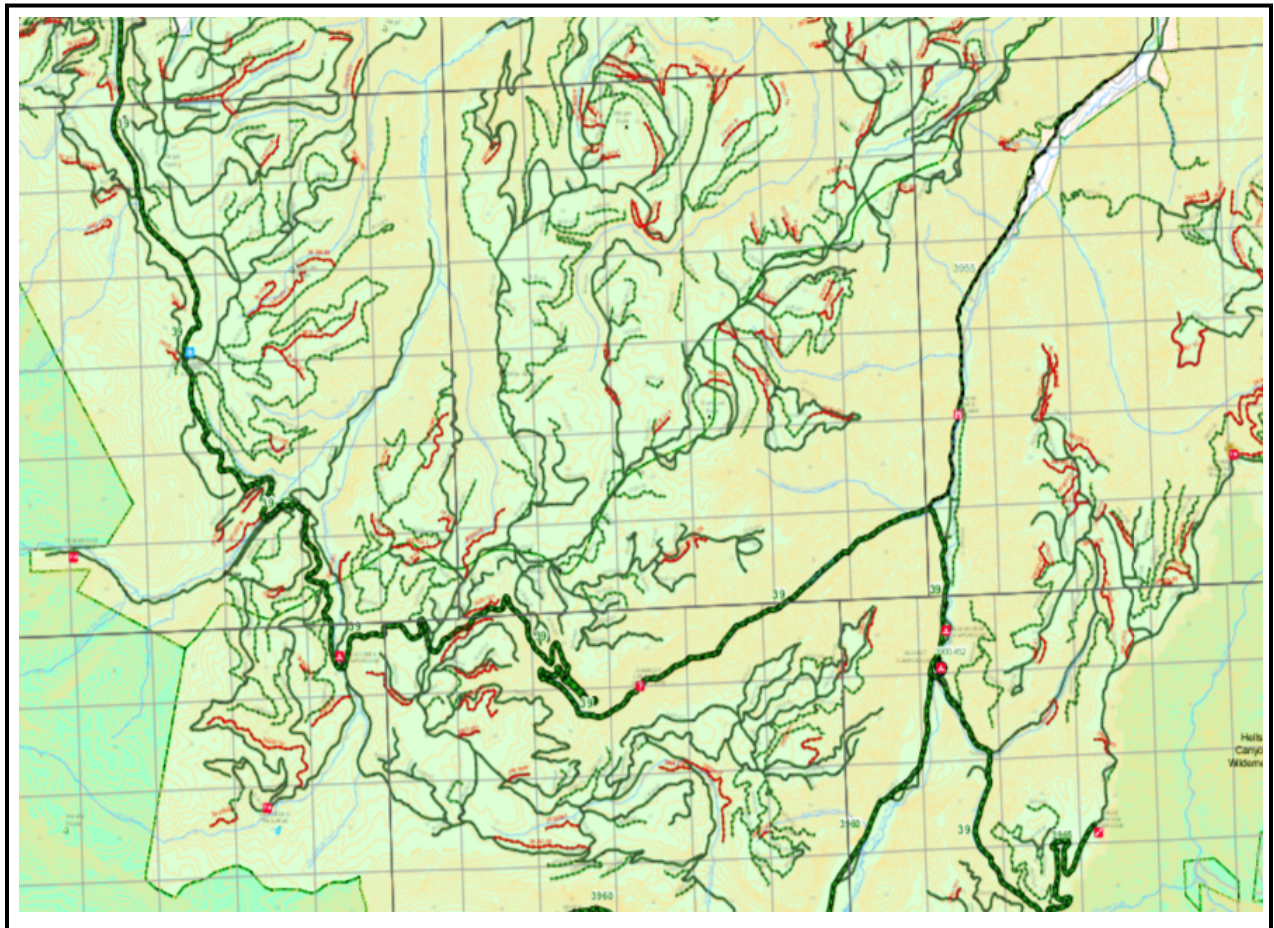




A Dilapidated Web of Roads - The Forest Service's Departure From a "Sustainable" Forest Road System



January 2021

Cover image: Birds eye view of a typical network of roads on national forest lands. Green lines signify the roads that the agency determined are “needed” and red lines are those that are “unneeded”. Significant “needed” roads remain.

WildEarth Guardians. A Dilapidated Web of Roads -The Forest Service’s Departure From a “Sustainable” Forest Road System. January 2021.

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Introduction

National forests spread from coast to coast across 40 states, spanning 193 million acres. These forests provide habitat for over 30% of the threatened and endangered species in the U.S., supply 20% of the nation's water to rivers and streams, offer countless places for Americans to recreate and are essential for the cultural, spiritual and personal survival of tribal nations. How these millions of acres are managed - 1/12th of U.S. lands and waters – is vitally important, yet often overlooked.

The Forest Service (USFS), part of the U.S. Department of Agriculture, is the agency that has the responsibility to manage these forests – as set forth in the policy direction of the 1897 Organic Act:

“...to improve and protect the forest within the reservation, or for the purpose of securing favorable conditions of water flows, and to furnish a continuous supply of timber for the use and necessities of citizens of the United States.”

