unproven government argument that post-fire logging reduces wildfire risk. With wildfires becoming larger and more destructive, courts appeared inclined to allow such logging to go forward, even though the best available science does not support the contention that salvage logging reduces future wildfire risk. *See, e.g.,* Order Granting Defendants' Motion for a Stay of the Preliminary Injunction, Klamath-Siskiyou Wildlands Ctr. v. Grantham, No. 2:18-cv-02785-TLN-DMC, 2019 WL 2325555, at \*5 (E.D. Cal. May 31, 2019) (granting the defendants' motion for a stay because "Federal Defendants contend that the Forest Service will lose the source of funds necessary to implement specific Project activities which will reduce the likelihood of a future catastrophic fire. . . . In its initial order, this Court determined that the harm to Federal Defendants was not irreparable because the Forest Service would not be barred from eventually implementing the Project if it succeeded at a later stage in the litigation. . . . But based on evidence subsequently provided by Federal Defendants, it appears that if the injunction remains in place, non-enjoined portions of the Project may actually become permanently futile if the enjoined salvage operations are precluded from taking place immediately.").

<sup>244</sup> Letter from Jerry F. Franklin, *supra* note 238, at 1–4.



unproven ground salvage logging helps prevent future wildfires, the integrity and viability of the NFP's LSR network will be undermined.<sup>245</sup>

#### VII. EXEMPTING THE OREGON AND CALIFORNIA LANDS FROM THE NFP: THE WESTERN OREGON PLAN REVISION(S)

Conservationists were not the only parties that challenged the legality of the NFP in 1994: the timber industry and timber-dependent counties also expressed displeasure through the courts. Even though most challenges to the NFP were transferred to Judge Dwyer, one timber industry challenge, *Northwest Forestry Association v. Shea*,<sup>246</sup> remained in the D.C. District Court and would prove consequential for the Pacific Northwest timber industry.

In *Shea*,<sup>247</sup> the industry charged BLM with violating the OCLA by creating reserves for wildlife and older forests in the nascent NFP.<sup>248</sup> After a labyrinth of procedural maneuvers, the industry and the Bush administration settled the case in 2003.<sup>249</sup> The settlement agreement aimed to increase the timber harvest across the range of the northern spotted owl, not just on O&C lands managed by BLM by: 1) amending the NFP to eliminate both the ACS and the S&M program; 2) conducting a status review of both the northern spotted owl and the marbled murrelet, with the goal of delisting the species and their designated critical habitats;<sup>250</sup> and 3) amending the NFP to eliminate any reserves on BLM

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<sup>245</sup> Recall Judge Dwyer's warning (*supra* note 127), endorsed by the Ninth Circuit, that "any more logging sales than the plan contemplates would probably violate the laws. Whether the plan and its implementation will remain legal will depend on future events and conditions." *SAS IV*, 871 F. Supp. 1291, 1300 (W.D. Wash. 1994).

<sup>246</sup> No. 94-1031-TPJ (D. D.C. filed May 11, 1994).

<sup>247</sup> The names of the parties changed several times over the fifteen years that the case remained active: the Northwest Forestry Association would be superseded by the American Forest Resources Council, and Patrick Shea – Director of BLM in the mid-1990s – would be replaced by Kathleen Clarke, who was BLM director during the second Bush Administration. See *Am. Forest Res. Council v. Shea*, 172 F. Supp. 2d 24 (D. D.C. 2001) (denoting the case name history of the petitioner); PUB. LANDS FOUND., HISTORICAL RECORD OF THE OFFICES, MANAGERS AND ORGANIZATIONS OF THE U.S. BUREAU OF LAND MANAGEMENT, GRAZING SERVICE, GENERAL LAND OFFICE AND O&C REVESTED LANDS ADMINISTRATION 1934-2012 16 (2012) (providing a list of BLM directors since the agency was created in 1946. Pat Shea served from 1997 to 1998, Tom Fry from 1998 to 2000, and Kathleen Clarke from 2000 to 2006).

<sup>248</sup> For a review of the OCLA, see Blumm & Wigington, *supra* note 35, at 20–22 (explaining the forces that led to the enactment of the OCLA); Scott & Brown, *supra* note 39, at 275–77 (providing an overview of the OCLA).

<sup>249</sup> The Bush Administration entered into numerous such "sweetheart settlements" with regulated industries like the timber industry. See, e.g., Michael C. Blumm, *The Bush Administration's Sweetheart Settlement Policy: A Trojan Horse Strategy for Advancing Commodity Production on Public Lands*, 34 ENV'T L. REP. 10,397, 10,397–98, 10,401 (2004) (describing the Bush administration's numerous settlements with litigation involving extractive industries challenging the previous administration's land policies).

<sup>250</sup> Under the settlement agreement, in 2003 FWS undertook a status review of both the northern spotted owl and marbled murrelet. Endangered and Threatened Wildlife and Plants; 5-year Review of the Marbled Murrelet and the Northern Spotted Owl, 68 Fed. Reg. 19,569

O&C lands except those habitat protections required to avoid jeopardy under ESA.<sup>251</sup> The Bush administration's close ties to the timber industry were evident as the administration quickly took action to implement what conservationists considered a sweetheart settlement, setting off another flurry of litigation.<sup>252</sup>

One of the fundamental reforms worked by the NFP was its recognition of the interconnectedness of the federal lands managed by the Forest Service and BLM.<sup>253</sup> The latter have been logged more heavily, largely due to the influence of the OCLA, a 1937 statute that has been misinterpreted to call for dominant timber use under pressure from local counties that are heavily dependent on their share of the revenues from logging.<sup>254</sup> The scientifically-grounded NFP rejected treating BLM and the Forest Service lands disparately, a decision that neither BLM, the counties, nor the timber industry has ever fully accepted.<sup>255</sup>

Although most aspects of the 2003 sweetheart settlement agreement between the Bush Administration and the timber industry did not manifest as intended, one provision of the agreement—calling for a revision of BLM's resource management plans (RMPs) for O&C lands—was more durable.<sup>256</sup> In 2005, BLM announced its intention to revise its western Oregon RMPs, claiming that “new information” compelled a revision of the NFP as it applied to O&C lands because timber harvests had been less than predicted under the NFP and needed to be increased in order to comply with the OCLA.<sup>257</sup> Consequently, in 2007, BLM released a draft EIS on revised

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(Apr. 21, 2003). Although the reviews concluded that the species should remain listed under ESA, the Bush FWS undertook several failed attempts to dramatically reduce the extent of critical habitat for the species. See DEP'T OF THE INTERIOR, INSPECTOR GEN.: REPORT OF INVESTIGATION: JULIE MACDONALD, DEPUTY ASSISTANT SECRETARY, FISH, WILDLIFE, AND PARKS 1, 4 (2008) (finding political manipulation of scientific information by FWS Deputy Director Julie MacDonald in the designation of critical habitat). Eventually, FWS would “successfully” designate spotted owl critical habitat in 2012. Endangered and Threatened Wildlife and Plants; Designation of Revised Critical Habitat for the Northern Spotted Owl, 77 Fed. Reg. 71,876 (Dec. 4, 2012). That designation was challenged by the timber industry, prompting FWS to redesignate critical habitat for the owl in 2021. Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for the Northern Spotted Owl, 86 Fed. Reg. 62,606, 62,606 (Nov. 10, 2021).

<sup>251</sup> Settlement Agreement, *Am. Forest Res. Council v. Clarke*, No. 94-1031 TPJ (D. D.C. filed Aug. 1, 2003).

<sup>252</sup> See *supra* text accompanying notes 131–155 (discussing the NFP's extensive requirements for land allocation and aquatic conservation strategies).

<sup>253</sup> See NFP RECORD OF DECISION, *supra* note 6 (discussing the adoption of the first joint management plan of federal lands by BLM and the Forest Service).

<sup>254</sup> *Headwaters*, 914 F.2d 1174, 1183–84 (9th Cir. 1990). *Headwaters* is discussed in Blumm & Wigington, *supra* note 35, at 24–29.

<sup>255</sup> See Sarah Gilman, *BLM Moves Away From Landmark Northwest Forest Plan*, HIGH COUNTRY NEWS (July 25, 2016), <https://perma.cc/8JK4-HATN> (discussing controversy regarding a BLM plan to increase logging efforts and timber reclamation).

<sup>256</sup> See Scott & Brown, *supra* note 39, at 312–13 (describing that “the 2003 Settlement Agreement requires the BLM to revise the RMPs by the end of 2008”).

<sup>257</sup> U.S. DEP'T OF THE INTERIOR, BUREAU OF LAND MGMT., ANALYSIS OF THE MANAGEMENT SITUATION 7–8 (2005).

RMPs that it coined the “Western Oregon Plan Revision” (WOPR),<sup>258</sup> which would have dramatically reduced riparian buffers and retained few protections for old-growth forests.<sup>259</sup>

Conservationists filed three separate legal challenges to WOPR, arguing that the new plans authorized more logging than was sustainable under various public lands laws, and that the failure to undertake section 7 ESA consultation was clear error.<sup>260</sup> The timber industry filed a challenge<sup>261</sup> arguing the opposite: that the new RMPs failed to authorize the maximum amount of timber harvest required by the OLCA.<sup>262</sup>

The courts never addressed the challenges to the revised RMPs because in January 2009, the Obama administration issued a press release acknowledging legal error in failing to consult on the WOPR under ESA, attempted to “withdraw” the revised RMPs, and announced that the NFP would once again govern land management on O&C lands.<sup>263</sup> However, since BLM lacked authority to simply “withdraw” a duly-enacted RMP,<sup>264</sup> the industry quickly filed suit challenging BLM’s withdrawal of WOPR

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<sup>258</sup> For children of the 1980s, BLM’s acronym recalled the War Operations Plan Response, a fictitious military supercomputer originally programmed to predict possible outcomes of nuclear war that was hacked by a young computer programmer played by Matthew Broderick in the 1983 film “War Games.” WAR GAMES (United Artists, Sherwood Productions, 1983).

<sup>259</sup> U.S. DEP’T OF THE INTERIOR, BUREAU OF LAND MGMT., DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE RESOURCE MANAGEMENT PLANS OF THE WESTERN OREGON BUREAU OF LAND MANAGEMENT DISTRICTS OF SALEM, EUGENE, ROSEBERG, COOS BAY, AND MEDFORD DISTRICTS, AND THE KLAMATH FALLS RESOURCE AREA OF THE LAKEVIEW DISTRICT (2007).

<sup>260</sup> Complaint for Declaratory and Injunctive Relief at 2, *Pacific Rivers Council v. Shepard*, No. 3:09-cv-58-ST (D. Or. Jan. 15, 2009); Complaint for Declaratory and Injunctive Relief at 2, *Oregon Wild v. Shepard*, No. 3:09-cv-00060-PK (D. Or. Jan. 15, 2009); Complaint at 9, *Am. Forest Res. Council v. Kempthorne*, No. 1:09-cv-00003-ESH (D. D.C. Jan. 2, 2009).

