The Roadless Report: Analyzing the Impacts of Two Roadless Rules on Forested Wildlands

by

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Executive Summary

Only a fraction of the nation's public, forested wildlands—four percent of the United States—remain wild today. The Forest Service, the agency that manages national forests, manages two types of undeveloped wildlands within its jurisdiction. The first is Wilderness, which are areas designated by Congress under the Wilderness Act and protected by the statute's substantive requirements. The second is roadless areas (approximately 2.4 percent of U.S. land base), which are vulnerable to development from activities such as logging or road-building. Roadless characteristics are the exact same qualities that define Wilderness. Threats to these qualities include logging and constructing roads, both of which can fragment roadless landscapes and immediately eliminate roadless characteristics for generations. Outside of Alaska with its massive Tongass and Chugach National Forests, Idaho has the second largest and Montana the third largest roadless acreage. Idaho national forests have about nine million acres of roadless areas, 16 percent of the nation's roadless base.

The 2001 Roadless Area Conservation Rule ("National Roadless Rule") and the Idaho Roadless Rule govern the states with the three largest roadless bases. The Forest Service, under the Clinton Administration, created the National Roadless Rule in response to strong public sentiment for protecting these areas and the clean water, the biological diversity, the forest health, and the recreational opportunities that roadless areas provide. The Bush Administration created a state-petitions process for each state to develop its own roadless rule, and before the Ninth Circuit set aside the process for violating several laws, the Forest Service published the Idaho Roadless Rule. Even after finding the state-petitions process unlawful, the Ninth Circuit later upheld the Idaho Roadless Rule.

With the National Roadless Rule in place for about 18 years and the Idaho Roadless Rule in place for about 10 years, we asked how well the National Roadless Rule and the Idaho Roadless Rule protect roadless areas in practice. We focused on Montana (governed by the National Roadless Rule) and Idaho (governed by the Idaho Roadless Rule). We first compared the rules to each other. The National Roadless Rule proclaims a prohibition on logging in roadless areas with four exceptions. The Idaho Roadless Rule divides roadless areas into a fivetheme spectrum and allows logging activities that accordingly vary from more restrictive to not restrictive. In reviewing the rule's express language, four of Idaho's five themes impose less restrictions on logging than the National Roadless Rule, which amounts to the potential for more logging under the Idaho Roadless Rule in 84 percent of Idaho's roadless areas. Additionally, while the National Roadless Rule allows a national forest to augment protection for any roadless area, the Idaho Roadless Rule forbids enhancing protection for any roadless area in Idaho.

The Forest Service provided the authors two spreadsheets that contained a preliminary accounting of logging in roadless areas in Montana and Idaho since 2010. This preliminary accounting identified the projects with roadless logging, and we found and examined the environmental analyses that authorized many of those projects. Friends of the Clearwater, a small forest-watchdog and educational nonprofit that monitors the wild Clearwater Basin in North Central Idaho, has on file most—if not all—projects over the last 30 years that proposed some logging in roadless areas on the Nez Perce and Clearwater National Forests, which

encompass much of the Clearwater Basin.

We found that the National Roadless Rule initially stopped roadless logging entirely in the Nez Perce and Clearwater National Forests, but that the Idaho Roadless Rule reversed that. In the 1990s, the Forest Service logged over 6,000 acres in roadless areas. When the Forest Service first implemented the National Roadless Rule in 2001 and until 2008, no logging occurred on these two forests. Since the 2008 Idaho Roadless Rule, however, the Forest Service has authorized logging on over 1,000 acres of roadless areas in the Nez Perce-Clearwater National Forests alone, often in the name of "forest health." Across Idaho, the Forest Service reported roadless Rule is structured for increased logging, the National Roadless Rule has four exceptions. We found the Forest Service, while not choosing to log roadless areas in the Nez Perce and Clearwater National Forests when the National Roadless Rule governed (2001-2008), has spent the last decade regularly applying those exceptions in Montana.

In the past decade, the Forest Service has authorized a considerable amount of logging in Montana roadless areas under the National Roadless Rule. The Forest Service disclosed preliminary figures, enumerating that it authorized approximately 33,000 acres of roadless logging from 2010 to 2018. The Forest Service fit these logging projects under one of the four exceptions to the National Roadless Rule's prohibition on logging. In approximately two-thirds of these projects, the Forest Service applied the exception for "stewardship-purpose" tree cutting to "restore" ecosystems.

The Forest Service's quality of discourse, in terms of concluding how logging impacts roadless characteristics, has shifted over time, further facilitating logging in roadless areas. Prior to the National Roadless Rule, 1990s Forest Service project-specific environmental analyses in Idaho's Nez Perce and Clearwater National Forests recognized that logging degraded and eliminated roadless characteristics. The agency held that timber harvest modified natural processes, shelterwood logging created unnatural disturbances in the landscape, and cutting trees, which generated features such as stumps, created signs of human alteration. Even in the environmental analyses for the National Roadless Rule and the Idaho Roadless Rule, the Forest Service recognized generally that logging and road construction can potentially eliminate roadless characteristics.

Despite the Forest Service's earlier position, the agency occasionally reversed its conclusions about the harm of logging after the advent of the National Roadless Rule. Between 2001 and 2008 in Idaho, the Forest Service sometimes concluded in its environmental analyses, as it had in the 1990s, that logging would degrade roadless characteristics. However, sometimes during these seven years, the Forest Service concluded that roadless characteristics might be improved by logging, specifically in reducing the potential for stand-replacing wildfire by removing dead or dying trees from the natural ecosystem. If the Forest Service could assert that ecosystems would be improved with logging, the Forest Service could apply an exception under the National Roadless Rule and cut trees in a roadless area. The Idaho Roadless Rule adopted this "stewardship purpose" logging exception for themes that govern most of Idaho's roadless base. After the Idaho Roadless Rule began to govern roadless areas in Idaho, we have seen this flip in reasoning solidify, with the Forest Service commonly concluding that logging in a

roadless area will often have neutral or beneficial impacts to roadless characteristics.

With the new conclusion that logging augments roadless characteristics, the Forest Service is able to exploit logging exceptions under the National Roadless Rule and logging permissions under the Idaho Roadless Rule. The Forest Service in Montana and Idaho, post 2010, similarly analyze the impacts of logging on roadless characteristics. Regardless of which rule governs, below are several examples of the reasoning that the Forest Service employs to conclude that logging will either not impact or beneficially impact roadless characteristics. The Forest Service argues that (1) taking no action will adversely impact roadless characteristics; (2) logging inflicts only temporary, short-term effects on roadless characteristics; (3) there will be minimal impacts (even while considering other roadless areas with evidence of similar timber harvests to have demonstrably impaired roadless characteristics); (4) a little more detriment is negligible if there is already evidence of any prior human activities; and (5) intense logging on a small part of the roadless area will not, on average, impact the whole roadless area.

Science fleshes out the fallacy of some of this reasoning. Peer-reviewed science establishes that natural tree death—regardless of its cause—is a process by which forests renew and exists in healthy forests and their ecosystems. Severe fires are part of the natural history of some forests, specifically those in norther Rocky Mountains of Idaho and Montana. Forests in the western United States generally have not experienced more fires as a direct result of bark beetle activity. Global warming—not the Forest Service's history of fire suppression—greatly influences fire seasons. Even with global warming, older unlogged forests, which include many roadless areas, have been found to burn less severely than thinning trees, which tends to open up and dry out forest vegetation that remains.

Time fleshes out the fallacy of the remaining reasoning. When the Forest Service revises forest plans, we found a pattern where the agency drops isolated acreage from its roadless inventory and wilderness-recommendation process due to evidence of timber harvest. The Forest Service Handbook directs the agency to identify a basic potential-wilderness inventory; the agency can include areas where logging has occurred if improvements are not substantially noticeable. The Forest Service will also use this criterion to update its roadless inventory. In two different forest plans, the Forest Service dropped the roadless acres where timber harvest had occurred because at the time of review, those portions of roadless areas did not meet the criteria for potential wilderness or espoused roadless characteristics.

In conclusion, neither the National Roadless Rule nor the Idaho Roadless Rule are protecting roadless areas from logging. The Forest Service appears to be exploiting exceptions and permissions in both rules, and the Forest Service's environmental analyses have shifted to justify utilizing the exceptions in an unchecked manner. Given these rules—particularly the National Roadless Rule—are not as protective as we thought, there needs to be a substantive review of both rules and of the remaining roadless areas in the United States. Additionally, the public and the government need to engage in a thoughtful discourse about whether protecting roadless areas is a priority and, if so, how to effectively do that.

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I. Introduction

The Forest Service manages two types of undeveloped wildlands in the United States. The first consists of lands that Congress has designated to be protected by the Wilderness Act, called Wilderness.¹ The second consists of roadless areas, which are defined by the Forest Service, an agency in the executive branch of government under the United States Department of Agriculture.² These areas are administered according to Forest Service policies and regulations. While many citizens understand that Wilderness receives express statutory protections, there is less known about the regulations that control the fate of roadless areas. A major aim of this report is to inform the reader on two of these regulations and their impacts.

In 2001 the Forest Service published the 2001 Roadless Area Conservation Rule,³ a national roadless regulation that aimed to preserve these areas. In 2008 the Forest Service published a state-specific roadless regulation for national forests within the State of Idaho.⁴ The stated purpose for the National Roadless Rule is to protect roadless areas from development while administering them. The 2008 Idaho Roadless Rule expressed a commitment to approach managing roadless areas for local and national interests. Both roadless rules govern roadless areas in national forests, which belong to all citizens of the United States.

In this report, we examined the effectiveness of these rules in protecting roadless areas from development projects. We reviewed the nation's roadless areas in Idaho and Montana, the states with the second and third most roadless acreage. In both states, we found a significant amount of logging in roadless areas over the past decade. The Forest Service allowed this logging under exceptions and permissions that were codified in both rules. The Forest Service has further justified logging region-wide by forecasting that the environmental impacts will either be short-term or minimal. We found this to be demonstrably untrue because the Forest Service often drops these impacted roadless acreages when it updates its inventory of roadless areas, and the dropped acreage is no longer protected by any regulation and is open to further activities such as logging and road building. For roadless areas in Idaho, the Idaho Roadless Rule has even further complicated accounting of true roadless areas by complicating the process to amend areas that no longer have roadless characteristics. Our conclusion is that neither rule effectively preserves the nation's wild areas not already protected by the Wilderness Act.

¹ In this report, a capitalized "Wilderness" means land that Congress has designated to be part of the National Wilderness Preservation System and protected by the Wilderness Act. 16 U.S.C. 1131 *et seq.* ² USDA. In this report, we have also abbreviated environmental impact statements (EISs) and records of decisions (RODs), environmental assessments (EAs) and each relative Decision Notice and Finding of No Significant Impact (DN-FONSI), and categorical exclusions (CEs) and decision memos (DMs). IRAs stand for "Inventoried Roadless Areas," and we use that term with "roadless areas" interchangeably throughout this report.

³ In this report, the 2001 Roadless Area Conservation Rule will be referred to as the "National Roadless Rule" or the "2001 Roadless Rule." The National Roadless Rule governs all roadless areas outside of Idaho and Colorado. *See* Roadless Area Conservation Rule 66 Fed. Reg. 3,244, 3,244 (Jan. 12, 2001); 36 C.F.R. part 294. This report will focus on the National Roadless Rule and the Idaho Roadless Rule, but not the Colorado Roadless Rule.

⁴ This regulation, found at 36 C.F.R. §§ 294.20-294.29, will be referred to throughout this report as the Idaho Roadless Rule.

II. Background

National Forests are a public treasure. These lands are owned by all Americans and are a hallmark of our public land system. They provide watershed protection, fish and wildlife habitat, and a glimpse into the country's natural history. National forests comprise about eight percent of the land in the United States⁵ and represent about nineteen percent of all forested land in the United States, mainly in the West and Alaska.⁶ The Forest Service, a federal agency within the Department of Agriculture, administers the national forests for a variety of purposes. These purposes include maintaining diverse fish and wildlife habitat, ensuring watershed protection, and administering multiple uses, such as public recreation, livestock grazing, logging, mining, and commercial recreation.⁷ Because livestock grazing, logging, mining, and even recreation can adversely impact the quality of fish and wildlife habitats, management objectives on Forest System Land can conflict.⁸

Only a fraction of the nation's wildlands remains wild today. Prior to World War II, the vast majority of the National Forest System was still wild and undeveloped.⁹ After the end of the war, however, a variety of interests pressured rapid development of national forests.¹⁰ By the 1950s timber corporations that had cut through their private reserves turned to national forests to continue operations, and annual cut levels more than doubled, from 3.5 billion board feet to 9.3 billion board feet.¹¹ During this decade, timber-industry lobbyists, operating under an intensive-management ideology, redefined sustainable yield, arguing that achieving sustained yield meant achieving the maximum possible timber harvest; the Forest Service used this new definition when appealing to Congress to increase its agency budget.¹² As the Forest Service looked to get out the cut post World War II, the agency turned to its administratively created roadless areas and began to open these up to logging.¹³ The trends established by an intensive-management

⁵ See USDA, Forest Service, Land Areas of the National Forest System (Jan. 2012) p. 1, *available at* https://www.fs.fed.us/land/staff/lar/LAR2011/LAR2011_Book_A5.pdf (last visited 2/12/19); USDA, Forest Service, U.S. Forest Resource Facts and Historical Trends (Aug. 2014) p. 14, available at https://www.fia.fs.fed.us/library/brochures/docs/2012/ForestFacts_1952-2012_English.pdf (last visited 2/1/19).

⁶ About 75 percent of the National Forest System lands have trees. Non-forested acreage in national forests mainly includes National Grasslands and high elevation mountains above timberline which are crucial watersheds.

⁷ See 16 U.S.C. §§ 528-531 (Multiple Use Sustained Yield Act); 16 U.S.C. § 1600 et seq. (National Forest Management Act).

⁸ *See, e.g.*, Waters, Thomas F. <u>Sediment in Streams: Sources, Biological Effects and Control pp. 22-41, (American Fisheries Society 1995); Foreman, Dave and Wolke, Howie. <u>The Big Outside pp. 29-36</u> (Ned Ludd Books 1989).</u>

⁹ See Foreman, Dave, No. 21 Around the Campfire: A Little Roadless Area History, available at https://rewilding.org/uncle-dave-foremans-around-the-campfire/ (2008) (last visited 2/1/19).

¹⁰ See Foreman, Dave and Wolke, Howie. <u>The Big Outside p. 32</u> (Ned Ludd Books 1989); Dana, Samuel Trask and Fairfax, Sally K. <u>Forest and Range Policy: Its Development in the United States pp. 179-180</u> (2d ed. McGraw-Hill 1980).

¹¹ Hirt, Paul. <u>A Conspiracy of Optimism</u> pp. 48-49, 55, 131, 134 (University of Nebraska Press 1994). ¹² Hirt, Paul. A Conspiracy of Optimism p. 132 (University of Nebraska Press 1994).

¹³ See Allin, Craig W. <u>The Politics of Wilderness Preservation</u>, pp. 102-03 (Greenwood Press)(1982); Gerard, David. 2000. "The Origins of the Federal Wilderness System," in <u>Political Environmentalism</u> pp.

ideology and "getting out the cut" policy that developed in the fifteen years after World War II continued into the 1960s, 1970s, and 1980s.¹⁴ Decades of implementing this policy landed several species on the endangered species list, including spotted owls in the Northwest, grizzly bears in the norther Rockies, and goshawks in the Southwest because humans developed the old-growth habitat upon which these species rely to a varying degree.¹⁵ Court intervention reducing the unsustainable timber harvest did not change the culture; while a 1989 nationwide survey of Forest Service employees agree that caring for healthy ecosystems should be among the top values the agency awarded, these same employees reported a reality where "meeting timber and other commodity targets" was one of the top values the agency actually rewarded.¹⁶ The agency culture to "get out the cut" still exists: in 2005, Forest Service employees perceived that meeting targets was still the value the Forest Service rewarded in the twenty-first century.¹⁷ Now, this reward system is combined with a current administration that has called for more intensive management with increased harvest levels.¹⁸

Today undeveloped wildlands comprise approximately 4 percent of the land area of the United States, and 49 percent of the National Forest System. These wildlands are mostly categorized within two legal-political categories. Nineteen percent of the National Forest System is designated as Wilderness and protected by the Wilderness Act; and 30 percent of the National Forest System has been categorized as "roadless areas."¹⁹

At its core, the undeveloped state of roadless areas generally meets the definition of "wilderness" in the Wilderness Act.²⁰ Thus, roadless areas have characteristics similar to

¹⁴ See Hirt, Paul. <u>A Conspiracy of Optimism</u> pp. 131, 216, 271-72 (University of Nebraska Press 1994).

¹⁵ Hirt, Paul. <u>A Conspiracy of Optimism p. 277</u> (University of Nebraska Press 1994).

¹⁶ See Hirt, Paul. <u>A Conspiracy of Optimism</u> pp. 273-74, 281-82 (University of Nebraska Press 1994).
 ¹⁷ See USDA Forest Service, Kennedy, J.J., Haynes, R.W., and Zhou, X. "Line Officers' Views on Stated USDA Forest Service Values and the Agency Reward System," General Technical Report PNW-GTR-632 p. 5 (Mar. 2005).

¹⁸ Exec. Order No. 13,855, 84 Fed. Reg. 45 (Dec. 21, 2018).

¹⁹ In 2001, there was approximately 93.8 million acres of roadless areas and Wilderness. See USDA, Forest Service, Roadless Area Conservation final EIS, Vol. 1 p. 1-1 (Nov. 2000) (58.5 million acres of inventoried roadless areas); Wilderness Connect, Wilderness Data Search, available at https://www.wilderness.net/NWPS/advSearch (35.3 million acres Wilderness using search parameters State: (All States), Agency: (Forest Service), Designation: (Before), and Year: (2001)) (last visited 2/22/19). We are presuming that Wilderness on the National Forest System designated after 2001 came from the 58.5 million acres of roadless land in 2001. The national Forest system comprises 193 million acres. USDA, Forest Service, By the Numbers, available at https://www.fs.fed.us/aboutagency/newsroom/by-the-numbers, last visited 2/22/19). The acreage of the United States is 2.4 billion acres, Department of the Interior, Bureau of Land Management, Public Land Statistics p. 1 available at https://www.blm.gov/sites/blm.gov/files/PublicLandStatistics2016.pdf (last visited 2/22/19). ²⁰ The Wilderness Act, 16 U.S.C. § 1131(c), defines Wilderness: "A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation,

^{223-24 (}T. L. Anderson, ed., Hoover Institution Press. (2000) (Primitive Areas the Forest Service established under their L-20 regulations were never intended to be permanent.); Hirt, Paul. <u>A Conspiracy of Optimism</u> p. 131 (University of Nebraska Press 1994).

Wilderness and have the potential to be designated as Wilderness. Not surprisingly, the roadless areas we know today have been shaped by policies that developed after the 1964 Wilderness Act. In addition to creating a legally protected category for designated Wilderness, the statute directed the Secretary of Agriculture to review primitive areas in national forests for areas that could be suitable for Congress to designate as Wilderness within 10 years.²¹ The Forest Service decided to inventory the roadless areas has attempted this inventory twice.

The Forest Service conducted its first roadless inventory, Roadless Area Review and Evaluations ("RARE I"), in the early 1970s. The roadless acreage at the time was considerably larger than what the Forest Service reported it to be in RARE I.²² In RARE I, the Forest Service performed a quick, light, and consequently inadequate review of wild areas in the United States. The Forest Service's entrenched culture and emphasis to get out the cut²³ and to limit wilderness acreage²⁴ undoubtedly contributed to the inaccurate inventory for RARE I.²⁵ The agency took only ten months—from August 1971 to June 1972—to review the entire National Forest System for roadless-area designations.²⁶ During the field stages of this review, many areas were snowbound and inaccessible.²⁷ Additionally, one author alleged that Rare I "was superficial and allowed commodity-minded regional foresters to select missions of acres of de facto wilderness for immediate road building and timber harvest."²⁸ While later inventories have improved, wilderness recommendations in the Forest Service's second Roadless Area Review Evaluation ("RARE II") in the late 1970s remained small.²⁹

Development of roadless wildlands on national forests has mainly involved logging and

which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value."

²¹ 16 U.S.C. § 1132(b).

²² See Foreman, Dave. No. 56 Around the Campfire: Chopping Down the Wilderness, *available at* https://rewilding.org/around-the-campfire-with-uncle-dave-chopping-down-the-wilderness-act/ (2013) (last visited 2/1/19). The areas with roadless characteristics that the Forest Service did not official include into the roadless inventory are commonly known now as "unroaded areas."

²³ See generally Hirt, Paul. <u>A Conspiracy of Optimism</u> (University of Nebraska Press 1994) for a historical account of how the Forest Service emphasized logging.

²⁴ See Roth, Dennis M. The Wilderness Movement and the National Forests: 1964-1980 pp. 6-8 (USDA Forest Service History Series FS 391, 1984) (The Forest Service Deputy Chief suggested a "pure" wilderness of between 18 and 18 million acres on the national forest system and the Forest Service sought to convince Congress to limit Wilderness for the "expense" of managing it and the lost opportunity costs to development.).

²⁵ Foreman, Dave, No. 21 Around the Campfire: A Little Roadless Area History, *available at* https://rewilding.org/uncle-dave-foremans-around-the-campfire/ (2008) (last visited 2/1/19).

