



2843 NW Lolo Drive, Ste. 200 | Bend, OR 97703
Phone (541) 647-2930
www.colw.org

June 24, 2022

Via Electronic Mail

Reviewing Officer
Deschutes National Forest Supervisor's Office
63095 Deschutes Market Road
Bend, OR 97701
objections-pnw-deschutes@usda.gov

Re: Green Ridge Landscape Restoration Project Pre-Decisional Administrative Review

Dear Reviewing Officer:

In accordance with 36 CFR 218, Subpart A and B, Central Oregon LandWatch ("LandWatch") submits the following objection regarding the Draft Decision and Finding of No Significant Impact for the Green Ridge Landscape Restoration Project.

LandWatch is an Oregon non-profit, public interest organization with over 700 members. Its offices are located in Bend, Oregon. LandWatch's mission is to defend and plan for Central Oregon's livable future and it has advocated for the preservation of natural resources in Central Oregon for over 30 years. LandWatch actively participates in Forest Service proceedings and decisions concerning the management of public lands in Central Oregon. Its members and supporters live in Central Oregon, including on lands adjoining the Sisters Ranger District, and regularly enjoy the public lands and resources in the project area for educational, recreational, spiritual, and scientific activities.

While LandWatch appreciates some changes were made to the proposed project between the Draft and Final Environmental Assessment ("EA"), we continue to have specific concerns related to issues raised during the public comment periods. The wall-to-wall nature of the proposed treatments is particularly concerning for the long-term health and function of sensitive resources within the project area. As discussed below, LandWatch requests a meeting to discuss the issues raised in this objection and potential resolutions.

Objector Name and Contact Information (Address and Phone):

Central Oregon LandWatch
Attn: Jeremy Austin, Wildlands & Water Program Manager
2843 NW Lolo Drive, Suite 200
Bend, OR 97703
541-649-2930

Name of Proposed Project:

Green Ridge Landscape Restoration Project

Name and Title of Responsible Official:

Ian Reid
District Ranger, Sisters Ranger District

National Forest and Ranger District:

Deschutes National Forest, Sisters Ranger District
Jefferson County, Oregon

Project Aspects and Specific Issues Addressed by the Objections:

See “Specific Issues and Supporting Reasoning” section below for addition information.

1. Logging in Northern Spotted Owl Habitats
2. Minimum Buffers for Ground-Based Mechanical Treatments in Riparian Reserves
3. Road Density and Travel Management

Demonstration of a Connection Between Central Oregon LandWatch’s Comments and its Objections:

LandWatch commented during both the scoping and draft EA comment periods on concerns related to logging in Northern Spotted Owl habitats, treatments in Riparian Reserves, and road density and travel management issues. Select examples of these comments are provided below.

1. Logging in Northern Spotted Owl Habitats

a. Previous Comments on Logging in NSO Dispersal Habitat, Core Use Areas and Home Range of Project NSO Territories.

“LandWatch is concerned that these retention areas are inadequate to provide optimal dispersal opportunities for the NSO. This concern dovetails with LandWatch’s overall recommendation that the extent and intensity of the Project’s treatments should be scaled back for the benefit of Project area forests, streams, and wildlife.” Scoping comments at 6

“As such, the Project should provide a very specific analysis of the impacts of all Project silviculture treatments in NSO core use areas of territories and the NSO dispersal habitat in the home ranges of these territories.” Draft EA comments at 5

“Central Oregon LandWatch asks the FS to explain, in a more concrete manner, how and where NSO NRF and dispersal habitat, AND their connectivity, are maintained across all five NSO core areas and home ranges, and how any disruption of this is justified against the backdrop of the importance of nurturing NSO survival after decades of forest mismanagement.” Draft EA comments at 6

b. Previous Comments on Logging in LSR

“The Project does not do enough to show, with the best available science, that thinning, logging, and prescribed burning will clearly result in more resilient forests, are clearly needed to reduce risk, or that they will not prevent LSRs from preserving old-growth trees and old growth species from the general threat of fire and a general concern of disease damage.” Draft EA comments at 4

“As such, LandWatch does not believe the reasons for activity in old growth LSR are triggered, and the Project’s justifications for LSR treatment are counter to NWF Plan standards and guidelines as laid out above.” Draft EA comments at 4

“We request the final Project documents more clearly document [sic] the number of acres to be treated in LSR for all alternatives. In light of the firmly established objectives set forth in the NW Forest Plan to protect these designated spaces, these LSR treatment numbers are unjustifiably high, and are clearly not supported by the NWF Plan.” Draft EA comments at 4

“For example, the Project identifies Persistent Shade Tolerant mixed conifer (PST) as vital NSO habitat, stating ‘The PST forest type was and is the most- well-suited and well-adapted forest type to serve as spotted owl habitat in the past and in the future. It likely historically served as dispersal or suitable habitat for the species (see Soils section for details). All action alternatives

include removal of dispersal habitat in this forest type.’ (EA, 160) Indeed, Alternative 2 has 6,191 PST-categorized acres slated for treatment, and Alternative 4 has 5,529 PST-categorized acres assigned for treatments. These numbers should be reconsidered and reduced, as these are wet forests naturally resilient to fire, and ones that host the important fir understory needed for NSO to thrive.” Draft EA comments at 5