<sup>261</sup> BLM refused to engage in ESA section 7 consultation on the revised RMPs under the mistaken impression that land management plans are not final agency actions subject to the ESA consultation. *See Bennett v. Spear*, 520 U.S. 154, 158, 161 (1997) (requiring consultation on ongoing federal actions such as management plans). Recognizing this error and fearing that it would not obtain the benefit of a new, less-restrictive management plan, the timber industry moved to enforce the *Shea* settlement agreement, arguing that the failure to consult was an anticipatory breach of contract, a creative strategy that would ultimately prove unsuccessful in compelling consultation. Plaintiffs’ Motion to Enforce October 17, 2003 Settlement Agreement, *Am. Forest Res. Council v. Caswell*, No. 1:94-cv-01031-JR, (filed Oct. 30, 2008). The court denied the motion.

<sup>262</sup> Complaint at 19, *Am. Forest Res. Council v. Salazar*, No. 1:11-cv-01174-RJL (D. D.C. June 27, 2011).

<sup>263</sup> U.S. Dep’t of the Interior, *News Release: Interior Withdraws Legally Flawed Plan for Oregon Forests, Presses for Sustainable Timber Harvests* (July 16, 2009), available at <https://perma.cc/HZ59-WTHS>.

<sup>264</sup> *See, e.g.*, *Seattle Audubon Soc’y v. Robertson*, Nos. C89-160WD, C89-99(T)WD, 1991 WL 180099, \*9, \*13 (W.D. Wash. Mar. 7, 1991) (rejecting the Forest Service’s attempted adoption of a new management plan for national forests within the range of the northern spotted owl through a Federal Register notice without complying with the public participation requirements of NFMA); *Klamath Siskiyou Wildlands Ctr. v. Boody*, 468 F.3d 549, 556–57 (9th Cir. 2006) (rejecting the Forest Service’s attempted adoption of a new management plan for national forests within the range of the northern spotted owl through a Federal Register notice without complying with the public participation requirements of FLPMA).

without complying with FLPMA's public involvement requirements.<sup>265</sup> The D.C. district court agreed with the industry and resurrected WOPR, effectively removing O&C lands from the NFP.<sup>266</sup>

Conservationists promptly filed a new suit, again challenging the resurrected RMPs on several grounds, including charging that BLM violated the ESA by promulgating the revised plans without complying with the consultation requirements of the ESA.<sup>267</sup> Since the ESA violation was clear, the federal government did not attempt to defend the WOPR, but timber interests intervened in the litigation to unsuccessfully defend the new RMPs.<sup>268</sup> As a result, in 2013 the NFP was once again the law of the land.

Somewhat shockingly, the Obama Administration responded to the resurrection of the NFP on BLM lands by announcing that it would once again attempt to revise the western Oregon RMPs to develop an alternative land management framework to the NFP.<sup>269</sup> This new planning effort (referred to by some critics as WOPR, Jr.) again focused on reducing the size of riparian and old forest reserves to increase "management flexibility" to enable timber harvests on O&C lands.<sup>270</sup> BLM issued a draft EIS for the re-revised RMPs in 2015, a final EIS in 2016, and final RMPs shortly thereafter.<sup>271</sup>

Conservationists once again challenged the revisions in court, maintaining that they deviated from the NFP without a rational explanation and would result in more timber harvest than listed species could withstand.<sup>272</sup> They lost their challenge to the revised WOPR in the district court, and the Ninth Circuit affirmed.<sup>273</sup> Both courts ruled that the conservation plaintiffs failed to demonstrate that BLM and consulting agencies did not consider the environmental consequences of BLM's withdrawal from the NFP, and thus did not violate either NEPA or the ESA.<sup>274</sup>

For their part, the timber industry and the counties responded to the western Oregon revised plans with their own lawsuit, arguing in the D.C. district court that because the new plans placed some O&C lands into

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<sup>265</sup> Douglas Timber Operators v. Salazar, 774 F. Supp. 2d 245, 256 (D. D.C. 2011).

<sup>266</sup> *Id.* at 260–62.

<sup>267</sup> Pac. Rivers Council v. Shepard, No. 03:11-CV-442-HU, 2012 WL 950032, at \*1 (D. Or. Mar. 20, 2012).

<sup>268</sup> *Id.* at \*4–5.

<sup>269</sup> Notice of Intent to Revise Resource Management Plans and an Associated Environmental Impact Statement for Six Western Oregon Districts of the Bureau of Land Management, 77 Fed. Reg. 14,414 (Mar. 9, 2012).

<sup>270</sup> Bureau of Land Mgmt., *Western Oregon Plan Revisions News* (Oct. 2006), available at <https://perma.cc/L6HK-D2L4>.

<sup>271</sup> *Resource Management Plans for Western Oregon*, BUREAU OF LAND MGMT., <https://perma.cc/NV3S-UTTK> (last visited Jan. 31, 2022).

<sup>272</sup> Pac. Rivers v. BLM, No. 6:16-cv-01598-JR, 2018 WL 6735090, at \*2–3 (D. Or. Oct. 12, 2018).

<sup>273</sup> Pac. Rivers v. BLM, No. 6:16-cv-01598-JR, 2019 WL 1232835 (D. Or. Mar. 15, 2019), *aff'd sub nom.* 815 F. App'x 107 (9th Cir. 2020).

<sup>274</sup> Pac. Rivers v. BLM, 815 F. App'x 107, 109 (9th Cir. 2020).

reserves for wildlife and water quality protection, the plans violated the OCLA's requirement that timber on O&C lands be cut, sold, and removed in conformity with the principle of sustained yield by assigning those lands to land use allocations that do not permit sustained yield timber production.<sup>275</sup> Senior Judge Richard Leon ruled in favor of the plaintiffs, holding that the OCLA imposes a nondiscretionary agency obligation to manage O&C lands for permanent forest production, and that “[t]he 2016 RMPs violate these mandatory directives by excluding portions of O&C timberland from sustained yield timber harvest” in reserves set aside for wildlife conservation.<sup>276</sup> Because “within the reserves, timber harvest is permitted for only limited purposes and is not performed on a sustained yield basis,” and because of the axiom that “shall means shall,” Judge Leon held that BLM's revised plans were arbitrary and capricious.<sup>277</sup>

In November 2021, Judge Leon issued his ruling on remedy, but he did not vacate the 2016 plans because that “would leave the O&C lands in a state of unregulated confusion,” pending their revision.<sup>278</sup> Moreover, the judge refused to require BLM to set the annual sustained yield capacity at at least 500 mmbf and refused to enjoin consultation under ESA.<sup>279</sup> Instead, Leon ordered BLM to report “what aspects, if any, of the Wildlife Provisions remain permissible in light of the [c]ourt's” view that a revision of BLM's land plans consistent with the OCLA “will almost certainly result in an upward revision of the annual sustained yield capacity.”<sup>280</sup>

What this decision means for the revision of BLM plans is hardly clear. Judge Leon clearly thought that the allowable sale quantity established in the 2016 plans was too low, but he also expressly recognized that setting the ASQ was subject to BLM's discretion, and that the agency was subject to legal requirements other than those of the OCLA, like the ESA and the other wildlife statutes.<sup>281</sup> Although the judge warned that his reluctance

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<sup>275</sup> Complaint, *Am. Forest Res. Council v. Kornze*, No. 1:16-cv-01599-RJL (D. D.C. Aug. 5, 2016); Complaint, *Ass'n of Or. & Ca. Ctys. v. Kornze*, No. 1:16-cv-01602-RJL (D. D.C. Aug. 5, 2016).

<sup>276</sup> *Am. Forest Res. Council v. Hammond*, 422 F. Supp. 3d 184, 190–91, 193 (D. D.C. 2019), *appeal filed sub nom. Am. Forest Res. Council v. United States*, 20-5008 (D. D.C. Jan. 24, 2020). BLM also argued that the lack of sufficient federal appropriations for forest management, other laws (such as ESA), and the lack of a “normal market” also precluded BLM from meeting its sustained yield calculation; but Judge Leon rejected these arguments as well. *Id.* at 190–91. Judge Leon was a Bush appointee to the court in 2002, after serving on three congressional investigations of alleged presidential wrongdoing. *Senior Judge Richard J. Leon*, U.S. DIST. COURT D.C., <https://perma.cc/86XK-SKLZ> (last visited May 8, 2022).

<sup>277</sup> *Hammond*, 422 F. Supp. 3d at 189–91.

<sup>278</sup> *Am. Forest Res. Council v. Nedd*, No. 1:16-cv-01599-RJL, at \*7 (D. D.C. Nov. 19, 2021).

<sup>279</sup> *Id.* at \*9–11.

<sup>280</sup> *Id.* at \*12, \*10.

<sup>281</sup> *See id.* at \*10 (“BLM retains discretion to determine and declare the annual sustained yield capacity going forward.”); *Id.* at \*11–12 (giving BLM 120 days to complete wildlife consultations under other statutes). BLM argued in its summary judgment brief that it was exactly its expert agency discretion that led to the setting of the ASQ at approximately 237 mmbf annually (with a forty percent variation in either direction), in light of the agency's competing legal obligations, market forces, and agency capacity. Federal Defendant's

“to unduly curtail [BLM’s] discretion” should not be interpreted as giving the agency “a blank check to proceed in any manner and at any pace,” it is hard to see how his order will, in fact, compel BLM to double the allowable sale quantity, as the timber industry sought, particularly on any relatively short timeline.<sup>282</sup> Moreover, because Judge Leon partially stayed his order vacating the plans pending their revision, the extent of immediate on-the-ground effects is unclear.<sup>283</sup> Should BLM undertake a revision of the 2016 RMPs as Judge Leon and the timber plaintiffs envision, it will further corrode the underlying ecological integrity of the NFP that was premised on BLM’s inclusion to meet at least the Forest Service’s habitat objectives throughout the range of the owl.

### VIII. REVISING THE NORTHWEST FOREST PLAN

NFMA requires the Forest Service to revise LRMPs every fifteen years to address changes affecting the management of natural resources for multiple uses.<sup>284</sup> Although the NFP claimed to be a 100-year plan,<sup>285</sup> the fifteen-year revision requirement applies equally to the nation’s first ecosystem management plan, which amended nineteen national forests and six BLM districts in three states.<sup>286</sup> In 2015, the Forest Service announced that it would undertake a revision of the Plan and hosted several public roundtables concerning various issues relevant to the revision.<sup>287</sup> Then, in 2018, the Forest Service initiated a literature review of scientific information that had come to light since the Plan’s adoption in

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Response in Opposition to Plaintiffs’ Motion for Summary Judgment at 27–28, 30–32, 35–37, Swanson Grp. Mfg. v. Bernhardt, No. 1:15-cv-01419-RJL (D. D.C. May 1, 2019); Federal Defendant’s Reply in Support of Cross Motion for Summary Judgment, at 11–13, Swanson Grp. Mfg. v. Bernhardt, No. 1:15-cv-01419-RJL (D. D.C. July 10, 2019). Leon’s order recalls the parable of the wise man who commands an intrepid youth to bring him yet another, different rock. *Luke* 18:9–14.

