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Comments: August 11, 2016

Annette Fredette
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Submitted via e-mail: 4FRI_comments@fs.fed.us

Re: 4FRI Rim Country Scoping Comments

Dear Ms. Fredette and the 4FRI Rim Country Planning Team:

Thank you for the opportunity to provide scoping comments on the 4FRI Rim Country Project. WildEarth Guardians is a nonprofit conservation organization with offices in Tucson, Arizona, Santa Fe, New Mexico, and five other states. WildEarth Guardians has more than 160,000 members and activists across the United States and the world. We protect and restore wildlife, wild places, wild rivers, and the health of the American West.

The issues we would recommend you incorporate into your Draft EIS fall under two primary issues: roads and Mexican spotted owl.

Minimum Road System

The Forest Service faces many challenges with its vastly oversized, under-maintained, and unaffordable road system. The impacts from roads to water, fish, wildlife, and ecosystems are tremendous and well documented in scientific literature. Given that the 4FRI Rim Country Project is considering changes to a large number of miles of roads, and given its large geographic scale, this is precisely the type of project where the Forest Service must consider its Travel Analysis Reports (TARs) for the three national forests, and more importantly, it must identify the Minimum Road System (MRS).1 We urge the Forest Service to carefully evaluate the proposed 4FRI Rim Country Project and its alternatives through this lens. This type of large-scale project is the perfect opportunity to begin making on-the-ground progress towards an economically and environmentally sustainable road network.

We are very encouraged to see this project considering ecosystem restoration on a large scale to address many of the factors that continue to degrade ecosystems. We fully support ecosystem

1 36 C.F.R. § 212.5(b)(1) ("For each national forest . . . the responsible official must identify the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of National Forest System lands.").

restoration, especially the project components that address water quality and aquatic habitats and improve watersheds and forest resiliency by returning expensive and deteriorating forest roads to the wild.

To address its sustainable and deteriorating road system, the Forest Service promulgated the Roads Rule (referred to as "subpart A") in 2001. 66 Fed. Reg. 3206 (Jan. 12, 2001); 36 C.F.R. part 212, subpart A. The Roads Rule created two important obligations for the agency. One obligation is to identify unneeded roads to prioritize for decommissioning or to be considered for other uses. 36
C.F.R.§ 212.5(b)(2). Another obligation is to identify the MRS needed for safe and efficient travel and for the protection, management, and use of National Forest system lands. Id. § 212.5(b)(1).2 The MRS is the road system, determined by the Forest Service, as needed to:

*Meet resource and other management objectives adopted in the relevant land and resource management plan,
*Meet applicable statutory and regulatory requirements,
*Reflect long-term funding expectations, and
*Ensure that the identified system minimizes adverse environmental impacts associated with road construction, reconstruction, decommissioning, and maintenance.

Id. (hereafter, MRS factors). See also Memorandum from Leslie Weldon to Regional Foresters et al. on Travel Management, Implementation of 36 CFR, Part 212, Subpart A (Mar. 29, 2012) (hereafter, 2012 Weldon Memo). The goal of subpart A is "to maintain an appropriately sized and environmentally sustainable road system that is responsive to ecological, economic, and social concerns."3

The Forest Service's Washington Office has issued a series of directive memoranda that outline how the agency expects forests to comply with subpart A.4 Pursuant to its own regulations and directive memoranda, the Forest Service must consider the valid portions of its TARs and begin to determine the MRS in its analysis of site-specific projects of the appropriate geographic size under NEPA. See 2012 Weldon Memo at 2 (directing forests to "analyze the proposed action and alternatives in terms of whether, per 36 CFR 212.5(b)(1), the resulting [road] system is needed"). By analyzing whether a proposed project is consistent with the relevant portions of the TAR, and considering the MRS factors under 36 CFR 212.5(b)(1), the Forest Service expects each forest to identify the MRS for particular forest segments. Id. ("The resulting decision [in a site-specific project] identifies the MRS and unneeded roads for each subwatershed or larger scale").