²⁶ See Allin, Craig W. <u>The Politics of Wilderness Preservation</u>, pp. 159-60 (Greenwood Press) (1982).

²⁷ Allin, Craig W. <u>The Politics of Wilderness Preservation</u>, p. 160 (Greenwood Press) (1982).

²⁸ Allin, Craig W. The Politics of Wilderness Preservation, p. 160 (Greenwood Press) (1982).

²⁹ Roth, Dennis M. The Wilderness Movement and the National Forests: 1964-1980 pp. 36-37 (RARE I inventoried approximately 55.9 million acres), 57-58 (RARE II inventoried approximately 62 million acres) (USDA Forest Service History Series FS 391, 1984).

associated roadbuilding.³⁰ At least 26 million acres of national forest wildlands have been developed in the past five decades.³¹ The official recorded acreage of roadless inventory has changed little from the 1970s to now.³² As described above, the post-World War II culture to get out the cut continued through the 1980s. That culture has not been substantially altered and still exists today.³³ The consequences of logging and roadbuilding over this time are increasingly fragmented roadless acreage with far more roads than the 1970s.³⁴

³² See USDA, Forest Service, RARE II: Roadless Area Review and Evaluation Final EIS pp. 6-7 (citing RARE I acreage of 56 million and RARE II acreage of 62.1 million) (Jan. 1979); *compare with* USDA, Forest Service, Roadless Area Conservation final EIS, Vol. 1 p. 1-1 (Nov. 2000) (58.5 million acres).
 ³³See Hirt, Paul. <u>A Conspiracy of Optimism</u> pp. 273-74, 281-82 (University of Nebraska Press 1994); *compare with* USDA Forest Service, Kennedy, J.J., Haynes, R.W., and Zhou, X. "Line Officers' Views on Stated USDA Forest Service Values and the Agency Reward System," General Technical Report PNW-GTR-632 p. 5 (Mar. 2005).

³⁰ See Foreman, Dave. Issue No. 56 Around the Campfire: Chopping Down the Wilderness, *available at* https://rewilding.org/wp-content/uploads/2013/10/56-Chopping-Down-the-Wilderness-Act.pdf (2013) (last visited 2/15/19).

³¹ See Foreman, Dave. Issue No. 56 Around the Campfire: Chopping Down the Wilderness, *available at* https://rewilding.org/wp-content/uploads/2013/10/56-Chopping-Down-the-Wilderness-Act.pdf p. 3(2013)(last visited 2/15/19)("[I]n 1964, at least 120 million acres...met the yardstick for Wilderness Area designation."); Wilderness Connect, Wilderness Data Search, *available at*

https://www.wilderness.net/NWPS/advSearch (entering "Forest Service" as only parameter for a search, the National Forest System has 36.6 million acres of Wilderness in 2019); USDA, Forest Service, Roadless Area Conservation final EIS, Vol. 1 p. 1-1 (58.5 million acres of roadless areas in 2001)(Nov. 2000). But note that 1.3 million of acres have been added to the National Wilderness System since 2001, and the authors presumed this acreage to come from the roadless base. *See* Wilderness Connect, Wilderness Data Search, *available at* https://www.wilderness.net/NWPS/advSearch (Entering "Forest Service" in the Agency box, "After" in the Designation Box, and "2001" in the Year box).

³⁴ Wyoming v. United States Department of Agriculture, 661 F.3d 1209, 1222 (10th Cir. 2011) ("Over the next two decades, however, the Forest Service began permitting road construction to occur in some of those inventoried roadless areas (" IRAs") on a site-specific basis.")(*citing* 66 Fed. Reg. 3244, 3246 (Jan. 12, 2001); 63 Fed. Reg. 4350, 4350 (Jan.28, 1998)); *see also Kootenai Tribe of Idaho v. Veneman*, 313 F.3d 1094, 1105 (9th Cir. 2002) (stating that, in 1982, the Forest Service started " permit[ting] road construction, industrial logging and other development in inventoried roadless areas on a local, site-specific basis.").



Figure 1. Roadless Area Map, USDA Roadless Area Conservation FEIS Vol. 1, p. 3-2.

Outside of Alaska with its massive Tongass and Chugach National Forests, Idaho has the next largest and Montana has the third largest roadless acreage (Figure 1).³⁵ About 38 percent of Idaho is in the National Forest System.³⁶ Of that Idaho acreage, roadless areas comprise about 9 million acres; this is approximately 16 percent of the total roadless base in the United States.³⁷ The Nez Perce and Clearwater National Forests consist of about 7.5 percent of Idaho's entire land base, approximately 4 million acres.³⁸ Of those 4 million acres, 1.5 million acres, or 37.5 percent, of the Nez Perce and Clearwater National Forests, are wildlands that are classified as roadless areas.³⁹ The nation's third largest roadless base is in Montana. There are over 6 million acres, comprising 11 percent of the nation's total roadless base.⁴⁰ It is therefore meaningful to evaluate the consequences of Roadless Rules in Montana and Idaho, given that these states

- ³⁸ See Nez Perce-Clearwater National Forests Homepage, available at
- https://www.fs.usda.gov/nezperceclearwater/ (last visited 2/14/19).

³⁵ See USDA, Forest Service, Roadless Area Conservation final EIS, Vol. 1, Appx. A, pp. A-3 through A-4 (Nov. 2000)

³⁶ Department of the Interior, Bureau of Land Management, Public Land Statistics p. 7, Table 1-3 (2016) (Idaho land base 52.93 million acres), *available at*

https://www.blm.gov/sites/blm.gov/files/PublicLandStatistics2016.pdf (last visited 1/31/19); USDA,

Forest Service, Land Areas of the National Forest System (Jan. 2012) p. 43, available at

https://www.fs.fed.us/land/staff/lar/LAR2011/LAR2011_Book_A5.pdf (Idaho national forest acreage 20,465,113 acres) (last visited 1/31/19).

³⁷ USDA, Forest Service, Roadless Area Conservation final EIS, Vol. 1 pp. 3-4 (Nov. 2000).

³⁹ USDA, Forest Service, Roadless Area Conservation National Forest System Lands in Idaho final EIS, Vol. 2, Appx. A, pp. A-5 to A-7 (Aug. 2008).

⁴⁰ See USDA, Forest Service, Roadless Area Conservation final EIS, Vol. 1 pp. 3-2, 3-4 (Nov. 2000). Alaska has the most roadless acreage.

collectively harbor such a large share of remaining federal wildlands.

Developing roadless areas through logging and roadbuilding instigated enough controversy to cause the Forest Service to amend its policy to protect these remaining areas. ⁴¹ The Forest Service, at the turn of this century and at the end of the Clinton administration, announced a policy and accompanying regulation "to conserve and protect the increasingly important values and benefits or roadless areas"⁴² This regulatory protection was the 2001 Roadless Area Conservation Rule.⁴³ The Forest Service clearly stated the conservative aim of the 2001 Roadless Rule: "The intent of this final rule is to provide lasting protection for inventoried roadless areas within the National Forest System in the context of multiple-use management."⁴⁴ To achieve this, the rule was structured "to immediately stop activities that pose the greatest risks to the social and ecological values of inventoried roadless areas," which included restrictions on "road construction, reconstruction, and timber harvest."⁴⁵ The Clinton Administration would not be the last administration to influence management of the nation's roadless areas.

In 2005 the Bush Administration developed a state-petition process where states could petition to create their own roadless rules for federal roadless areas within that state.⁴⁶ In 2006 Idaho's then-governor, Jim Risch,⁴⁷ petitioned the Forest Service for an Idaho-specific roadless rule, which the agency issued 2008.⁴⁸ The next year, the Ninth Circuit struck down the state-petition process for lacking the requisite environmental analysis under that National Environmental Policy Act and lacking proper consultation under the Endangered Species Act.⁴⁹ But, the Idaho roadless regulation that emerged from this unlawful process survived.

The National and Idaho Roadless Rules have been challenged in court yet both have survived. The National Roadless Rule survived challenges by states and special interest groups.⁵⁰ Even though the Ninth Circuit struck down the process by which the Forest Service initiated a roadless rule for Idaho, the Court upheld a later challenge to the rule that emerged.⁵¹. As a result, the Idaho Roadless Rule governs roadless areas in the national forests of Idaho.

The Idaho Roadless Rule shifted roadless policy from protecting roadless values to

⁴¹ See 63 Fed. Reg. 4350, 4350 (Jan. 28, 1998); USDA, Forest Service, Roadless Area Conservation final EIS, Vol. 1 p. 1-5 (Nov. 2000).

⁴² USDA, Forest Service, Roadless Area Conservation final EIS, Vol. 1 p. 1-14 (Nov. 2000).

⁴³ See generally 66 Fed. Reg. 3,244, 3,244 (Jan. 12, 2001); USDA, Forest Service, Roadless Area Conservation final EIS, Vol. 1 p. xi (Nov. 2000).

⁴⁴ 66 Fed. Reg. 3244, 3244 (Jan. 12, 2001).

⁴⁵ USDA, Forest Service, Roadless Area Conservation final EIS, Vol. 1 p. ES-1 (Nov. 2000).

⁴⁶ Special Areas; State Petitions for Inventoried Roadless Area Management, 70 Fed. Reg. 25,654 to 25,662 (May 13, 2005).

⁴⁷ A politician attributed with a general pro-development stance on natural-resource issues.

https://www.britannica.com/biography/Jim-Risch (last visited 1/2/2019).

⁴⁸ See 73 Fed. Reg. 61,456 to 61,496 (Oct. 16, 2008).

⁴⁹ See Cal. ex rel. Lockyer v. U.S. Dep't of Agric., 575 F.3d 999, 1011-19 (9th Cir. 2009), aff'g Cal. ex rel. Lockyer v. U.S. Dep't of Agric., 459 F.Supp.2d 874 (N.D. Cal. 2006).

⁵⁰ Wyoming v. U.S. Dep't of Agriculture, 661 F.3d 1209 (10th Cir. 2011).

⁵¹ Jayne v. Sherman, 706 F.3d 994 (9th Cir. 2013).

prioritizing local interests. Although the Idaho Roadless Rule, promulgated seven years after the National Roadless Rule, claimed that "[t]he rule does not authorize the building of a single road or the cutting of a single tree," and expressed a continued commitment to protecting roadless areas, the Idaho Rule's first and foremost expressed intent was to "take[] a balanced approach recognizing both local and national interests for the management of these lands."⁵² After stating that management in consideration of local interests—not protecting foremost roadless values—drove this new state-specific rule, the Forest Service then described the rule to "establish[] permissions and prohibitions that will govern what type of activities may occur in [inventoried roadless areas]."⁵³

For approximately the past 20 years, the Forest Service has nationally administered roadless areas with a stated intent to protect and conserve roadless areas.⁵⁴ The Forest Service implemented these policies by "prohibiting activities that have the greatest likelihood of degrading desirable characteristics" and "ensuring that ecological and social characteristics of inventoried roadless areas are identified and evaluated through local forest planning efforts."⁵⁵ The Idaho Roadless Rule superseded the management of national roadless areas within Idaho's borders in 2008 and will be 11 years old this year. A previous report, authored by Shana Hirsch in 2014 for the Friends of the Clearwater, discussed the contradictions in Idaho Roadless policy, such as permitting more activities that risk degrading roadless characteristics.⁵⁶ Hirsch's paper suggested that the Idaho Roadless Rule may be less protective than its national counterpart.⁵⁷ To our knowledge, there have been no recent reports that have evaluated either rules' efficacy in protecting the nation's dwindling roadless acreage. Below we assess how well the National and Idaho Roadless Rules are protecting our nation's roadless areas.

III. Methodology used in answering how well the 2001 Roadless Area Conservation Rule and the Idaho Roadless Rule protect roadless areas on the ground

The question that motivated this report is how well the National Roadless Rule and the Idaho Roadless Rule protect roadless areas in practice. To answer this, first compared the rules to each other: their structures, their permissions, and their prohibitions. Then, we compared the rules to timber projects that the Forest Service has authorized in Idaho and Montana roadless areas. We also compared timber projects that the Forest Service has allowed under roadless rules with the Forest Service's justifications for reducing acreage in roadless inventory or precluding an area from Wilderness consideration.

The Forest Service provided us with the agency's own preliminary numbers of timber

⁵² 73 Fed. Reg. 61456, 61456 (Oct. 16, 2008).

⁵³ 73 Fed. Reg. 61456, 61456 (Oct. 16, 2008).

⁵⁴ See USDA, Forest Service, Roadless Area Conservation final EIS, Vol. 1 p. 1-14 (Nov. 2000).

⁵⁵ USDA, Forest Service, Roadless Area Conservation final EIS, Vol. 1 p. 1-14 (Nov. 2000).

⁵⁶ Hirsch, Shana. "Contradictions in Idaho Roadless Policy: The Effects of Shifting Discourse in Forest Service Environmental Impact Statements in the Nez Perce-Clearwater National Forest 1989-2012" (June 2014). On file with authors.

⁵⁷ Hirsch, Shana. "Contradictions in Idaho Roadless Policy: The Effects of Shifting Discourse in Forest Service Environmental Impact Statements in the Nez Perce-Clearwater National Forest 1989-2012" pp. 19-21 (June 2014). On file with authors.

harvest in roadless areas in Idaho and Montana national forests over the past decade. This information was noted in two spreadsheets—one for each state—that identified the project, the roadless area, the year, the exception that allowed timber harvest, and a preliminary figure for acres where the Forest Service authorized logging. We attempted to confirm these numbers by obtaining the project's environmental documents from the Internet—environmental impact statements (EISs), environmental assessments (EAs), and categorical exclusions (CEs)—and their respective decision documents, records of decision (RODs), decision notices and findings of no significant impact (DN-FONSIs), and decision memos (DM). We were not able to find documents for every project, so we could not confirm everything the Forest Service disclosed, and we did find discrepancies. Thus, we stress that the numbers disclosed by the Forest Service are preliminary. The authors have these spreadsheets on file, but excerpts from the projects on these spreadsheets appear in Appendix A (Idaho) and Appendix B (Montana) to this report.

To examine timber projects in the roadless areas of Idaho, we first reviewed a temporal cross-section of project proposals in Idaho's Nez Perce-Clearwater National Forests between the early 1990s to approximately 2017.⁵⁸ Friends of the Clearwater, a forest-watchdog nonprofit in Idaho with a mission area that encompasses the Nez Perce-Clearwater National Forests, has environmental documents and decisions from the past thirty years on file in its library. These sources permit a comparison of logging projects in roadless areas over the course of three distinct time periods: the 1990s, when there was no roadless rule restricting logging in roadless areas; from 2001-2008, when the National Roadless Rule governed Idaho roadless areas; and after 2008, when the Idaho Roadless Rule superseded the National Roadless Rule in Idaho. For these thirty years of projects, we tracked the Forest Service's analyses, the size of the work, and whether the proposed project moved forward under the governing roadless rule. These NEPA documents provided an inside look at the quality of the Forest Service's assessments about the effects of logging in roadless areas and how those conclusions have changed over time. Excerpts can be found in Appendix A to this report.

To examine timber projects in Montana, we began with the preliminary numbers disclosed by the Forest Service on logging authorized in Montana roadless areas since 2010. We noted which exception under the National Roadless Rule that the Forest Service cited when it authorized roadless-area timber harvests. We created a table that included the name of the project, the amount of logging authorized in roadless, which exception under the National Roadless Rule allowed the Forest Service to cut trees in the roadless area, and the reasoning the Forest Service provided on environmental impacts. We have provided excerpts of these NEPA documents in Appendix B.

Using excerpts from the environmental assessments noted above, we evaluated the Forest Service's conclusions on the projected impacts of logging to roadless areas. Under the National Environmental Policy Act, the Forest service has to support its conclusion on how logging will

⁵⁸ These two forests, the Nez Perce National Forest and the Clearwater National Forest border each other, and were administratively combined into the Nez Perce-Clearwater National Forest in 2012. *See* Nez Perce-Clearwater National Forest, About the Forest, available at

https://www.fs.usda.gov/main/nezperceclearwater/about-forest (last visited 2/2/19). Our review examined projects within both forests. We could access a thirty-year transect because Friends of the Clearwater's mission area includes both forests and had many of these NEPA documents on file.

impact roadless areas, including disclosing whether logging will degrade roadless characteristics and wild areas. We identified several analytical trends common to the Forest Service in both states in minimalizing the impacts that logging would have on roadless areas, and we evaluated the logic of the trend.

Finally, while project-level NEPA analysis provides an opportunity to analyze potential future impacts for activities proposed in roadless areas, the forest-plan revision process offers a more certain retrospective on project impacts. When the Forest Service revises each national forest's forest plan, the Forest Service must reconsider what, if any, places the agency might recommend to Congress to designate as Wilderness. This often leads to updating that forest's roadless inventory, where the Forest Service compares the on-the-ground condition of roadless areas against the definition of roadless characteristics and criteria of what the Forest Service considers to be eligible to recommend to Congress to designate as Wilderness. We chose two forest-plan revisions to review: the Idaho Panhandle National Forests in Idaho, and the Beaverhead-Deerlodge National Forests in Montana.

Using all of the above—Forest Service disclosures, NEPA documents, and the files of two forest-plan revisions, we answered the question of how well each roadless rule protects roadless areas. To understand our findings in context, a discussion of the roadless rules—their structures, their permissions, and their prohibitions—is necessary.

IV. National Roadless Rule and Idaho Roadless Rules: structures, permissions, and prohibitions

Both roadless rules are designed to govern activities that may and may not take place in roadless areas. The National Roadless Rule and the Idaho Roadless Rule define roadless characteristics-the values that roadless areas espouse-identically. But, what defines these rules are the different levels of timber harvest that each rule allows. The National Roadless Rule is a general prohibition on timber harvest and road construction in all roadless areas. In contrast, the Idaho Roadless Rule divides roadless areas into a five-tiered hierarchy with different levels of protection, limiting timber-harvest exceptions for roadless areas at the top of the tier and eliminating any additional protections at the bottom of the tier. While there is some overlap of timber harvest that each rule permits and prohibits, on the whole, the Idaho Roadless Rule allows more potentially roadless-degrading activities in the majority of the roadless areas. These rules also differ in that the National Roadless Rule imposes a minimum level of protection, beyond which the Forest Service can choose to protect roadless areas, while the Idaho Roadless Rule adds a maximum level of protection, prohibiting the Forest Service from protecting a roadless area at a higher level than what the rule has deemed appropriate for each hierarchy. Finally, the National Roadless Rule allows for flexibility in updating the roadless inventory, while the Idaho Roadless Rule has frozen Idaho's roadless inventory in the rule and created an extremely difficult process to update roadless areas so as to reflect on-the-ground characteristics.

IV.A. Similarity: The National Roadless Rule and the Idaho Roadless Rule define "roadless characteristics" identically.

The largest similarity between the two rules is how the Forest Service defines roadless

characteristics, which are the natural features that comprise roadless areas.⁵⁹ Except for minor grammatical differences, the two rules' definitions are virtually identical. Roadless area characteristics are "[r]esources or features that are often present in and characterize" roadless areas.⁶⁰ Roadless areas, by definition, include the following:

(1) High quality or undisturbed soil, water, and air;

(2) Sources of public drinking water;

(3) Diversity of plant and animal communities;

(4) Habitat for threatened, endangered, proposed, candidate, and sensitive species and for those species dependent on large, undisturbed areas of land;

(5) Primitive, semi-primitive non-motorized and semi-primitive motorized classes of dispersed recreation;

- (6) Reference landscapes;
- (7) Natural appearing landscapes with high scenic quality;
- (8) Traditional cultural properties and sacred sites; and
- (9) Other locally identified unique characteristics.⁶¹

The definition of roadless characteristics originate from wild qualities enumerated in the Wilderness Act, where the Forest Service identified the roadless areas administratively in order to assess whether those areas should be recommended to Congress for wilderness designation.⁶²

The other similarity between the rules is that the Idaho Roadless Rule has adopted some of the National Roadless Rule's exceptions for activities that may occur in some roadless areas in some situations. However, this is a minor similarity because the Idaho Roadless Rule used the National Roadless Rule's exceptions for some roadless areas, and added onto them for a majority of the Idaho Roadless Areas, as discussed below.

IV.B. The differences between permissible logging activities under the structure and language of the Idaho and National Roadless Rules.

The National and the Idaho Roadless Rules differ in their basic structure. The National Roadless Rule treats all roadless areas as one category of land—roadless areas—and sets out to govern what activities are prohibited, and what activities may proceed under certain circumstances. The Idaho Roadless Rule creates a five-class hierarchy for Idaho roadless areas, dividing roadless areas into a spectrum and then allowing activities that accordingly vary from

⁵⁹ See Roadless Area Conservation Rule, 66 Fed. Reg. 3,244, 3,272 (Jan. 12, 2001) compare with 36 C.F.R. § 294.21.

⁶⁰ Roadless Area Conservation Rule, 66 Fed. Reg. 3,244, 3,274 (Jan. 12, 2001) (definition of "Roadless area characteristics).