<sup>282</sup> *Nedd*, No. 1:16-cv-01599-RJL, at \*11. The industry sought at least 500 mmbf harvested annually, Spies et al., *supra* note 1, at 517, whereas the 2016 BLM plans set allowable sale quantities at approximately 237 mmbf.

<sup>283</sup> See *supra* text accompanying notes 278–280.

<sup>284</sup> 16 U.S.C. § 1604(f)(5) (2018).

<sup>285</sup> THE FIRST 10 YEARS, *supra* note 171, at 2; see FSEIS, *supra* note 144, at S-12 (referencing 100-year timeframe for effects analysis and recovery of degraded environmental conditions).

<sup>286</sup> The NFP was drafted under the Forest Service’s 1982 planning rule but employed many of the same landscape planning concepts called for in the 2012 regulations. For example, the 2012 planning rule embraces landscape connectivity, 36 C.F.R. §§ 219.8(a)(1), (a)(3)(i), (a)(3)(i)(E); 219.9(a)(1), managing landscapes for ecosystem structure, function, and composition, *id.* at § 219.9(a)(1); course and fine filter management approaches, *id.* at § 219.9; and robust monitoring, *id.* at 219.12. BLM essentially adopted the Forest Service’s planning framework when it jointly promulgated the NFP, a decision to which Judge Dwyer deferred. SAS IV, 871 F. Supp. 1291, 1313–14 (W.D. Wash. 1994).

<sup>287</sup> U.S. FOREST SERV., FOREST PLAN REVISION - FOREST LISTENING SESSIONS 19 <https://perma.cc/CJ4L-YLA3> (last visited Jan. 22, 2022).

1995, eventually producing a peer-reviewed “Science Synthesis.”<sup>288</sup> In 2020, the agency released a bioregional assessment that explored planning strategies for managing public lands while considering community and stakeholder interests in advance of the anticipated Plan revisions.<sup>289</sup>

Although the Forest Service has yet to publicly and officially begin the Plan revision process under the agency’s 2012 planning rule,<sup>290</sup> these early analyses are a prelude to a revision of the plan, possibly to begin in the fall 2022 and continue for several years.<sup>291</sup> Given Judge Dwyer’s prophetic judicial holdings about the need for federal forest managers to work together to address the ecosystem-wide ecological challenges of the spotted owl region,<sup>292</sup> coupled with the Forest Service’s 2012 planning rule that places ecological integrity at the heart of forest planning<sup>293</sup> and new environmental stressors such as climate change and large-scale wildfires,<sup>294</sup> the agencies have considerable work ahead. Although the history of the NFP may suggest that the challenges ahead are largely

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<sup>288</sup> SYNTHESIS OF SCIENCE, *supra* note 18, at 11. The purpose of the Science Synthesis was to capture the best available science to inform the revision process. *See id.* (explaining that science synthesis underwent extensive peer review).

<sup>289</sup> U.S. FOREST SERV., BIOREGIONAL ASSESSMENT OF NORTHWEST FORESTS 3 (2020).

<sup>290</sup> 36 C.F.R. § 219.1 (2012).

<sup>291</sup> Outstanding questions include whether the Forest Service will revise the regional framework of the NFP itself (which amended nineteen Forest Service and six BLM land plans) or revise each plan individually; the timing of congressional appropriations necessary to accomplish the revision; and whether local forest, regional, or national staff will be responsible for the revision effort. The Chief of the Forest Service and the Secretary of Agriculture must sign off on the revision strategy, which has yet to occur. Also, the congressional delegation in the Pacific Northwest has said surprisingly little about the NFP revision. If that were to change, it could alter the trajectory of the process. Early indications suggest that the Forest Service will begin the revision effort in the southern part of the spotted owl’s range, in northern California and southern Oregon on the Six Rivers, Shasta-Trinity, Klamath, Modoc, Mendocino, Lassen, Fremont-Winema, and Rogue River-Siskiyou National Forests. Not coincidentally, this subregion has seen an exponential increase in high-severity wildfire that has consumed a great deal of northern spotted owl suitable habitat over the past two decades. SYNTHESIS OF SCIENCE, *supra* note 18, at 39.

<sup>292</sup> *SAS IV*, 871 F. Supp. 1291, 1300 (W.D. Wash. 1994) (“The order now entered, if upheld on appeal, will mark the first time in several years that the owl-habitat forests will be managed by the responsible agencies under a plan found lawful by the courts. It will also mark the first time that the Forest Service and BLM have worked together to preserve ecosystems common to their jurisdictions.”).

<sup>293</sup> *See* 36 C.F.R. §§ 219.8 (“sustainability”), 219.9 (“diversity of plant and animal communities”), 219.19 (defining “[e]cological integrity” as “the quality or condition of an ecosystem when its dominant ecological characteristics (for example, composition, structure, function, connectivity, and species composition and diversity) occur within the natural range of variation and can withstand and recover from most perturbations imposed by natural environmental dynamics or human influence”); *see also* Susan Jane M. Brown, *A Blueprint for National Forest Management in the Biden Administration*, AMERICAN BAR ASSOCIATION (Apr. 12, 2021), <https://perma.cc/323J-CPJK> (arguing that consistent with NFMA and other multiple-use statutes and in order to address the myriad challenges facing the agency, the Forest Service should adopt an interpretive rule establishing ecological integrity the lodestar for federal forest management).

<sup>294</sup> SYNTHESIS OF SCIENCE, *supra* note 18, at 8.

ecological in nature, we think that the real challenges are primarily socioeconomic.<sup>295</sup>

### A. *The Socioeconomic Dimension*

As a society, we have learned a great deal about the ecological workings of the Douglas-fir and hemlock forests of western Washington, Oregon, and California, including that they are: 1) enormously biodiverse; 2) degraded from historic management (including from wildfire suppression); 3) an essential source of drinking water for millions; and 4) representative of important ways of life for many Pacific Northwesterners, including Indigenous peoples.<sup>296</sup> Although these public forests have not yielded all their secrets, we know enough now to act to preserve them for future generations. As Judge Dwyer noted,<sup>297</sup> until society is willing to preserve the remaining ancient forest required by dependent species like spotted owls, marbled murrelets, and salmon—and to address the root causes of declining forest health—there will be conflicts over efforts to continue to log to meet socioeconomic concerns when the best available science counsels against old-growth forest harvests.

Given the underlying socioeconomic issues, and the fact that the regional economy is no longer dependent on the timber industry to drive economic prosperity,<sup>298</sup> we think that a revised NFP must be premised on the reality that for some communities and individuals, working in the woods is an essential aspect of their identity. Rural communities represent an important thread of the fabric of the Pacific Northwest, providing most of the workforce and infrastructure sustaining forest restoration and management.<sup>299</sup> As long as national forest and O&C lands are managed for multiple uses, some timber harvests on federal public lands will remain a fixture in the region, although one downsized in response to changing domestic and international markets and pressures.<sup>300</sup> Future timber harvests can provide streams of revenue for timber-dependent communities. But it would be disingenuous to suggest that timber can or should be the only source of rural economic development.

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<sup>295</sup> Charnley, *supra* note 188, at 330.

<sup>296</sup> See generally SYNTHESIS OF SCIENCE, *supra* note 18; Spies et al., *supra* note 1.

<sup>297</sup> See *SAS II*, 771 F. Supp. 1081, 1096 (W.D. Wash. 1991) (“To bypass the environmental laws, either briefly or permanently, would not fend off the changes transforming the timber industry. The argument that the mightiest economy on earth cannot afford to preserve old growth forests for a short time, while it reaches an overdue decision on how to manage them, is not convincing today. It would be even less so a year or a century from now.”).

<sup>298</sup> SYNTHESIS OF SCIENCE, *supra* note 18, at 107–08.

<sup>299</sup> As discussed *supra* text accompanying notes 182–197, the NFP included programs such as NEAL, aimed at addressing the expected decline in regional employment in the forest products industry, but these programs failed to live up to expectations for many reasons, including lack of funding and agency confusion regarding their role in stimulating economic development.

<sup>300</sup> SYNTHESIS OF SCIENCE, *supra* note 18, at 674, 734, 777, 942, 957.



A robust landscape restoration program could provide living-wage jobs for local communities, although it needs to be coupled with other socioeconomic programs to enhance socioeconomic resilience. Arising out of the 1990s labor movement, the “just transition” principle “is that a healthy economy and a clean environment can . . . coexist.”<sup>301</sup> According to this principle, achieving this coexistence would not cost workers or communities their health, environment, jobs, or economic assets, and any unavoidable losses would be fairly compensated, with those most affected involved in the process of crafting solutions.<sup>302</sup> Just transition approaches have been suggested for declining coal-producing regions,<sup>303</sup> communities dependent on fossil fuel development,<sup>304</sup> and other communities where historically steady income streams have become far less reliable or disappeared altogether.<sup>305</sup>

A just transition for timber country should be a cornerstone of NFP revision. This socioeconomic framework could be developed in partnership with regional academic institutions and nongovernmental organizations,<sup>306</sup> and will require sustained federal investment in the socioeconomic well-being of rural communities like those provided by the Secure Rural Schools and Community Self-Determination Act of 2000<sup>307</sup> and the Payments in

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<sup>301</sup> *What is Just Transition?*, JUST TRANSITION ALL., <https://perma.cc/7E8L-XDZR> (last visited Jan. 31, 2022).

<sup>302</sup> *Id.*; *Just Transition: A Framework for Change*, CLIMATE JUSTICE ALL., <https://perma.cc/2AA8-3DUS> (last visited Jan. 31, 2022).

<sup>303</sup> Autumn Spanne, *Just Transition: History, Principles, and Examples*, TREEHUGGER (June 30, 2021), <https://perma.cc/PQF4-GF4L>.

<sup>304</sup> See Judy Fahys, *As the US Pursues Clean Energy and the Climate Goals of the Paris Agreement, Communities Dependent on the Fossil Fuel Economy Look for a Just Transition*, INSIDE CLIMATE NEWS (June 28, 2021), <https://perma.cc/3M9F-6PB2> (discussing the economic hardships faced by communities because of the clean-energy transition and proposing that just transition approaches may be a solution).

<sup>305</sup> See Philip Gass, *In Search of Just Transition: Examples from Around the World*, INT'L INST. FOR SUSTAINABLE DEV. (Apr. 8, 2019), <https://perma.cc/49BP-7GAJ> (examining how various countries have approached just transitions to clean-energy).

<sup>306</sup> Examples of academic institutions include Oregon State University's Extension Service, which works with local communities in the region to develop sustainable land management and community resilience programs and techniques, and the Ecosystem Workforce Program at the University of Oregon, which aims to achieve ecological health, economic prosperity, and democratic governance through research and education. *About Us*, OR. STATE UNIV. EXTENSION SERV., <https://perma.cc/ES8D-Q9Z7> (last visited Jan. 31, 2022); *Ecosystem Workforce Program*, UNIV. OF OR., <https://perma.cc/U2X2-YHM4> (last visited Jan. 23, 2022). Nongovernmental organizations such as Headwaters Economics that have long been engaged in land management and socioeconomic policy development have also advanced worthwhile alternative approaches to socioeconomic resilience in natural resource-dependent communities. *About Us*, HEADWATERS ECON., <https://perma.cc/3YBP-494F> (last visited Jan. 23, 2022).

