



October 2, 2015

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**Objection to Southwest Jemez Mountains Landscape Restoration Project  
Santa Fe National Forest  
Final Environmental Impact Statement and  
Draft Record Of Decision**

**Project name:** Southwest Jemez Mountains Landscape Restoration Project

**Deciding officials:** Forest supervisor, Santa Fe National Forest

**Project location:** Sandoval County, New Mexico

**Proposed decision:** The Selected Alternative authorizes the following activities for implementation over the next 8-10 years or until objectives are met:

- Mechanically treat approximately 30,000 acres of ponderosa pine and mixed conifer forest
- Use prescribed fire on approximately 77,000 acres
- Allocate 20 percent of ponderosa pine and 20 percent of dry mixed conifer vegetation types as old growth
- Create and maintain aspen stands
- Restore and revegetate riparian areas by planting native vegetation, stabilizing streambanks, and building exclosures to restrict impacts from grazing ungulates
- Protect and improve water flow from seeps and springs by removing competing vegetation
- Control nonnative and invasive plants using methods other than herbicides
- Protect cultural resources by treating vegetation and controlling erosion
- Improve riparian and aquatic wildlife habitat by installing instream structures
- Close and revegetate degraded campsites
- Re-open and reconstruct, if necessary, approximately 20 miles of existing closed roads and close them after use
- To support project activities, re-open and maintain approximately 87 miles of existing closed roads and close them after use.
- Construct approximately 12 miles of temporary roads for use on the project and decommission them when treatments are completed
- Decommission up to 100 miles of roads identified as candidates for decommissioning as part of this project

- Develop up to five gravel pits and access roads to provide gravel for road maintenance and improvement work  
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- Amend the Forest Plan with 12 site-specific, nonsignificant forest plan amendments

**Objector:** WildEarth Guardians

### **Objector's Notice and Interest**

NOTICE IS HEREBY GIVEN that WildEarth Guardians ("Guardians", "we") objects pursuant to 36 CFR § 218.7 to the objection reviewing officer from the Final Environmental Impact Statement (FEIS) and Draft Record of Decision (ROD) prepared for the Southwest Jemez Mountains Landscape Restoration Project ("SWJMLRP" or "project") on the Santa Fe National Forests. The Responsible Official is Santa Fe National Forest Supervisor Maria T. Garcia.

Legal notice of this objection period was published on August 19, 2015 in the Albuquerque Journal, the stated Newspaper of Record. It states the ROD and FEIS are subject to predecisional objection procedures and 36 CFR § 218(a).

WildEarth Guardians is a non-profit organization dedicated to maintaining, protecting, and restoring the native ecosystems of New Mexico and the American West. Guardians has an organizational interest in the proper and lawful management of the Santa Fe National Forest. Our members, staff, and board members participate in a wide range of recreational activities on these National Forests, including the areas proposed for logging and other treatments. Guardians represents approximately 105,000 total members and activists.

Guardians claims standing, additionally, to participate in the public land decision-making process on the grounds that we have been involved in National Forest management issues since our founding, with a particular emphasis on this region. Our members have hiked, fished, hunted and photographed these National Forests, including the portions of the project area that would be affected.

The procedural harm and direct physical impacts associated with this project detract from the ability of our members to be involved in the decision-making process of our public lands, and impact the outstanding natural beauty and biodiversity that makes the lands in and adjacent to the challenged project so appealing and desirable to our members who utilize and find enjoyment from these lands.

In addition, our members are taxpayers that are required to pay for the logging and roading activities being proposed. The irretrievable commitments of financial resources associated with this project are also borne by the American people as a whole. Guardians has legal standing to participate in the process and object to those projects it finds unacceptable and inconsistent with applicable laws and regulations.

Guardians participated significantly in the collaborative process and commented extensively during the opportunities to do so during the NEPA process associated with this project and our

comments shall be in the project file or record. Guardians objects to this project on the grounds the EIS and decision document are legally indefensible. Objector contends that with this project the Forest Service violates the National Environmental Policy Act (NEPA), the National Forest Management Act (NFMA), the Forest Plans (LRMP), the NFMA implementing regulations and rules, the Endangered Species Act (ESA), USFS TES species policy, as well as the Administrative Procedures Act (APA).