⁶¹ Roadless Area Conservation Rule, 66 Fed. Reg. 3,244, 3,274 (Jan. 12, 2001). 36 C.F.R. § 294.21 (definitions of "Roadless area characteristics"). The only difference in the text of the Idaho Roadless Rule is a couple of extra commas in a comma series and with a conjunction in subsections (5) and (4) that had no substantive impact on the definition. *See* 36 C.F.R. § 294.21

⁶² See USDA, Forest Service, RARE II: Roadless Area Review and Evaluation Final EIS pp. 5-6 (Jan. 1979) ("RARE II began with a Forest Service inventory of roadless, undeveloped areas that met the minimum criteria for wilderness consideration under the Wilderness Act.").

more restrictive to not restrictive. These themes, from most restrictive to no restrictions, are the following: 1) Wild Land Recreation, 2) Special Areas of Historic and Tribal Significance; 3) Primitive; 4) Backcountry / Restoration; 5) General Forest, Rangeland, Grassland.⁶³ Roadless areas in the category at the top of this hierarchy (Wild Land Recreation) denote more prohibitions than the National Roadless Rule, but only approximately 1.5 of Idaho's 9.3 million acres fall into this category. The other four categories, which encompass the remaining acreage (approximately 7.8 million acres) permit more logging or roadbuilding, or both, to go forward in Idaho roadless areas. For this report, we focused on logging activity, which the Forest Service recognizes may very well degrade roadless characteristics.⁶⁴

The table below ranks the protection afforded National and Idaho roadless areas based express prohibitions to logging and the number or breadth of exceptions that allow logging in roadless areas. We broke down the Idaho roadless themes and ranked their protectiveness in comparison to the National Rule. The first row contains the most protective language for a roadless area, with subsequent rows having progressively fewer protections and broader exceptions. For each subsequent entry, we emboldened the added exceptions or substantive amendments that permissively broadened situations where the Forest Service could authorize logging in roadless areas.⁶⁵ The Table 1 below summarizes the following discussion.

Rule and provision	General express prohibition against logging?	Exceptions
Idaho Roadless Rule -	Yes, express	1. Personal or administrative use
Wild Land Recreation	general	2. Where incidental to a non-prohibited management
Theme (16 percent of	prohibition	activity
Idaho roadless areas)	against logging.	
36 C.F.R. § 294.24(a)		
2001 National	Yes, express	1. Personal or administrative use
Roadless Rule	general	2. Where incidental to a non-prohibited management
	prohibition	activity
	against logging.	3. Small diameter trees to "improve" listed/sensitive

Table 1. Ranking of prohibitions in Idaho and National Roadless Rules according to explicit prohibitions and permissions in each rule.

⁶³ There is one other category of roadless areas in the Idaho Roadless Rule: Forest Plan Special Areas, which comprise 334,500 acres, or roughly four percent of Idaho Inventoried Roadless Areas. These areas are small research natural areas or designated eligible wild and scenic river corridors within roadless areas. The Idaho Roadless Rule excluded them from all roadless categories and noted that these areas be protected and managed in accordance with their respective forest plans. As the Idaho Roadless Rule does not govern this four percent of the roadless base, they will not be discussed further. *See* Idaho Roadless Rule, 73 Fed. Reg. 61,456, 61,479 (Oct. 16, 2008); 36 C.F.R. §294.21 (Forest Plan Special Area definition).

⁶⁴ See Roadless Area Conservation Rule, 66 Fed. Reg. 3,244, 3,244 (Jan. 12, 2001); USDA, Forest Service, Roadless Area Conservation final EIS, Vol. 1 p. ES-1 (Nov. 2000).

⁶⁵ While this discussion deals largely with logging, it should be noted that the Idaho Roadless Rule is more permissive for roadbuilding. According to the preliminary figures disclosed by the Forest Service in the spreadsheets of projects in roadless areas (on file with authors), approximately 18 miles of roads have been built in Idaho roadless areas whereas in Montana, the number is under a mile. We have not confirmed these numbers.

		species habitat
	Express language	4. Small diameter trees to
	that all	"restoreecosystemstructure" (i.e.
	exceptions FS	"reduceuncharacteristic wildfire effects") within
	expects to	range of natural disturbance regimes of current
	infrequently	climatic period
	apply.	5. Roadless areas already substantially altered by
	appiy.	timber harvested before January 2001
Idaho Roadless Rule –	Yes, express	1. Personal or administrative use
Special Areas of	general	2. Where incidental to a non-prohibited management
Historic or Tribal	prohibition	activity
Significance and	against logging.	3. Any trees (but maximize retention of fire-resilient
Primitive Roadless	against logging.	large trees) to "improve" listed/sensitive species habitat
Areas (19 percent of	No express	4. Any trees (but maximize fire-resilient large trees) to
Idaho roadless areas	language	"restoreecosystemstructure" within range of natural
Idalio Toduless aleas	showing FS	disturbance regimes of current climatic period
36 C.F.R. § 294.24(b)	expectation to	5. Any trees (but maximize fire-resilient large trees) to
50 C.P.R. § 274.24(0)	infrequently	"reduceuncharacteristic wildland fire effects to an at-
	apply.	risk community or municipal water supply system"
	appiy.	within range of natural disturbance regimes of
		current climatic period
Idaho Roadless Rule –	No express	1. Personal or administrative use
Backcountry /	prohibition	2. Where incidental to a non-prohibited management
Restoration Roadless	against logging,	activity
Areas (57 percent of	but conditions	3. Any trees (but maximize retention of fire-resilient
Idaho roadless areas)	required.	large trees) to "improve" listed/sensitive species habitat
Idalio Toadiess areas)	required.	4. Any trees (but maximize fire-resilient large trees) to
36 C.F.R. § 294.24(c)	No express	"restoreecosystemstructure"
50 C.I .IX. § 294.24(C)	language that	5. Any trees (but maximize fire-resilient large trees) to
	exceptions are to	reduce "reduceuncharacteristic wildland fire effects"
	be infrequently	anywhere in roadless area
	employed	6. Any trees (but maximize fire-resilient large trees) to
	employed	reduce "hazardous fuel conditions" within a
		"community protection zone"
		7. Any trees (but maximize fire-resilient large trees) to
		reduce "hazardous fuel conditions" outside of a"
		community protection zone" where there is a
		"significant risk" to an at-risk community or
		municipal water supply system
		8. Roadless areas already substantially altered before
		the Forest Service issued the Idaho Roadless Rule
Idaho Roadless Rule –	No prohibition	No exceptions because logging is allowed if the forest
General Forest,	against logging.	plan allows timber harvest.
Rangeland, and		
Grassland Roadless	No express	
Areas (4 percent of	language about	
Idaho roadless areas)	intent to	
	infrequently log.	
36 C.F.R. § 294.24(c)		
55 CH if $5277.27(0)$	1	1

IV.B.1. Timber cutting, sale, or removal in inventoried roadless areas under the National Roadless Rule

The National Roadless Rule is a rule of general prohibition with specific, enumerated exceptions. "Timber may not be cut, sold, or removed in inventoried roadless areas of the National Forest System, except as provided in paragraph (b) of this section."⁶⁶ The rule then provides the following exceptions where timber cutting, sale, or removal may occur in inventoried roadless areas:

- (1) The cutting, sale, or removal of generally small diameter timber is needed for one of the following purposes and will maintain or improve one or more of the roadless area characteristics as defined in § 294.11.
 - (i) To improve threatened, endangered, proposed, or sensitive species habitat; or
 - (ii) To maintain or restore the characteristics of ecosystem composition and structure, such as to reduce the risk of uncharacteristic wildfire effects, within the range of variability that would be expected to occur under natural disturbance regimes of the current climatic period;
- (2) The cutting, sale, or removal of timber is incidental to the implementation of a management activity not otherwise prohibited by this subpart;
- (3) The cutting, sale, or removal of timber is needed and appropriate for personal or administrative use, as provided for in 36 CFR part 223; or
- (4) Roadless characteristics have been substantially altered in a portion of an inventoried roadless area due to the construction of a classified road and subsequent timber harvest. Both the road construction and subsequent timber harvest must have occurred after the area was designated an inventoried roadless area and prior to January 12, 2001. Timber may be cut, sold, or removed only in the substantially altered portion of the inventoried roadless area.⁶⁷

Exception (4) accounted for mapping errors and outdated inventory at the time the Forest Service published the 2001 Rule. Exceptions (2) or (3) could be expected for such activities as enforcing valid existing rights or maintaining trails, neither of which would be considered a timber sale.⁶⁸ Exception (b)(1) allows timber sales to go forward if they are generally limited to small diameter trees. However, this (b)(1) exception notably appears to contradict maintaining roadless characteristics, as it allows the very activity that the Forest Service also states is likely to degrade roadless characteristics. Nonetheless, in enumerating these exceptions, the Forest Service explicitly noted that the "cutting, sale, or removal of timber in these areas is expected to be infrequent."⁶⁹

⁶⁶ Roadless Area Conservation Rule, 66 Fed. Reg. 3,244, 3,273 (Jan. 12, 2001) (§ 294.13(a)

⁶⁷ Roadless Area Conservation Rule, 66 Fed. Reg. 3,244, 3,273 (Jan. 12, 2001) (§ 294.13(b)(1)-(4)). ⁶⁸ See, e.g., 36 C.F.R. § 223.2.

⁶⁹ Roadless Area Conservation Rule, 66 Fed. Reg. 3,244, 3,273 (Jan. 12, 2001) (§ 294.13(b)).

IV.B.2. Timber cutting, sale, or removal in the Idaho Roadless Rule for (1) Wild Land Recreation

Idaho roadless areas in the Wild Land Recreation, 1,479,700, comprise only 16 percent of Idaho's 9,304,300 million acres of inventoried roadless areas.⁷⁰ Similar to the National Roadless Rule, which generally prohibits logging, this provision also generally prohibits cutting trees in Wild Land Recreation roadless areas.⁷¹ Exceptions to this prohibition include cutting, sale, or removal for personal or administrative use or where incidental to some other permitted activity. These exceptions are comparable to the National Roadless Rule (b)(2) and (b)(3) exceptions above. But while the National Roadless Rule's personal or administrative use exception requires the use to be "needed and appropriate," the Idaho Roadless Rule imposes no such restriction.⁷²

IV.B.3. Timber cutting, sale, or removal in the Idaho Roadless Rule for (2) Special Areas of Historic or Tribal Significance and (3) Primitive roadless areas

Special Areas of Historic or Tribal Significance (48,600 acres) and Primitive (1,772,700) roadless areas together comprise approximately 19 percent of the inventoried roadless areas.⁷³ Similar to the general prohibition of the National Rule, the Idaho Rule generally prohibits cutting, selling, or removing timber from these areas with certain exceptions.⁷⁴ While the language for logging exceptions in these roadless themes appear almost identical, there are several words omitted from the Idaho Roadless Rule that substantively broadens the possible exceptions for activities that may occur in Idaho roadless areas.

The Forest Service modified three phrases from the National Roadless Rule when creating exceptions for the Idaho Roadless Rule that allow for broader and more frequent timber harvest. The National Roadless Rule and the Idaho Roadless Rule both explicitly permit timber harvest in roadless areas "to improve threatened, endangered, proposed, or sensitive species habitat," or to "restore the characteristics of ecosystem composition."⁷⁵ The National Roadless Rule permits harvesting *generally small diameter timber* where needed to "improve…roadless area characteristics" for the (b)(1) exceptions.⁷⁶ In contrast, the Idaho Roadless Rule directs logging under the exception to "[m]aximize the retention of large trees as appropriate for the forest type, to the extent the trees promote fire-resilient stands."⁷⁷ The Idaho Roadless Rule's provision notably omits the size of timber the Forest Service generally expects to cut or remove for this category of roadless areas.

The second noteworthy deviation is how frequently the Forest Service expected to apply

⁷⁰ Idaho Roadless Rule, 73 Fed. Reg. 61,456, 61,479 (Oct. 16, 2008).

⁷¹ 36 C.F.R. § 294.24(a).

⁷² Roadless Area Conservation Rule, 66 Fed. Reg. 3,244, 3,273 (Jan. 12, 2001) (§ 294.13(b)(3)); *compare with* 36 C.F.R. § 294.24(a); *see also, e.g.*, 36 C.F.R. § 223.2.

⁷³ Idaho Roadless Rule, 73 Fed. Reg. 61,456, 61,479 (Oct. 16, 2008).

⁷⁴ 36 C.F.R. § 294.24(b)

⁷⁵ See 36 C.F.R. §294.24(b)(1)(i), (ii); *compare with* Roadless Area Conservation Rule, 66 Fed. Reg. 3,244, 3,273 (Jan. 12, 2001) (§294.13(b)(1)).

⁷⁶ Roadless Area Conservation Rule, 66 Fed. Reg. 3,244, 3,273 (Jan. 12, 2001) (§294.13(b)(1)).

⁷⁷ 36 C.F.R. § 294.24(b)(2)(iii).

the exceptions in this section. At the beginning of the list of four exceptions that allow timber harvest in inventoried roadless areas, the National Roadless Rule states, "The cutting, sale, or removal of timber in these areas is expected to be infrequent."⁷⁸ While this term is vague because the National Roadless Rule does not define "infrequent," the Idaho Roadless Rule avoids making this qualitative forecast for these two categories of Idaho roadless areas, which are the second and third most protective in the Idaho Roadless Rule hierarchy.

Thirdly, the Idaho Roadless Rule also omitted reference to wildfire effects from climate. The National Roadless Rule, which provided for infrequent cutting, sale, or removal of small diameter timber allowed such activities to reduce "the risk of uncharacteristic wildfire effects, within the range of variability that could be expected to occur under natural disturbance regimes of the current climatic period."⁷⁹ The National Roadless Rule explicitly requires the Forest Service to consider ecosystem wildfire effects within climatic changes, such as periods of warmer or cooler temperatures.⁸⁰ The Idaho Roadless Rule eliminated any consideration of a climatic oscillations as well as global warming's impact upon them by dropping the "within the range of variability" and "current climatic period" from the 2001 Roadless Rule.⁸¹ Instead, the Idaho Roadless Rule allows logging to avoid "uncharacteristic" fire effects or "to maintain or restore the characteristics of ecosystem composition, structure, and processes" for three of the five roadless classifications.⁸² Only the most protected theme—Wild Land Recreation—does not allow this justification for logging. As we move further into a century where fire behavior might change due to global warming,⁸³ the Forest Service need not acknowledge how global warming is impacting fire behavior when applying this logging exception to Idaho roadless areas.

Although the Idaho Rule requires regional forester approval to apply one of the enumerated exceptions, this does not appear to offer more protection. Where National Roadless Rule allows the responsible official to apply exceptions,⁸⁴ the Idaho Roadless Rule requires the exception to be "approved by the regional forester."⁸⁵ Theoretically, review by a regional official, and not a responsible official, is a higher level of review that might offer more protection. However, regional foresters have often routinely approved other exceptions outside of roadless areas.⁸⁶

⁷⁸ Roadless Area Conservation Rule, 66 Fed. Reg. 3,244, 3,273 (Jan. 12, 2001) (§ 294.13(b)).

⁷⁹ Roadless Area Conservation Rule, 66 Fed. Reg. 3,244, 3,273 (Jan. 12, 2001) (§294.13(b)(1)(ii)).

⁸⁰ Roadless Area Conservation Rule, 66 Fed. Reg. 3,244, 3,273 (Jan. 12, 2001) (§ 294.13(b)(1)(ii)); see *also* USDA, Forest Service, Natural Climate Cycles webpage, available at

https://www.fs.usda.gov/ccrc/climate-basics/climate-primer/natural-climate-cycles (last visited 2/15/19). ⁸¹ See 36 C.F.R. § 294.24(b)(1)(2).

⁸² 36 C.F.R. § 294.24(b)(1)(ii), (iii) (Special Areas of Historic or Tribal Significance and Primitive roadless areas); § 294.24(c)(1)(iv), (v)(Backcountry/Restoration).

⁸³ Pechony, O. and Shindell, D.T. *Driving forces of global wildfires over the past millennium and the forthcoming century*, Proceedings of the National Academy of Sciences,

www.pnas.org/cgi/doi/10.1073/pnas.1003669107 (Sept. 2010).

⁸⁴ Roadless Area Conservation Rule, 66 Fed. Reg. 3,244, 3,273 (Jan. 12, 2001) (§294.13(b)).

⁸⁵ 36 C.F.R. § 294.24(b)(2)(v).

⁸⁶ For example, regional foresters must approve a project proposal when regeneration-cut units will create an opening exceeded by regulation. *See, e.g.*, 16 U.S.C. § 1604(g)(3)(F)(iv); 36 C.F.R. § 219.11(d)(4) (imposing a 40-acre limit on clearcutting and other regeneration that creates an even-age timber stand); Clearwater Forest Plan p. II-25. But, such regional approval appears ubiquitous. *See, e.g.*, USDA, Forest

IV.B.4. Timber cutting, sale, or removal in the Idaho Roadless Rule for (4) Backcountry/Restoration Theme

The Idaho Roadless Rule's Backcountry/Restoration theme, the fourth of five categories, comprises the most of all Idaho roadless categories—5,312,900 acres, which is 57 percent of all Idaho inventoried roadless areas.⁸⁷ Where the upper echelon of Idaho's five roadless categories (Wild Land Recreation, Special Areas of Historic or Tribal Significance, and Primitive) began with a general prohibition and then enumerated exceptions, Even though the Forest Service claimed this theme to be comparable to the National Roadless Rule,⁸⁸ Backcountry/Restoration does not even begin by proclaiming timber harvest is generally prohibited. The subsection begins by listing when cutting, selling, and removing timber is permissible.⁸⁹

The Backcountry/Restoration theme adopts the exceptions enumerated in the Idaho Rule's Wild Land Recreation, Special Areas of Historic or Tribal Significance, and Primitive roadless areas.⁹⁰ Additionally, however, the Backcountry/Restoration theme broadens logging allowances with a carte blanche exception to remove whatever the Forest Service considers to be hazardous fuels. In addition to exceptions discussed above, logging in Backcountry/Restoration is permitted

(i) To reduce hazardous fuel conditions within the community protection zone if...the project generally retains large trees as appropriate for the forest type and is consistent with land management plan components as provided for in § 294.28(d)

and

(ii) To reduce hazardous fuel conditions outside the community protection zone where there is significant risk that a wildland fire disturbance event could adversely affect an atrisk community or municipal water supply system....⁹¹

These provisions allow for discretionary logging virtually anywhere on nearly six million acres of wild national forests. Even with requiring the regional forester approval outside the 442,000 acres of "community protection zones,"⁹² regional foresters routinely approve other

Service (Nez Perce-Clearwater National Forest): Strychnine Pine DN-FONSI p. 16 (Apr. 2015); Lower Orogrande ROD p. 15 (Apr. 2015); French Larch DN-FONSI p. 6 (Oct. 2016); Barnyard South Sheep Project DN-FONSI pp. 15-16 (Jul. 2015); Little Slate ROD p. 6 (Feb. 2012); Dutch Oven Vegetation Management Project DN-FONSI p. 39 (May 2017).

⁸⁷ See Idaho Roadless Rule, 73 Fed. Reg. 61,456, 61,479 (Oct. 16, 2008).

⁸⁸ See USDA, Forest Service, Roadless Area Conservation National Forest System Lands in Idaho final EIS, Vol. 1 p. 4 (Aug. 2008).

⁸⁹ See 36 C.F.R. § 294.24(c)(1).

⁹⁰ See 36 C.F.R. § 294.24(c); compare with (a), (b). Idaho's Backcountry/Restoration Theme also removed the 2001 National Rule's expectation to remove "generally small diameter timber," to cut, sell, or remove timber in a manner "expected to be infrequent," and omitting wildfire effects "expected... under natural disturbance regimes of the current climatic period." *See* Roadless Area Conservation Rule, 66 Fed. Reg. 3,244, 3,273 (Jan. 12, 2001) (§ 294.13(b)); compare with 36 C.F.R. § 294.24(c).
⁹¹ 36 C.F.R. § 294.24(c)(1)(i), (ii).

⁹² See 36 C.F.R. § 294.21 ("Community protection zone"); Idaho Roadless Rule, 73 Fed. Reg. 61,456,

unrelated exceptions.⁹³ Additionally, in past 15 years on the Nez Perce and Clearwater National Forests, the Forest Service has not uncommonly cited "reducing fuels" as a goal for projects that also happen to produce timber for sale.⁹⁴ This has occurred in spite of the fact the forest types in the Northern Rockies burn based upon climatic rather than fuel factors, burning at levels of mixed-severity with infrequence.⁹⁵ The above descriptions do not fit the vast majority of Idaho's forests, especially where recent science has suggested that fire and forest structure is more variable than previously thought,⁹⁶ and that unlogged and unmanaged areas—roadless areas—are at less risk of severe wildfires than areas with a logging history.⁹⁷

IV.B.5. Timber cutting, sale, or removal in the Idaho Roadless Rule for (5) General Forest, Rangeland, and Grassland roadless areas

The Idaho Roadless Rule's General Forest, Rangeland, and Grassland theme, the fifth of five categories, comprises the 405,900 acres of Idaho roadless areas—approximately four percent of Idaho's roadless base.⁹⁸ The provision governing timber harvest in General Forest, Rangeland, and Grassland roadless areas is short because there are no prohibitions from logging, thus no exceptions to create. Roadless areas under this theme receives no protection under the Idaho Roadless Rule. Instead, the fate of roadless areas are tied to the forest plans, i.e., logging is allowed in these roadless areas if the forest plan allows it.⁹⁹

IV.C. Other differences between the rules: the ability to increase roadless protection or update the roadless inventory

Besides the Idaho Roadless Rule's hierarchy and numerous exceptions to logging, there are two additional features that differentiate the Idaho Roadless Rule from its national counterpart. The first difference is how each rule interacts with the governing forest plan. The second is the procedural ease with which the Forest Service may update a national forest's

 ⁹⁵ Odion et al. Examining Historical and Current Mixed-Severity Fire Regimes in Ponderosa Pine and Mixed-conifer Forests of Western North America. PLOS|One, Vol. 9(2), e87852, pp. 9-12 (Feb. 2014).
 ⁹⁶ See Odion et al. Examining Historical and Current Mixed-Severity Fire Regimes in Ponderosa Pine and Mixed-conifer Forests of Western North America. PLOS|One, Vol. 9(2), e87852, pp. 1-14. (Feb. 2014).