2 In promulgating its rules, the Forest Service indicated that "[t]he requirement to identify roads for decommissioning is '[e]qually important' as the overall identification of the minimum road system." Center for Sierra Nevada v. U.S. Forest Service, 832 F. Supp. 2d 1138 (E.D. Cal. 2011) (quoting 66 Fed. Reg. at 3207).
3 See 2012 Weldon Memo at 1 ("The national forest road system of the future must continue to provide needed access
for recreation and resource management, as well as support watershed restoration and resource protection to sustain healthy ecosystems."). See also Memorandum from Joel Holtrop, U.S. Forest Service Washington Office, to Regional Foresters et al. (Nov. 10, 2010) (hereafter, 2010 Holtrop Memo) ("Though this process points to a smaller road system than our current one, the national forest road system of the future must provide needed access for recreation and resource management and support watershed restoration and resource protection to sustain healthy ecosystems and ecological connectivity.").
4 2010 Holtrop Memo; 2012 Weldon Memo; Memorandum from Leslie Weldon, U.S. Forest Service Washington Office,
to Regional Foresters et al. (Dec. 17, 2013) (hereafter, 2013 Weldon Memo) (supplementing and reaffirming the 2012 Weldon Memo).

It is now time for the Forest Service to take the next step under subpart A: identify the MRS through site-specific projects subject to NEPA.5

This project provides the appropriate geographic scale for the Forest Service to identify the MRS. The Forest

Service's Washington Office has directed forests to use the TAR to identify the MRS for proposed actions at the scale of a 6th code subwatershed or larger. 2012 Weldon Memo at 2. See also 2012 FAQs (noting that "travel analysis and identification of the MRS could be done at the same scale, if that scale is at the ranger district or unit level."). Plus, consideration of the MRS factors at 36 C.F.R. § 212.5(b)(1) only makes sense on a larger geographic scale.

Pursuant to the plain language of the agency's own regulations and directive memoranda interpreting those regulations, the Forest Service must identify the MRS when analyzing the 4FRI Rim Country Project under NEPA. See, e.g., 2012 Weldon Memo at 2 ("Travel analysis should be used to inform the environmental analysis.")

Subpart A directs the agency to "identify the roads on lands under Forest Service jurisdiction that are no longer needed."6 It refers to all roads, not just National Forest System roads. The rules define a road as "[a] motor vehicle travelway over 50 inches wide, unless designated and managed as a trail."7

The Forest Service must ensure that the actions proposed under the 4FRI Rim Country Project are consistent with subpart A. Here, this project proposes to decommission approximately 230 miles of system and unauthorized roads on the Coconino and Apache-Sitgreaves and 20 miles of unauthorized roads on the Tonto, and improve 150 miles of road, and build 350 miles of temporary roads. The forest must assess these proposed actions in relation to the TARs as well as the factors for an MRS, with the goal of minimizing adverse environmental impacts. Specifically, the decisions to close, decommission, or maintain certain roads should reflect the results from the risks and benefits analysis in the TARs. Routes identified for decommissioning through the TARs or other processes within the project area must be closed, decommissioned, and reclaimed to a stable and more natural condition during the life of the project. To the extent that the final decision in this project differs from what is recommended in the TARs, the Forest Service must provide an explanation for that inconsistency.

The Forest Service should prioritize road decommissioning in this project to enhance landscape connectivity and ecological integrity based on:
*Effectiveness in reducing fragmentation, connecting un-roaded and lightly-roaded areas, and improving stream segments, with a focus on inventoried roadless areas, important watersheds, and other sensitive ecological and conservation areas and corridors;

5 See 2012 Weldon Memo ("The next step in identification of the MRS is to use the travel analysis report to develop proposed actions to identify the MRS . . . 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.").
6 36 C.F.R. § 212.5(b)(2). See also Center for Sierra Nevada, 832 F. Supp. 2d at 1155 ("The court agrees that during the Subpart A analysis the Forest Service will need to evaluate all roads, including any roads previously designated as open under subpart B, for decommissioning.").
7 36 C.F.R. § 212.1.

*Benefit to species and habitats, including restoring aquatic and terrestrial habitats and habitat connections;
*Addressing impaired or at-risk watersheds;
*Achieving motorized route density standards; and
*Enhancement of quite recreation experiences.

The Forest Service should use the National Best Management Practices for Water Quality Management on National Forest System Lands (Volume 1, April 2012) (available at http://www.fs.fed.us/biology/resources/pubs/watershed/FS_National_Core_BMPs_April2012.pdf) to guide road

management in determining the MRS. The BMP program "was developed to improve agency performance and accountability in managing water quality consistent with the Federal Clean Water Act (CWA) and State water quality programs" and "[c]urrent Forest Service policy directs compliance with required CWA permits and State regulations and requires the use of BMPs to control nonpoint source pollution to meet applicable water quality standards and other CWA requirements." National Best Management Practices. It directs forests to:

*Design the transportation system to meet long-term land management plan desired conditions, goals, and objectives for access rather than to access individual sites.
*Limit roads to the minimum practicable number, width, and total length consistent with the purpose of specific operations, local topography, geology, and climate to achieve land management plan desired conditions, goals, and objectives for access and water quality management.