<sup>307</sup> 16 U.S.C. § 7101 (2018). “The Secure Rural Schools program provides critical funding for schools, roads, and other municipal services to more than 700 counties across the U.S. and Puerto Rico . . . to help stabilize the funds available to rural counties” for essential county services such as search and rescue, libraries, mental health services, and other services. *Secure Rural Schools Program: Understanding the Program*, U.S. FOREST SERV., <https://perma.cc/KG7X-QZML> (last visited Jan. 31, 2022).

Lieu of Taxes program.<sup>308</sup> An equitable socioeconomic transition for timber country must be a key component of NFP revision and would be consistent with similar proposals advanced by the Biden administration.<sup>309</sup>

### *B. Ensuring Ecological Integrity*

After addressing the socioeconomic issues, a revised NFP must ensure the ecological integrity of the public forest lands within the range of the northern spotted owl. The best available science is clear that the remaining mature and old growth forests in the Pacific Northwest are essential to combating climate change,<sup>310</sup> providing clean drinking water for a growing populace,<sup>311</sup> and are vital places for wildlife to thrive<sup>312</sup> and humans to recreate.<sup>313</sup> As Judge Dwyer stated, it is past time for “the mightiest economy on earth . . . to . . . reach[] an overdue decision on how to manage”<sup>314</sup> mature and old-growth forests by designating these trees and forests as “not suitable for timber production” through the Plan revision process.<sup>315</sup> The status of these forests as unsuitable for timber harvest<sup>316</sup>

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<sup>308</sup> 31 U.S.C. § 6902. The Payments in Lieu of Taxes program, enacted in 1976, supplies federal payments to states and “local governments to help offset losses in property taxes due to the existence of nontaxable [f]ederal lands within their boundaries.” *Payment in Lieu of Taxes*, U.S. DEP’T OF THE INTERIOR, <https://perma.cc/SME4-J7DC> (last visited Jan. 31, 2022). The program’s payments are based on acreage, not the intensity of development, like severance taxes. *Id.*

<sup>309</sup> See *Fact Sheet: President Biden’s Leaders Summit on Climate*, THE WHITE HOUSE (Apr. 23, 2021), <https://perma.cc/7E3C-2LLP> (discussing Biden administration strategies for addressing the climate crisis); see also OREGON WILD, A SUSTAINABLE REDESIGN OF THE SECURE RURAL SCHOOLS ACT 2–3, 7 (2021) (proposing changes to the Secure Rural Schools Act to create carbon markets to generate revenue to support timber-dependent communities).

<sup>310</sup> Olga N. Krankina et al., *Carbon Balance on Federal Forest Lands of Western Oregon and Washington: The Impact of the Northwest Forest Plan*, FOREST ECOLOGY & MGMT., Dec. 2012, at 171, 171; James R. Strittholt et al., *Status of Mature and Old-Growth Forests in the Pacific Northwest*, 20 CONSERVATION BIOLOGY 363, 364 (2006); Olga N. Krankina et al., *High-Biomass Forests of the Pacific Northwest: Who Manages Them and How Much is Protected?*, 54 ENV’T MGMT. 112, 112–13 (2014).

<sup>311</sup> Patric Brandt et al., *Multifunctionality and Biodiversity: Ecosystem Services in Temperate Rainforests of the Pacific Northwest, USA*, BIOLOGICAL CONSERVATION, Jan. 2014, at 362, 364.

<sup>312</sup> *Id.* at 363.

<sup>313</sup> *Id.* at 364.

<sup>314</sup> *SAS II*, 771 F. Supp. 1081, 1096 (W.D. Wash. 1991).

<sup>315</sup> See 36 C.F.R. §§ 219.7(e)(1)(v) (2020).

<sup>316</sup> The Plan does generally prohibit logging of forests above eighty years of age in LSRs, designating them as unsuitable for programmed timber harvest and removing any timber volume from LSRs from counting toward the Forest Service’s annual sale quantity, or timber target. 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, 2, 8, 29 (Apr. 1994). The drafters of the NFP settled on the age of 80 in 1994 because forests that had originated in the early 1900s from large wildfire events (e.g., the Yacolt and Tillamook burns) were beginning to develop older forest characteristics in the 1990s at that time. See K. Norman Johnson et al., *The Northwest Forest Plan: Triumph and Tragedy* 124 (unpublished manuscript) (on file with authors) (describing

would last until the next forest planning cycle (roughly fifteen to thirty years), when society would revisit whether and how they should be managed to meet the needs of present and future generations.<sup>317</sup> The designation therefore would not be permanent.

In 2001, former the Forest Service Chief Michael Dombeck issued a moratorium on old-growth forest logging shortly before the Clinton administration left office,<sup>318</sup> demonstrating that a cessation of older forest logging is feasible and not a novel concept. Indeed, two of the authors of the NFP have called for an end to mature and old-growth logging as consistent with the best available science.<sup>319</sup> They pointed out that old-growth forests are not necessary to supply a sustained yield of timber products because timber harvests using “ecological forestry” practices over thousands of acres of land suitable for harvest would provide substantial economic and ecological benefits.<sup>320</sup> They maintained that old-growth “forests simply contribute too much ecologically, socially and spiritually in their current state” to be logged.<sup>321</sup> The Biden administration, which has touted its commitment to fighting the climate and species extinction crises,<sup>322</sup> could contribute to both through a revised NFP that protects some of the most carbon-rich and biodiverse forests in the world and protecting from logging the oldest cohorts of trees.<sup>323</sup>

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NFP drafter’s reliance on knowledge of forests that had developed after large 1902 wildfires for the 80-year rule). Designating only mature and old-growth trees as not suitable for timber production means younger forest would be suitable for harvest, and also that older forests and trees (particularly those in more frequent fire regimes) could be actively restored to more resilient conditions. Indeed, older “dry” forests are in urgent need of active restoration treatments to reduce stand densities, shift species composition toward more resilient species, and restore important processes such as more frequent fire. *See* Jerry F. Franklin & K. Norman Johnson, *A Restoration Framework for Federal Forests in the Pacific Northwest*, 110 J. FORESTRY 429, 432, 435–37 (2012) (proposing accelerated treatment methods for dry forests and discussing restoration of older forests).

<sup>317</sup> *See* 36 C.F.R. § 219.11(a)(2) (2020) (“The responsible official shall review lands identified in the plan as not suited for timber production at least once every 10 years, or as otherwise prescribed by the law, to determine whether conditions have changed.”).

<sup>318</sup> Douglas Jehl, *Clinton Forest Chief Acts to Stop Logging of the Oldest Trees*, N.Y. TIMES (Jan. 9, 2001), <https://perma.cc/T7ZY-XRPK>.

<sup>319</sup> Jerry Franklin & Norm Johnson, *Opinion: Protect Older Natural Forests in the Western Cascades*, REGISTER-GUARD (April 27, 2021), <https://perma.cc/ECG5-P77Z>; Henry Houston, *Flattening a Forest: Retired Forestry Professors, an Environmental Group and a Lawmaker Speak Out on a Proposed Logging of Mature Forestland*, EUGENE WEEKLY (May 13, 2021), <https://perma.cc/T57N-Z5FG>.

<sup>320</sup> Franklin & Johnson, *supra* note 319.

<sup>321</sup> *Id.*

<sup>322</sup> Proclamation No. 13990, 86 Fed. Reg. 7,037, (Jan. 25, 2021); Proclamation No. 14008, 86 Fed. Reg. 7,619, (Feb. 1, 2021).

<sup>323</sup> The Administration’s recent executive order, explained in the postscript to this Article, could signal the end of old-growth logging, although that result is hardly clear.

### 1. *Protecting Biological Diversity*

Protecting older forests from programmed timber harvest would address several ecological and social challenges associated with federal forest management in the Pacific Northwest, but other existential conflicts will remain. Managers will need to confront the substantial increase in natural disturbance, especially wildfire, over 1994 baseline conditions. As the Pacific Northwest warms and precipitation patterns change,<sup>324</sup> experts predict that the region will experience more fires that are larger and more severe than in the past.<sup>325</sup> The best available data suggests that patterns of flora and fauna will shift as the climate in the region changes.<sup>326</sup> In order to respond, the agencies must evaluate the existing reserve systems (LSRs, riparian reserves, and key watersheds) in order to ensure that the reserve system provides adequate room to migrate<sup>327</sup> for plants and animals and for ecological processes to function in a new environment, elements of which may have no regional analog.<sup>328</sup>

#### *a. Reserves*

The current LSR network is premised on static boundaries that do not change and may not reflect the best available habitat for wildlife or even the older forest in a watershed.<sup>329</sup> Recent analysis suggests that the administratively and congressionally reserved landscapes in the Pacific Northwest have experienced more high-severity wildfire than other land

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<sup>324</sup> JERRY M. MELILLO ET AL., CLIMATE CHANGE IMPACTS IN THE UNITED STATES: THE THIRD NATIONAL CLIMATE ASSESSMENT 489 (2014).

<sup>325</sup> SYNTHESIS OF SCIENCE, *supra* note 18, at 46.

<sup>326</sup> *Id.*

<sup>327</sup> The 2012 planning rule emphasizes plan content that maintains and restores connectivity of terrestrial and aquatic landscapes, habitat, and habitat function. 36 C.F.R. §§ 219.8(a)(1)–(a)(3), 219.9(a)(1), 219.10(a)(1) (2020); *see id.* § 219.19 (defining “connectivity”). Species movement patterns will shift as the Pacific Northwest warms and precipitation changes in response to climate change. SYNTHESIS OF SCIENCE, *supra* note 18, at 5. The regional nature and size of the NFP is especially adaptable for a proactive management strategy that protects and restores landscape connectivity across administrative and ownership boundaries. To adapt to climate change, managers must ensure that native species have ample habitat in which to survive and migrate under predicted future climate scenarios to more suitable climates that are in a relatively undisturbed condition. Thus, a revised NFP must identify and protect functional landscape level connectivity based on the best available science and predictive climate models.

<sup>328</sup> SYNTHESIS OF SCIENCE, *supra* note 18, at 14–19, 31–46.