Later laws like the 1960 Multiple-Use Sustained Yield Act broadened policy and directed that lands and waters be managed “for outdoor recreation, range, timber, watershed, and wildlife and fish purposes.”² Despite these policies, the Forest Service has a long history of heavily supporting, subsidizing, and prioritizing extractive uses like logging, grazing, and mining over water protection, wildlife recovery, and recreation. The result is a legacy of mismanagement that has degraded the ecological integrity of forests and grasslands, and left in its wake polluted streams and fragmented habitats.

In order to log, mine, and graze, the Forest Service carved and spliced a vast network of roads across millions of acres of national forest lands. The agency built many roads in poor locations and did not construct them to last. Today, with over 370,000 miles of roads and a draconian budget that leaves 90% of the roads unmaintained, the Forest Service is facing a severe crisis that is exponentially worsened due to climate change. The agency does not have the resources to repair or maintain the entire forest road system. Left unchecked, forest roads will continue to fall apart, bridges will keep collapsing, and access to public lands will further be unreliable at best and unsafe at worst.

The Forest Service, along with numerous conservation and recreation groups, recognized this problem decades ago and developed a blueprint for a sustainable road system through the 2001 Roads Rule.³ The goal was to establish a road system that would provide access for recreation and management, is aligned with budget realities, while also reducing impacts to ecological functions and wildlife.

On the 20th Anniversary of the Roads Rule, it is important to review where the agency is today. This paper provides background on the rule, analysis of the progress to date and opens the door to a broader discussion on what is needed to truly meet the goals of the Roads Rule. As innocuous as forest roads may seem, healthy forests, waterways, wildlife are at risk, particularly as impacts from climate change become more pronounced.

¹ Organic Administrative Act of 1897. 30 Stat. 34-36; codified U.S.C. vol. 16, sec. 551.

² Multiple Use Sustained Yield Act of 1960. 16 U.S.C. §§528-531 and U.S. Forest Service. “Managing Multiple Uses on National Forests, 1905-1985. A 90-year Learning Experience And It Isn’t Finished Yet.” Available: <http://npshistory.com/publications/usfs/fs-628/chap1.htm> (last accessed January 4, 2020).

³ Road Management Policy. 2001. 36 CFR Parts 212, 261 and 295.

The 2001 Roads Rule - An Important Step Forward

Road construction across national forest lands always existed to support extractive industry demands, but rose exponentially after World War II. Housing demands created a large market for building supplies and lumber, which meant that forests were being cut at record paces. Congress supported the logging industry by dedicating millions of taxpayer dollars to the Forest Service to construct forest roads everywhere and anywhere. Roads were bulldozed through floodplains and up river valleys. Roads were cut along steep hillsides and over mountain tops. There was little thought or planning involved with the primary road construction driver being the need to cut trees. The figure below illustrates the rapid road construction over two decades.

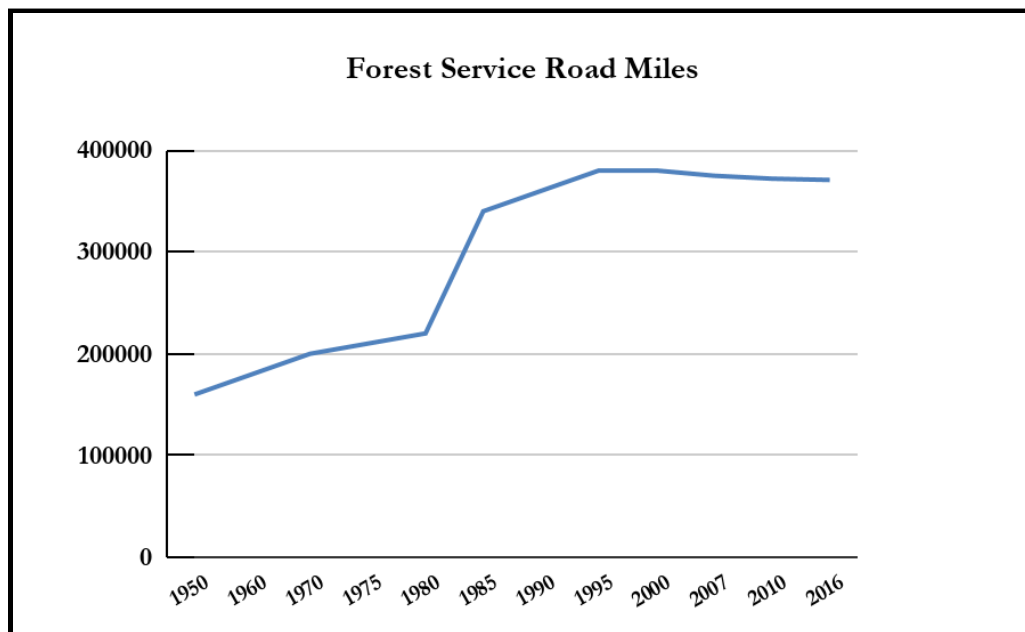


Figure 1. Growth of Forest Service road system from 1960-2016.⁴

By the late 1990's, as timber markets changed, the Forest Service began to acknowledge the growing body of evidence illustrating the harmful consequences from its poorly located, constructed, and managed forest road system. At the same time, the billions of dollars in Congressional appropriations that largely paid for building the road system were dropping at a rapid pace. Conservation groups, fueled by a groundswell of public support, pushed the agency to change. As a result, the Forest Service initiated a process to overhaul its road management policies. In 1998, the Forest Service issued an Advance Notice of Proposed Rulemaking announcing its intent to revise regulations concerning the management of the National Forest Transportation System.⁵ The multi-year effort resulted in the landmark 2001 Roadless Rule, that most people are familiar with, protecting millions of acres of national forests from logging and road building. At the same time, then Forest Service Chief Mike Dombeck signed the Road Management Strategy Rule and Policy that went into effect on January 12, 2001, otherwise known as the "Roads Rule."⁶

⁴ Adapted from Gerald Coghlan and Richard Sowa. *National Forest Road System and Use Draft Report*. USDA Forest Service. 1998.