Id. at 104.

We urge the Coconino, Apache-Sitgreaves and Tonto National Forests to limit their road networks to those roads that are necessary for access and management, and which can be adequately maintained within agency budgets and capabilities. While it appears the Coconino and Apache- Sitgreaves are taking this responsibility serious, it also appears the Tonto is not. We encourage road decommissioning and reductions in road density to improve watershed conditions and aquatic health in streams, as well as to protect and enhance wildlife habitat and connectivity. The Forest Service should continue working to reduce sediment delivery from roads, improve or remove road crossings, and close or decommission roads that cannot be adequately maintained.

National Forests provide a range of significant environmental and societal benefits, including clean air and water, habitat for myriad wildlife species, and outdoor recreation opportunities for millions of visitors and local residents each year. See 66 Fed. Reg. 3244, 3245-47 (Jan. 12, 2001) (Preamble to Roadless Area Conservation Rule describing key ecosystem and other services of roadless National Forest lands). The Forest Service's extensive and decaying road system, however, poses a growing liability to the future ability of the National Forests to provide critical environmental, ecosystem, and recreation services. Collectively, the National Forest System contains over 370,000 miles of roads (not even counting the tens of thousands of additional miles of unclassified, non-system, temporary, and user-created roads). That is nearly eight times the length of the entire U.S. Interstate Highway System. The National Forest road system is primarily a byproduct of the big timber era. The system is often convoluted, unmanageable, and ineffective at meeting 21st century transportation needs.
Much of the system is in serious disrepair: as of the end of Fiscal Year 2015, the National Forest

road system had a 3 billion dollar maintenance backlog. USDA, Forest Service, National Forest System Statistics 2015.

Well-sited and maintained roads provide important services to society. But the adverse ecological and environmental impacts associated with the Forest Service's massive and deteriorating road system are well documented. Those adverse impacts are long-term, occur at multiple scales, and often extend far beyond the actual "footprint" of the road. Included in these comments is a 2014 literature review from The Wilderness Society that surveys the extensive and best available scientific literature-including the Forest Service's General Technical Report synthesizing the scientific information on forest roads (Gucinski 2001)-on a wide range of road-related impacts to ecosystem processes and integrity on National Forest lands. See The Wilderness Society, Transportation Infrastructure and Access on National Forests and Grasslands: A Literature Review (May 2014) (attached as Exhibit A).

Erosion, compaction, and other alterations in forest geomorphology and hydrology associated with roads seriously impair water quality and aquatic species viability. See Exhibit B at 2-4. Roads disturb and fragment wildlife habitat, altering species distribution, interfering with critical life functions such as feeding, breeding, and nesting, and resulting in loss of biodiversity. Id. at 4-6. Roads facilitate increased human intrusion into sensitive

areas, resulting in poaching of rare plants and animals, human-ignited wildfires, introduction of exotic species, and damage to archaeological resources. Id. at 6, 9. Roads are also major vectors for spreading weeds.

A robust analysis under NEPA of the forest road system and its environmental and social impacts is especially critical in the context of climate change. As the CEQ's recent draft guidance on addressing climate change in NEPA analyses recognizes, "[c]limate change can increase the vulnerability of a resource, ecosystem, human community, or structure, which would then be more susceptible to climate change and other effects and result in a proposed action's effects being more environmentally damaging." CEQ, Revised Draft Guidance for Greenhouse Gas Emissions and Climate Change Impacts (Dec. 18, 2014), at 22. The draft CEQ guidance makes clear that "[s]uch considerations are squarely within the realm of NEPA, informing decisions on whether to proceed with and how to design the proposed action so as to minimize impacts on the environment, as well as informing possible adaptation measures to address these impacts, ultimately enabling the selection of smarter, more resilient actions." Id.

Climate change intensifies the adverse impacts associated with roads. The Forest Service should consider the risk of increased disturbance when analyzing this proposed project. For example, as the warming climate alters species distribution and forces wildlife migration, landscape connectivity becomes even more critical to species survival and ecosystem resilience. Id. at 9-14. See also USDA, Forest Service, National Roadmap for Responding to Climate Change at 26 (2011), available at http://www.fs.fed.us/climatechange/pdf/Roadmapfinal.pdf (recognizing importance of reducing fragmentation and increasing connectivity to facilitate climate change adaptation).