⁹⁹ 36 C.F.R. § 294.24(d).

^{61,460 (}Oct. 16, 2008).

⁹³ See Section IV.B.3, footnote 86.

⁹⁴ See, e.g., USDA, Forest Service, Dutch Oven Vegetation Management Project DN-FONSI pp. 8-9, 13 (May 2017); USDA, Forest Service, North Side Powell Project DN-FONSI p. 1, 3 (Sept. 2017); USDA, Forest Service, Iron Mountain Vegetation Restoration Updated EA p. 1-1, 2-3 to 2-6 (May 2013)(Nez Perce-Clearwater National Forest); USDA, Forest Service, Little Slate ROD pp. 3-4, 15 (Feb. 2012)(Nez Perce National Forest); USDA, Forest Service, Blacktail Hazardous Fuels Project DN-FONSI pp. 1, 3 (Feb. 2008)(Nez Perce National Forest); USDA, Forest Service, Red Pines FEIS p. I-v (Jun. 2005) and ROD p. 4 (Nov. 2006) (Nez Perce National Forest).

⁹⁷ See Bradley, C.M., Hanson, C.T., DellaSala, D.A. *Does increased forest protection correspond to higher fire severity in frequent-fire forests of the western United States?*, Ecosphere, Vol. 7(10), pp. 1-13 (Oct. 2016); Odion et al. *Patterns of Fire Severity and Forest Conditions in the Western Klamath Mountains, California.* Conservation Biology, Vol 18(4) pp. 927-936 (Aug. 2004).

⁹⁸ Idaho Roadless Rule, 73 Fed. Reg. 61,456, 61,479 (Oct. 16, 2008).

roadless inventory to reflect areas with actual, on-the-ground roadless characteristics.

The National Roadless Rule imposes minimum protections by which all forest plans must comply but can further enhance, while Idaho Roadless Rule trumps all forest plans, prohibiting a forest plan from enhancing roadless protection beyond the exceptions in the operative theme. A managing document called a "forest plan" outlines how the Forest Service will manage that forest over the upcoming decade.¹⁰⁰ The National Roadless Rule contains a provision that prohibits forest plans to allow activities in specific roadless areas if the rule prohibits that activity,¹⁰¹ leaving the option for "[a]ny future limitations...to protect roadless characteristics...[to] be decided upon at the local level through forest...planning efforts, with public participation."¹⁰² This provision makes the National Roadless Rule a floor of minimum protection by which all forest plans must comply, but the rule does not prohibit individual forests from developing plans that can add restrictions and protect roadless areas at a higher level. The Idaho Roadless Rule strips away optional enhanced protection.

The Idaho Roadless Rule trumps any inconsistent forest-plan provision with respect to Idaho's roadless inventory, which creates a ceiling if the inconsistent forest-plan provision had provided more protection to a roadless area than the IRR does.¹⁰³ The IRR states, "The prohibitions **and permissions** set forth in the subpart are not subject to reconsideration, revision, or rescission in subsequent project decisions or land and resource management plan amendments or revisions...."¹⁰⁴ These two provisions work together to prevent normal planning processes, such as a forest plan revision, from considering stronger protections for roadless areas than exist under the IRR. Unlike the National Roadless Rule that allows public comment in plan revisions to increase protection for roadless areas. The Meadow Creek Roadless Area in the Nez Perce National Forest is an example where the Idaho Roadless Rule eliminated higher protection in the forest plan and prevents any change to the new, reduced protection, absent new rulemaking.

The West Meadow Creek roadless area (see Picture 1 below) provides an example of the Idaho Roadless Rule lessening the protection afforded by the governing forest plan.¹⁰⁵ Meadow Creek, comprised of East and West Meadow Creek roadless subareas, is over 200,000 acres.¹⁰⁶ This entire area adjoins the Selway-Bitterroot Wilderness to the north and east, and is separated from the Frank Church-River of No Return Wilderness on the south by the Magruder

¹⁰⁰16 U.S.C. § 1604(a), (b), (f)(5) (National Forest Management Act).

¹⁰¹ See Roadless Area Conservation Rule, 66 Fed. Reg. 3,244, 3,273 (Jan. 12, 2001) (§ 294.14(e)).

¹⁰² USDA, Forest Service, Roadless Area Conservation final EIS, Vol. 1 p. 3-42 (Nov. 2000).

¹⁰³ See 36 C.F.R. § 294.28(d).

¹⁰⁴ 36 C.F.R § 294.28(e) (emphasis added).

¹⁰⁵ The Nez Perce Forest Plan describes the Meadow Creek roadless area, which encompasses almost all of the Meadow Creek drainage and subdivides the Meadow Creek roadless areas into two sub-areas, Meadow Creek East and Meadow Creek West. *See* USDA, Forest Service, Nez Perce Forest Plan Final EIS, Appx. C, pp. C-75 to C-100 (1987). The Idaho Roadless Rule refers to these subareas as East Meadow Creek roadless area and West Meadow Creek roadless area. *See* Idaho Roadless Rule, 73 Fed. Reg. 61,456, 61,495 (Oct. 16, 2008). We refer to them as East Meadow Creek roadless area and West Meadow Creek roadless area.

¹⁰⁶ USDA, Forest Service, Nez Perce Forest Plan Final EIS, Appx. C, p. C-75 (1987).

Corridor.¹⁰⁷ With elevations ranging from 1,800 feet – 8,200 feet, this spectacular landscape is drained by waterways that feed into the Wild & Scenic Selway and Salmon Rivers, as well as the South Fork Clearwater River.¹⁰⁸ "As a whole, this area contains nearly all features of the two adjacent wildernesses except low-elevation river break country...[A] full range of aspects, elevations, and vegetative types is represented; and opportunities for solitude and primitive recreation are outstanding."¹⁰⁹

The geology of Meadow Creek is unique. The headwaters of Meadow Creek proper were never glaciated. Thus, the meadows in the upper stream system were not scoured by glaciers¹¹⁰ as were most high elevation mountain meadows. The Meadow Creek Roadless Area has more miles of significant fishery than any other roadless area on the Nez Perce portion of the Nez Perce-Clearwater National Forests.¹¹¹ Due to intact habitat and incredibly high water quality, healthy populations of westslope cutthroat, steelhead, rainbow trout, and bull trout exist throughout the drainage.¹¹² Summer Chinook journey from the ocean to the clean and cold tributaries of the roadless area.¹¹³ Despite these facts, fishing pressure is small.¹¹⁴

¹⁰⁷ See USDA, Forest Service, Nez Perce Forest Plan Final EIS, Appx. C, pp. C-75, C-89 (1987). This includes acreage managed by the Bureau of Land Management.

¹⁰⁸ See USDA, Forest Service, Nez Perce Forest Plan Final EIS, Appx. C, pp. C-75, C-89 (1987).

¹⁰⁹ USDA, Forest Service, Nez Perce Forest Plan Final EIS, Appx. C, p. C-75 (1987).

¹¹⁰ See USDA, Forest Plan, Nez Perce National Forest Meadow Creek Planning Unit Brochure p. 35 (1977).

¹¹¹ USDA, Forest Service, Nez Perce Forest Plan Final EIS, Appx. C, p. C-92 (1987).

¹¹² USDA, Forest Service, Nez Perce Forest Plan Final EIS, Appx. C, p. C-80, C-92 (1987).

¹¹³ See USDA, Forest Service, Nez Perce Forest Plan Final EIS, Appx. C, p. C-80 (1987).

¹¹⁴ See USDA, Forest Service, Nez Perce Forest Plan Final EIS, Appx. C, p. C-80, C-92 (1987).



Picture 1. West Meadow Creek roadless area (courtesy of Ron Marquart).

The Idaho Roadless Rule lessened the protection for the approximate 100,000-acre West Meadow Creek roadless area. The governing Nez Perce Forest Plan stated that the West Meadow Creek roadless area was suitable for timber harvest, but the plan prohibited logging in this roadless area during the life of this forest plan.¹¹⁵ When the 2001 National Roadless Rule was in place, it allowed forest plans to augment protection over the National Rule's minimum requirements, so the 2001 Roadless Rule had no adverse impact to the forest plan's protection of the West Meadow Creek roadless area. The Idaho Roadless Rule, however, eliminated this protection. The Idaho Rule categorized the West Meadow Creek roadless area as Backcountry/Restoration.¹¹⁶ The Backcountry/Restoration theme, as discussed above, does not begin with a prohibition on timber harvest, but rather conditions timber harvest upon provisions broader than the 2001 Roadless Rule. And, because the Idaho Roadless Rule's permissions also supersede any governing forest plans, not only is timber harvest allowed over what current forest plan had prohibited, timber harvest will always be allowed in the West Meadow Creek roadless area over any forest plan provisions, and there is nothing short of a new rule, a rule amendment, or an act of Congress that can remedy this lack of protection.

The final substantive difference between the two rules is how much easier the National Roadless Rule allows for the Forest Service to update its roadless inventory to reflect areas with roadless characteristics than does the Idaho Roadless Rule. When revising a forest plan, the

¹¹⁵ See USDA, Forest Service, Nez Perce Forest Plan pp. II-4, VI-23 (1987).

¹¹⁶ Idaho Roadless Rule, 73 Fed. Reg. 61,456, 61,495 (Oct. 16, 2008).

Forest Service may evaluate the forest's roadless areas, considers whether to recommend any areas to Congress to designate as Wilderness under the Wilderness Act, and may simultaneously update the forest's roadless inventory, as no law or regulation restricts that.¹¹⁷ Because the Forest Service can update the roadless inventory in the forest plan revision process, the official approving roadless updates is the responsible official for that forest, which is the forest supervisor.¹¹⁸ Under this process, the Forest Service adjusts boundaries and adds or drops roadless areas commensurate with roadless characteristics and the approval of that forest's supervisor. In Idaho, however, the Idaho Roadless Rule has reassigned the responsibility for updating all of Idaho's nine-million-acre roadless inventory on its twelve national forests to the top Forest Service official.¹¹⁹ Under 36 C.F.R. § 294.27(b), only the Chief of the Forest Service may add or remove roadless areas, and only the chief may reassign a roadless area to a different theme of the five management themes. Additionally, Idaho roadless inventory can only be modified roadless-area-by-roadless-area, and the rule is unclear as to how to commence the process to modify an Idaho roadless area.¹²⁰ There are approximately 281 individual, inventoried roadless areas in Idaho's national forests that the Chief would have to separately review each area to comprehensively update of Idaho's roadless inventory.¹²¹ Because this process is more onerous than allowing a forest supervisor to approve such a change in the forest plan revision, portions of roadless areas that no longer have roadless characteristics are more likely to stay roadless in name only.¹²²

Comparing the structure and language of the Idaho Roadless Rule to the National Roadless Rule reveals weaker express protection for the majority of Idaho roadless areas. While the Idaho Roadless Rule eliminated some exceptions for potentially roadless-degrading tree cutting that the National Roadless Rule permitted, the Idaho Roadless Rule did so for a minority of roadless areas in Idaho, allowing more harvest activities in the majority of Idaho's roadless areas. Although the Idaho Roadless Rule's FEIS compared the National Roadless Rule to Idaho's own "Backcountry/Restoration" roadless theme, Backcountry/Restoration expressly broadens what roadless-degrading activities may be allowed to proceed. While the National Roadless Rule allow individual forests to broaden protections for specific roadless areas, the Idaho Roadless Rule stripped away this option. And finally, updating the roadless inventory is much more difficult in Idaho, suggesting that updates will be infrequent and the recorded roadless inventory will be outdated when compared to the conditions on the ground.

Regardless of which roadless rule or which roadless theme applies to a roadless area, however, there has been logging in all roadless areas in the past decade.

¹¹⁷ See 16 U.S.C. §§ 1604(f), (g); 36 CFR §219.6(b)(15); 219.7(c)(2)(v); Roadless Area Conservation Rule, 66 Fed. Reg. 3,244, 3,244 (Jan. 12, 2001).

¹¹⁸ See 36 C.F.R. §§ 219.2(b)(3).

¹¹⁹ See Idaho Roadless Rule, 73 Fed. Reg. 61,456, 61,492 to 61,496 (Oct. 16, 2008). Some individually listed forests have been administratively combined. *See, e.g.*, Nez Perce-Clearwater National Forest homepage, *available at* https://www.fs.usda.gov/nezperceclearwater/ (last visited 2/18/19); Salmon-Challis National Forest homepage, *available at* https://www.fs.usda.gov/scnf/ (last visited 2/18/19). ¹²⁰ See 36 C.F.R. § 294.27(b).

¹²¹ See Idaho Roadless Rule, 73 Fed. Reg. 61,456, 61,492 to 61,496 (Oct. 16, 2008).

¹²² See Pictures 4, 5, 6, and 7 below, which are all pictures of the logged West Fork Crooked River roadless area after shelterwood logging.

V. In the past decade, there has been a quantitative uptick of logging in Idaho roadless areas and considerable logging in Montana roadless areas under both roadless rules

As discussed below, for the Idaho national forest we reviewed, we found an uptick of logging in Idaho roadless areas since the advent of the 2008 Idaho Roadless Rule in addition to a qualitative shift in the discourse of logging's impacts to roadless characteristics. We also found a considerable amount of logging that has occurred in Montana roadless areas in the past decade under the National Roadless Rule.

V.A. Roadless logging stopped entirely in two Idaho national forests with the advent of the National Roadless Rule and began again in those national forests after the Forest Service implemented the Idaho Roadless Rule

The tables in Appendix A illustrate two major shifts on roadless activities in the Nez Perce-Clearwater National Forests between 1989 and 2016: the first is the cessation of logging and roadbuilding in IRAs when the 2001 Roadless Rule went into effect, and the second is the recommencement of logging and roadbuilding in roadless areas when the 2008 Idaho Roadless Rule went into effect. In the decade before the Forest Service issued the 2001 Roadless Rule (1989-2000), the Forest Service in the Nez Perce-Clearwater had analyzed approximately nine projects that proposed various amounts of logging, roadbuilding, or a combination of both in inventoried roadless areas.¹²³ Of these projects, five projects moved forward in some capacity within the inventoried roadless areas.¹²⁴ Even though NEPA analyses had already been done for all the projects in Table 1, because projects often take several years to sell and complete, the 2001 Roadless Rule and actions leading up to the rule altered three of the previously approved projects, lessening the logging and roadbuilding originally approved for the roadless areas. In 1998 the Forest Service issued direction to suspend road construction within certain unroaded areas, which meant that the Middle Fork Timber Sale went forward with helicopter logging and no roadbuilding.¹²⁵ The 2001 Roadless Rule and its general prohibition on logging and

¹²³ See Appendix A; see also USDA, Forest Service, Wing Creek-Twentymile Timber Sales Final EIS and ROD (Jul. 1989); USDA, Forest Service, Mallard Timber Sale Final EIS (Dec. 1990)(Nez Perce National Forest); USDA, Forest Service, Cove Timber Sale Final EIS and ROD (Dec. 1990)(Nez Perce National Forest); USDA Fuzzy Bighorn EA (Dec. 1995)(Clearwater National Forest); USDA, Forest Service, Goat Roost Road Proposal Draft EA (Jul. 1994)(Clearwater National Forest); USDA, Forest Service, White Sand Ecosystem Management Final EIS (Apr. 1996)(Clearwater National Forest); USDA, Forest Service, Fish Bate Salvage Final EIS pp. 47-48, 217 (Jan. 1996)(Clearwater National Forest); USDA, Forest Service, JJ (Jerry Johnson) Ecosystem Restoration Project draft EIS p. IV-71 (Sept. 2000)(Clearwater National Forest).
¹²⁴ Wing Creek-Twentymile Timber Sales (1989), Mallard Timber Sale (1990), Cove Timber Sale (1990), Goat Roost Road Proposal (1994/1995), USDA, Forest Service, Middle Fork ROD (Oct. 1997) (Nez Perce National Forest); see Appendix A.

¹²⁵ Forest Service, *Consideration of the Temporary Suspension of Road Construction in unroaded areas of the Middle Fork Timber Sale* File Code 1950-3 (February 17, 1998), on file with authors. Although the Forest Service dropped the roadbuilding so only helicopter logging went forward, the Forest Service also dropped this roadless area in the subsequent inventory for "development." USDA, Forest Service, Roadless Area Conservation National Forest System Lands in Idaho final EIS, Appendices A-2, -7, -9; H p. H-4 (Aug. 2008).

roadbuilding stopped full implementation of the Cove and Mallard Timber Sales because the projects involved several smaller timber sales, and the Forest Service had not sold some of these smaller units by the 2001 Roadless Rule.¹²⁶ In summary, from 1989 to 2000, the Forest Service approved projects that resulted in logging approximately 6,246 acres of inventoried roadless areas in the Nez Perce and Clearwater National Forests.¹²⁷

When the 2001 Roadless Rule governed Idaho's Nez Perce and Clearwater National Forests (2001-2008), the authors could not identify an instance where the Forest Service authorized logging or roadbuilding in the forests' roadless areas. Although we identified NEPA analyses that proposed logging in roadless areas as an alternative, the Forest Service never chose that alternative. For example, the Forest Service published the final environmental impact statement authorizing logging that would impact up to 3,250 acres in the North Lochsa Slope Roadless Area in 1999, before the Forest Service published the 2001 Roadless Rule.¹²⁸ But, in an amended decision for this project in 2002, the project's deciding official acknowledged that the Chief of the Forest Service had reserved decision authority for timber harvest in roadless areas explicitly because of ongoing litigation with the roadless rule.¹²⁹ The deciding official avoided submitting to that authority by dropping the roadless logging proposed.¹³⁰ Although subsequent timber harvest proposals during these years all contained an alternative that logged in roadless areas, the agency's deciding official never chose that alternative.¹³¹ The Roadless Rule litigation ended with the Wyoming v. U.S. Department of Agriculture,¹³² which encompassed the 2001-2008 window that the RACR governed the Nez Perce and Clearwater National Forests. Unresolved litigation might have primarily influenced decisions by the Nez Perce and Clearwater forest supervisors to avoid logging in roadless areas. However, other than the one record of decision discussed above, the deciding officials did not list ongoing litigation as a reason for avoiding roadless logging. This omission suggests that the deciding officials relied on the analysis presented in environmental documents or project appeals of those decisions, which recognized environmental impacts of roadless-area logging and the National Rule's prohibitions.

Roadless logging increased on the Nez Perce-Clearwater National Forest with the advent of the Idaho Roadless Rule. Although the Forest Service has not proposed individual projects that involve logging acreage on par with some projects from the 1990s, logged roadless acreage

¹²⁶ Barker, E. "Chainsaws fall silent in Cove-Mallard" (Jan. 17, 2000) *available at* https://www.hcn.org/issues/170/5496 (last visited 2/12/19).

¹²⁷ See Appendix A, Table 1.

¹²⁸ See USDA, Forest Service, North Lochsa Face ROD p.6, 14 (Jun. 1999) (Clearwater National Forest); see also Appendix A.

 ¹²⁹ USDA, Forest Service, North Lochsa Face Second ROD, p. 33-36 (Nov. 2002); *see also* Appendix A.
 ¹³⁰ USDA, Forest Service, North Lochsa Face Second ROD, p. 35-36 (Nov. 2002).

 ¹³¹ The Middle-Black project proposed an alternative that harvested 6,530 acres in Mallard-Larkins, Siwash, and Pot Mountain Roadless areas, but did not select that select that alternative. *See* USDA, Forest Service, Middle-Black Final EIS, p. 219 (Dec. 2002) (Clearwater National Forest); USDA, Forest Service, *ARO Letter-Middle-Black Ecosystem Management Project ROD-Clearwater NF-Appeal #03-01-00-0023-Friends of the Clearwater et al.*, File Code 1570-1 (Apr. 9, 2003) (selecting alternative 4; The Forest Service's ARO Letter—Clean Slate Ecosystem Management Project ROD-Nez Perce NF-Appeal #04-01-00-0037-Friends of the Clearwater, et al., p. 7 (Sept. 3, 2004), on file with authors.
 ¹³² Wyoming v. U.S. Dep't of Agriculture, 661 F.3d 1209 (10th Cir. 2011).

from 2010 to 2017 amounted to 1,139 acres of roadless areas on just these two forests. The statewide increase in roadless-area logging under the Idaho Roadless Rule is also remarkable. The Forest Service began issuing final NEPA documents under the purview of the Idaho Roadless Rule in 2010 or so.¹³³ From 2010 until 2017, based on Region 1's own preliminary spreadsheet on roadless logging provided to the authors, approximately 18,620 acres of Idaho roadless areas have been harvested.¹³⁴ We found even more logging in the nation's roadless areas in Montana over the past decade.