<sup>329</sup> JACK WARD THOMAS ET AL., A CONSERVATION STRATEGY FOR THE NORTHERN SPOTTED OWL: REPORT OF THE INTERAGENCY SCIENTIFIC COMMITTEE TO ADDRESS THE CONSERVATION OF THE NORTHERN SPOTTED OWL 3 (1990); Jerry F. Franklin, *A Conceptual Basis for FEMAT*, J. FORESTRY, April 1994, at 21, 22.

use allocations.<sup>330</sup> In fact, wildfire has made more northern spotted owl habitat unsuitable than from any other cause, including logging.<sup>331</sup>

Consequently, in frequently disturbed landscapes, such as those in the southern part of the spotted owl's range in northern California and southern Oregon, fixed reserves may not be the best strategy to preserve biodiversity and respond to a changing climate where fire is more prevalent on much of the landscape.<sup>332</sup> An iterative or flexible terrestrial reserve system would produce neither excessive nor truncated land management. A "boundary-less" reserve system in northern California and southern Oregon could incorporate the provisions of the 2011 recovery plan for the northern spotted owl that calls for managing owl habitat in "dry forests" to maintain essential owl habitat features, but also allows restoration forestry, wildfire risk reduction, and maintenance treatments (including prescribed fire) in owl habitat.<sup>333</sup> Such an approach would protect existing

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<sup>330</sup> See James D. Johnston et al., *Does Conserving Roadless Wildland Increase Wildfire Activity in Western U.S. National Forests?*, ENV'T RES. LETTERS, July 2021, at 1, 10 (discussing fire severity in congressionally and administratively reserved roadless areas). By no means does the fact that unmanaged lands may experience greater disturbance suggest that intensively-managed industrial forestlands are more resilient to disturbance; indeed, short-rotation plantations of all ownerships routinely burn hotter, faster, and more intensively than older forests, and are generally depauperate of biodiversity. See Harold S. J. Zald & Christopher J. Dunn, *Severe Fire Weather and Intensive Forest Management Increase Fire Severity in a Multi-Ownership Landscape*, ECOLOGICAL APPLICATIONS, Feb. 2018, at 1, 8–10 (discussing fire severity in intensely managed forests).

<sup>331</sup> U.S. DEP'T OF AGRIC. ET AL., PNW-GTR-929, STATUS AND TRENDS OF NORTHERN SPOTTED OWL HABITATS 22 (2016). A great deal of spotted owl habitat has been affected by wildfire, but this fact does not mean that spotted owls do not use burned but suitable habitat for some life functions post-fire. See U.S. FISH & WILDLIFE SERV. REGION 1, REVISED RECOVERY PLAN FOR THE NORTHERN SPOTTED OWL (*STRIX OCCIDENTALIS CAURINA*) at III-29 to III-31 (2011) [hereinafter NSO RECOVERY PLAN]. However, the extent and duration of post-fire habitat use is limited, and the lack of complex late-successional forest habitat after high severity wildfire is a limiting factor to persistent spotted owl use of burned forests. See generally Derek E. Lee, *Spotted Owls and Forest Fire: A Systematic Review and Meta-Analysis of the Evidence*, ECOSPHERE, July 2018, at 1.

<sup>332</sup> SYNTHESIS OF SCIENCE, *supra* note 18, at 37–40. Although all forests in the Pacific Northwest evolved with fire as the major natural disturbance process, forests in the southern part of the spotted owl's range – roughly from Roseburg, Oregon south to Marin, California – are particularly well-adapted to frequent and mixed-fire regimes. *Id.* Forests in the central and northern parts of the owl's range experience less routine fire, but when they do experience wildfire, it is often large, stand-replacing wildfires like that which occurred during the 2020 Labor Day fires in Oregon. *Id.* at 105; see William G. Robbins, *Oregon and Climate Change: The Age of Megafires in the American West*, 122 OR. HIST. Q. 250, 267–69 (2021) (discussing the Oregon 2020 Labor Day fires within the context of other historic stand-replacing fires in the region). As the climate continues to warm, experts predict that there will be more wildfire in more places than in the past. SYNTHESIS OF SCIENCE, *supra* note 18, at 48. Moreover, because more human development is now located in the unfortunately named wildland-urban "interface" – the junction between the forest and the human-built environment – than in the past, communities will be more exposed to wildfire and its destructive power, further compelling urgent action. *Areas Where Homes, Forests Mix Increased Rapidly Over Two Decades*, U.S. FOREST SERV. (Mar. 12, 2018), <https://perma.cc/5AS6-P4QV>.

<sup>333</sup> See generally NSO RECOVERY PLAN, *supra* note 331, at III-34 to III-35.

habitat to buffer against disturbance while new, suitable spotted owl habitat comes on line.<sup>334</sup>

A “hybrid” reserve strategy for more frequent fire forests also has merit.<sup>335</sup> Under this approach, a mapping exercise would identify currently suitable spotted owl habitat and designate these denser forest stands as reserves, with particular attention paid to identifying and reserving areas that are most likely to escape wildfire in the near term (that is, “fire refugia”).<sup>336</sup> The unreserved acreage that does not currently possess suitable habitat characteristics would be scheduled for restoration treatments, including prescribed fire, that result in the retention of a density of larger older trees and other biological legacies which are likely to persist in the face of a warming climate.<sup>337</sup> As reserved areas experience wildfire over time, and as unreserved lands are restored to a future range of variability, unreserved lands would be newly designated as reserves and fire-affected reserves would be returned to an unreserved status and managed for ecological integrity.<sup>338</sup>

In other landscapes, such as the Willamette Valley, the Oregon Coast Range, southwest Washington, the Olympic Peninsula, and the North Cascades, a more static reserve system may still be appropriate to anchor the NFP’s regional ecosystem framework and provide large blocks of intact interior forest.<sup>339</sup> In these locations, an ecological forestry management regime<sup>340</sup> focused on terrestrial and aquatic restoration and ecological integrity should be the dominant emphasis.<sup>341</sup>

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<sup>334</sup> Franklin & Johnson, *supra* note 316, at 435.

<sup>335</sup> See SYNTHESIS OF THE SCIENCE, *supra* note 18, at 923–24 (suggests there may be situations when “hybrid” . . . qualities or ecosystems might be desirable”); *id.* at 1049 (defining “hybrid ecosystem”).

<sup>336</sup> *Id.* at 185 (explaining that “fire refugia” includes “settings where fire [i]s infrequent”); *id.* at 954 (explaining that modeling “found that most of the existing area of spotted owl habitat could be maintained for 50 years despite the occurrence of wildfire (at recent rates) and restoration activities designed to create open, more resilient forests.” Whereas “[p]rojected losses of owl habitat from wildfire were significantly more than from relatively limited restoration activities, but these losses were made up for by gains in habitat from growth and succession of small-diameter or relatively open forests”).

<sup>337</sup> Johnson et al., *supra* note 316, at 168, 172.

<sup>338</sup> Franklin & Johnson, *supra* note 316, at 432.

<sup>339</sup> Spies et al., *supra* note 1, at 2.

<sup>340</sup> Ecological forestry employs ecological models from natural forest systems as a basis for managing forests. It incorporates principles of natural forest development, including the role of disturbances, in the initiation, development, and maintenance of forests and forest landscape mosaics. Most importantly, ecological forestry recognizes that forests are complex ecosystems with diverse biota, complex structure, and multiple functions, not simple collections of trees valuable for the production of wood. In doing so, it seeks to maintain the fundamental capacities (integrity) of the forest ecosystem in which it is applied. JERRY F. FRANKLIN ET AL., *ECOLOGICAL FOREST MANAGEMENT* 6 (2018). Principles for “wet” and “dry” forest management from the 2011 spotted owl recovery plan are consistent with an ecological forestry approach to land management. See NSO RECOVERY PLAN, *supra* note 331, at III-11 to III-41.

<sup>341</sup> See Brown, *supra* note 293.

*b. Wildfire*

As wildfire becomes an even greater disturbance agent on the landscape, robust direction concerning the management of post-fire NFP forests will be essential. Unlogged forests affected by wildfire are one of the rarest ecotypes in the Pacific Northwest,<sup>342</sup> providing widespread wildlife benefits.<sup>343</sup> On the other hand, post-fire logging can have serious deleterious effects on water quality, soil health, wildlife, future wildfire risk, and forest succession.<sup>344</sup> The existing NFP recognizes that logging after natural disturbance, particularly after wildfires, is of limited ecological necessity, and therefore restricts the practice to rare circumstances within LSRs.<sup>345</sup> But the existing Plan provides no management direction regarding post-disturbance logging in its other land use allocations.

Since the promulgation of the NFP in 1994, the scientific literature has become extremely definitive that complex early seral habitat created by natural disturbance is quite valuable ecologically, and therefore warrants protection.<sup>346</sup> Consequently, a revised NFP should extend the current management direction applicable to LSRs to the entire landscape, explicitly requiring retention of large, old trees post-fire.<sup>347</sup> Updated management directives to this effect would be consistent with the 2011 northern spotted owl recovery plan that expressly directs land managers in the post-fire environment to conserve and restore “habitat elements that take a long time to develop (e.g., large trees, medium and large snags, [and] downed wood).”<sup>348</sup>

*c. Wildlife*

Two additional wildlife recommendations bear noting. First, while retaining all suitable northern spotted owl habitat is essential to the

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<sup>342</sup> Mark E. Swanson et al., *The Forgotten Stage of Forest Succession: Early-Successional Ecosystem on Forest Sites*, FRONTIERS IN ECOLOGY & ENV'T, 2010, at 5. However, with the increasing extent and severity of wildfire in the region, this assertion may not hold true over time.

<sup>343</sup> *Id.* at 32, 34, 39.

<sup>344</sup> *Id.* at 81–82.

<sup>345</sup> NFP STANDARDS & GUIDELINES, *supra* note 133, at C-13 to C-16.

<sup>346</sup> Swanson et al., *supra* note 342.

<sup>347</sup> NSO RECOVERY PLAN, *supra* note 331, at III-49. Since the best available science indicates that there is little ecological need to intervene in the post-fire environment other than to protect public health and safety along roads and other public infrastructure, only limited exceptions to a prohibition on post-fire management would be appropriate. See Swanson et al., *supra* note 342 (describing the largely negative ecological results of post-fire interventions). See also the postscript to this Article, on the recent Biden Administration executive order.

<sup>348</sup> NSO RECOVERY PLAN, *supra* note 331, at III-47 to III-49.

conservation and recovery of the species,<sup>349</sup> owl researchers now recognize that aggressive control of the invasive barred owl—a superior competitor to the spotted owl—is required if the iconic native species is to continue to exist.<sup>350</sup> In 2013, FWS began implementation of an experimental lethal control program for barred owls through 2021.<sup>351</sup> Results from the experimental program indicate that removing barred owls, in combination with conservation of suitable habitat, can slow or reverse the rate of spotted owl population declines.<sup>352</sup> Thus, the revised NFP should establish a permanent control program and, similar to BLM’s approach in its 2016 RMPs, only authorize timber harvests that do not result in incidental take of spotted owls until population numbers stabilize.<sup>353</sup>

Second, although much of the focus of the Plan has been on northern spotted owls, the forest biota addressed in the Plan’s S&M program warrants continued conservation attention in a revised NFP. The 2012 planning rule takes a course-filter/fine-filter approach<sup>354</sup> to sensitive wildlife protection by requiring the designation and management of “Species of Conservation Concern” (SCC),<sup>355</sup> a concept arguably pioneered

<sup>349</sup> Memorandum from State Supervisor, Oregon Fish and Wildlife Office, to Acting Assistant Regional Director, Ecological Services, Interior Regions 9/12, Portland, Oregon, 1–2, 4 (Jan. 15, 2021) [hereinafter FWS 2021b]; NSO RECOVERY PLAN, *supra* note 331, at III-43 to III-45.