⁵ 63 FR 4350

⁶ See 66 Fed. Reg. 3217 (Jan 12, 2001). See also, March 1, 2001 USDA Road Management Policy Notice

The “Roadless Rule” protected the last remaining wild places from road building and the associated impacts that roads bring. The “Roads Rule” was developed to deal with the vastly oversized and harmful forest road system that was already constructed. It required the Forest Service “to set a standard that each forest identify the minimum road system required to balance access objectives with ecosystem health goals; and to use a science-based roads analysis to identify the road network needed to serve the public and land administrators”.⁷ The new “Roads Rule” also required the Forest Service to identify unneeded roads for decommissioning, or other uses, and to give priority to those that pose the greatest risk to public safety or environmental quality. The “Roads Rule’s” intent was to move the forest road system toward a more “sustainable” condition, one that balanced ecological, economic, and social needs. One main failing was its lack of compliance deadline. In fact, the only deadline was the requirement for each forest to complete the “science-based roads analysis” by July 2003, with some exceptions.⁸ Most national forests did meet this one deadline, but did so by only analyzing a fraction of their roads—those managed for passenger vehicles that account for less than 20% of the overall system. The other 80% of their road system, the dirt roads or those managed for “high-clearance” vehicles, were ignored.



Figure 2. The photo on the left illustrates a typical “passenger vehicle” maintained road often with paved surface, wider road footprint, safety features such as guardrails and higher maintenance costs. The photo on the right illustrates a typical “high-clearance” vehicle road that is often natural surface, narrow road footprint, less maintenance costs which leads to gullies, ruts and potholes. As of 2018, 83% of national forest roads are minimally maintained in the “high-clearance” category.

This narrow review meant that the roads problem wasn’t getting resolved. At the same time, the Forest Service was taking a broader look at the impacts of roads and motor vehicles (i.e. off-highway vehicles (OHV’s) and snowmobiles), leading to the adoption of the Travel Management Rule in 2005. The agency determined that there was a need for a new rule because the types and uses of motorized vehicles had increased, the road system was continuing to deteriorate, and all of this was harming the environment. The Travel Management Rule has three subparts: Subpart A — Administration of the Forest Transportation System; Subpart B - Designation of Roads, Trails and Areas for Motor Vehicle Use; and Subpart C — Use by Over-Snow Vehicles (see Table 1). The agency immediately focused on Subpart B in order to reduce the most harm by restricting off-road vehicles to specific designated roads, trails, and areas.⁹ As a result, the agency devoted its time and resources toward addressing poorly managed motorized recreation.

⁷ 2001 Roads Rule. 36 CFR Parts 212, 261 and 295.

⁸ 66 FR 3235

⁹ See 70 Fed. Reg 68264 (Nov. 9, 2005).

Table 1. Overview of the Differences Between Subparts of the Travel Management Rule

36 C.F.R. §212	Objective:	Requires:	Product(s):
Subpart A; Roads Rule	To achieve a sustainable national forest road system.	Use a science-based analysis to identify the minimum road system and roads for decommissioning	- Travel Analysis Report - Map with roads identified as “likely needed” and “likely unneeded”
Subpart B; Travel Management Rule	To protect forests from unmanaged off-road vehicle use by ending cross-country travel and ensuring the agency minimizes the harmful effects from motorized recreation.	Designating a system of roads, trails, and areas available for off-road vehicle use according to general and specific criteria.	- Motor Vehicle Use Maps that indicate what roads/trails are open for motorized travel
Subpart C; Travel Management Rule	To protect forests from unmanaged over-snow vehicle use in a manner that minimizes their harmful effects.	Designating specific roads, trails, and/or areas for oversnow vehicle use according to the criteria per Subpart B.	- Oversnow vehicle maps designating trails and areas for winter motorized recreation

In 2009, the Forest Service updated its directives pertaining to the “science-based analysis” required under Subpart A, thereby establishing the Travel Analysis Process (TAP) that could support, separately or together, the planning process for both Subparts A and B. Once completed, the resulting Travel Analysis Reports were meant to inform National Environmental Policy Act (NEPA)-level analysis and decisions for the identification of the minimum road system. Yet, upon the release of the new travel analysis process directives, many national forests were already far along in their efforts to designate off-road vehicle use, and either did not produce a Travel Analysis Report or did so only for the purposes of meeting Subpart B requirements. As such, compliance with Subpart A languished.