The reviewing officer may determine whether to discuss resolution. 36 C.F.R. § 218.11. Guardians believes a final decision implementing the SWJMLRP must:

1. Modify the selected alternative to eliminate road reconstruction and new construction.

## **Reasons**

The federal Administrative Procedure Act, 5 U. S. C. 706 (2) (A), prohibits an agency from acting in an arbitrary and capricious fashion. Fair and honest procedures are also an element of complying with NEPA. Under NEPA regulations, an EIS "shall provide full and fair discussion of significant environmental impacts." 40 C.F.R. 1502.1.

To assure that a "fair discussion" occurs, agencies are required to obtain "high quality" information, including "(a)ccurate scientific analysis." 40 C.F.R. 1500.1(b). The regulations are explicit that: "Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements." 40 C.F.R. 1502.24.

In particular the FEIS and specialists reports are rife with omissions, false assumptions and arbitrary conclusions. The most significant flaws rendering all of the findings in the FEIS and specialists reports arbitrary and capricious concern watershed affects, forest conditions, fire history, silviculture, fire behavior effects and climate change.

The following streams or sections of streams in the area do not meet water quality standards under the Clean Water Act and are called impaired waters: Redondo Creek, San Antonio Creek, Jemez River, Rio Guadalupe, East Fork Jemez River, Sulphur Creek, Vallecito Creek, and Rio Cebolla. Problems include high water temperatures, high turbidity (cloudy water), high pH, and high levels of aluminum and dissolved oxygen (NMED 2012). Natural conditions contribute to the high aluminum levels (NMED 2012), lack of shading along streams contributes to higher water temperatures.

We believe that the benefits of the selected action alternative maybe outweighed by the negative affects on soil and water resources in a watershed that already suffers serious impairments to soil conditions and water quality. In particular, reopening and reconstructing roads and constructing new roads will have long-lasting cumulative impacts on the watershed and will further contribute to the impairments listed by NMED, especially turbidity. But the FEIS and Watershed Specialists Report fail to disclose these impacts with omissions and indefensible assumptions.

## **The Forest Service Must Address the Road System in the FEIS.**

To address its unsustainable and deteriorating road system, the Forest Service promulgated the Roads Rule (referred to as “subpart A”) in 2001.<sup>1</sup> The rule directs each National Forest to conduct “a science-based roads analysis,” generally referred to as the “travel analysis process” or “TAP.”<sup>2</sup> Based on that analysis, forests must first “identify the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of National Forest System lands.”<sup>3</sup> The Rule further defines the minimum road system as:

the road system determined to be needed [1] to meet resource and other management objectives adopted in the relevant land and resource management plan . . . , [2] to meet applicable statutory and regulatory requirements, [3] to reflect long-term funding expectations, [and 4] to ensure that the identified system minimizes adverse environmental impacts associated with road construction, reconstruction, decommissioning, and maintenance.<sup>4</sup>

Forests must then “identify the roads . . . that are no longer needed to meet forest resource management objectives and that, therefore, should be decommissioned or considered for other uses, such as for trails.”<sup>5</sup> The minimum road system must, among other things, reflect long-term funding expectations.<sup>6</sup>

The TAP for the Santa Fe National Forest identified likely needed and likely unneeded roads. While this is a critical step, the Santa Fe National Forest still must identify its minimum road system and unneeded roads for decommissioning and implement those decisions in order to achieve compliance with subpart A. The existing road system is not reflective of current or long-term funding expectations and is not sustainable.

Subpart A defines the minimum road system 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.”<sup>7</sup>

At a minimum, the FEIS must include an alternative addressing the Minimum Road System, especially since the project area is such a substantial portion of the Santa Fe National Forest.

The project must implement TAP recommendations and advance implementation of the minimum road system and motorized route density standards. In addition, routes identified for decommissioning through the TAP 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.

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<sup>1</sup> 66 Fed. Reg. 3206 (Jan. 12, 2001); 36 C.F.R. part 212, subpart A

<sup>2</sup> 36 C.F.R. § 212.5(b)(1). Forest Service Manual 7712 and Forest Service Handbook 7709.55, Chapter 20 provide detailed guidance on conducting travel analysis.