V.B. Logging levels in Montana roadless areas have reached between 33,000 and 40,000 acres in the past decade

We found that, between 2010 and 2018, projects that involved cutting down trees in Montana's inventoried roadless areas likely spanned between 33,000 and 40,000 acres.¹³⁵ Among exceptions to the prohibition on logging roadless in the 2001 Roadless Area Recreation Rule is section 294.13(b)(1): "The cutting, sale, or removal of generally small diameter timber is needed...(i) To improve threatened, endangered, proposed, or sensitive species habitat; or (ii) To maintain or restore the characteristics of ecosystem composition and structure, such as to reduce the risk of uncharacteristic wildfire effects, within the range of variability that would be expected to occur under natural disturbance regimes of the current climatic period....^{*136} The Forest Service applied subsection (b)(ii) for approximately 60 to 90 percent of roadless logging in Montana in the past decade.¹³⁷ Most often in the remaining roadless-logging projects, the Forest

¹³⁵ USDA, Forest Service, *MT Projects in IRAs_2001_without graphs_2008 to present* (disclosed 2017) (timber harvest in Montana roadless areas), on file with authors. The Forest Service's numbers are preliminary numbers only. The Forest Service disclosed approximately 32,921 acres broken down by project. We compared that acreage with the available NEPA documents approving the projects and confirmed that the Forest Service approved approximately 39,377 acres of logging in Montana roadless areas. We have not been able to resolve some of the discrepancies between the numbers provided by Region 1 and the numbers that the Forest Service approved in individual project NEPA documents.
¹³⁶ Roadless Area Conservation Rule, 66 Fed. Reg. 3,244, 3,273 (Jan. 12, 2001) (§294.13(b)(1)(i), (ii)).
¹³⁷ USDA, Forest Service, *MT Projects in IRAs_2001_without graphs_2008 to present* (disclosed 2017) (timber harvest in Montana roadless areas), on file with authors. The logging-project documents from this spreadsheet where we could confirm that the Forest Service approved roadless logging are the following:

¹³³ Appendix A; USDA, Forest Service, *Projects in IRAs_2001_without graphs_2008 to present* (disclosed 2017) (timber harvest in Idaho roadless areas), on file with authors.

¹³⁴ See Appendix A; Appendix A; USDA, Forest Service, *Projects in IRAs_2001_without graphs_2008 to present* (disclosed 2017) (timber harvest in Idaho roadless areas), on file with authors. The Forest Service numbers are preliminary numbers only. The Forest Service disclosed approximately 18,600 acres of logging in Idaho roadless areas, which are preliminary numbers, and broke that acreage down by project. We compared that acreage with the available NEPA documents approving the listed projects. We could not find NEPA documents for all projects listed and could confirm approximately 10,000 acres. However, we found other discrepancies that need to be resolved. For example, the NEPA documents for the Upper North Fork project on the Salmon-Challis approved 2,200 acres less than the 4,211 acres of timber harvest that the Forest Service noted in numbers disclosed to us. *See* USDA, Forest Service, Upper North Fork HFRA Ecosystem Restoration Project Final EIS pp. 266, 268, 277. And we found approximately 870 acres of tree cutting in a roadside hazard project on the Nez Perce-Clearwater National Forests not disclosed in the Forest Service's preliminary numbers. *See* USDA, Forest Service, Nez Perce-Clearwater NF's Roadside, Administrative and Recreation Site Maintenance Project p. 30-31 (Aug. 2016). We have not resolved these discrepancies.

Service applied subsection (b)(2): "The cutting, sale, or removal of timber is incidental to the implementation of a management activity not otherwise prohibited by this subpart."¹³⁸

VI. The qualitative shift in the Forest Service's environmental analysis on the impacts of logging in a roadless areas.

The discourse of how logging impacts roadless areas and roadless characteristics has also shifted. For Forest Service NEPA documents in Idaho before the National Roadless Rule, the Forest Service considered logging and roadbuilding in roadless areas a form of development with negative impacts on roadless characteristics.¹³⁹ In the seven years while the National Roadless Rule governed Idaho national forests, the Forest Service's position began to shift with assertions that logging would actually accentuate, rather than negatively impact, roadless characteristics. And after adoption of the Idaho Roadless Rule in 2008, the Forest Service has nearly abandoned the position that logging negatively impacts roadless characteristics.

We found this same discourse for roadless projects in Montana national forests, suggesting that the Forest Service's new analysis in Idaho is not unique. The exceptions in the National Roadless Rule and the Idaho Roadless Rule that expressly allow for logging if it can "maintain or restore the characteristics of ecosystem composition, structure, and processes"¹⁴⁰ introduced a new presumption missing from previous Forest Service analysis prior to 2001: logging helps the natural integrity of roadless areas. Reviewing Forest Service NEPA documents for roadless-logging impacts in Idaho and Montana, we identified a set of common themes have emerged around analyzing logging impacts roadless areas; we discuss these common themes in section B below.

USDA, Forest Service, Trapper Creek Vegetation Management Project EA and DN-FONSI (Dec. 2014) (Beaverhead-Deerlodge National Forest);

USDA, Forest Service, Sweet Grass Restoration and Resiliency Project EA (Jan. 2015) and DN-FONSI (Apr. 2015) (Custer Gallatin National Forest); USDA, Forest Service, Quartz Haugen Precommercial Thinning DM (May 2010)(Lolo National Forest); USDA, Forest Service, Cedar-Thom Final EIS (Nov. 2014) and ROD (Feb. 2015)(Lolo National Forest); USDA, Forest Service, Antinomy Project EA (Aug. 2011)and DN-FONSI (Jul. 2012)(Lolo National Forest); USDA, Forest Service, Tenmile -South Helena final EIS, Vol. I & II (Aug. 2017) and ROD (Dec. 2018)(Helena-Lewis and Clark National Forest); USDA, Forest Service, Telegraph Vegetation Project final EIS, Vol. I & II (Jul. 2016) and ROD, (Jan. 2017)(Helena-Lewis and Clark National Forest); USDA, Forest Service, Hogum Creek Big Game Habitat Enhancement Project DM, (Jul. 2011)(Helena National Forest). The difference in the percentage range results from the roadless acreage logged that the Forest Service disclosed with the acreage the authors could confirm with NEPA documents. Using the Forest Service records, it applied subsection (b)(ii) for approximately 60 percent of the acreage logged (19,578 acres out of the 32,921 acres reported). Using the numbers that the NEPA documents suggests, the Forest Service applied subsection (b)(ii) to log approximately 90 percent of the acreage (35,132 out of 39,377 acres approved with NEPA decision documents).

¹³⁸ Roadless Area Conservation Rule, 66 Fed. Reg. 3,244, 3,273 (Jan. 12, 2001) (§ 294.13(b)(2)); *see also* Appendix B to this report.

¹³⁹ See Appendix A.

¹⁴⁰ See 36 C.F.R. § 294.24(b)(1)(ii), (c)(4); see also Roadless Area Conservation Rule, 66 Fed. Reg. 3,244, 3,273 (Jan. 12, 2001) (§294.13(b)(1)(ii)).

VI.A. Changes in the quality of the analysis for proposals to log and build roads in Idaho inventoried roadless areas

In addition to increasing logging in Idaho inventoried roadless areas, the Forest Service has changed its conclusions about how logging impacts those areas. The conclusions have changed because the premises about the anticipated impact have changed. This discourse shift emerges by reviewing decades-old environmental analysis and comparing it with the Forest Service's present-day counterpart for analyzing how logging impacts roadless areas.

In the 1990s, the Forest Service consistently considered timber harvest to negatively impact the natural integrity and natural appearance of Idaho's Nez Perce and Clearwater National Forests' roadless areas. This conclusion was based on the effects of cutting down trees, and how the area would look post-project when compared to pre-project conditions and the surrounding uncut areas. The Forest Service acknowledged that timber harvest, or "vegetation management," modified "natural processes."¹⁴¹ Shelterwood logging that would retain 33 percent of the vegetation created "unnatural disturbances in the immediate area."¹⁴² Logging, which generated features such as tree stumps, created "sign of human alteration."¹⁴³ Not only would timber harvest that eliminated 25 percent of the canopy "would lose natural integrity [and] would no longer appear natural,"¹⁴⁴ but so would vegetation management that eliminated more than *five* percent of the existing canopy.¹⁴⁵ Before 2001, when cutting down trees in a roadless area would create unnatural disturbances, minimally eliminate five percent of the existing canopy, and leave behind stumps, the Forest Service consistently concluded that there would be negative impacts to roadless characteristics: "The introduction of man's activity (logging) throughout the project area, even though roads would not be constructed, would normally preclude its being considered undeveloped and suitable for wilderness."¹⁴⁶ In 1990s analyses, the Forest Service also consistently found that logging degraded roadless characteristics to the point where the area no longer had wilderness characteristics and the Forest Service could not recommend it to Congress for Wilderness designation.¹⁴⁷

The Forest Service's position on logging impacts to roadless areas shifted with the advent of the National Roadless Rule. The rule created several exceptions, including the following: 1) timber harvest could proceed in roadless "to improve threatened, endangered, proposed, or sensitive species habitat"; and 2) timber harvest could proceed in roadless "to maintain or restore

 ¹⁴¹ USDA, Forest Service, Wing Creek-Twentymile Timber Sales Final EIS and ROD, p. 97 (Jul. 1989).
 ¹⁴² USDA, Forest Service, White Sand Ecosystem Management Final EIS, p. 4-50 (Apr. 1996)
 (Clearwater National Forest).

¹⁴³ USDA Fuzzy Bighorn EA, p. IV-16 (Dec. 1995) (Clearwater National Forest).

¹⁴⁴ USDA, Forest Service, Fish Bate Salvage Final EIS, pp. 122, 217 (Jan. 1996) (Clearwater National Forest).

¹⁴⁵ USDA, Forest Service, Middle Fork Final EIS, p. 3-93 (Oct. 1997) (Nez Perce National Forest).

 ¹⁴⁶ USDA, Forest Service, Fish Bate Salvage Final EIS, p. 217 (Jan. 1996) (Clearwater National Forest).
 ¹⁴⁷ The Forest Service similarly evaluated roadbuilding activities to damage the roadless characteristics in the decade leading up to 2001. As a matter of a direct impact, road construction removes from roadless the area where a road is built and fragmented roadless areas. *See* USDA, Forest Service, White Sand Ecosystem Management Final EIS, p. 4-53 (Apr. 1996) (Clearwater National Forest); USDA, Forest Service, Goat Roost Road Proposal Draft EA p. 35-36 (Jul. 1994) (Clearwater National Forest); USDA, Forest Service, Middle Fork Final EIS, p. 2-22 (Oct. 1997) (Nez Perce National Forest).

the characteristics of ecosystem composition and structure, such as to reduce the risk of uncharacteristic wildfire effects....¹⁴⁸ It is unclear if these exceptions were based on scientific studies and findings instead of theory, as the Forest Service cited to ideology, and not science, when discussing timber harvest for "stewardship purposes."¹⁴⁹ However, recent science challenges the assumption that old, unlogged forests are more prone to uncharacteristically severe wildfire, science that counterintuitively linked logged areas with subsequent severe fires.¹⁵⁰ Nonetheless, a review of the Forest Service's environmental analysis between 2001 and 2008 starts to reveal a shift—while logging previously had consistently negatively impacted roadless areas, the same activities sometimes inexplicably became neutral activities or even had long-term beneficial forecasts.

Between 2001 and 2008, when the National Roadless Rule governed Idaho's Nez Perce and Clearwater National Forests, the Forest Service occasionally concluded in its environmental analyses that logging might benefit roadless characteristics. For example, in one 1999 project the Forest Service had stated its selected alternative would have the "greatest direct and indirect effects upon the area's roadless characteristics and wilderness features due to proposed timber harvest and burning activities."¹⁵¹ When approaching the same project after the 2001 Roadless Rule, the Forest Service stated in the 2002 draft supplemental EIS, "Natural integrity would increase by removing insect and disease infected off-site ponderosa pine...."¹⁵² In the same document, the Forest Service predicted that vegetation composition and structure "would be improved" because it "[r]educes the potential for large, stand-replacing wildfire by removing dead and dying trees...."¹⁵³

While the Forest Service predicted that logging would increase the natural integrity of

¹⁴⁸ Roadless Area Conservation Rule, 66 Fed. Reg. 3,244, 3,273 (Jan. 12, 2001).

¹⁴⁹ See USDA, Forest Service, Roadless Area Conservation final EIS, Vol. 1 (Nov. 2000), pp. 3-19 through 3-20 (discussing the ideologies of active management to maximize environmental health for "the most desirable conditions" versus passive management to allow nature to govern its own); p 1-8 (Comment group: "They believe conservation requires active land management. To this group, **active management** means roads for fuelwood **thinning**, insect and disease treatment, resource use, and development of recreation facilities. This viewpoint stresses that failure to actively manage forests...could result in...increased insect infestations and uncharacteristically severe fire.") (emphasis in original); p. 2-7 ("Timber harvest would be prohibited except for **stewardship** purposes. Stewardship purpose timber harvest can only be used where it maintains or improves roadless characteristics....) (emphasis in original); p. 2-24 ("Stewardship-purpose timber harvest includes timber sales made primarily to help achieve desired ecological conditions or to attain some non-timber resource objective requiring manipulation of the existing vegetation (for example, reducing forest fuels by constructing a fuel break).

¹⁵⁰ Bradley, C.M., Hanson, C.T., DellaSala, D.A. *Does increased forest protection correspond to higher fire severity in frequent-fire forests of the western United States?*, Ecosphere, Vol. 7(10), Article e01492 pp. 1-13 (Oct. 2016).

 ¹⁵¹ USDA, Forest Service, North Lochsa Face Final EIS p. 141 (Jun. 1999) (Clearwater National Forest).
 ¹⁵² USDA, Forest Service, North Lochsa Face Draft Supplemental EIS p. 3-312 (Jan. 2002) (Clearwater National Forest).

¹⁵³ USDA, Forest Service, North Lochsa Face Draft Supplemental EIS p. 3-313 (Jan. 2002) (Clearwater National Forest). Roadless logging was dropped from this project. *See* USDA, Forest Service, North Lochsa Face Second ROD, p. 33-36 (Nov. 2002).

one roadless area, the next year the discourse of logging impacts in a different roadless area were mixed. "Natural processes would be altered in and adjacent to timber harvest by harvesting trees—resulting in removal of biomass and the effects that would have on the ecosystem. The design of timber harvest—removing a maximum of 50 percent tree cover—would result in effects similar to that resulting from mixed severity fire occurrence."¹⁵⁴ But, the Forest Service also said, "Area of timber harvest would no longer provide a reference landscape."¹⁵⁵ Yet, the Forest Service concluded here that there would be no long-term irreversible or irretrievable commitment of roadless character, even while contemporaneously acknowledging that "The harvested or burned trees would be irretrievably committed...."¹⁵⁶ As the Forest Service had not yet selected an alternative that logged roadless, the public had no opportunity to challenge this new type of analysis until the Clean Slate Project in 2004. In the appeal officer nonetheless addressed an objection that the Forest Service's roadless analysis was flawed:

The FEIS does state on page 278 that there are no expected irreversible or irretrievable commitments under any of the alternatives. This is not true, since Alternatives 4, 5, and 6 all propose harvest activities within the Inventoried Roadless Area...Alternatives 4, 5, and 6 all propose harvest activities within the IRA and, therefore, were not selected...The [Final Supplemental Environmental Impact Statement] says that Alternatives 2, 3, 4, 5, and 6 would result in an irretrievable commitment within the three unroaded areas because of the loss of production and the use of natural resources through harvesting and burning."¹⁵⁷

The flawed analysis —that logging would not irretrievably commit roadless resources to use through harvest—became the standard Forest Service analysis after the Idaho Roadless Rule.

Since the Idaho Roadless Rule, the Forest Service on the Nez Perce-Clearwater National Forest has regularly concluded that all logging proposed for inventoried roadless areas would have no direct, long-term adverse impacts to the portion of roadless area where the logging occurred. Removing vegetation from a naturally dense forest with logging cuts, which so drastically impacted natural integrity and natural appearances in 1990s analyses, now would not develop or irretrievably commit any areas of roadless acreage, often without further explanation. In the first roadless-logging project approved under the Idaho Roadless Rule on the Nez Perce-Clearwater National Forest, the Forest Service approved 480 acres of roadless logging, simply concluding that "roadless characteristics will not be negatively affected by the proposal and the ability of the area to be considered for wilderness will not be altered."¹⁵⁸ The Forest Service has found even stumps to no longer impair roadless areas: "While there may be some short duration effects to the inventoried roadless areas or the wilderness characteristics of the roadless areas...they are generally limited to the actual implementation activities (e.g.-hazard tree falling,

¹⁵⁴ USDA, Forest Service, Middle-Black Final EIS, p. 221 (Dec. 2002) (Clearwater National Forest).

¹⁵⁵ USDA, Forest Service, Middle-Black Final EIS, p. 222 (Dec. 2002) (Clearwater National Forest).

¹⁵⁶ USDA, Forest Service, Middle-Black Final EIS, p. 226 (Dec. 2002) (Clearwater National Forest).

¹⁵⁷ USDA, Forest Service, Forest Service's ARO Letter—Clean Slate Ecosystem Management Project ROD-Nez Perce NF-Appeal #04-01-00-0037-Friends of the Clearwater, et al., p. 7 (Sept. 3, 2004), on file with authors.

¹⁵⁸ USDA, Forest Service, Nut Basin Whitebark Pine Project DM (Jul. 2010) (Nez Perce National Forest).

machinery on roads, etc.) rather than the results of the activity (e.g.-stumps following timber cutting and removal).¹⁵⁹

Other reasoning that the Forest Service relies upon to explain why roadless logging will not adversely impact roadless areas include the following: 1) logging along a road in or adjacent to the IRA;¹⁶⁰ or 2) twenty years after logging the area will have fifteen-foot trees.¹⁶¹ Omitting discussion of how removing biomass might impact the function of the ecosystem¹⁶² or what fire brings to the ecosystem that logging cannot replace,¹⁶³ the Forest Service has concluded in several of these projects that logging will be beneficial for roadless characteristics.¹⁶⁴ Below are a series of pictures of one roadless area before tree cutting (taken from the boundary), after constructing a road (taken from the newly cut road), and after tree cutting (an aerial photograph). In the environmental analysis for this project, the Forest Service determined that selling and removing trees in this roadless area did not have the potential to significantly impact roadless characteristics or whether the Forest Service could consider it for a Wilderness recommendation.¹⁶⁵

¹⁵⁹ USDA, Forest Service, Nez Perce-Clearwater NF's Roadside, Recreation Site and Administrative Site Maintenance Project p. 31 (Aug. 2016).

¹⁶⁰ See USDA, Forest Service, Nez Perce Roadside Hazard Tree DN-FONSI pp. 15-16 (Jun. 2013); USDA, Forest Service, Nez Perce-Clearwater NF's Roadside, Recreation Site and Administrative Site Maintenance Project p. 31 (Aug. 2016).

¹⁶¹ USDA, Forest Service, Orogrande Community Protection Project Final EA, p.283 (Jan. 2016) (Nez Perce-Clearwater National Forests).

¹⁶² See USDA, Forest Service, Middle-Black Final EIS, p. 221 (Dec. 2002) (Clearwater National Forest) ("Natural processes would be altered in and adjacent to timber harvest by harvesting trees—resulting in the removal of biomass and the effects that would have on the ecosystem.")

¹⁶³ See DellaSala and Hanson. <u>The Ecological Importance of Mixed-Severity Fires: Nature's Phenix pp.</u> 23-101 (2015).

¹⁶⁴ See USDA, Forest Service, Nut Basin Whitebark Pine Project DM, p. 9 (Jul. 2010) (Nez Perce National Forest); USDA, Forest Service, Nez Perce Roadside Hazard Tree Project EA p. 16 (May 2013) ("The project will have a beneficial effect to roadless manageability and primitive recreation opportunities as it will allow the ability to safely travel road systems within the roadless and unroaded areas.")

¹⁶⁵ USDA, Forest Service, Orogrande Community Protection Project Final EA, p. 284 (Jan. 2016) (Nez Perce-Clearwater National Forests); *see also* USDA, Forest Service, Orogrande Community Protection Project Final DN-FONSI, p. 14 (Jan. 2016).


Northeast West Fork Crooked River Inventoried Roadless Area October 2016. Picture 2 (Left): Roadless boundary starts at tree line. Picture 3 (Right): Roadless boundary begins after front line of trees, and the hill rising in the background is roadless. Pictures courtesy of Friends of the Clearwater.



Northeast West Fork Crooked River Inventoried Roadless Area June 2017. Picture 4 (Left): Newly finished temporary road switchback in roadless area (courtesy of Friends of the Clearwater). Picture 5 (Right): Cuts to extend road in left picture further into roadless area (courtesy of Friends of the Clearwater).



Picture 6. West Fork Crooked River Inventoried Roadless Area October 2017. Roadless area begins just above houses (courtesy of Alpha 1 Photography).



Picture 7. West Fork Crooked River Inventoried Roadless Area October 2017. Picture above: Detail close-up of the large open area depicted in previous picture (courtesy of Alpha 1 Photography).



Picture 8. Jay Point roadside cut in Sneakfoot Meadows roadless area (on the left of road) and Lochsa Face roadless area (on right of road) from the Nez Perce-Clearwater NF's Roadside, Recreation Site and Administrative Site Maintenance Project (courtesy of Friends of the Clearwater, 2017), on file with authors.