<sup>350</sup> FWS 2021b, *supra* note 349, at 2–4; Alan B. Franklin et al., *Range-Wide Declines of Northern Spotted Owl Populations in the Pacific Northwest: A Meta-Analysis*, 259 BIOLOGICAL CONSERVATION, July 2021, at 2, 11–15 (finding a sharp range-wide decline in spotted owl populations).

<sup>351</sup> *Barred Owl Study Update*, U.S. FISH & WILDLIFE SERV., <https://perma.cc/L9Y5-GQV2> (last visited Feb. 15, 2022).

<sup>352</sup> J. DAVID WIENS ET AL., EFFECTS OF BARRED OWL (*STRIX VARIA*) REMOVAL ON POPULATION DEMOGRAPHY OF NORTHERN SPOTTED OWLS (*STRIX OCCIDENTALIS CAURINA*) IN WASHINGTON AND OREGON—2019 ANNUAL REPORT 1 (2020); J. David Wiens et al., *Invasiver Removal Triggers Competitive Release in a Threatened Avian Predator*, 118 PROC. NAT’L ACAD. SCI., Aug. 2021, at 1, 1.

<sup>353</sup> Since control of barred owls across the range of the northern spotted owl is time-consuming and expensive, managers should identify priority areas for barred owl removal and focus first on removal in spotted owl source populations and other critical linkages for the species (*e.g.*, southwest Oregon).

<sup>354</sup> 36 C.F.R. § 219.9(a)–(b) (2020). The regulation explains:

Compliance with the [course-filter] ecosystem requirements . . . is intended to provide the ecological conditions to both maintain the diversity of plant and animal communities and support the persistence of most native species in the plan area. Compliance with the [fine-filter] requirements . . . is intended to provide for additional ecological conditions not otherwise provided by compliance with [the course-filter requirements] for individual species as set forth in [the fine-filter requirements].

*Id.* § 219.9. The course-filter requirements generally consist of land use allocations and plan components applicable across the landscape, whereas fine-filter components are tailored to individual species whose ecological needs are not met by the general course filter provisions: “If the responsible official determines that the [other] plan components . . . are insufficient to provide such ecological conditions, then additional, species-specific plan components, including standards or guidelines, must be included in the plan to provide such ecological conditions in the plan area.” *Id.* § 219.9(b)(1).

<sup>355</sup> *Id.* § 219.9(c).



by the NFP's adaptive S&M program. SCC are species other than ESA-listed, proposed, or candidate species in the Plan area that the regional forester has determined, on the basis of best available science, that there exists a "substantial concern about the[ir] capability to persist over the long-term in the plan[ning] area."<sup>356</sup> Regional foresters have yet to designate SCC for the NFP revision, but these species are likely to mirror the types of wildlife addressed by the Plan's S&M program. Although the 2012 planning rule does not require surveys for or buffers around SCC—as the Plan does for S&M species—protection of mature and old-growth trees and forests across the landscape would largely obviate the need for laborious species-specific management. To ensure against a decline in abundance or diversity of SCC, plan monitoring and adaptive management, required by the 2012 planning rule,<sup>357</sup> is essential.

## 2. *The Continuing Importance of the Aquatic Conservation Strategy*

Critics of the NFP often cite the Plan's failure to provide the alleged "promised" 1.1 bbf of timber,<sup>358</sup> but one aspect of the Plan that indisputably has been a resounding success is the ACS and its associated watershed management framework.<sup>359</sup> Monitoring of plan implementation has confirmed that "the fundamental tenets and ecological framework of the ACS are sound," and that "aquatic ecosystems in the NFP area are likely improving as expected, albeit slowly."<sup>360</sup> There is little scientific evidence suggesting that the ACS should be altered,<sup>361</sup> although the effects of a warming climate may justify augmented protections.<sup>362</sup>

For example, the NFP has designated 164 key watersheds over nine million acres to protect high-quality water sources and salmon habitat.<sup>363</sup> Additional key watershed designations and stronger environmental safeguards may be needed to buffer against projected climate change effects (like drought and floods) and rapid human population growth, including providing thermal refuges for aquatic wildlife, establishing climate adaptation and restoration goals, and imposing restrictions on logging, road building, and other stressors. Although the NFP made good

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<sup>356</sup> *Id.*; see generally NFP STANDARDS & GUIDELINES, *supra* note 133, at C-4 to C-6 (describing four different standards for "survey and manage" with varying degrees of priority, depending on the nature of information available about presence of species).

<sup>357</sup> 36 C.F.R. § 219.12.

<sup>358</sup> AM. FOREST RES. COUNCIL, THE NORTHWEST FOREST PLAN 2011. The Plan never actually made this "promise." See *supra* text accompanying notes 142–143.

<sup>359</sup> SYNTHESIS OF SCIENCE, *supra* note 18, at 533–37.

<sup>360</sup> *Id.* at 533. Still, a number of wild salmonid and steelhead runs have been listed as threatened and endangered during the past 20 years. See *ESA Threatened & Endangered: Species Directory*, NAT'L OCEANIC & ATMOSPHERIC ADMIN. FISHERIES, <https://perma.cc/LUH5-5A4B> (last visited Feb. 15, 2022).

<sup>361</sup> SYNTHESIS OF SCIENCE, *supra* note 18, at 533–35, 537.

<sup>362</sup> *Id.* at 533, 535–537.

<sup>363</sup> NFP STANDARDS & GUIDELINES, *supra* note 133, at B-18.

progress reducing the extent and adverse effects of roads,<sup>364</sup> climate change's adverse effects on water quality and species will likely warrant greater watershed restoration and protections.<sup>365</sup>

### 3. Climate Change

A revised NFP must address the existential threat of global climate change. The Pacific Northwest's older, high-biomass forests are globally significant carbon sinks.<sup>366</sup> In recent years, the scientific community has made great strides in understanding the potential effects of climate change, management changes necessary to minimize those effects, and the critical role that high-biomass forests play in this process.<sup>367</sup> Providing long-term carbon storage through the protection of mature and old-growth forests can buffer against climate change and provide the U.S. with a means of complying with the international climate change agreements on forest carbon sinks and reservoirs,<sup>368</sup> consistent with the Biden administration's professed focus on climate action.<sup>369</sup>

### 4. Tribal Co-Management

The Pacific Northwest is home to numerous federally recognized and unrecognized Tribes and Indigenous people who have actively managed what are now national forests for millennia.<sup>370</sup> As the Science Synthesis explained, "the ecosystems of the NWFP area support a wide array of tribal resources, including various foods, medicines, [and] materials."<sup>371</sup> These resources also support sacred sites, tribal sense of place, and cultural

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<sup>364</sup> SYNTHESIS OF SCIENCE, *supra* note 18, at 506–10; Krankina et al., *Carbon Balance on Federal Forest Lands of Western Oregon and Washington: The Impact of the Northwest Forest Plan*, *supra* note 310, at 179–80; Krankina et al., *High-Biomass Forests of the Pacific Northwest: Who Manages Them and How Much is Protected?*, *supra* note 310, at 118; see Strittholt et al., *supra* note 310, at 371–372 (highlighting the importance of roadless classifications to the maintenance of the reserve network on federal lands).

<sup>365</sup> SYNTHESIS OF SCIENCE, *supra* note 18, at 506–10.

<sup>366</sup> Krankina et al., *High-Biomass Forests of the Pacific Northwest: Who Manages Them and How Much is Protected?*, *supra* note 310, at 113.

<sup>367</sup> *Id.* at 113–14.

<sup>368</sup> Beverly E. Law et al., *Strategic Forest Reserves Can Protect Biodiversity in the Western United States and Mitigate Climate Change*, COMMC'NS EARTH & ENV'T, 2021, at 1, 5; SYNTHESIS OF SCIENCE, *supra* note 18, at 62–63. Not all forests within the range of the northern spotted owl are equally as well-suited to absorb and sequester forest carbon over time: forests with a more frequent (fire) disturbance regime, such as those in the southern part of the range, are unlikely to store carbon for long periods of time. Mesic forests, with much longer disturbance horizons, may be better suited to function as carbon refugia. *Id.* at 64. Thus, plan content pertaining to carbon sequestration or climate refugia should take into consideration the tradeoffs inherent in management of a dynamic system. *Id.*

<sup>369</sup> Proclamation No. 13990, 86 Fed. Reg. 7,037 (Jan. 25, 2021); Proclamation No. 14008, 86 Fed. Reg. 7,619 (Feb. 1, 2021).

<sup>370</sup> SYNTHESIS OF SCIENCE, *supra* note 18, at 851.

<sup>371</sup> *Id.* at 896.

identity;<sup>372</sup> however, when written, the Plan itself did not consider tribal management practices or explicitly seek to promote many resources valued by tribes.<sup>373</sup> Consequently, Plan revision will provide a long-overdue opportunity to reevaluate the role of tribal co-management of national forestlands.<sup>374</sup>

“Co-management” can have many connotations, but generally involves the following parameters: 1) “recogni[zing] tribes as sovereign governments;” 2) proceeding consistent with “the federal government’s trust responsibilities to tribes;” 3) providing “structures for tribal involvement;” 4) “[m]eaningfully integrati[ng] tribes early and often in the decision-making process;” 5) “incorporation of tribal expertise” in decision making; and 6) supplying “dispute resolution mechanisms.”<sup>375</sup> Although the Forest Service and other federal land managers rarely use the phrase “co-management,” the concept is similar to cooperative federalism frameworks that appear in many federal land management statutes,<sup>376</sup> prompting knowledgeable commentators to recommend that “[t]he principles and strategies employed in cooperative federalism should be extended to Indian tribes and modified to affirm tribal sovereignty and safeguard the cultural resources and reserved treaty rights found on federal public lands.”<sup>377</sup> Indeed, in 2020 Montana Senator Jon Tester (D-Mont.) introduced the Badger-Two Medicine Protection Act, which embraces co-management principles that “emanates from Blackfeet [Tribal] values and vision for the area”<sup>378</sup> and “demonstrates a form of

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<sup>372</sup> *Id.* at 859.

<sup>373</sup> *Id.* at 809.

<sup>374</sup> See generally Michael C. Blumm & Lizzy Pennock, *Tribal Consultation: Toward Meaningful Collaboration with the Federal Government*, 33 COLO. ENV’T L. J. 1 (2022).

<sup>375</sup> See 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 iii–iv (2020).