<sup>3</sup> 36 C.F.R. § 212.5(b)(1)

<sup>4</sup> *Id.*

<sup>5</sup> *Id.* § 212.5(b)(2). The requirements of subpart A are separate and distinct from those of the 2005 Travel Management Rule, codified at subpart B of 36 C.F.R. part 212, which address off-highway vehicle use and corresponding resource damage pursuant to Executive Orders 11,644, 37 Fed. Reg. 2877 (Feb. 9, 1972), and 11,989, 42 Fed. Reg. 26,959 (May 25, 1977).

<sup>6</sup> *Id.* § 212.5(b)(1).

<sup>7</sup> 36 C.F.R. § 212.5(b)(1)

The National Best Management Practices for Water Quality Management on National Forest System Lands (Volume 1, April 2012) should also be used to guide road management in determining the minimum road system because the "...National 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. Current 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."<sup>8</sup> As outlined on page 104:

- 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.

Additionally, the USFS Washington Office is finalizing Volume II which will provide direction on how monitoring of BMP's should occur in order to achieve water quality protections. Proper BMP implementation, followed by thorough monitoring, is the only way to ensure waterways are protected.

### **The Forest Service Must Analyze the Road System under the National Environmental Policy Act.**

In addition to the requirements of the 2012 Planning Rule and subpart A, NEPA requires the Forest Service to analyze its road system as part of the FEIS. The FEIS must analyze in depth all "significant issues related to [the plan revision]." 40 C.F.R. § 1501.7; *see also id.* § 1502.1 (an EIS "shall provide full and fair discussion of significant environmental impacts" and "shall focus on significant environmental issues and alternatives"). Due to the extensive road mileage contemplated by the FEIS, management of the roads and their significant environmental impacts on a range of forest resources undoubtedly qualifies as a significant issue that must be analyzed in the FEIS.<sup>9</sup>

A robust NEPA analysis of the forest road system and its environmental and social impacts is especially critical in the context of climate change. As the Council on Environmental Quality'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."<sup>10</sup> The draft CEQ guidance

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<sup>8</sup> The National Best Management Practices for Water Quality Management on National Forest System Lands. USFS. Volume 1, April 2012.

<sup>9</sup> NEPA analysis as part of a previous travel management planning process under subpart B does not satisfy the Forest Service's duty to comprehensively analyze the impacts of its road system in the DEIS. The purpose of the TMP is to designate existing roads and trails available for off-road vehicle use, not to identify and provide a framework for a sustainable road system.

<sup>10</sup> Council on Environmental Quality, *Revised Draft Guidance for Greenhouse Gas Emissions and Climate Change Impacts*, at 22 (Dec. 18, 2014), available at <http://www.whitehouse.gov/administration/eop/ceq/initiatives/nepa/ghg-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.”<sup>11</sup>

Importantly, adequate analysis of the forest road system cannot be provided in a piecemeal fashion under other, individual resource topics in the EIS. That approach would preclude comprehensive analysis of the significant impacts associated with the road system and could result in fragmented and conflicting management direction that fails to satisfy the substantive mandates of the 2012 Planning Rule and subpart A.

## **Watershed Specialists Report**

### **I. Roads**

New road construction and reconstruction may affect soils and water quality, a significant issue for analysis. Roads and ground-based logging activities may cause significant losses of soil productivity (Gucinski et al. 2001: 21) (“Losses of productivity associated with road-caused, accelerated erosion are site specific and variable in extent, but they are commonly reported for all steep-slope landscapes”). New roads can permanently impair soil productivity even if their use is temporary (Trombulak and Frissell 2000).

Road-related soil erosion is a chronic source of sediment production that can limit water quality (Gucinski et al. 2001). The distance that sediment travels is an important factor in determining how much eroded soil is delivered to a water body. Soil loss and erosion occurring closer to a stream have greater potential to deliver sediment and lead to water quality impairment than erosion triggered farther away from streams. For this reason, road-stream crossings have high potential to adversely impact water quality (Endicott 2008). In addition, road construction and fuel treatments may combine to increase overland water flow and runoff by removing vegetation and altering physical and chemical properties of soil, which can permanently alter watershed function (Elliot 2010, Robichaud et al. 2010). This has implications for the purpose and need to protect municipal water supplies from socially undesirable effects of flooding and erosion.