Forest Service projects in Idaho roadless areas provide an informative window into understanding how the Forest Service treated and analyzed logging projects in roadless areas before the National Roadless Rule, while the National Roadless Rule governed roadless areas in Idaho, and after the Forest Service implemented the Idaho Roadless Rule. This change in discourse demonstrates that the Forest Service in Idaho now considers logging to have neutral or beneficial impacts to roadless areas. Interestingly, this same discourse has arisen in roadless areas outside of Idaho within the past decade as well. Below we discuss similar trends taken from projects in roadless areas across Montana's national forests and identify some common themes.

VI.B. Common themes to Forest Service's approach to analyzing the impact of logging in roadless areas in both Idaho and Montana.

There are similarities between how the Forest Service in Idaho and the Forest Service in Montana analyzed the impacts of logging on roadless characteristics post 2010. Regardless of which rule governs, below are several examples of the reasoning that the Forest Service employs in reach conclusions that logging will either have no impact on roadless characteristics or a beneficial one. We discuss each of the following themes in turn: (1) Taking no action will adversely impact roadless characteristics; (2) Logging inflicts only temporary, short-term effects on roadless characteristics. (3) Using two standards of measurement to forecast minimal or beneficial impacts for some roadless areas while concluding that other areas where those activities are complete have demonstrably impaired roadless characteristics; (4) a little more detriment is negligible if there is already evidence of prior human activities; and (5) a small acreage of intense logging on some of the roadless area will not impact the entire roadless area.

VI.B.1. Taking no action will hurt roadless characteristics: "Ecological processes are so impaired, they will lead to severe wildfires or outbreaks from insects and disease unless the Forest Service saves the area by logging it."

The Forest Service now occasionally concludes that *not* logging in roadless areas will hurt roadless areas. Under the analysis that NEPA requires of agencies, alternatives are the "heart" of a project's environmental analysis.¹⁶⁶ Alternatives present a side-by-side comparison of the proposal and alternatives, "thus sharply defining the issues and providing a clear basis for choice...."¹⁶⁷ When the Forest Service proposes an action, whether it undertakes an environmental impact statement or an environmental assessment, the agency must consider a no-action alternative.¹⁶⁸ The discourse of no-action alternatives have flipped.

In the 1990s and early 2000s in Idaho, the Forest Service presumed that no-action to roadless areas would have no environmental impact. Without managing the area by removing trees and biomass, ecological processes would continue uninterrupted and without a human-induced disturbance. No action meant no impact to natural integrity or ecosystem processes.¹⁶⁹

In past decade, however, the Forest Service across the region has waffled, sometimes asserting that ecological processes or structures need fixing, so any no-action alternative would *impair* roadless characteristics precisely for lack of human involvement. There are still instances where the Forest Service presumes the no-action alternative will not impact roadless areas because there will be no activities in the roadless area.¹⁷⁰ But, there are increasing instances where the Forest Service concludes this is not the case. When the Forest Service does not directly state there would be greater tree mortality from inaction, the agency implies so with the converse statements: the proposed action would make an area more resilient to wildfire, insects, and disease; or without the proposed action, the area would be at greater risk to wildfire, insects, and disease.¹⁷¹ When concluding that no action causes fuels to accumulate, contributing to a

¹⁶⁶ 40 C.F.R. § 1502.14.

¹⁶⁷ 40 C.F.R. § 1502.14.

¹⁶⁸ See 42 U.S.C. § 4332(2)(E); 40 C.F.R. §§ 1502.14(d), 1508.9(b); *Bob Marshall Alliance v. Hodel*, 852 F.2d 1223, 1228 (9th Cir. 1988).

¹⁶⁹ See, e.g., USDA, Forest Service, Middle Fork Final EIS, p. 3-92 (Oct. 1997) (Nez Perce National Forest). (No-action alternative "would not allow timber harvest in the roadless area. This alternative would allow the continuation of this area as designated roadless area, and potential consideration for wilderness designation."); USDA, Forest Service, Wing Creek-Twentymile Timber Sales Final EIS and ROD, p. 97 (Jul. 1989); USDA, Forest Service, Cove Timber Sale Final EIS, p. 164 (Dec. 1990) (Nez Perce National Forest); USDA, Forest Service, Fish Bate Salvage Final EIS, p.47 (Jan. 1996) (Clearwater National Forest).

¹⁷⁰ See USDA, Forest Service, Antinomy Project EA, p. 64 (Aug. 2011) (Lolo National Forest); USDA, Forest Service, Cedar-Thom Final EIS, p. 3-278 (Nov. 2014) (Lolo National Forest).

¹⁷¹ See, e.g., USDA, Forest Service, Orogrande Community Protection Project Final EA, pp. 262-63 (Jan. 2016)(Nez Perce-Clearwater National Forests)(referencing disease- and insect-infected trees in the Idaho roadless area); USDA, Forest Service, Lolo Insects and Disease Project Final EIS, p.122 (Aug. 2018)("Indirect effects of no action could lead to an increased probability of negative ecologic effects (such as increased burn severities) from a stand replacement fire in the short term (less than 10 years."); *see also* USDA, Forest Service, South Fork Fish EA, p. 1 (May 2009)(Lolo National Forest)("Fire exclusion has resulted in ecological conditions (vegetation characteristics, fuel composition, and fire

future severe fire, the Forest Service's premise relies on several foundations. The Forest Service has referenced the agency's general practice of fire suppression over the past century.¹⁷² The agency has also reasoned that trees killed by other natural ecological processes, such as insect or disease outbreaks, will result in an accumulation of fuels, which will then lead to severe forest fires.¹⁷³ And sometimes, the Forest Service describes that what it considers to be "heavy fuel loadings" to be simply a natural process.¹⁷⁴ What might be commonly inferred from the no-action-alternative discussions is that the Forest Service considers any large-scale fire or outbreak from insects or disease to be an unnatural process.¹⁷⁵

Of course, there are obstacles to a simple narrative that a no-action alternative impairs ecological processes, and those obstacles are rooted in recent peer-reviewed science and logic. For example, tree death—regardless of the cause—is itself a process by which forests renew, and that all healthy forests have this process.¹⁷⁶ Firstly, severe fire effects are not unusual in the Rockies; multiple lines of evidence suggest that fires in the northern Rockies (Idaho and Montana) were most often of mixed severity, with a combination of low-, moderate-, and high-severity effects.¹⁷⁷ Secondly, The Forest Service's general practice of fire suppression has not

¹⁷² USDA, Forest Service, South Fork Fish EA, pp. 1, 3 (May 2009) (Lolo National Forest). The agency cited to its general practice, and NEPA documents did not contain a specific discussion of whether the agency's general practice specifically suppressed actual fires within or nearby roadless areas; *see* USDA, Forest Service, Lolo Insects and Disease Project Final EIS, pp. 121-22 (Aug. 2018).

¹⁷³ USDA, Forest Service, Orogrande Community Protection Project Final EA, pp. 262-63 (Jan. 2016) (Nez Perce-Clearwater National Forests, Idaho); USDA, Forest Service, Tenmile-South Helena final EIS, Vol. II, p. 959 (Aug. 2017) (Helena-Lewis and Clark National Forest); USDA, Forest Service, Telegraph Vegetation Project final EIS, Vol. II, p. 834 (Jul. 2016) (Helena-Lewis and Clark National Forest).
¹⁷⁴ See USDA, Forest Service, Sweet Grass Restoration and Resiliency Project EA, pp. 2,15, 114-15, 116 ("Without treatment, fuel augmentation within forested areas would continue to follow their natural rates of succession, eventually leading to dense pockets of timber with heavy fuel loadings....") (Jan. 2015) (Custer Gallatin National Forest); USDA, Forest Service, Trapper Creek Vegetation Management Project EA, p. 111-12 (Dec. 2014) (Beaverhead-Deerlodge National Forest) (current conditions would be "shaped by ongoing activities and ecological processes," causing a shift in vegetative composition that will then increase "the potential for more intense fires [] as the amount of biomass on these acres increase, as well as the development of ladder fuels.").

¹⁷⁵ See USDA, Forest Service, Tenmile-South Helena final EIS, Vol. II, p. 959 (Aug. 2017) (Helena-Lewis and Clark National Forest).

¹⁷⁶ See Franklin, J.F., Shugart, H.H., & Harmon, M.E., *Tree Death as an Ecological Process*, BioScience, Vol. 37, No. 8, pp. 550-556 (Sept. 1987).

frequency, severity and pattern) that depart from the estimated natural range of variability...These conditions may predispose stands to insect and disease epidemics and stand-replacing fire events."). USDA, Forest Service, Sweet Grass Restoration and Resiliency Project EA, p. 281 (Jan. 2015) (Custer Gallatin National Forest). ("Alternative 1 (no action) should have no direct or indirect effects from management activities to the existing level of roadless character within the project area. However, the benefits of the project, which was designed to restore and provide for resilient vegetative conditions in a post-fire and post-flood environment, would not be achieved...[T]he area would continue to slowly recover and without human without human intervention."); USDA, Forest Service, Rennic Stark Project EA, p. 144 (Nov. 2012)(Lolo National Forest)(without action, less resiliency to wildfire); USDA, Forest Service, South Fork Fish EA, pp. 3-4 (May 2009)(Lolo National Forest); USDA, Forest Service, Sparring Bull final EIS, pp. 233, 236 (Apr. 2012)(Kootenai National Forest).

¹⁷⁷ See Odion et al. Examining Historical and Current Mixed-Severity Fire Regimes in Ponderosa Pine

impacted every single acre of forest; without specific records that the Forest Service has suppressed a fire in or near a certain area, an equal explanation is that natural wildfire has simply not ignited in that area for a long time.¹⁷⁸ Global warming will have a great influence on fire seasons going forward.¹⁷⁹ Even with global warming, older, unlogged forests have not burned more severely than managed forests.¹⁸⁰ And forests in the western United States have not experienced more fires as a direct result of bark beetle activity.¹⁸¹ At an absolute minimum, these scientific studies undermines several premises underlying the Forest Service's analyses, which should warrant investigation and discussion in project-level environmental analyses.

VI.B.2. The trees will grow back: "Logging inflicts temporary, short-term effects where it once adversely impacted roadless characteristics for a long time."

When analyzing how logging impacts roadless areas, in tandem with asserting that logging would produce long-term benefits, the Forest Service has emphasized the temporary nature of negative logging impacts. According to NEPA documents reviewed for Idaho's Nez Perce-Clearwater National Forest and Montana's national forests, we found this analysis to be common. The Forest Service in Idaho concluded in one 2015 analysis that proposed regeneration logging would be a temporary impact, suggesting two decades for recovery and recovery to consist of fifteen-feet-tall trees that would provide "shade and visual screening."¹⁸² The Forest Service in Idaho increased the range of recovery time projected for another regeneration logging project in a different roadless area a couple years later: "Except for stumps, harvest areas would be increasingly less noticeable within 20-40 years as the stands mature...."¹⁸³ The Forest Service in Idaho did not go so far in either project to conclude that an area logged

and Mixed-conifer Forests of Western North America. PLOS|One, Vol. 9(2), e87852, pp. 1-14 at pp. 1-2, 9. (Feb. 2014).

¹⁷⁸ See Odion et al. Examining Historical and Current Mixed-Severity Fire Regimes in Ponderosa Pine and Mixed-conifer Forests of Western North America. PLOS|One, Vol. 9(2), e87852, pp. 1-14. (Feb. 2014).

¹⁷⁹ Whitlock, C. et al. "Climate Change: Uncertainties, Shifting Baselines, and Fire Management," in <u>The ecological importance of mixed severity fires: Nature's Phoenix</u> pp. 265-289 (DellaSala and Hanson, eds. 2015).

¹⁸⁰ See Bradley, C.M., Hanson, C.T., DellaSala, D.A. *Does increased forest protection correspond to higher fire severity in frequent-fire forests of the western United States?*, Ecosphere, Vol. 7(10), Article e01492,pp. 1-13 (Oct. 2016)("On the contrary, using over three decades of fire severity data from relatively frequent-fire pine and mixed conifer forests throughout the western United States, we found support for the opposite conclusion—burn severity tended to be higher in areas with lower levels of protection status (more intense management), after accounting for topographic and climatic conditions in all three model runs.").

¹⁸¹ See Hart, S.J. et al. Area burned in the western United States is unaffected by recent mountain pine beetle outbreaks, Proceedings of the National Academy of Sciences, Vol. 112, No. 14, pp. 4375-4380 (May 2015) (recognizing that mountain pine beetles and fire activity and mountain pine beetles have each independently increased due to warmer temperatures, but mountain pine beetles have not caused the increase in fire activity).

¹⁸² USDA, Forest Service, Orogrande Community Protection Project Final EA, p. 283 (Jan. 2016) (Nez Perce-Clearwater National Forests, Idaho).

¹⁸³ USDA, Forest Service, Lolo Insects and Disease Project Final EIS, p. 124 (Aug. 2018).

would be an area developed.¹⁸⁴ Even if this style of analysis was limited to only one national forest in Idaho, this style of impacts analysis was pervasive for logging proposals across Montana roadless areas:

- "The appearance of different age classes of vegetation will only be short-term, if noticed at all."¹⁸⁵
- "The largest effect would be on the approximately 3,000 acres where the small rubber tracked equipment (skidsteer) would be used for the construction of burn piles. Stumps, minor ground disturbance or vegetation crushing, and burn piles in these areas would be visible for 3-5 years following treatment."¹⁸⁶
- "Evidence of development and use would be present in the short term in the form of burn piles, active harvest management, and brushing/limbing and skid trails for machinery access to units."¹⁸⁷

The temporary-impact-because-trees-will-grow-back-soon conclusion was a fairly popular discussion in environmental analyses.¹⁸⁸ But, science, the Forest Service, and time challenge this conclusion.

Science forecasts a far longer recovery time for a logged area to return to an old, unlogged tract of land. For example, Douglas-firs require approximately 80 years just to reach maturity.¹⁸⁹ However, these old, unlogged tracts of land are not just about tree age. Rather, these forests have a complex, multistoried structure composed of all ages of trees—a "mosaic of both early and late successional stages."¹⁹⁰ Contrary to a simple narrative, old-growth forests are not forests where there have been no ecological disturbances for hundreds of years; rather, ecological disturbances have impacted the area in mosaic-like fashion for hundreds of years. Fires, depending upon severity, create "mixed forests of young, mature, and old-growth trees in various proportions (and thus various ecological characteristics)."¹⁹¹ Based on how long it takes

¹⁸⁴ See USDA, Forest Service, Orogrande Community Protection Project Final EA, pp. 273-88 (Jan. 2016) (Nez Perce-Clearwater National Forests, Idaho); USDA, Forest Service, Lolo Insects and Disease Project Final EIS, pp. 123-33 (Aug. 2018).

¹⁸⁵ USDA, Forest Service, Trapper Creek Vegetation Management Project EA, p. 113 (Dec. 2014) (Beaverhead-Deerlodge National Forest).

¹⁸⁶ USDA, Forest Service, Sweet Grass Restoration and Resiliency Project EA, p. 283 (Jan. 2015) (Custer Gallatin National Forest).

¹⁸⁷ USDA, Forest Service, Tenmile -South Helena final EIS, Vol. II, p. 970 (Aug. 2017) (Helena-Lewis and Clark National Forest).

¹⁸⁸ See USDA, Forest Service, Antinomy Project DN, p. 15 (Jul. 2012)(Lolo National Forest); USDA, Forest Service, Telegraph Vegetation Project final EIS, Vol. II, p. 820 (Jul. 2016)(Helena-Lewis and Clark National Forest); USDA, Forest Service, Little Belt Mountains Hazard Tree Removal Project EA and FONSI pp. 52, 53 (Sept. 2014)(Lewis & Clark National Forest); p. 52, 53; USDA, Forest Service, Cutoff Project EA, p. 37 (Apr. 2010)(Lolo National Forest); USDA, Forest Service, Sparring Bull final EIS, p. 236 (Apr. 2012)(Kootenai National Forest).

¹⁸⁹ USDA, Pacific Northwest Research Station. New Findings About Old-Growth Forests. Science Update, Iss. 4 (June 2003) pp. 4-5.

¹⁹⁰ Habeck, J.R., "Old-Growth Forests in the Northern Rocky Mountains." Natural Areas Journal, Vol. 8(3) pp. 202-211, 204 (1988)

¹⁹¹ USDA, Pacific Northwest Research Station. New Findings About Old-Growth Forests. Science

for nature to work upon forests to achieve these characteristics in the first instance, regaining these characteristics must also take a similar amount of time, so logging such a unique tract of land cannot logically be a temporary impact.

Various Forest Service documents challenge its assertion that logging has temporary impacts on roadless characteristics. In one roadless logging project, the Forest Service concluded that logging impacts would be negative but temporary in its main NEPA document.¹⁹² However, this conclusion was at odds with the Forest Service's own expert wildlife report that predicted a century of recovery time for the same proposal.¹⁹³

Finally, the fallacy of the short-term impacts from roadless logging gains focus with time and retrospective. In 1997, when the Forest Service proposed and approved helicopter logging in the then- Middle Fork Face IRA, it noted that helicopter logging would have an "unclear" impact to the roadless area.¹⁹⁴ When Idaho reviewed and updated its roadless inventory less than a decade later, the Forest Service dropped the Middle Fork Face IRA for "development."¹⁹⁵ And, when the Forest Service proposed another logging project in the same formerly roadless area, approximately 20 years after logging was authorized, the agency noted, among other reasons, that "previous harvest would make unimpaired preservation of the area impractical...."¹⁹⁶ The agency provided a picture in its 2017 report of the formerly roadless area at issue with evidence of logging from approximately two decades ago. That picture, Picture 9 is below.

Update, Iss. 4 (June 2003) p. 5

¹⁹² See USDA, Forest Service, Orogrande Community Protection Project Final EA, pp. 282-84 (Jan. 2016) (Nez Perce-Clearwater National Forests, Idaho); USDA, Forest Service, Orogrande Community Protection Project Final DN-FONSI, p. 14 (Jan. 2016).

¹⁹³ See, e.g., USDA, Forest Service, Orogrande Wildlife Report Orogrande Community Protection Project file, *56-0005_150408_WildlifeReport.pdf* (Apr. 2015), on file with authors, pp. 20, 35-36 (predicting replacement denning habitat for lynx to be "a long period of time to acquire multi-story structure, on the order of 100 years" and predicting at least 80 years for trees to achieve a suitable diameter to function as black-backed woodpecker nesting habitat).

¹⁹⁴ USDA, Forest Service, Middle Fork ROD, p. 10 (Oct. 1997) (Nez Perce National Forest).

¹⁹⁵ See USDA, Forest Service, Roadless Area Conservation National Forest System Lands in Idaho final EIS, Vol. 2, Appx. A pp. 2, 7, 9 (Aug. 2008).

¹⁹⁶ USDA, Forest Service, Johnson Bar Fire Salvage draft ROD p. 8 (Oct. 2015).



*Picture 9. Former Middle Fork Face roadless area picture from a 2017 Forest Service report. Picture depicts impacts from helicopter logging that occurred circa 1999.*¹⁹⁷

Of course, the Forest Service's post-2008 NEPA analyses pointedly suggest that the type of logging might influence this retrospective. Several Montana logging projects that have entered roadless areas in the past decade forecasted no impact to roadless because of the small diameter of the trees cut, and this is a general requirement to apply the "stewardship-purpose" timber-harvest exception under the 2001 Roadless Rule.¹⁹⁸ However, while the 2001 Roadless Rule generally imposes a limit on small diameter trees, it does not impose a limit on regeneration cuts, such as clearcuts or shelterwood cuts; these types of cuts inflict the most drastic visual impact of all the types of logging. And, if there is a type of logging that does not impact to roadless character, then one would expect the Forest Service to distinguish and consider the type of logging performed when conducting an inventory of roadless areas do not impact roadless acreage, one might expect the Forest Service to review the type of logging done when updating its roadless inventory.

¹⁹⁷ USDA, Forest Service, Johnson Bar SEIS Unroaded Area Analysis Report, FileCode 1950 p.6 (Jun. 2017), on file with authors.

¹⁹⁸ See Roadless Area Conservation Rule, 66 Fed. Reg. 3,244, 3,273 (Jan. 12, 2001) (§294.13(b)(1); USDA, Forest Service, Roadless Area Conservation final EIS, Glossary p. 10 (Nov. 2000).; see also, e.g., USDA, Forest Service, Hogum Creek Big Game Habitat Enhancement Project DM, p. 3 (Jul. 2011) (Helena National Forest); USDA, Forest Service, Antinomy Project EA, pp. 64-65 (Aug. 2011) (Lolo National Forest).

VI.B.3. Using two standards of measurement: "Proposed projects will have minimal or beneficial impacts while the effects of identical activities in past projects have demonstrably impaired roadless areas."

One analysis trend we observed is that the Forest Service changes its conclusion on the impacts of logging once logging is complete. While we noticed this inconsistent reasoning between project-specific predictions and subsequent roadless inventory updates, we occasionally noted this dual measurement system in the same project analysis or in two different project analyses happening contemporaneously.