Then, in 2010, the Forest Service’s Washington Office issued a memorandum reaffirming its commitment to identify a minimum road system and unneeded roads as required under Subpart A.¹⁰ The memo explained

¹⁰ See Forest Service Memorandum, November 10, 2010 by Deputy Chief Joel Holtrop (stating, “[b]y completing the applicable sections of Subpart A, the Agency expects to identify and maintain an appropriately sized and environmentally sustainable road system that is responsive to ecological, economic, and social concerns.”

that “[b]y completing the applicable sections of Subpart A, the Agency expects to identify and maintain an appropriately sized and environmentally sustainable road system that is responsive to ecological, economic, and social concerns.”¹¹ The memo directed that each forest must complete a travel analysis process, which analyzed the risks, benefits (i.e. access needs), and costs of their road system that incorporated *all* system roads. The new deadline was set as the end of fiscal year 2015. The resulting travel analysis reports were to be accompanied by a map and list of roads identifying which are “likely needed” and which are “likely unneeded.” Upon concerns by some local governments and proponents of motorized recreation, the Washington Office replaced the 2010 memo with another in 2012 that explained, “...travel analysis does not trigger the NEPA. The completion of the Travel Analysis Process is an important first step towards the development of the future minimum road system (MRS).”¹² The 2012 memo included the triangle diagram (below) describing where the agency viewed roads analysis in relation to NEPA analysis.

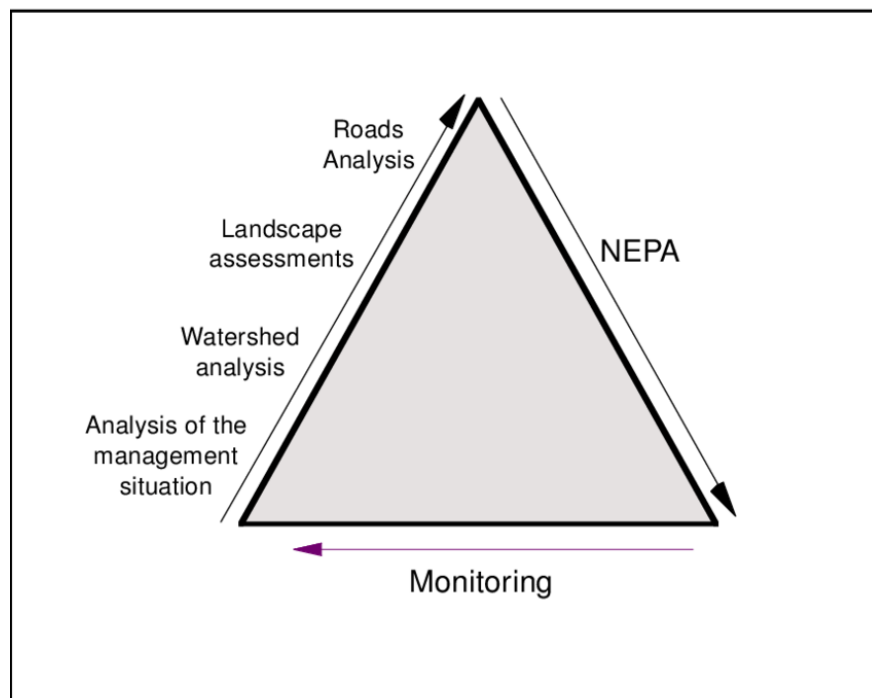


Figure 3. Excerpted from the 2012 Forest Service memo explaining the distinction between the analysis step and minimum road system decisions.

The 2012 memo retained the requirement that each forest complete travel analysis by 2015, which most did. The next step was to use travel analysis recommendations to inform NEPA analyses (the right side of the triangle diagram) and decisions to identify a minimum road system, a process that has yet to occur across most Forest Service lands.

¹¹ See Forest Service Memorandum, November 10, 2010 by Deputy Chief Joel Holtrop.

¹² See Forest Service Memorandum, March 29, 2012 by Deputy Chief Leslie Weldon, (stating, “[t]he next step in identification of the MRS is to use the travel analysis report to develop proposed actions to identify the MRS. These proposed actions generally should be developed at the scale of a 6th code subwatershed or larger. Proposed actions and alternatives are subject to environmental analysis under NEPA. Travel analysis should be used to inform the environmental analysis.”).

Reviews of the Forest Service Travel Analysis Process

The Travel Analysis Process had flaws from the beginning. In an effort to support individual forest autonomy, the Washington Office provided very little direction in how forests should analyze their road systems, how to estimate costs and what criteria to use in determining needed vs. unneeded roads. This led to travel analysis processes that varied widely between regions, with some containing systemic flaws.

In 2016, after repeated examples of problematic processes and reports brought to the attention of the USFS Washington Office (WO) by The Wilderness Society and WildEarth Guardians, the U.S. Department of Transportation John A. Volpe National Transportation Systems Center (Volpe) was contracted to review a random sample of travel analysis reports from each region to provide third-party feedback. In total, Volpe reviewed the travel analysis processes and reports from 38 of the 154 forests. The Volpe Center shared its findings in a draft report shared internally within the Forest Service.¹³ The draft report contained several important observations and listed three overarching concerns:

- A lack of clarity regarding the process;
- Failure to follow 36 CFR 212.5(b) direction and Washington Office guidance; and
- Omission of required documents, referenced appendices, or key supporting materials.