<sup>376</sup> See *id.* at 78–81. For example, section 6(a) of NFMA requires its land plans to be “coordinated with the land and resource management planning process of State and local governments and other Federal agencies.” 16 U.S.C. § 1604(a) (2018). Section 202(c)(9) of FLPMA requires its land plans to “be consistent with State and local plans to the maximum extent [the Secretary] finds consistent with Federal law and the purposes of [FLPMA].” 43 U.S.C. § 1712(c)(9) (2018). And section 302(b) of FLPMA also expressly preserves state authority to manage “fish and resident wildlife” on both the Forest Service and BLM lands. *Id.* § 1732(b).

<sup>377</sup> MILLS & NIE, *supra* note 375, at 81.

<sup>378</sup> *Id.* at 88. In a press statement accompanying the introduction of S. 4288, Timothy Davis, Chairman of the Blackfeet Tribal Business Council, explained:

The Blackfeet Nation has maintained a profound connection to the Badger-Two Medicine since time immemorial . . . It is our last cultural refuge, home to many of our origin stories, a stronghold for our ceremonies and traditions, and until it is permanently protected, we cannot rest. This bill ensures the teaching of our Pikuni ancestors will be fulfilled and we can always be connected with the sacred. We are extremely grateful to Senator Tester for his support and leadership in our effort to protect these sacred lands.

carefully crafted, innovative shared governance that could enable tribal co-management in the future.”<sup>379</sup>

There is, however, no need to wait for the uncertain federal legislative process to embrace co-management.<sup>380</sup> Commentators have suggested the use of the forest planning process to recognize and protect tribal cultural and natural resource interests,<sup>381</sup> and the Forest Service has acknowledged that strategies to promote tribal ecocultural resources are consistent with emerging directions in forest management, including reestablishing more natural disturbance regimes and landscape heterogeneity using adaptive management and restoration forestry. Such strategies can be integrated with measures to protect large, old trees, cultural sites, and other ecocultural resources that are potentially sensitive to treatments and vulnerable to severe disturbances.<sup>382</sup> An assessment of tribal interests within or nearby NFP lands must be a priority for those revising the NFP. The Plan should identify and designate areas and management prescriptions (such as the use of prescribed fire to propagate huckleberry fields), and explore tribal management of designated areas.<sup>383</sup>

### 5. *The Role of the Oregon and California Lands*

A revised NFP must also address O&C lands managed by BLM. In 2016, BLM revised its land plans within the spotted owl's range and effectively withdrew them from the Plan.<sup>384</sup> Environmentalists, the timber industry, and the O&C counties all challenged the revised plans. As explained in Part VI, the Oregon federal district court eventually upheld BLM Plan revisions against an environmentalist challenge, and the Ninth Circuit affirmed.<sup>385</sup> The Biden administration could attempt to reintegrate the lands into the NFP but would need to rationally explain why rejoining the Plan is warranted, since only a short time ago BLM thought O&C lands should not be part of the NFP.<sup>386</sup>

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*Tester Introduces Legislation to Permanently Protect Badger-Two Medicine*, JON TESTER U.S. SENATOR FOR MONTANA (July 22, 2020), <https://perma.cc/T5QG-LG2F>; see Cassidy Randall, *New Bill Would Permanently Protect 130,000 Acres of Montana's Badger-Two Medicine*, HIGH COUNTRY NEWS (Aug. 5, 2020), <https://perma.cc/CY5P-W8XT>.

<sup>379</sup> MILLS & NIE, *supra* note 375, at 88.

<sup>380</sup> See Blumm & Pennock, *supra* note 374.

<sup>381</sup> See, e.g., Martin Nie, *The Use of Co-Management and Protected Land-Use Designations to Protect Tribal Cultural Resources and Reserved Treaty Rights on Federal Lands*, 48 NAT. RES. J. 585, 596, 611–12 (2008).

<sup>382</sup> SYNTHESIS OF SCIENCE, *supra* note 18, at 885–86, 894, 896–97.

<sup>383</sup> *Id.* at 886.

<sup>384</sup> See *supra* text accompanying notes 125, 257–277.

<sup>385</sup> *Pac. Rivers v. BLM*, No. 6:16-cv-01598-JR, 2019 WL 1232835 (D. Or. Mar. 15, 2019), *aff'd*, 815 F. App'x 107, 110 (9th Cir. 2020); See *supra* text accompanying notes 272–274.

<sup>386</sup> A reasoned explanation that should survive judicial review would explain that the 2016 revised plans lacked a reasoned basis, or at least lacked an explanation of the environmental costs of removing BLM plans from the NFP. There was certainly no attempt to explain how the removal was consistent with the policies of the NFP. There was no science supporting the removal; in fact, all the science of the last quarter-century suggests that intact forests,

A bigger problem for the integrity of the NFP—revised or not—is the District of Columbia district court’s decision construing the OCLA to require harvests of more than 205 mmbf of timber annually.<sup>387</sup> Judge Leon’s opinion was based on a questionable interpretation of an eighty-decade-old statute (a classic “lord of yesterday”<sup>388</sup>) adopted by no other court<sup>389</sup> and an analysis of the effect of sustained yield harvesting that is open to serious question.<sup>390</sup> If affirmed on appeal,<sup>391</sup> the result would not only put the wildlife and waters in the region at risk, but may also make it impossible for BLM to rejoin the ecosystem-based NFP.

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especially old-growth forests, are much more economically and ecologically valuable as carbon sinks or biodiversity habitat than being commercially logged. *See, e.g.*, Franklin & Johnson, *supra* note 316, at 433 (explaining that old-growth trees take centuries to replace and have unique characteristics that provide drought resistance, wildlife habitat, genetic reservoirs, and other ecosystem services). Although the federal land management agencies have a clear roadmap to follow when revising their rules, they have some experience learning the hard way. *See, e.g.*, Organized Vill. of Kake v. U.S. Dep’t of Agric., 795 F.3d 956, 966–67 (9th Cir. 2015) (striking down the Forest Service’s repeal, after reinstatement, after repeal, and after promulgation of the agency’s Roadless Rule); *Survey and Manage II*, 380 F. Supp. 2d 1175, 1192–93 (W.D. Wash. 2005) (explaining that the Forest Service failed to follow required NEPA procedure when revising a rule).

<sup>387</sup> Am. Forest Res. Council v. Hammond, 422 F. Supp. 3d 184, 188–91 (D. D.C. 2019), *appeal filed sub nom.* Am. Forest Res. Council v. United States, 20-5008 (D.C. Cir. 2020); *see also supra* text accompanying notes 275–277.

<sup>388</sup> *See* WILKINSON, *supra* note 59, at xiii (explaining that much of our “natural resources are governed by . . . the ‘lords of yesterday,’ which are laws, policies, and ideas, not people” that “arose for good reason” at the time of their conception, but that “simply do not square with the economic trends, scientific knowledge, and social values in the modern West”).

<sup>389</sup> Am. Forest Res. Council v. Hammond, 422 F. Supp. at 188–91. It is true that the Ninth Circuit in *Headwaters*, 914 F.2d 1174, 1183 (9th Cir. 1990), classified the OCLA as a dominant use statute, in contrast with the multiple use paradigm of other statutes like FLPMA, due to uncodified savings clause in FLMPA instructing that the OCLA was to prevail over FLPMA’s provisions in cases of conflicts. Pub. L. No. 94-579, 90 Stat. 2786, § 701 (1976). But the *Headwaters* court did not require any specific level of harvests. And since the savings clause extended only to FLMPA’s provisions, the Ninth Circuit was able to quickly clarify that the OCLA did not required harvests of 500 mmbf annually and did not exempt BLM from complying with other environmental law like NEPA and the ESA. *Portland Audubon Soc’y v. Babbitt*, 998 F.2d 705, 709 (9th Cir. 1993), *aff’g* 795 F. Supp. 1489, 1505–07 (D. Or. 1992). Thus, whatever “dominant use” means under the OCLA, it must comply with environmental restrictions imposed by laws other than FLPMA. *See* Michael C. Blumm & Jonathan Lovvorn, *The Proposed Transfer of BLM Timber Lands to the State of Oregon: Environmental and Economic Questions*, 32 LAND & WATER L. REV. 353, 366–77 (1997) (examining *Headwaters*, *Portland Audubon*, and related cases). *See supra* text accompanying notes 278–283 (discussing *Nedd*).

<sup>390</sup> Judge Leon’s conception of sustained yield management elevated an abstract definition of sustained yield—and a contested one at that—over the context of on-the-ground land management considerations. It also failed to show sufficient deference to BLM’s expertise to calculate the sustained yield from O&C lands. *See* *Lands Council v. McNair*, 629 F.3d 1070, 1074 (9th Cir. 2010).

<sup>391</sup> Although Judge Leon handed down his decision on relief in November 2021, *see supra* text accompanying notes 278–283, he issued a partial vacatur of the plans at issue but stayed his order, raising questions about its immediate appealability. *Am. Forest Resource Council v. Nedd*, No. 16-01599, 2021 WL6692032, at \*4.

Both scientists and the courts have long made clear the importance of O&C lands as an essential component in the effort to forestall the extinction of the northern spotted owl,<sup>392</sup> a conclusion more salient today than at the time of the adoption of the NFP over a quarter-century ago. Removing O&C lands from the scope of the NFP is ecologically, if not legally, arbitrary. We presume that the Biden administration will see the necessity of maintaining BLM forest lands as an integral part of a revised NFP. As of this writing, however, the administration has yet to take any action regarding the current and future management of O&C lands.

### IX. CONCLUSION

The NFP—initially an emergency measure aimed at rescuing the northern spotted owl from industrial logging of old-growth forests, while also resuming logging that had been enjoined by the courts—has survived over a quarter-century despite determined efforts to amend or replace it. That fact might be its chief achievement: it still exists. But despite its longevity, the Plan's future remains quite unclear. Half of the political administrations charged with implementing the Plan tried to end or undermine it. The NFP survived only because federal courts prevented repeated efforts to undermine it by the Bush Administration, which parroted opposition to the Plan by the timber industry and the local counties.<sup>393</sup>

The Plan's ecosystem approach to Northwest federal forest management is now under existential threat from the federal district court in the District of Columbia, which responded to efforts to free O&C lands from the NFP by interpreting the eighty-year old OCLA<sup>394</sup> to require timber harvest levels rejected by other courts as ecologically and legally unsustainable.<sup>395</sup> Through it all, Congress has remained largely silent, apparently content to let the largest ecosystem management program in the world exist without congressional leadership or sponsorship. The status of O&C lands and their potential exit from the NFP has thus far received the same congressional acquiescence as has the NFP for virtually its entire life. The upshot is the Biden administration has a relatively free hand in administratively revising the plan, subject, of course, to judicial review.

Courts, especially the Ninth Circuit, have been instrumental in preserving the existence of the NFP. They have upheld pertinent ESA

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<sup>392</sup> *E.g.*, *Portland Audubon Soc'y v. Lujan*, 712 F. Supp. 1456, 1466–69 (D. Or. 1989), *aff'd in part, rev'd in part*, 884 F.2d 1233, 1479–80 (9th Cir. 1989); *Portland Audubon Soc'y v. Lujan*, 795 F. Supp. 1489, 1494 (D. Or. 1992), *modified*, No. 87-1160-FR, 1992 WL 176353 (D. Or. July 16, 1992), *aff'd sub nom.* *Portland Audubon Soc'y v. Babbitt*, 998 F.2d 705 (9th Cir. 1993); *SAS III*, 798 F. Supp. 1473, 1479–82 (W.D. Wash. 1992), *supplemented*, 798 F. Supp. 1484 (W.D. Wash. 1992), *aff'd in part, appeal dismissed in part sub nom.* *Seattle Audubon Soc'y v. Espy*, 998 F.2d 699 (9th Cir. 1993).