The EIS analysis for the Telegraph Vegetation Project on the Helena-Lewis and Clark National Forest in Montana illustrates this double standard. When noting the degree of development apparent to most visitors and the roadless area's departure from the undeveloped roadless characteristic, the Forest Service noted "firewood cutting" and "some past harvest and fuels activities" as examples why roadless area's undeveloped characteristic was reduced.¹⁹⁹ The Forest Service noted that past harvest and fuel activities in the Jericho Mountain roadless area that contributed to evidence of human activity included the following: burning of piled material, compacting and crushing fuels, rearrangement of fuels, sanitation cut, and clearcuts.²⁰⁰ These, the Forest Service has concluded when describing the existing condition, is part of what reduced the undeveloped quality: "The impact of human activity is present on much of the area."²⁰¹ Yet, when predicting impacts from the alternative eventually adopted, even clearcuts would not have a long-term impact on the roadless expanse, despite the alternative chosen would trammel the natural environment the most.²⁰² Tree-stumps would be "temporary in nature,"²⁰³ and "[e]vidence of development and use would be present in the short term in the form of burn piles, active harvest management, and bushing/limbing and skid trails for machinery...."²⁰⁴

The Forest Service in Idaho has held in one project that previous timber harvest had adversely impacted roadless characteristics while contemporaneously finding that similar activities proposed for a different project would not adversely impact roadless characteristics. The Forest Service released a draft record of decision for the Johnson Bar Project around the same time that the agency considered its final decision in the Orogrande Community Protection Project.²⁰⁵ In the Johnson Bar draft ROD, Forest Service authorized a second logging project on the former

¹⁹⁹ See USDA, Forest Service, Telegraph Vegetation Project final EIS, Vol. II, p. 828 (Jul. 2016) (Helena-Lewis and Clark National Forest).

²⁰⁰ USDA, Forest Service, Telegraph Vegetation Project final EIS, Vol. II, p. 832 (Jul. 2016) (Helena-Lewis and Clark National Forest).

²⁰¹ USDA, Forest Service, Telegraph Vegetation Project final EIS, Vol. II, p. 828 (Jul. 2016) (Helena-Lewis and Clark National Forest).

²⁰² See USDA, Forest Service, Telegraph Vegetation Project ROD, p. 2 (Jan. 2017) (Helena-Lewis and Clark National Forest) (selecting alternative 4); USDA, Forest Service, Telegraph Vegetation Project final EIS, Vol. II, p. 842, 844 (Jul. 2016) (Helena-Lewis and Clark National Forest).

²⁰³ USDA, Forest Service, Telegraph Vegetation Project final EIS, Vol. II, pp. 836, 844 (Jul. 2016) (Helena-Lewis and Clark National Forest).

²⁰⁴ USDA, Forest Service, Telegraph Vegetation Project final EIS, Vol. II, p. 844 (Jul. 2016) (Helena-Lewis and Clark National Forest).

²⁰⁵ See USDA, Forest Service, Johnson Bar Fire Salvage draft ROD p. 8 (Oct. 2015); *compare with* USDA, Forest Service, Orogrande Community Protection Project Final DN-FONSI, p. (Jan. 2016).

Middle Fork Face IRA, now an unroaded area.²⁰⁶ The Forest Service refused to analyze an alternative that would avoid logging the unroaded area, reasoning, in part, "previous harvest would make unimpaired preservation of the area impractical."²⁰⁷ But in the Orogrande Project, the Forest Found that regeneration harvest with a temporary road would not make unimpaired preservation of the roadless area impractical.²⁰⁸

Using shifting standards means that the Forest Service can contradict itself for each proposed project with minimal accountability. Frequent analytic reversals mean that there is no one standard to which the public can refer when commenting on whether proposed logging activities will impact a roadless area. This type of analysis also allows the Forest Service great flexibility to assert that logging in roadless areas will not have an impact, and allows the Forest Service to change its standards for every project so that previous projects have degraded the roadless characteristics, while present proposals will not.²⁰⁹ This also sets up the Forest Service to conclude that, because the roadless resource has been impaired by past projects, a little more activity that would normally degrade roadless characteristics would be minimally impactful.

VI.B.4. The shifting baseline: "The roadless area is already not pristine from prior activities, so a little more degradation is negligible."

Not only are temporary impacts underestimated in terms of size, intensity, and recovery time,²¹⁰ but while the impacts are still apparent, the Forest Service uses those existing impacts to justify why additional logging will not reduce roadless characteristics. This little-detriment-on-top-of-an-already-degraded-roadless-area analysis was by far the most common analysis that we noticed for proposed logging in roadless areas in Idaho or Montana.

In Montana inventoried roadless areas,

- "[P]roposed vegetation treatments would only result in minor short-term effects, the majority of those effects will occur within an area already influenced by development...."²¹¹.
- "Approximately 126 acres (3 percent) of the thinning would occur within the developed portion of two inventoried roadless areas (54 acres within the Marble Point IRA and 72 acres within the Stark Mountain IRA), which have been substantially altered by past road

²⁰⁶ USDA, Forest Service, Johnson Bar Fire Salvage draft ROD p. 8 (Oct. 2015).

²⁰⁷ USDA, Forest Service, Johnson Bar Fire Salvage draft ROD p. 8 (Oct. 2015). The Forest Service reanalyzed the area with the same conclusion in 2017. *See* USDA, Forest Service, Johnson Bar SEIS Unroaded Area Analysis Report, FileCode 1950 (Jun. 2017), on file with authors.

²⁰⁸ See USDA, Forest Service, Orogrande Community Protection Project Final EA, pp. 282-84 (Jan. 2016) (Nez Perce-Clearwater National Forests, Idaho).

²⁰⁹ See USDA, Forest Service, Lolo Insects and Disease Project Final EIS, p. 114 (Aug. 2018) ("This [roadless] analysis is specific to the Lolo Insect & Disease project and does not represent discussions made in resource analyses for other projects on the Nez Perce-Clearwater National Forests.").
²¹⁰ See Sections VI.B.2, VII.

²¹¹ USDA, Forest Service, Trapper Creek Vegetation Management Project EA, p. 114 (Dec. 2014) (Beaverhead-Deerlodge National Forest).

construction and timber harvest... Precommercial thinning small diameter trees within existing clearcuts is not predicted to affect the existing roadless characteristics of the IRAs because these areas are currently substantially altered."²¹²

- "The activities will occur within a narrowly specified corridor (up to 150 feet of existing road edges), where existing roadless values are low. Reasons contributing to this existing low roadless value include: Motorized use occurring in close proximity to these acres, previous timber harvest, and other development and use that currently degrades the roadless value. The existing roadless value of the approximately 203 total acres within IRA proposed for hazard tree removal is thus considered low and...will not further degrade these values.²¹³
- The existence of the roads themselves may have a greater impact on the undeveloped character than the removal of adjacent hazard trees.²¹⁴
- Developed areas of IRA "currently do not meet criteria for placement on potential wilderness inventory...because they contain forest roads and past harvest, which are visually evident on the landscape."²¹⁵

In the Sweet Grass Project on Montana's Custer-Gallatin National Forest, the Forest Service specifically noted that "Restoration activities, specifically fuels reduction, could cause the irreversible or irretrievable commitment of resources in portions of the North Absaroka Roadless Area, #1-371, potentially affecting eligibility for inclusion into the wilderness system. Activities could also potentially affect unroaded areas."²¹⁶ In spite of this, the Forest Service ultimately found the logging activities to have no potentially significant impact, blaming past management activities: "[P]ast management activities such as timber harvest, vegetation management, and fire management have had strong impacts on the natural appearance of the area."²¹⁷

The Forest Service in Idaho has used this reasoning as well:

• "The limited area and scope of activities within the Eldorado Creek roadless area and unroaded expanse would have little effect to the natural qualities since the units occur off roads bordering the roadless area where firewood cutting and stumps are evident as well

²¹² USDA, Forest Service, Quartz Haugen Precommercial Thinning DM, pp. 2-3 (May 2010) (Lolo National Forest). This was in addition at asserting that "[t]reatments would not preclude future designation or management as wilderness" in the same paragraph.

²¹³ USDA, Forest Service, Roadside Hazard Tree Removal #7 DM p. 8 (Jul. 2014) (Beaverhead-Deerlodge National Forest).

²¹⁴ USDA, Forest Service, Little Belt Mountains Hazard Tree Removal Project EA and FONSI p.52 (Sept. 2014) (Lewis & Clark National Forest).

²¹⁵ USDA, Forest Service, Rennic Stark Project EA, p. 143 (Nov. 2012) (Lolo National Forest).

²¹⁶ USDA, Forest Service, Sweet Grass Restoration and Resiliency Project EA, p. 279 (Jan. 2015) (Custer Gallatin National Forest).

²¹⁷ USDA, Forest Service, Sweet Grass Restoration and Resiliency Project DN-FONSI, p. 33 (Apr. 2015) (Custer Gallatin National Forest).

as off-road vehicle use."218

A little more degradation is not negligible; it is cumulative. More activities will augment and compound upon the impacts that already exist. For example, perhaps only a road existed before a proposed timber harvest and the Forest Service said that a road already impaired roadless characteristics; after the timber harvest, though, a road and stumps will show evidence of human development. Development upon development upon development will decrease roadless characteristics cut by cut. The Forest Service tends to minimize this accumulation in the cumulative effects analysis for the roadless inventory and impacts to potential wilderness areas. For example, in the Trapper Creek proposal on the Beaverhead-Deerlodge National Forest, in analyzing cumulative impacts to natural integrity of roadless characteristics, the Forest Service instead focused on the beneficial effect of manually setting back the natural ecological process of succession.²¹⁹ And instead of considering how stumps would look in addition to the other activities that decreased the undeveloped quality of the roadless area, the Forest Service simply dismissed the additional impacts as "short-term."²²⁰ The Forest Service did the same in the Little Belt Roadside Hazard project on the Helena-Lewis and Clark National Forest. The Forest Service acknowledged that roadless impacts from other commercial thinning and harvest in the roadless area should be considered; however, the Forest Service ignored the cumulative detrimental impact added upon places where existing roadless values were already considered low, simply dismissing the impacts as short term.²²¹ The Forest Service dismissed logging in an Idaho roadless area as a short-term impact, despite citing to existing stumps and off-road vehicle use to argue that roadless characteristics were demonstrably diminished, and despite recognizing the additional stumps would remain on the landscape for several decades.²²²

VI.B.5. Dilution is the solution to logging: "A little bit averaged over a large roadless area will make no difference."

Another popular analysis that the Forest Service adopts in both Idaho and Montana is to dilute the conclusions of the direct and indirect impacts of logging in roadless by dividing the roadless acreage to be logged by the total roadless acreage and then using that small percentage to support its conclusion that logging in the roadless area will have negligible impacts to roadless and wilderness characteristics.

²²² USDA, Forest Service, Lolo Insects and Disease Project Final EIS, p. 129 (Aug. 2018)

²¹⁸ USDA, Forest Service, Lolo Insects and Disease Project Final EIS, p. 123 (Aug. 2018); *see also Id.* p. 126.

²¹⁹ USDA, Forest Service, Trapper Creek Vegetation Management Project EA, pp. 134-35 (Dec. 2014) (Beaverhead-Deerlodge National Forest).

²²⁰ USDA, Forest Service, Trapper Creek Vegetation Management Project EA, p. 135 (Dec. 2014) (Beaverhead-Deerlodge National Forest).

²²¹ USDA, Forest Service, Little Belt Mountains Hazard Tree Removal Project EA and FONSI pp. 54-55 (Sept. 2014) (Lewis & Clark National Forest).

^{(&}quot;Implementation of this project would likely lead to the need to re-map the Eldorado Creek roadless area for future wilderness considerations in the short term, where [it]...excludes the 318 acres of harvest within the roadless area...After approximately 20-40 years and later, the advanced decomposition of the stumps coupled with regeneration would be substantially unrecognizable and harvested portions of the IRA could again qualify for potential wilderness...but this designation is unlikely given the relatively low qualities of wilderness attributes and manageability of the current area as stated in the Idaho Roadless FEIS (2008).").

In Idaho, the Forest Service found that 437 acres of regeneration harvest "would modify vegetation on approximately 437 acres (approximately 6%) of 3 units within the Eldorado Creek roadless expanse by regeneration harvest," declaring the "remaining 6,544 acres of the Eldorado Creek roadless area including the unroaded expanse would be unaffected by the project."²²³ In another Idaho roadless logging project, the Forest Service stated, "The vegetation management activities total approximately 280 acres in the IRA...As such, the vegetation management activities total approximately 2.4 percent of the roadless expanse and 3.0 percent of the [inventoried roadless area]."²²⁴ Where the Forest Service in Idaho stated these small sizes without stating a direct causation between size and significant impact, the Forest Service in Montana linked proportion with causation:

- "[T]he magnitude of the area within IRAs where hazard trees are to be removed is less than one half of one percent in each of the IRAs. As such, negligible effects to the roadless and wilderness attributes of these IRAs are predicted as a result of this decision."²²⁵
- "Overall effects to the whole of the Cabinet West IRA would be minimal...0.00089 percent of the total IRA area." ²²⁶

The Forest Service is using the discussion on the indirect effects of logging a portion of a roadless area to replace the discussion of the direct effects of doing so. When considering only the acreage logged, a direct and an indirect impact emerge that we have not seen the Forest Service recognize their analyses.

The direct impact is when the Forest Service updates its roadless inventory and considers potential wilderness, there is no provision in the Forest Service handbook directing a visual average. However, the manual does have directions for adjusting boundaries to exclude portions of roadless areas with denuded roadless characteristics.²²⁷ So, this analysis—minimal divided into the whole—is not the manner in which roadless acreage is evaluated for wilderness potential or how roadless boundaries are considered when the inventory is performed. A direct impact needs to look at the acreage logged as its own area and ask the questions about impacts to roadless characteristics in that portion of the roadless area.

The indirect impact not considered is whether logged areas will fragment the roadless area or reduce it to a size where it could no longer be considered to designate as Wilderness. In the 1964 Wilderness Act, where Congress defined wilderness as tracts of land that "has at least five thousand acres...or is of sufficient size as to make practical for its preservation and use in an unimpaired condition....."²²⁸ The Forest Service uses this size requirement when considering

²²³ USDA, Forest Service, Lolo Insects and Disease Project Final EIS, p. 123 (Aug. 2018).

²²⁴ USDA, Forest Service, Orogrande Community Protection Project Final DN-FONSI, p. 14 (Jan. 2016).

²²⁵ USDA, Forest Service, Roadside Hazard Tree Removal #7 DM p. 8 (Jul. 2014) (Beaverhead-Deerlodge National Forest).

²²⁶ USDA, Forest Service, Sparring Bull final EIS, p. 236 (Apr. 2012) (Kootenai National Forest).

²²⁷ See Forest Service Handbook 1909.12, Chapter 70, Ch. 71.22b(10), 73(2) (2015).

²²⁸ 16 U.S.C. § 1131(c).

whether to recommend wilderness for Congress to designate.²²⁹ Although some roadless areas in Idaho and Montana are much larger than 5,000 acres,²³⁰ others are much smaller in size,²³¹ and at least one national forest in Montana has dropped entire roadless areas over four thousand acres large not contiguous to other roadless or wilderness areas for being less than five thousand acres.²³² Additionally, the Forest Service Handbook does not provide for dividing the acreage substantially altered and noticeable by the acreage not impacted; the manual instead directs the Forest Service to adjust the boundaries so as to exclude the acreage that does not meet the "improvements" criteria, which addresses impacts from mining to logging to roads.²³³

VII. Forest plan revisions, updated roadless inventory, and wilderness recommendations

The issues with the above analyses become even more prominent when reviewing forestplan revisions. Our review revealed a pattern where the Forest Service dropped roadless areas from Wilderness consideration and the forest's roadless inventory during forest-plan revisions because of evidence of timber harvest. This conclusion is important because these losses ultimately reduce roadless acreage when the Forest Service updates each national forest's plan.

Roadless inventories are generally updated during forest-plan revisions. The Forest Service should revise each national forest's forest plan at least every fifteen years.²³⁴ When revising a forest plan, the Forest Service considers whether to recommend any to Congress to designate as wilderness under the Wilderness Act.²³⁵ This basic inventory is a surrogate to updating the forest's roadless inventory even though the Forest Service is no longer required to update its roadless inventory under the 2012 planning regulations.²³⁶ For all national forests

²³³ See Forest Service Handbook 1909.12, Chapter 70, §§ 71.22a, 71.22b (2015).

²³⁴ 16 U.S.C. § 1604(f)(5).

²²⁹ Forest Service Handbook 1909.12, Chapter 70, section 71.21 (2015).

²³⁰ See, e.g., USDA, Forest Service, Beaverhead-Deerlodge Revised Forest Plan Final EIS, Appx. C (Jan. 2009) p. C-7 (Anderson Mountain IRA is 31,099 acres); p. C-20 (Big Horn Mountain IRA is 53,494 acres); USDA, Forest Service, Roadless Area Conservation National Forest System Lands in Idaho final EIS, Appx. C, Vol. 3 (Aug. 2008): p. C3-18 (Lochsa Face IRA is 76,000 acres); p. C3-38 (North Lochsa Slope is 117,700 acres); p. C3-44 (Pot Mountain IRA is 51,100 acres).

²³¹ See, e.g., USDA, Forest Service, Beaverhead-Deerlodge Revised Forest Plan Final EIS, Appx. C (Jan. 2009) p. C-14 (Bear Creek IRA is 7,277 acres); p. C-37 (Cowboy Heaven IRA is 6,916 acres); p. C-66 (Fred Burr IRA is 5,586 acres); p. C-120 (O'Neil Creek is 6,757 acres); p. C- 123 (Potosi IRA is 5,296); p. C-161 (Timber Butte IRA is 5,278 acres); USDA, Forest Service, Roadless Area Conservation National Forest System Lands in Idaho final EIS, Appx. C, Vol. 3 (Aug. 2008): p. C3-9 (Eldorado Creek IRA is 6,800 acres); p. C3-48 (Rawhide IRA is 6,000 acres); p. C3-74 (Blacktail Mountain IRA is 5,000 acres).
²³² USDA, Forest Service, Beaverhead-Deerlodge Revised Forest Plan Final EIS, Appx. C (Jan. 2009) pp. C-2 to C-3 (Removing 4,466-acre Beaver Lake Roadless Area and 4,420-Dixon Mountain Roadless Area, in port for not meeting the minimum size criteria).

²³⁵ See 16 U.S.C. § 1604(f), (g); 36 CFR §219.6(b)(15); 219.7(c)(2)(v).

²³⁶ The Forest Service's new planning regulations, in contrast with the 1982 regulations, do not require the Forest Service to update the roadless inventory when reviewing areas for potential wilderness. *See* 36 C.F.R. 219.7(c)(2)(v)(2012); *compare with* !982 Planning Regulations, 47 Fed. Reg. 43,026 at 43,034, 43,047 to 43,048 (§219.17). Substantively, however, identifying a basic potential wilderness inventory could serve as the surrogate for updating the roadless inventory; both could be done with the same process because of comparable natural qualities. *See* Roadless Area Conservation Rule, 66 Fed. Reg. 3,244, 3,272 (Jan. 12, 2001) (§294.11, "Roadless area characteristics"); *compare with* USDA, Forest

before 2008, the forest supervisor of a national forest generally updated its roadless inventory, and still has the authority to do so outside of Idaho.²³⁷

The Forest Service Handbook directs the standard by which the agency identifies and evaluates areas that it could recommend to Congress for Wilderness. The process begins with a basic inventory: whether the area meets the size criteria and no improvements or vegetation treatments or timber harvest areas that are "not substantially noticeable."²³⁸ After the initial inventory, the Forest Service evaluates, analyzes, and possibly recommends that inventory,²³⁹ but this first stage—the initial inventory—is where the Forest Service updates the forest's roadless inventory.

Updating roadless inventory would involve either adding or dropping acres in accordance with whether the area exhibits roadless characteristics or areas where timber harvests are substantially noticeable.²⁴⁰ Because the forest-plan revision process is also subject to NEPA, the Forest Service has to provide the reasons for additions or reductions.²⁴¹ This allowed us to review the activities or reasons for dropping roadless acreage. We examined the roadless-inventory update to Montana's Beaverhead Deerlodge during its forest plan revision. We also reviewed the Idaho Panhandle National Forests roadless-inventory update; because this forest was its forest plan at the same time as development of the Idaho Roadless Rule, the Idaho Roadless Rule adopted the Idaho Panhandle National Forest's roadless-inventory additions and deletions.²⁴²

Service, Forest Service Handbook 1909.12, Ch. 70, §§ 71.1 to 71.3 (2015). Because the 2012 planning regulations are relatively new and forest plans are updated on the order of decades, it remains unclear as to whether the Forest Service will continue to update roadless areas nationally when considering wilderness recommendations. Without a requirement to do so, the agency could avoid roadless-inventory updates, and thus avoid a review that could document roadless losses or result in adding roadless areas that would then have more restrictive management imposed by the National Roadless Rule than regular planning (that might permit unrestricted timber harvest in the area). *See* USDA, Forest Service, Beaverhead-Deerlodge Revised Forest Plan Final EIS, Appx. C, p.1 (Jan. 2009) (describing a difference between "roadless areas" and "areas with wilderness potential," and emphasizing, "Prohibitions in the [Roadless Area Conservation Rule] do not apply to 'Areas with Wilderness Potential' inventoried in 2006 unless they are *also* mapped as IRAs.")(emphasis in original).