Out of numerous critical observations, one top issue was ambiguity in how a given road was rated overall (e.g., high risk, low risk, high benefit, etc.¹⁴). Volpe found that 14 travel analysis reports, 37% of total reviewed, failed to explain what particular combination of factors led a road to be classified as high risk or high benefit. Some forests used flow charts or prioritized certain factors (e.g., all roads covered by easements or cooperative agreements are considered overall high benefit roads), while others simply broke down the scoring ranges arithmetically (e.g., after adding the scores for all risk factors on each road, those roads with scores in the top 33 percent of possible scores are high risk). The review team even flagged travel analysis reports where no methodology was described or justified at all.

Another top issue was how the results informed recommendations related to the minimum road system. Most forests identified particular risk/benefit categories, such as all high-risk and low-benefit roads, to recommend as “likely not needed” or for specific actions, such as changing the road maintenance level (a lower maintenance level means the road is less costly to maintain). Yet, Volpe found 15 travel analysis reports (39%) did not describe any method for developing recommendations, although a few simply did not explain their rationale for making exceptions to an overall approach.

Further, Subpart A directs that the minimum road system should “reflect long-term funding expectations.” Volpe found that forests and regions differed widely in how they analyzed and presented estimates of future funding available for road maintenance. In most cases, forests estimated only an annual basic maintenance cost for the current road system, which omitted costs for the recommended minimum road system or for the backlog of deferred maintenance. The review found few forests’ proposed minimum road systems that were actually in alignment with expected budgets. Ten travel analysis reports (26%) either did not include a financial analysis or the numbers were vague with no discussion of how they were derived.

¹³ Volpe Travel Analysis Subpart A Review – Summary of Observations – Draft. U.S. Department of Transportation Volpe Center for the U.S. Forest Service. June 20, 2016.

¹⁴ Road risk referenced how big of an impact the road had on natural resources such as wildlife, fish and water quality. Road benefit referenced how important the road was for recreation, timber, and wildfire management.

The Volpe review demonstrated the poor quality of the travel analysis reports and a need for the entire process to be redone using more consistent guidelines, which has yet to occur. If an entire new process is not feasible forest wide or at a district level, then at a minimum, each national forest should update their minimum road system recommendations during project development. Additionally, updating previous travel analysis reports consistently as part of project-level planning will ensure forest officials incorporate the best available science and changing resource conditions when determining specific road risks and benefits. Ideally, each national forest will fully comply with Subpart A by identifying their minimum road system through NEPA and move forward with implementation on a landscape scale, such as at the district, multi-district, or forest level. Until the Forest Service fully complies with its Subpart A duties, there will be a need to reevaluate and revise travel analysis reports on a consistent basis, and the objectives of the 2001 Roads Rule are left unaddressed.

Lack of Progress Towards Identifying a Minimum Road System

It's important to remember that the overall goals of the Travel Management Rule are to reduce the harm to wildlife, habitat, landscapes, and water from an oversized and deteriorating road system. Establishing a minimum road system is a critical step, which then can more strategically direct restoration efforts. Roads restoration will increase climate resiliency, improve ecological integrity, and decrease habitat fragmentation across the entire forest system, thereby facilitating better connectivity for fish and wildlife. Numerous authors have suggested removing roads is necessary to: 1) restore water quality and aquatic habitats, and 2) improve habitat security and restore terrestrial habitat.¹⁵ However, given declining Forest Service capacity to maintain or treat roads, there is a need for some prioritization. At a landscape scale, certain roads and road segments pose greater risks to terrestrial and aquatic habitat integrity than others. Hence, restoration strategies must focus on identifying and removing, or at least mitigating the higher risk roads. Many forests identified these “high risk roads” in Travel Analysis Reports, but have not yet reduced those risks. Additionally, areas with the highest ecological values, such as being adjacent to a roadless area or dissecting critical wildlife habitat, should also be prioritized for restoration efforts. Yet, few forests are prioritizing road removal or moving towards the sustainable transportation system that was called for over 20 years ago.

Overall, the Forest Service has made limited progress complying with the 2001 Roads Rule, even though most national forests completed some version of a Travel Analysis Report in 2015. As noted in the section above, evaluations of those reports reveal numerous inconsistencies and a systemic failure to identify an affordable road system. Most forests have yet to fully use travel analysis recommendations to identify a minimum road system in NEPA decisions on a broad scale, such as at a forest or district level. Rather, when the agency does include Subpart A compliance in its NEPA decisions, it is often at a project level. Even then, such inclusion is the exception and rarely results in actually identifying a minimum road system that is both ecologically and economically sustainable.

For example, the Payette National Forest's Huckleberry Landscape Restoration Project decision identified a minimum road system that failed to consider how its deferred maintenance backlog would affect the agency's ability to maintain the system after project completion, and failed to disclose the long-term ecological

¹⁵ Gucinski et al. 2000, Hebblewhite et al. 2009. See also: The Environmental Consequences of Forest Roads and Achieving a Sustainable Road System (WildEarth Guardians, 2020).

consequences from its acknowledged lack of maintenance capacity. In addition, all the subwatersheds in the project area are functioning at unacceptable risk for road densities and location, yet the identified minimum road system fails to move these rankings even to the next category of functioning at risk (FR), let alone functioning appropriately (FA). When asked to at least decommission enough roads to improve the rankings for just the Riparian Conservation Areas (RCAs), the Forest Service refused, stating that “[i]ncluding enough RCA road decommissioning to achieve FR in the Road Density/Location WCI would not address... the Forest Plan emphasis on active management in these subwatersheds.”¹⁶ Few examples exist that so clearly show the agency’s bias for cutting trees over identifying a minimum road system that will provide for the protection of national forest system lands and reflect long-term funding expectations.