<sup>393</sup> *See, e.g., supra* text accompanying notes 217–231, 256–262.

<sup>394</sup> *See, e.g., supra* text accompanying notes 50–56, 387–390.

<sup>395</sup> *See, e.g., supra* text accompanying notes 122–126, 131.

listings, affirmed the Plan itself, rejected less ambitious recovery goals for listed species, and invalidated project-level post-fire salvage and other logging proposals. The timber industry responded to these setbacks by wielding its influence to obtain congressional appropriation riders and by choosing a more favorable non-western judicial forum that has produced what might be considered unlikely victories in the D.C. District Court.<sup>396</sup> Some of these decisions directly conflicted with courts in the Ninth Circuit and have yet to survive appellate review in the D.C. Circuit.<sup>397</sup>

The story of the persistence of the Plan is also in large measure a story about science versus socioeconomics and long-standing environmental politics. The science is relatively clear: the importance of intact forests in a climate-changed world is not in doubt and has only grown stronger in the quarter-century since the NFP's adoption.<sup>398</sup> The science has so far proved more persuasive to the courts than the politics and a forecasted regional socioeconomic collapse, which largely failed to materialize.<sup>399</sup>

Given the importance of making land management decisions based on the best available science, and the fact that the courts have generally—but only to a point—afforded managers deference in the interpretation and implementation of that science,<sup>400</sup> a strong scientific foundation for a revised NFP is essential. To that end, the revision must include an expanded prohibition on post-fire logging, subject to narrow exceptions, such as for public safety or for ecosystem purposes.<sup>401</sup> A salvage logging prohibition, and directives to restore degraded lands and manage these and other lands for ecological integrity, could be implemented according to “just-transition” policies, providing jobs-in-the-woods and other economic development assistance to help transition Northwest forests and nearby communities into the frequent wildfire world that lies ahead.<sup>402</sup> Ecological transitions can be ameliorated in ways that market transitions have not. A smooth ecological transition, under just-transition principles, is imperative in light of the important role the NFP can play in fulfilling international obligations as a carbon sink.<sup>403</sup>

An underappreciated achievement of the NFP is the ACS, which has long held the possibility of revolutionizing watershed management, and

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<sup>396</sup> See *supra* text accompanying notes 275–283.

<sup>397</sup> See *supra* text accompanying notes 124–127, 131, 254. The industry and counties persuaded the D.C. district court to give no comity to these prior decisions; presumably, that decision will be an issue on appeal. *Am. Forest Res. Council v. Hammond*, 422 F. Supp. 3d 184, 190–91 (D. D.C. 2019).

<sup>398</sup> See, e.g., *Forests and Climate Change*, INT'L UNION OF CONSERVATION OF NATURE (Feb. 2021) <https://perma.cc/YW2R-2NXF>; see also *supra* text accompanying notes 310, 366–368 (discussing the importance of mature forests to mitigating the effects of climate change).

<sup>399</sup> See, e.g., *SAS II*, 771 F. Supp. 1081, 1096 (W.D. Wash. 1991) (“[T]he mightiest economy on Earth can[] afford to pr[otect] the last of its remaining[] old growth forests.”).

<sup>400</sup> *Lands Council v. McNair*, 629 F.3d 1070, 1082 (9th Cir. 2010).

<sup>401</sup> See *supra* text accompanying notes 342–348.

<sup>402</sup> See *supra* text accompanying notes 301–309.

<sup>403</sup> See *supra* text accompanying notes 366–369.

therefore should be carried forward in the revision effort.<sup>404</sup> Decades after its inception, ongoing monitoring efforts demonstrate that the scientific basis of the ACS is sound, and conditions in aquatic and riparian ecosystems in the NFP area are improving as FEMAT expected, contributing to the delisting of endangered fish.<sup>405</sup>

The issue of fixed versus flexible reserve boundaries is worthy of consideration. We recognize this as a challenging and divisive issue, and one that will likely require managers, scientists, and stakeholders to consider the forest in new ways, not as fixed “zones” created and managed disparately. Drawing lines on a map, as decision makers have done in the past—essentially partitioning the land into either/or buckets of “manage this” and “don’t manage that”—disregards the reality of modern forest management in a climate-constrained world. Although many stakeholders prefer to define reserved and non-reserved land use allocations, lines on a map may not be the best way to achieve objectives like restoring degraded landscapes, protecting relatively intact areas, and managing landscapes for ecological integrity that serves multiple uses.<sup>406</sup>

The NFP is the most ambitious ecosystem plan the world has ever seen. Over almost three decades, it has pioneered landscape planning on a grand scale, nearly ended the industrial harvesting of old-growth trees, illustrated how to systematically protect and restore watersheds, and highlighted the essential role of monitoring and adaptive management to land management.<sup>407</sup> In many ways, the NFP is the standard-bearer for landscape planning,<sup>408</sup> a working example of ecosystem management on an extensive scale. Whether it survives another quarter-century is hardly

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<sup>404</sup> See *supra* text accompanying notes 358–365 (discussing the ACS). If ACS principles were incorporated into NEPA analyses, the result would give waterways protection that does not exist outside the confines of the Wild and Scenic Rivers Act. See, e.g., Michael C. Blumm & Max M. Yoklic, *The Wild and Scenic River Act at 50: Overlooked Watershed Protection*, 9 MICH. J. ENV’T & ADMIN. L. 1, 42–50 (2019) (discussing comprehensive river management plans).

<sup>405</sup> See *supra* text accompanying notes 358–362 (discussing the ACS); SYNTHESIS OF SCIENCE, *supra* note 18, at 463 (“[T]he Oregon chub was delisted in 2015 . . . becoming the first fish to be delisted because of increases in numbers. Habitat on the Willamette National Forest contributed to its recovery.”).

<sup>406</sup> See SYNTHESIS OF SCIENCE, *supra* note 18, at 5–6, 187, 406, 726, 728.

<sup>407</sup> True, the Plan has yet to achieve one of its principal goals—the recovery of the northern spotted owl—but there is no scientifically-justified alternative. Indeed, spotted owl researchers are clear that to recover the species, protection of all remaining suitable habitat and lethal control of the barred owl is required. WEINS ET AL., *supra* note 352, at 1–2 (“Despite over 30 y[ears] of protection under the Federal E[SA], populations have continued to decline and, in some cases, those declines have accelerated. . . . The study concluded that removal of barred owls, when coupled with conservation of suitable forest conditions, can slow or even reverse population declines of spotted owls.”).

<sup>408</sup> Landscape planning became a political football in the Obama administration when revising BLM’s land planning regulations. After a years-long effort, the promulgated regulations, 81 Fed. Reg. 89,589 (Dec. 12, 2016) (to be codified at 43 C.F.R. pt. 1600), were disapproved by the Republican Congress in 2017. Pub. L. No. 115-12 (Mar. 27, 2017); Bobby McEnancy, *Congress Kills BLM’s Planning 2.0 Rule*, NAT. RES. DEF. COUNCIL (Mar. 7, 2017), <https://perma.cc/VS9E-8W9X>.



assured: federal land management remains contentious and the ultimate political football, particularly in Pacific Northwest forests.

Whatever the future brings, we are reminded of George Santayana's admonition, "[t]hose who cannot remember the past are condemned to repeat it."<sup>409</sup> The NFP has taught society numerous social, economic, and ecological lessons, including how to resolve, albeit imperfectly, continuous and contentious land management conflicts. Many of those lessons remain as true today as they were in 1994 when the NFP was adopted, such as the central role of science in land management planning. Other lessons, such as those about climate change, natural disturbance, and species recovery, are only now beginning to become fully apparent. The fundamental framework of the NFP remains scientifically unimpeachable and has the potential to successfully guide federal forest management in the Anthropocene.<sup>410</sup> Undermining those principles to serve short-sighted commercial or political ends will only serve to reignite the "war in the woods," suggesting that we have learned nothing in the past quarter-century. We hope and believe that society will prove wiser than that.

#### X. POSTSCRIPT

On April 22, 2022—Earth Day 2022—while this Article was in press, President Biden signed Executive Order 14072, which calls for public land managers to define, inventory, and plan to protect mature and old-growth trees on lands they manage.<sup>411</sup> With some exceptions,<sup>412</sup> the Forest Service no longer logs a great deal of older forests in the Pacific Northwest, thus blunting the potential effect of the Executive Order. On the other hand, BLM continues to log older forests as authorized and encouraged by the 2016 RMPs, and may conclude that the OCLA precludes BLM's ability to provide meaningful protection for these forests.<sup>413</sup> Regardless, the President Biden's Earth Day Executive Order provides both agencies and

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<sup>409</sup> GEORGE SANTAYANA, *THE LIFE OF REASON* 115 (1905).

<sup>410</sup> That is the current geological age, the period during which human activity has been the dominant influence on climate and the environment. *Anthropocene*, *OXFORD ENGLISH DICTIONARY*, <https://perma.cc/EN82-P9F7> (last visited Feb. 15, 2022) (defining "anthropocene" as "[t]he epoch of geological time during which human activity is considered to be the dominant influence on the environment, climate, and ecology of the earth, a formal chronostratigraphic unit").

<sup>411</sup> Strengthening the Nation's Forests, Communities, and Local Economies, 87 Fed. Reg. 24,851, 24,851 (Apr. 27, 2022).

<sup>412</sup> See text accompanying note 319.

<sup>413</sup> However, the executive order repeatedly uses the phrase "to the extent consistent with applicable law." 87 Fed. Reg. at 24,852, 24,854. If BLM interprets the OCLA to preclude the conservation of older forests as inconsistent with sustained yield forestry—as did Judge Leon, *supra* text accompanying notes 276–283, the Executive Order might not have a significant effect on BLM lands within the NFP. See Hal Benton et al., *Biden's Executive Order in Seattle Spotlights Importance of Old-Growth Forests in Fight Against Climate Change*, *SEATTLE TIMES*, <https://perma.cc/LEY2-95ZR> (last updated Apr. 28, 2022) (quoting Jerry Franklin, one of the authors of the NFP, as being "disappointed" that the executive order did not ban all old-growth harvesting within the NFP).

the administration with yet one more opportunity to finally heed Judge Dwyer's admonition that "the argument that the mightiest economy on earth cannot afford to preserve old growth forests for a short time, while it reaches an overdue decision on how to manage them, is not convincing today. It would be even less so a year or a century from now."<sup>414</sup>

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<sup>414</sup> *SAS II*, 771 F. Supp. 1081, 1096 (W.D. Wash. 1991).