²³⁸ Forest Service Handbook 1909.12 (2015), Chapter 70, §§ 71.2, 71.22b(2), (3). The inclusion criterion was more specific in the 2007 version of the Forest Service Handbook: "Timber harvest areas where logging and prior road construction are not evident, except as provided in Section 71.12 for areas east of the 100th meridian. Examples include those areas containing early logging activities related to historic settlement of the vicinity, areas where stumps and skid trails or road are substantially unrecognizable, or areas where clearcuts have regenerated to the degree that canopy closure is similar to surrounding uncut areas." Forest Service Handbook (2007) 1909.12, Ch. 70, §71.11(9).

²³⁹ Forest Service Handbook 1909.12, Ch. 70, §70.62 (2015).

²³⁷ As described in section IV.C, the 2008 Idaho Roadless Rule permanently set a roadless inventory that only the Chief of the Forest Service may update, roadless area by roadless area.

²⁴⁰ Forest Service Handbook 1909.12 (2015), Chapter 70, §§ 71.2, 71.22b(2), (3).

 ²⁴¹ See, e.g., Alliance for the Wild Rockies v. U.S. Forest Service, 907 F.3d 1105, 1109-12 (9th Cir. 2018).
 ²⁴² See, e.g., USDA, Forest Service, Roadless Area Conservation National Forest System Lands in Idaho final EIS, Appx. C, Vol. 3 (Aug. 2008) Idaho Panhandle IRAs pp. C3-109 (Hammond Creek IRA, 17,400 acres), C3-154 (Midget Peak IRA, 7,200 acres), C3-172 (Packsaddle IRA, 19,300 acres); *compare with* USDA, Forest Service, Idaho Panhandle Revised Forest Plan file,

In Montana, the Forest Service revised its 1986 (Beaverhead Forest Plan) and 1987 (Deerlodge) forest plans for the Beaverhead-Deerlodge National Forest in 2009.²⁴³ When reviewing its inventory, the Forest Service dropped roadless inventory dropped because it had been "incorrectly included, or if activities such as road building, timber harvest, or mining changed their roadless character since the 1983 inventory."²⁴⁴ For each roadless area, the Forest Service distinguished the acreage adjusted because of better mapping technology from the acreage dropped or added for each individual roadless area.²⁴⁵ From that original calculation, GIS recalculations, better mapping, and land exchanges reduced the roadless acreage by 9,894.²⁴⁶ Independent of GIS modifications, the Forest Service dropped 69,089 acres of roadless since the last inventory in 1983.²⁴⁷ Unlike the Idaho Panhandle National Forests revised plan, which the authors could access, we did not have the Beaverhead-Deerlodge plan-revision planning file. Instead, we used Appendix C of the FEIS for the Beaverhead-Deerlodge National Forest Revised Forest Plan to choose three roadless areas where the Forest Service dropped a large amount of acreage in the revised inventory for reasons other than mapping and land exchanges, and submitted a Freedom of Information Act (FOIA) request for documents that would explain why the Forest Service dropped 2,089 acres from the Emerine IRA, 3,906 acres from the North Carpp IRA, and 11,450 acres from the Tash Peak IRA.²⁴⁸

According to the Forest Service's FOIA response documents, the Forest Service dropped roadless inventory related to timber harvests. Not every reduction had a reason on the maps provided, but there were hundreds of acres dropped for roads and harvest that occurred after the Forest Service designated the area as a roadless area. This was true for map quadrants with the 1987 roadless areas and the hand-drawn remapping. For example, in the Tash Peak IRA, on the Peterson Lake quadrant, at least 1,600 acres dropped from the inventory can clearly be attributed to the Selway Timber Sale, according to the mapping author's notes.²⁴⁹ The redrawn boundary

²⁰⁰⁹⁰⁷¹³_hammond_creek_ira_chronology.pdf, 20090713_midget_peak_ira_chronology.pdf, 20090713_packsaddle_ira_chronology.pdf (Jul. 2009), on file with authors.

 ²⁴³ See USDA, Forest Service, Beaverhead-Deerlodge Revised Forest Plan Final EIS, Appx. C, p. C-1 (Jan. 2009); USDA, Forest Service, Beaverhead-Deerlodge Revised Forest Plan ROD (Jan. 2009).
 ²⁴⁴ USDA, Forest Service, Beaverhead-Deerlodge Revised Forest Plan Final EIS, Appx. C, p. C-2 (Jan. 2009).

²⁴⁵ See, e.g., USDA, Forest Service, Beaverhead-Deerlodge Revised Forest Plan Final EIS, Appx. C, p. C-9 (Jan. 2009). Areas were added "if they had been overlooked in earlier inventories, or roadless character was regained." *Id.* at C-2. The Forest Service did not distinguish the roadless added because they had been overlooked and the roadless added because they had regained roadless characteristics. The Forest Service also eliminated a couple of entire roadless areas because they were not at least 5,000 acres in size or contiguous to an existing congressionally designated Wilderness area, which is generally what is required to designate land under the Wilderness Act. *Id.* at C-2 to C-3.

²⁴⁶ USDA, Forest Service, Beaverhead-Deerlodge Revised Forest Plan Final EIS, Appx. C, p. C-3 (Jan. 2009).

²⁴⁷ USDA, Forest Service, Beaverhead-Deerlodge Revised Forest Plan Final EIS, Appx. C, p. C-2 to C-3 (Jan. 2009).

²⁴⁸ USDA, Forest Service, Beaverhead-Deerlodge Revised Forest Plan Final EIS, Appx. C (Jan. 2009), pp. C-51 to C-52 (Emerine—2,089 acres); pp. C-117 to C-119 (North Carpp IRA—3,906 acres); pp. C-158 to C-160 (Tash Peak—11,450 acres).

²⁴⁹ See Appendix C, Map 3. We visually approximated the acreage lost using the map scale and the

on the Peterson Lake quadrant is hand-drawn and weaves in and out of roadless boundaries, accompanied by the note "match to harvest."²⁵⁰ In the Emerine IRA, the map's author redrew the roadless boundary to drop approximately 2,120 acres of the roadless areas, attributing the reduction to roads and harvest after roadless designations.²⁵¹ Finally, in the North Carpp IRA, on the Carpp Ridge quadrant, the author who redrew the boundaries noted the area excluded approximately 3,520 acres because of areas of roads and harvest activities since the area's roadless designation.²⁵² On the Moose Lake quadrant in the North Carpp IRA the redrawn boundary noted the excluded areas with "Existing open road & harvest activity."²⁵³ Approximately 3,900 acres were dropped from North Carpp IRA in these two quadrants.²⁵⁴

Although the Forest Service attributed reducing the roadless inventory due to timber harvest, the agency was not consistent on denoting the name of the logging project and never dated the logging project. For this reason, it is possible that timber harvest either occurred after the roadless designation but before the National Roadless Rule or after roadless designation and after the National Roadless Rule, but if so, these timber harvests would be at least a decade old. However, forest-plan revisions demonstrate that two decades is not enough for a roadless area to recover. For example, in the Tash Peak IRA, the map author redrew roadless boundaries to exclude the Selway Timber Sale. According to documents the Forest Service disclosed about projects on East Selway Creek, areas were clearcut in the late 1980s.²⁵⁵ After approximately twenty years, when the roadless inventory was updated in the Beaverhead-Deerlodge National Forest in 2007,²⁵⁶ the area was impaired enough as to cause the Forest Service to exclude it from roadless inventory in the next round of forest planning.

In Idaho, the Forest Service revised the 1987 Idaho Panhandle National Forest and issued that revised plan in 2015.²⁵⁷ When reviewing the roadless inventory, contemporaneously with the promulgation of the Idaho Roadless Rule, the Forest Service reduced several roadless areas because of logging.²⁵⁸ In Idaho, the Forest Service distinguished acreage added or lost due to better mapping technology from acreage lost for other reasons, such as timber sales.²⁵⁹ According to Forest Service records, in the Hammond Creek IRA, the Forest Service dropped from roadless 1,024 acres because of the Arid Cedar Timber Sale and 808 acres because of the

²⁵⁶ See, generally, USDA, Forest Service, Beaverhead-Deerlodge Revised Forest Plan Final EIS, Appx. C (Jan. 2009).

²⁵⁷ USDA, Forest Service, Idaho Panhandle National Forests Land Management Plan Final ROD, (Jan. 2015).

²⁵⁸ The planning record for the Idaho Panhandle National Forests Revised Forest Plan is on file with the authors.

²⁵⁹ See, e.g., USDA, Forest Service, Idaho Panhandle Revised Forest Plan file,
 20090713_hammond_creek_ira_chronology.pdf (Jul. 2009), on file with authors.

conversion of 640 acres per square mile.

²⁵⁰ See Appendix C, Map 3.

²⁵¹ See Appendix C, Map 4.

²⁵² See Appendix C, Map 5.

²⁵³ See Appendix C, Map 6.

²⁵⁴ See Appendix C, Maps 5 and 6.

²⁵⁵ Disclosed by the Forest Service in response to Friends of the Clearwater's September 7, 2015 Freedom of Information Act request to the Beaverhead-Deerlodge National Forest: *FOIA_VegProjectList* (Excel). On file with authors.

Cedar Slate Timber Sale.²⁶⁰ The Forest Service reduced the Skitwish Ridge IRA by 2,912 acres due to the Horizon Timber Sale.²⁶¹ The Forest Service reduced Midget Peak IRA by 281 acres, attributing it to the Wahoo Midget Timber Sale.²⁶² The Forest Service decreased Packsaddle roadless area by 50 acres because of the Keep Cool Timber Sale and 473 acres due to the North Gold Timber Sale.²⁶³ The Forest Service noted an undisclosed amount of Upper Priest roadless lost from "adjustments for old timber sales and other natural features," and the Forest Service decreased Continental Mountain IRA by 209 acres because of a combination of mapping to more definable boundaries and old timber harvest units.

While reviewing the documents supporting roadless-inventory reduction, not once did the Forest Service note specific details about the timber harvest when dropping the areas where timber harvest occurred. No documents we reviewed discussed the size of the trees taken, how old the harvest was, whether the harvest was a regeneration cut, or whether the purpose of the cut was "stewardship" to "restore ecosystem characteristics." The area of timber harvest was not averaged with the whole roadless area—the area of timber harvest was simply dropped from the rest of the roadless area, presumably using the Forest Service Handbook guidelines, for being "substantially noticeable."

VIII. Answering the question: Do roadless rules protect our roadless areas?

Neither roadless rule's express language or structure protect roadless acreage in the states with the second- and third largest of the nation's roadless inventory. In the past decade alone, the Forest Service has collected preliminary numbers that suggest approximately 18,000 acres of tree cutting has occurred in national roadless areas in Idaho, and at least 32,000 acres of tree cutting has occurred in national roadless areas in Montana. The Forest Service is using the permissive structure of the Idaho Roadless Rule to cut trees in Idaho's national roadless areas under exceptions for wildfires, insects, and disease. The foundation underlying the Idaho Rule's exceptions are not supported by emerging science, and does not recognize that ecological disturbance systems exist at some level in all forests for tree renewal and forest health, and that these are impacted by climate. The National Roadless Rule is not preserving the nation's roadless areas in Montana. The Forest Service there is most often using the "stewardshippurpose" exception to allow timber harvest national roadless areas under the 2001 National Roadless Rule. The rise in the Forest Service arguments that ecological processes, without human management, would damage themselves might be linked to language in the roadless rule. Both the National and Idaho Roadless Rules each created exceptions for "stewardship-purpose timber sales"²⁶⁴—tree cutting to benefit at-risk species or to "restore...ecosystem composition

- 20090713_skitwish_ridge_ira_chronology.pdf (Jul. 2009), on file with authors.
- ²⁶² USDA, Forest Service, Idaho Panhandle Revised Forest Plan file,

²⁶⁰ USDA, Forest Service, Idaho Panhandle Revised Forest Plan file,

²⁰⁰⁹⁰⁷¹³ hammond creek ira chronology.pdf (Jul. 2009), on file with authors.

²⁶¹ USDA, Forest Service, Idaho Panhandle Revised Forest Plan file,

²⁰⁰⁹⁰⁷¹³_midget_peak_ira_chronology.pdf (Jul. 2009), on file with authors.

²⁶³ USDA, Forest Service, Idaho Panhandle Revised Forest Plan file,

²⁰⁰⁹⁰⁷¹³_packsaddle_ira_chronology.pdf, on file with authors.

²⁶⁴ USDA, Forest Service, Roadless Area Conservation final EIS, Glossary p. G-10 (Nov. 2000).

and structure....²⁶⁵ Timber proposals after 2001 have increasingly used these permissions, even in Montana's national roadless areas, where the language of the National Rule predicted "stewardship-purpose" timber harvest to be infrequent. Upon review of the 2001 Rule's environmental impact statement, this "stewardship-purpose" exception does not appear to be based on science.

Neither rule's environmental impact statement, when compared against logging projects over the last decade, offer accurate predictions of logging levels when reviewed with the benefit of hindsight. The 2001 Roadless Area Conservation Rule predicted that approximately 12 to 15 million board feet would be sold each year, harvested from 1,200 to 1,400 roadless acres nationwide.²⁶⁶ By the Forest Service's own preliminary numbers, at least 32,000 acres have been logged in Montana's national roadless acreage since 2008. Averaged over 10 years, this is about 3,200 acres per year, so the Forest Service has logged in Montana almost triple what the environmental impact statement predicted for nationwide numbers.

When comparing the 2001 Roadless Rule to the environmental impact statement for the Idaho Roadless Rule, the Forest Service implied that it might have been averaging 600 acres of timber harvest in the nation's roadless areas in Idaho. In the FEIS for the 2008 Idaho Roadless Rule, the Forest Service predicted that it would harvest 9,000 acres over the next fifteen years under the National Roadless Rule, and 15,000 acres over the next fifteen years under the Idaho Roadless Rule.²⁶⁷ The Forest Service based this projection on what each Idaho national forest provided on "[t]he volume of timber harvested between 2001 and 2006 and projected to be harvested between 2007 and 2011" in Idaho roadless areas.²⁶⁸ If the Forest Service projected 9,000 acres of logging over the next fifteen years (approximately 600 acres per year) based on what the Forest Service had already reported doing in Idaho roadless areas, then the 2001 Rule's prediction that there would be an average of 1,200 to 1,400 roadless acres harvested *nationally* might have been underestimated.²⁶⁹

The Idaho Roadless Rule does is not sufficiently protecting roadless acreage in the Idaho's Nez Perce and Clearwater National Forests. We do not know where the logging was happening in roadless areas on national forests for the figure that the Forest Service presented in its EIS (above). But, according to our records, the Forest Service logged in no roadless areas on the Nez Perce and Clearwater National Forests between 2001 and 2008 when the National Roadless Rule was in place.²⁷⁰ Under the Idaho Roadless Rule, the last eight years have seen

²⁶⁵ Roadless Area Conservation Rule, 66 Fed. Reg. 3,244, 3,273 (Jan. 12, 2001) (§294.13(b)(1)(i), (ii)).

²⁶⁶ USDA, Forest Service, Roadless Area Conservation final EIS, Vol. 1 pp. 3-203 to 3-204 (Nov. 2000); *see* Roadless Area Conservation Rule, 66 Fed. Reg. 3,244, 3,257 (Jan. 12, 2001) (selecting alternative 3).

 ²⁶⁷ USDA, Forest Service, Roadless Area Conservation National Forest System Lands in Idaho final EIS, Vol. 1 p. 76 (Aug. 2008).

²⁶⁸ USDA, Forest Service, Roadless Area Conservation National Forest System Lands in Idaho final EIS, Vol. 1 pp. 76, 95 (Aug. 2008).

²⁶⁹ The court that later upheld the Idaho Roadless Rule relied upon the Forest Service's prediction that it would log three million board feet of roadless areas under the 2001 National Rule, thus prompting a finding that the increase predicted under the Idaho Rule was a "modest" amount and therefore acceptable. *Jayne v. Sherman*, 706 F.3d 994, 1006 (9th Cir. 2013).

²⁷⁰ See Appendix A.

over a thousand acres of timber harvest in roadless areas on these two forests alone.²⁷¹

The Forest Service's conclusions on the impacts of logging have also changed over the past two decades as well. The Forest Service's analyses on timber harvest in roadless areas trend toward a conclusion that logging will have no impact because of one or a combination of the following reasons: not taking action would cause natural process to erode roadless characteristics; the activity causes only a short-term negative impact but a long-term benefit; there has already been detrimental impacts to a roadless area, so impacts from more activity would be negligible; and impacted roadless over a small acreage is averaged out by the remaining, unimpacted roadless area. Retrospective analyses on the impacts of projects, provided by later project considerations or forest-plan revisions, illustrate serious, fundamental concerns with the ability of the Forest Service to manage forest resources.

When the Forest Service reviews roadless characteristics after timber is harvested from a roadless area, the agency retrospectively considers roadless characteristics to have been impaired. The Forest Service's conclusions before the 2001 Roadless Rule that logged areas were developed and no longer suitable to recommend as wilderness are conclusions that still exist, but only for project-specific retrospective evaluations or forest-plan revisions.²⁷² Forest-plan revisions reveal that the Forest Service drops harvested roadless areas its roadless inventory. The Forest Service proposes logging activities in roadless areas, forecasting either no impact or a short-term one, only to turn around at the next forest plan revision to drop the roadless acreage logged or proclaim it unsuitable to recommend wilderness. Forest-plan revisions are supposed to happen at least every fifteen years, which is not enough time for areas to recover from the temporary short-term impacts projected by the Forest Service that tend to encompass multiple decades. Additionally, when the Forest Service updated the roadless inventory in the forest-plan revisions we reviewed, the Forest Service supports its decision to drop the areas, noting merely that the area has had a timber harvest. The size of trees logged (i.e., small diameter), the reason for the timber harvest (i.e., to improve ecological functioning), or the type of logging done never figure into the discussion to drop the roadless acreage because of timber harvest. Neither does the Forest Service, when updating the inventory, averages the roadless acreage logged over the remaining, unlogged roadless area-the Forest Service's own policy directs it to exclude acreage in places where timber harvest is substantially noticeable. This causes the Forest Service to minimally drop the roadless acreage logged or maximally drop the entire roadless area because the logged area fragments the remaining roadless or reduces acreage to below what can be considered for Wilderness under the Wilderness Act.

The Idaho Roadless Rule exacerbates the problems of the National Roadless Rule because the Idaho Roadless Rule is more permissive and less transparent. The Idaho Rule has created a roadless inventory that can only be modified roadless area-by-roadless area (not forestwide during forest-plan revisions) and only by the Chief of the Forest Service. Although the

²⁷¹ See Appendix A.

²⁷² See, e.g., USDA, Forest Service, Wing Creek-Twentymile Timber Sales Final EIS and ROD, p. 97, 99 (Jul. 1989)("[H]arvest units would be visually apparent for many years."; "Lands committed to timber production are not suitable for wilderness classification."); USDA, Forest Service, Mallard Timber Sale ROD, p. 7 (Dec. 1990)(Nez Perce National Forest)("Selection of Alternative Four...is the critical, irreversible and irretrievable decision to commit Roadless area 1847 to development.")

Forest Service has preliminary numbers that 18,000 acres of roadless areas in Idaho have been logged, we do not know of any petition to adjust roadless acreage to reflect the roadless characteristics that may no longer remain. Thus, Idaho's rule has effectively created a permanent and arbitrary designation of lands called "roadless areas" that do not necessarily have the rule's definition of "roadless characteristics." For example, the logged portion of the West Fork Crooked River Inventoried Roadless Area, Pictures 4, 5, 6, and 7 above, is still "roadless." Roadless areas in Idaho that no longer have roadless characteristics will still be called "roadless areas" until the Chief of the Forest Service designates otherwise. Having frozen roadless boundaries while logging in these areas, the Forest Service in Idaho is skewing a reliable accounting of the truly wild areas that still remain in the United States, an accounting the public will not fully know so long as the Idaho Roadless Rule persists.

IX. Conclusion

Neither the 2001 Roadless Rule nor the Idaho Roadless Rule are protecting roadless areas from timber harvest that degrade roadless characteristics. The structures of both rules permit some timber-harvest activities. The Forest Service has spent the past decade exploiting these permissions and authorizing roadless logging by order of tens of thousands of acres in Idaho and Montana. Our report examined only two states. Based on our findings, we think it paramount to answer the question how pervasive this problem is, and organizations and individuals should be asking these same questions and comparing these same NEPA analyses for roadless areas in Alaska, which has the largest roadless base, as well as other Forest Service regions across the country. Based on the Forest Service's regular assertions that logging no longer impacts roadless areas, we also think there needs to be broad monitoring efforts by citizens, nongovernmental organizations, and the Forest Service on the roadless tracts logged in the name of "ecosystem restoration" to compare the Forest Service's predictions to actual impacts or administrative fate of these areas.

In addition to the Forest Service utilizing permission to harvest timber that each rule provides, the Forest Service's NEPA analysis has evolved to support roadless logging as an environmentally neutral or even a beneficial impact to roadless characteristics. Although the Forest Service asserts that timber-harvest projects may enhance roadless characteristics, the record before us shows a pattern of removing lands from roadless acreage based on the same effects, the ones that were intended to be "short-term" and intended to "enhance" roadless characteristics. Given these rules do not protect land from human development as the Forest Service predicted they would when developing each rule, there needs to be a substantive review of the remaining unprotected wild areas in the United States. Additionally, the public and the government need to engage in a discourse about whether protecting roadless areas is a priority and, if so, how to effectively do that.