As more years pass with the Forest Service failing to identify, let alone implement, an ecologically and economically sustainable forest road system, recommendations in travel analysis reports are becoming more outdated.

The graph below illustrates this lack of progress. Total system miles (blue line) have barely changed since the 2001 Roads Rule. Although there is a slight decrease in open roads and an increase in closed roads, this is likely more indicative of storms washing out roads, forcing closure, rather than thoughtful moves towards a sustainable transportation system.

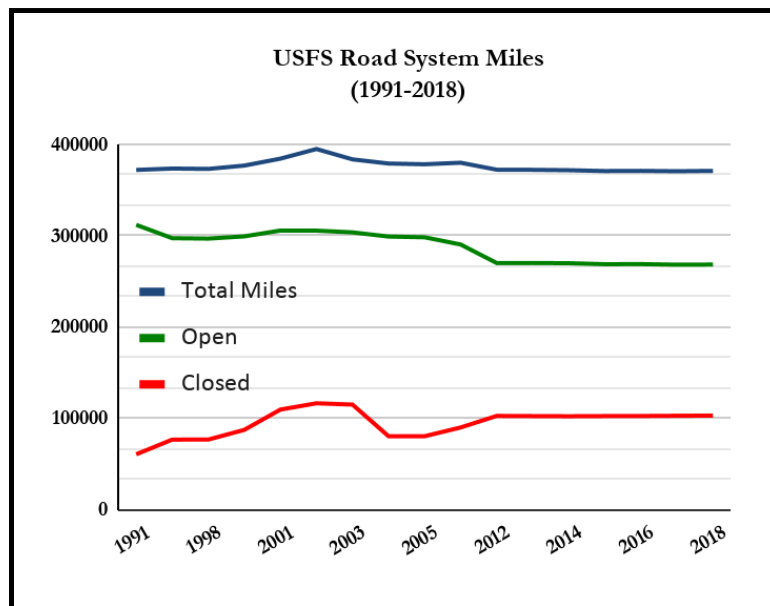


Figure 4. Road system mileage shows only minor changes in the past 30 years. Source: USFS

Notably, Forest Service Region 6 (Pacific Northwest) has shown some commitment toward identifying and implementing a minimum road system. Many forests in the region identify road challenges in their NEPA project purpose/need statements, use information from their travel analysis reports, develop matrices displaying all information for each road and recommendations from travel analysis reports, include detailed maps and photos, and some even identify the minimum road system within the project boundary. The following are example purpose/need statements from projects in the region:

¹⁶ Huckleberry Landscape Restoration Project FEIS Vol 2. Appendix 8, p. 14

- “reduce the density of open road systems in this project area through closure or decommissioning”;
- “identify a road system that meets transportation needs while reducing aquatic risk associated with specific roads”;
- “sustainably manage the network of roads in the project area”; and
- “identify the minimum road system needed for safe and efficient travel, and for administration, utilization, and protection of National Forest System lands”.

Even with the incorporation of roads in most projects in Region 6 and the identification of the minimum road system in some projects, nearly all forests across the U.S. have yet to fully comply with Subpart A requirements, let alone, achieve a sustainable transportation system that is “appropriately sized and environmentally sustainable... that is responsive to ecological, economic, and social concerns”.¹⁷ Few remedies exist that can effectively spur the Forest Service to comply with its duties under Subpart A, even within the courts.

Case Law Addressing Compliance with Subpart A

There is limited case law addressing the Forest Service’s duty to identify the minimum road system and prioritize roads for decommissioning under Subpart A of the Travel Management Rule. The only Circuit Court decision on point is from the Ninth Circuit Court of Appeals in *Alliance for the Wild Rockies v. U.S. Forest Service*, 907 F.3d 1105 (9th Cir. 2018). There, the Ninth Circuit determined that the Forest Service has discretion to designate a minimum road system that exceeds the number of miles in the minimum road system recommended by the project’s travel analysis report.¹⁸ Alliance for the Wild Rockies (Alliance) challenged the Forest Service’s approval of the Lost Creek-Boulder Creek Landscape Restoration Project on 80,000 acres of the Payette National Forest in Idaho for violations of the National Forest Management Act (NFMA), National Environmental Policy Act (NEPA) Endangered Species Act (ESA), and Subpart A of the Travel Management Rule (TMR).¹⁹ The District Court for the District of Idaho entered summary judgment for the Forest Service on all claims.²⁰ On appeal, the Ninth Circuit affirmed in part as to the NEPA and TMR claims, and reversed and remanded in part as to the NFMA claims, dismissing the ESA claim as moot.