The extent and location road construction and its effects to soil erosion, runoff channelization and suspended sediment loads merit a hard look in the analysis. Project design features may fail to mitigate significant cumulative effects (Endicott 2008: 93) (noting lack of science to validate effectiveness of many best management practices related to forest roads). New roads directly remove and cumulatively fragment wildlife habitat, and they indirectly contribute to biological invasions of noxious weeds (Gucinski et al. 2001).

**A. Elevated road use and sediment delivery.** The WSP does not address the major effect of increased and extended use of roads on sediment delivery to streams. It is extremely well documented that elevated road use greatly increases sediment delivery by several fold (Reid and Dunne, 1984; Foltz, 1996; Gucinski et al., 2001). However, this impact is not even mentioned in the WSP. It is not, in any way, addressed by the Equivalent Roaded Area (p. 40)

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<sup>11</sup> *Id.*

used to assess watershed impacts. This is a significant defect because it is quite clear that watersheds, streams, and habitats affected by the alternatives are severely degraded with respect to sediment. This is also a major defect because there are significant differences among the alternatives with respect to these impacts.

The treatment of other associated activities on sediment delivery underscores the failure to reasonably estimate sediment impacts from elevated road use—the WSP provides several baseless estimates of reductions in sediment delivery from bank treatments, headcut treatments, etc., but completely fails to make any assessment of the extremely significant impact of elevated road use on sediment delivery.

**B. Road re-opening.** The WSP is devoid of any sound assessment of the impacts of road re-opening on sediment delivery. The re-opening would require considerable maintenance/reconstruction of previously closed roads, which usually significantly increases sediment delivery (Black and Luce, 1999; Luce and Black, 2001; Coe, 2006; Robichaud et al., 2010), usually, by *at least* a factor of two. This is a major impact due to the magnitude of road re-opening and a major flaw due to existing sediment problems in affected watersheds.

The WSP also fails to reasonably make known that re-opening roads irretrievably reverses soil and vegetation recovery that have accrued via non-use (Beschta et al., 2004)

### **C. Road decommissioning**

1. The WSP (p.66) states that road decommissioning under all alternatives was included in the ERA analysis for the alternatives. However, the WSP provides absolutely no information on how this is done in the ERA analysis—the background information on ERA values for activities provides absolutely no information on decommissioning. Absent this information, the approach is arbitrary and capricious with respect to road decommissioning effects.

2. However, it appears that decommissioning was assumed to be immediately effective in both the modeling and the narrative. This is in conflict with a significant body of evidence, that, at best, any benefits from decommissioning are slow to accrue. The USFS's own field data indicate that erosional and hydrologic recovery on decommissioned roads is slow and that full recovery may not ever occur, although this is not assessed or made known in the WSP. The USFS's own cumulative effects approaches (Region 5 and Regions 1& 4) indicate that even after decades, decommissioned roads continue to contribute erosion and sediment delivery above natural background levels.

3. The WSP (p. 66) narrative on decommissioned road effects is misleading, because it states: "A... [decommissioned]...road will not ... detach soil, transport sediment, cause greater than background erosion." This fails to reasonably make known that significant reductions in erosion from decommissioned roads are very slow to accrue and may never reach background levels.

**D. Stream crossings and proximity affected by road activities.** It has extremely well-documented that road impacts on streams increase with proximity to streams, and are particularly

acute at stream crossings. However, the WSP is completely devoid of any assessment of the number of stream crossings affected by road construction, re-opening, maintenance or elevated use. This is a major defect due the persistent magnitude of impacts at crossings and the pervasive sediment-related problems in affected watersheds.

Similarly, the WSP also fails to reasonably assess the impacts of road activities on segments that are relatively close proximity (ca. 200') to streams.

**E. ERA model limitations.** It is well-documented that the ERA model used to assess watershed impacts is completely incapable of assessing proximity-related impacts on streams. Thus, the model cannot address impacts associated with stream crossings and road segments near streams. The WSP compound these problems by failing to make known this significant limitation of the model, although case law has held that the USFS must disclose model limitations.