Climate change is also expected to lead to more extreme weather events, resulting in increased flood severity, more frequent landslides, altered hydrographs, and changes in erosion and sedimentation rates and delivery processes. Many National Forest roads are poorly located and designed to be temporarily on the landscape, making them particularly vulnerable to these climate alterations. Even those designed for storms and water flows typical of past decades may fail under future weather scenarios, further exacerbating adverse ecological impacts, public safety concerns, and maintenance

needs. The Forest Service should analyze in detail the impact of climate change on forest roads and forest resources.

The President's Executive Order 13,653 (Nov. 2013) provides direction on "Preparing the United States for the Impacts of Climate Change." The Order recognizes that "[t]he impacts of climate change - including an increase in prolonged periods of excessively high temperatures, more heavy downpours, an increase in wildfires, [and] more severe droughts . . . - are already affecting communities, natural resources, ecosystems, economies, and public health across the Nation," and that "managing th[o]se risks requires deliberate preparation, close cooperation, and coordinated planning . . . to improve climate preparedness and resilience; help safeguard our economy, infrastructure, environment, and natural resources; and provide for the continuity of . . . agency operations, services, and programs." Exec. Order 13,653, § 1. To that end, the Order requires agencies to take various actions aimed at making "watersheds, natural resources, and ecosystems, and the communities and economies that depend on them, more resilient in the face of a changing climate." Id. § 3. For example, "recognizing the many benefits the Nation's natural infrastructure provides, agencies shall, where possible, focus on program and policy adjustments that promote the dual goals of greater climate resilience and carbon sequestration." Id. Agencies also must develop and implement adaptation plans that "evaluate the most significant climate change related risks to, and vulnerabilities in, agency operations and missions in both the short and long term, and outline actions . . . to manage these risks and vulnerabilities." Id. § 5(a).

The Forest Service's 2014 adaptation plan recognizes that the wide range of environmental and societal benefits provided by our national forests "are connected and sustained through the integrity of the ecosystems on these lands." See USDA Forest Service, Climate Change Adaptation Plan, page 58 (2014). The plan highlights USDA's

2010-2015 Strategic Plan Goal 2 of "[e]nsur[ing] our national forests . . . are conserved, restored, and made more resilient to climate change, while enhancing our water resources." Id. at 58. And consistent with section 5(a) of Executive Order 13,653, the plan identifies numerous climate change risks - including increased wildfire, invasive species, increasing water temperatures, extreme weather events, and fluctuating precipitation and temperature - that "pose challenges to sustaining forests and grasslands and the supply of goods and services upon which society depends, such as clean drinking water, forest products, outdoor recreation opportunities, and habitat." Id. at 60-64. With respect to transportation infrastructure specifically, the adaptation plan recognizes that, "[w]ith increasing heavy rain events, the extensive road system on NFS lands will require increased maintenance and/or modification of infrastructure (e.g. larger culverts or replacement of culverts with bridges)." Id. at 62.

The Forest Service's Climate Change Adaptation Plan points to a number of actions to address the risks of climate change to our forests, and in particular to forest roads. For example, the plan highlights the 2012 Planning Rule as a mechanism to ensure that "National Forest System . . . land management planning policy and procedures include consideration of climate change." Id. at 73. The final directives to the planning rule echo the importance of designing plan components "to sustain functional ecosystems based on a future viewpoint" and "to adapt to the effects of climate change." FSH 1909.12, ch. 20, § 23.11. The adaptation plan also points to Forest Service Manual 2020, which provides "Ecological Restoration and Resilience" directives designed "to restore and maintain resilient ecosystems that will have greater capacity to withstand stressors and recover from disturbances, especially those under changing and uncertain environmental conditions, including climate change and extreme weather events." Exhibit D at 73.

For all these reasons, the Forest Service must include the MRS as one of the alternatives in its analysis. Subpart A defines the MRS as that "needed for safe and efficient travel[;] for administration, utilization, and protection of [forest] lands[; and] to meet resource and other management objectives adopted in the relevant . . . plan." 36 C.F.R. § 212.5(b)(1).

Temporary Roads

Under NEPA, the Forest Service has a duty to consider the effects of its proposed action when added to the existing road and trail network. Wilderness Society v. U.S. Forest Service, 850 F. Supp. 2d 1144, 1157-58 (D. Idaho 2012) (holding the Forest Service was arbitrary and capricious to conclude that designating 94 miles of user-created routes as non-system routes would have no significant impact).