Specific to the TMR claim, Alliance alleged that the Forest Service’s decision to designate a minimum road system for the project area that exceeded the number of miles in the minimum road system recommended in the Forest Service’s travel analysis report was arbitrary and capricious.²¹ The Forest Service prepared a travel analysis report for the Lost Creek Project that identified 474 existing miles of roads in the project area, 240 miles of which it recommended for the minimum road system and 68 miles for decommissioning.²² However, in the final record of decision for the project, the Forest Service designated 401 miles as the minimum road system and identified 68 miles identified for decommissioning.²³ The Ninth Circuit reasoned that the agency’s decision did not render the project’s minimum road system arbitrary or capricious where the Forest Service

¹⁷ 36 C.F.R. 212.5(b)

¹⁸ 907 F.3d 1105 (9th Cir. 2018) at 1118.

¹⁹ *Id.* at 1109-1112.

²⁰ *Id.* at 1112.

²¹ *Id.* at 1117-18.

²² *Id.* at 1117-18.

²³ *Id.* at 1118.

fully explained its decision, and considered all of the factors listed under 36 C.F.R. § 212.5.²⁴ (noting the Final Environmental Impact Statement (FEIS) contained “a robust discussion of maintenance costs . . . and accounts for ‘long-term funding expectations’”).

The few lower court decisions addressing Subpart A²⁵ afford the Forest Service considerable discretion in how to identify the minimum road system consistent with the rule. For example, in *Bark v. United States Forest Service*, 393 F. Supp. 3d 1043 (D. Or. 2019), *rev’d and remanded on other grounds*, 958 F.3d 865 (9th Cir. 2020), conservation groups challenged the Forest Service’s forest thinning project on Mt. Hood National Forest as violating NEPA, NFMA, and the TMR. The groups claimed the project improperly identified a minimum road system without complying with Subpart A of the TMR.²⁶ The District Court for the District of Oregon rejected the challenge, holding that the project did not actually identify a minimum road system, and it was not required to do so;²⁷ (stating, “I find no statutory basis for requiring the Forest Service to identify a minimum road system as part of the CCR Project.”). The court explained that minimum road system “proposals may be incorporated into landscape-level restoration projects such as this one,” or the Forest Service “may also choose to identify a minimum road system as a stand-alone proposal.”²⁸

In addition to discretion about how to identify the minimum road system, lower courts have concluded the Forest Service has discretion about when to identify it. In *Center for Sierra Nevada Conservation v. U.S. Forest Service*, 832 F.Supp.2d 1138 (E.D. Cal. 2011), the District Court held the Forest Service has discretion to complete travel management planning under Subpart B of the TMR before identifying a minimum road system under Subpart A. The Court explained, “the Forest Service Manual suggests that the Forest Service may address Subparts A and B in any order.”²⁹

Regardless of this broad discretion, courts have required the Forest Service to be clear about its actions. In *Idaho Conservation League v. Guzman*, 766 F. Supp. 2d 1056 (D. Idaho 2011), the District Court directed the Forest Service to amend its decision to eliminate any suggestion that the agency made a minimum road system determination. The Court noted, “there is no dispute that the Forest Service could not properly designate a minimum road system, because it did not follow the requisite public notice requirements.”³⁰

The District Court in *Friends of Bitterroot v. Marten*, No. 9:20-cv-00019-DLC, 2020 WL 5804251 (D. Mont. Sept. 29, 2020), reached a similar result. Conservation groups challenged the Forest Service’s designation of a minimum road system for a vegetation management project on the Bitterroot National Forest for violating the TMR, NEPA, and APA by omitting the required analysis and as “substantially different” than what was recommended in the project travel analysis report with explanation.³¹ The Court concluded the Forest Service’s implementation of a minimum road system lacked the necessary analysis where it addressed only one

²⁴ *Id.* at 1118.

²⁵ In *MN Center for Environmental Advocacy v. Forest Service*, 914 F. Supp. 2d 957 (D. Minn. 2012), conservation groups challenged the Superior National Forest’s Forest Plan, alleging violations of NFMA, NEPA, ESA, and the Executive Orders and the agency’s own regulations. Specifically, the plaintiffs alleged the Forest Service failed to identify the minimum road system. *Id.* at 981 (describing Count VII). Yet because the groups did not brief any argument for that claim, the court deemed the issue abandoned. *Id.* at 981 n.14.

²⁶ 393 F. Supp. 3d at 1062.

²⁷ *Id.*

²⁸ *Id.*

²⁹ 832 F.Supp.2d 1138 (E.D. Cal. 2011), at 1149-57.

³⁰ 766 F. Supp. 2d 1056 (D. Idaho 2011), at 1078-79.

³¹ *Friends of Bitterroot v. Marten*, No. 9:20-cv-00019-DLC, 2020 WL 5804251 (D. Mont. Sept. 29, 2020) at *10.

of the four factors required under 36 C.F.R. § 212.5(b)(1).³² However, recognizing that the agency's decision to implement a minimum road system is wholly discretionary, the Court remanded without vacatur and instructed the Forest Service to strike any language in the decision that refers to implementation of a minimum road system.³³

These are discouraging results from the courts resulting in ongoing delays in identifying the minimum road system, but more importantly, implementation that begins to reverse the harm caused by decades of unfettered road construction.