**D. Overall cumulative impacts:** the WSP provides no sound assessment of the cumulative impacts of the alternatives on sediment delivery and sediment-related problems. The activities will cumulatively exacerbate pervasive existing sediment-related problems, but there is no coherent or logical assessment of these cumulative impacts. They are just cursorily dismissed, without any sound rationale.

The foregoing is compounded by the WSP's wholly arbitrary assessments of the impacts associated with ERA levels. For instance, it asserts (p. 78) that the 40% ERA forecast (under the arbitrary assumption of high severity wildfire) for the San Antonio Outlet is "unacceptable." This level of ERA probably would be deleterious, but the WSP is completely silent on why the impacts of the 40% ERA would be much different, or less acceptable, than the impacts from 35% ERA forecast in the same watershed under Alt. 1 in years 2016 and 2017 (WSP, pp. 63-64). Given the relative difference, the impacts under Alt. 1 would be similarly negative to that assumed to accrue from fire, based on ERA levels.

The information in the WSP consistently indicates that many streams and watersheds are severely degraded, especially with respect to sediment-related conditions, at current ERA levels. The action alternatives, especially Alt. 1, would greatly increase these ERA levels, but the WSP fails to reasonably assess these impacts.

## II. Peakflows

The WSP includes no assessment of peakflow impacts, although available data from the southwest region consistently indicates that the level of canopy removal and roads under the action alternatives would significantly increase peakflows (Troendle and King, 1985; Gottfried, 1991; MacDonald and Stednick, 2003). Increases in peakflows would elevate channel erosion and sediment transport (Dunne et al., 2001), thus, elevating turbidity relative to the currently degraded levels.

## III. Cumulative sediment-related impacts and compliance with the SFNF Plan



The WSP (p. 87) notes that “The threshold for sedimentation described in the Santa Fe National Forest Plan set a limit of no more than 20% increase above natural levels.” However, the WSP utterly fails to reasonably assess compliance with this plan standard. At a minimum, such an assessment would require: 1) a credible assessment of the magnitude of cumulative sediment delivery from all management impacts (grazing, roads, etc), 2) plus those from all activities under the alternatives, and 3) an assessment of current and natural levels of sedimentation. All of these requisites are completely missing in the WSP.

However, due to the degraded state of watershed and the nature and magnitude of proposed activities, it is highly likely that most of the action alternatives would violate this plan standard.

#### IV. Fire-related issues

**A. Fire occurrence:** The WSP distorts wildfire-related impacts in two interrelated ways. First, it assumes that fire will occur with under the No Action alternative, resulting in fairly uniform high severity fire. It is well-established that fire is not certain to occur. Fuel treatment does not alter ignition probabilities. This untenable assumption skews the entire analysis of cumulative effects under the alternatives

Second, the WSP intrinsically assumes that fire will not occur under the action alternatives. Again, this is not tenable, because fuel treatments do not alter ignition probabilities. Fuel treatments do not prevent fire. At best, they only lower fire severity in *treated areas* that are affected by fire. Not every square inch will be treated under the alternatives. Thus, fire effects are just as likely under the action alternatives as they are under the no-action alternatives, and, thus, will combine with impacts of activities, although this is not properly assessed in the WSP.

#### **B. Fire impacts in the ERA model.**

1. **Wildfire.** The ERA method in WSP intrinsically and baselessly assumes that wildfire has uniformly high impacts that require a 25 year timeframe for recovery. All of this is in direct conflict with available information. It is extremely well-documented that wildfire burns across a spectrum of fire severity and that watershed impacts vary with severity. Therefore, the uniform high-impact assumption is wholly baseless.

It is also well-documented that fire impacts on watersheds are much more transient than those from logging, grazing, and roads. Even after severe wildfire, watershed impacts typically abate within the 3 years after fire. Therefore, the baseless assumptions in the ERA method in the WSP are direct conflict with available evidence and serve to severely skew the impact analysis.

2. **Prescribed fire.** The ERA method in WSP baselessly assumes that prescribed wildfire has uniformly low impacts. This is in direct conflict with available information which indicates that prescribed fire burns at a variety of severities, including high severity. Prescribed fires frequently burn hotter and over more area than expected; the Cerro Grande fire is but one

infamous example. Therefore, the uniform low-impact assumption used in the ERA in the WSP is wholly baseless.



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