Here, the agency is proposing to construct an alarming amount - 350 miles - of temporary roads. Temporary roads must be closed within 10 years of completion of a project, per 16 U.S.C. 1608(a), unless the Forest Service re-evaluates the road and determines it to be necessary for the minimum road system. The Forest Service must ensure that the temporary roads will in fact be temporary by including monitoring and enforcement of the projects and 10 years following completion of the projects. The most obvious way to do this would be through a thorough tracking system for the temporary roads. Therefore, we specifically request that this project incorporates a tracking system for the huge volume of temporary roads in this project so that at any time the agency and the public can see which roads were built (including date and mileage), if the roads have been reclaimed, and when they were reclaimed.

During the project and for an additional 10 years after completion of the project, the temporary roads will continue to have very real impacts on the landscape. For example, temporary roads will continue to allow for harassment of wildlife, littering, fires, invasive plant distribution, and negative impacts to aquatic and riparian habitat, as well as the fish that depend on that habitat.

The agency must consider the effects of its proposal to construct temporary roads when combined with the effects of its minimum road system. It must also consider how construction of the proposed temporary roads will detract from the purpose of subpart A of the agency's own rules, to "identify the minimum road system needed for

safe and efficient travel and for administration, utilization, and protection of the National Forest System lands." 36 C.F.R. § 212.5(b). This is especially true if the Forest Service fails to provide assurances that the proposed temporary roads will in fact be closed within 10 years of completion of the relevant project.

We request that the DEIS addresses these effects from so-called temporary roads. To address these concerns regarding temporary roads, we request an alternative that dramatically reduces the temporary road mileage and requires the temporary roads to be limited to the absolute minimum existence, with a default time-frame of 3 months barring exceptional circumstances that call for a longer timeframe. Seasonal restrictions might also be appropriate, especially in important wildlife habitat (see MSO section, below).

The Forest Service must seriously analyze temporary roads, as seen in the United States District Court of Montana case, Native Ecosystems Council v. Krueger, 946 F.Supp.2d 1060 (2013). In that case, environmental groups challenged a timber sale project posed in the Beaverhead-Deerlodge National

Forest. The thinning and restoration project was set to involve construction of a large number of temporary roads. The Forest Service, after an Environmental Assessment and Wildlife Report were completed, stated that there would be no significant impact on grizzly bears. The Forest Service based this determination on road density statistics that failed to include temporary roads. Because the Forest Service entirely "[failed] to consider an important aspect of the problem", the case was remanded to the Forest Service to perform a new biological assessment to resolve the question of whether the Project "may affect" grizzly bears in the area.

Mexican Spotted Owl

The 4FRI Rim Country Project proposes mechanical thinning and/or prescribed fire on about 68,630 acres of Mexican spotted owl (MSO) protected activity centers (PACs) and over 128,800 acres of recovery habitat. In reference to these proposed actions, we make the following comments and considerations, all based on the 2012 MSO Recovery Plan8:

*We would like to see a better distinction between management actions and habitat needs in riparian habitat versus upland habitat. See id. at 271.
*"Ongoing climate change will result in unpredictable changes in habitat distribution and quality, and this creates considerable uncertainty in developing strategies to recover the owl. Again, this argues for preserving options where possible, as well as for attempting to account for potential changes in habitat distribution and quality." Id. at 250.
*"Given our lack of experience and demonstrated expertise in purposely creating the forest structure used by owls, the recommendations for PACs focus on minimizing management." Id. at 257.
*"In many cases, strategic treatments on surrounding and/or adjoining lands will reduce fire risk sufficiently so that, in the short term, treatments are not needed within PACs (Ager et al. 2007, Finney et al. 2007, Ager et al. 2010)." Id. at 258.
*"No mechanical or prescribed fire treatments should occur within PACs during the breeding season unless non-breeding is inferred or confirmed that year per the accepted protocol."
Id. at 261.
*There is reference in the scoping letter to a vague diameter limit within PACs. We request that limit be set at no more than 18 inches dbh, as per the 2102 MSO Recovery Plan at 268.
*Mechanical treatment should be limited to 20% of non-core PAC area within an EMU. Id. at 262.
*Seasonal restrictions should be implemented. Id.
*A robust monitoring program should be established. Id.
*Prescribed fire should be allowed to enter core areas only if it is expected to burn with low fire severity and intensity. Id. at 263.
*Within recovery foraging/non-breeding habitats, strive to retain trees greater than 24 inches dbh. Id. at 269.

8 U.S. Fish and Wildlife Service. 2012. Final Recovery Plan for the Mexican Spotted Owl (Strix occidentalis lucida), First Revision. U.S. Fish and Wildlife Service. Albuquerque, New Mexico, USA. 413 pp.

Thank you for your consideration of these scoping comments. Please keep me apprised of any developments on the 4FRI Rim Country Project.

Sincerely,

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