Recommendations for Achieving a Sustainable Forest Road System

Since the 2001 Roads Rule went into effect, the Forest Service has yet to identify a minimum road system or take action to significantly decrease its massive forest road network that exceeds 370,000 miles and has a deferred maintenance backlog of over \$3 billion. USDA National Forest System statistics from Fiscal Years 2012 to 2018 show only a 0.35% decrease in road system miles. Numerous factors demonstrate the need for the agency to correct this situation, not the least of which is the growing climate crisis, a failure to substantially reduce the deferred maintenance backlog, the continued harmful effects to fish, wildlife, and their habitats, and the road washouts/failures that eliminate recreational access for millions of Americans to public lands. Given the agency's failure thus far to rightsize the forest road system, Congress and the new administration must step in and take decisive action not only to ensure identification of a minimum road system for each national forest and grassland, but also to direct that the agency takes measurable actions to reduce road-related ecological impacts as it moves to achieve a more sustainable system. Toward this end, we offer the following recommendations:

- **National Forest Units:**

- **Projects**

- NEPA Analysis Stage*

- Update travel analysis reports, including reevaluating risks and benefits and incorporating economics as part of the project analysis based on new consistent methods developed at the national level (see below).
 - Use travel analysis reports, with updated information and field verification, to inform proposed actions.
 - Include road-related actions and road decommissioning in every project.
 - Include the need “to identify and implement a minimum road system” as a project purpose and then identify the minimum road system.
 - Include the need “to reduce risks to aquatic resources and wildlife from roads” as a project purpose.
 - Incorporate analysis of transportation vulnerabilities due to climate change and actions for increasing resilience.
 - Identify high priority roads that should be removed to expand a roadless area or connect/improve a wildlife corridor or reduce fragmentation of key habitat.

³² *Id.* at 12.

³³ *Id.*

- Include unauthorized or other non-system roads/trails/routes in project analysis and incorporate in road/route density calculations.
- Improve understanding of road-related risks/benefits among the public by sharing information, such as photos on road conditions (i.e. driveability), storm-damage, road maintenance costs and budgets, etc.

Project Implementation Stage

- Prioritize timing of road decommissioning and treatments in locations where roads impact water quality, wildlife, and/or habitat.
- Use road decommissioning methods that restore natural ecological conditions, and fully remove road features (i.e. decompacting hardened road surfaces hydrologically disconnecting from streams; native vegetation seeding/planting).
- Hire contractors that are experienced in road treatments and adjust as specific field conditions warrant.
- Perform Best Management Practices (BMP) audits and use field monitoring data to analyze the effectiveness of specific design criteria and practices, making adjustments as necessary. Release monitoring reports and audits annually.
- Monitor decommissioned roads to ensure illegal motorized vehicle incursions have not occurred or caused additional harm.
- Share outcomes and environmental benefits to the public via multiple outreach methods.

o **Land management plans**

- Include specific components that will ensure the forest achieves an ecologically sustainable road system that also provides for the viability of fish and wildlife species.
- Include specific components that ensure all system roads are maintained to their objective standard through standards and guidelines.
- Incorporate ecologically-based road/motorized trail density standards as part of each revised forest plan.
- Set the identification of the minimum road system as an objective, with annual decommissioning targets to ensure the forest actually implements its identified minimum road system.

● **National Forest Regions**

- o Set regional requirements that forest units include the need “to identify and implement a minimum road system” as a project purpose where the agency has yet to do so.
- o Ensure accountability by requiring annual road decommissioning targets be met by each forest supervisor in the region and is a performance metric reviewed by the Regional Forester.
- o Prioritize existing funding to remove excessive and damaging roads from the system.
- o Incorporate robust outreach and education to increase understanding of the risks, benefits and costs of the road system.

- **USFS Washington Office**

- Develop updated and consistent methods for the travel analysis process that will ensure the proper assessment and measurement of road-related risks and benefits based on science, and for determining long-term funding expectations. As part of the updated travel analysis process, the methods would direct each forest to consider issues not fully analyzed in previous efforts, specifically climate change vulnerabilities, road/motorized/unauthorized road and trail densities, habitat connectivity, and the increased wildfire risks from the forest road system.
- Issue a new memorandum establishing a deadline for each national forest to identify unneeded roads and identify the minimum road system for each national forest unit in compliance with Subpart A. The memo would also direct each forest unit to update their Travel Analysis Reports using consistent methods that have been established at the national level.
- Demand accountability for Subpart A implementation by developing performance metrics that Regional Foresters must achieve.
- Provide annual reports for the public and Congress on progress towards achieving a sustainable road system, an update on road-related challenges, and an accurate accounting of costs.
- At all levels, incorporate climate change assessments to drive strategic implementation plans.
- At all levels, improve coordination between engineering and resource staff to facilitate integrated restoration projects that involve road projects to meet ecological goals.

- **Congress**

- Reinstate, permanently authorize, and adequately fund the Legacy Roads and Trails program as a budgetary line item that is specifically targeted to reduce impacts to water quality and wildlife from the road system through effective decommissioning of both system and unauthorized roads.
- Require annual accounting and reporting of Legacy Roads and Trails accomplishments and ongoing needs.
- Require annual accounting and reporting of the Forest Service's progress in achieving a sustainable road system.

As climate change impacts on national forests increase and intensify, the Forest Service has the ability to make progress on at least one front—reducing the oversized and harmful road system to one that is more sustainable. The tools are already present: various roads analyses, budgetary benefits, an expansive roads database, and an urgent need. With support from Congress and clear administrative guidance, the Forest Service can actually make real progress in achieving a road system that ensures protection of national forest lands and provides sustainable access. There is no more time to waste.