“Finally, consultation with the US Fish and Wildlife Service is required; the EA reports that: ‘Consultation on effects to northern spotted owl and northern spotted owl critical habitat is currently ongoing with US Fish and Wildlife Service.’ The findings of this consultation are essential to the NSO analysis. Further, the findings of this consultation must be disclosed to the public during the Pre-decisional NEPA review period.” Draft EA comments at 7

2. Previous Comments on Proposed Treatments within Riparian Reserves

“We are concerned about the negative effects of forest treatments in riparian areas, including soil runoff from both machinery and hand tool treatments, new temporary roads, and reduced vegetation shading that provides crucial cold-water conditions in the Deschutes River, Metolius River, and their tributaries.” Scoping comments at 4

“Central Oregon LandWatch is concerned about the amount of proposed treatments in the Administratively Withdrawn Areas, Late Successional Reserves, and Riparian Reserves, and has general concerns with the Project methods proposed to meet the stated Project Purpose.” Draft EA comments at 2

“Central Oregon LandWatch believes the Project fails to fully satisfy the nine ACS objectives; the Project activities must “not retard or prevent attainment of Aquatic Conservation Strategy objectives,” and we believe that the development of temporary roads and treatments in riparian reserves do just that. 47” Draft EA comments at 16

3. Previous Comments on Road Density and Travel Management

“We suggest the EA explore additional roads and road segments for closure and decommissioning. The EA should also clearly explain the difference between road closure and decommissioning, as well as an explanation for why either strategy is proposed over the other.” Scoping comments at 5

“Additionally, the FS should decommission many more miles of roads in order to meet its road density standards, should decommission rather than close as many roads as possible, and especially in vital mule deer habitat found in the project area’s high meadows and mature forests.” Draft EA comments at 2

“The Forest must provide a true and accurate accounting of road densities in the project area that includes roads that are physically open on the ground (ML 1 roads and temporary roads) and not just roads that are “administratively” open pursuant to the Travel Management Rule and Motor Vehicle Use Maps (ML 2-5 roads).” Draft EA comments at 11

Suggested Remedies that would Solve the Objection:

LandWatch asks the U.S. Forest Service to adopt and incorporate the following changes to the proposed project.

1. Logging in Northern Spotted Owl Habitats
 - a. Reduce logging in NSO dispersal habitat that is within NSO home range and core use areas of the Project territories so 80% canopy cover is retained for these dispersal areas.
 - b. Reduce logging in NSO dispersal habitat that intersects with LSR allocations and apply the same treatments used in LSOG—hand thinning of trees less than 8 inches.
2. Minimum Buffers for Ground-Based Mechanical Treatments in Riparian Reserves
 - a. Increase minimum buffers for ground-based mechanical treatments within Riparian Reserves to a minimum 200 feet for all fish-bearing streams, 150 feet for perennial non-fish-bearing streams, and 100 feet for intermittent streams.
 - b. Only conduct hand thinning treatments in all 38 acres of proposed hardwood units.
3. Road Density and Travel Management
 - a. Recalculate road densities based on whether ML 1-5 roads and temporary roads within the project area are physically open or closed to public motorized use.
 - b. Incorporate additional road decommissioning to comply with the forest plan road density standards and objectives.

Request for Meeting to Discuss Resolution:

LandWatch requests a meeting to discuss the issues raised in this objection and potential resolutions.

Specific Issues and Supporting Reasoning

1. Logging in Northern Spotted Owl Habitats

The Project falls within Northern Spotted Owl (NSO) Critical Habitat Unit (CHU) #7, subunit ECN 8, which has 1,033 acres of nesting, roosting, and foraging (NRF) habitat in the project area, and 5,073 acres of dispersal habitat.¹ There are five NSO territories in the project area: Alder, Castle Rocks, Meadow Creek, Metolius Basin, and Six Creek.²

LandWatch has two primary requests for proposed treatments in the NSO ECN 8 dispersal habitats for the home range and core use areas of the five NSO territories: 1) Reduce logging in NSO dispersal habitat that is within NSO home range and core use areas of the Project territories so 80% canopy cover is retained for these dispersal areas; and 2) Reduce logging in NSO dispersal habitat that intersects with LSR allocations and apply the same treatments used in LSOG—hand thinning of trees less than 8 inches.

- a. *Reduce logging in NSO dispersal habitat that is within NSO home range and core use areas of the Project territories so 80% canopy cover is retained for these dispersal areas*

For the five NSO territories in the Project area, Alder, Meadow Creek, and Six Creek would see a reduction in their dispersal habitat in the home ranges and core use areas of their territories under the final EA.

The current breakdown of identified dispersal habitat in the project area is as follows:

- Alder – core use area: 102 acres; home range: 814 acres
- Meadow Creek – core use area: 95 acres; home range: 401 acres
- Six Creek – core use area: 165 acres; home range: 655 acres³

¹ [Green Ridge Landscape Restoration Project, Final Environmental Assessment \(EA\)](#), Table 10: Acres of dispersal habitat under the action alternatives, immediately after implementation, Sisters Ranger District, Deschutes National Forest, USDA; [Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for the Northern Spotted Owl](#), Federal Register, Vol. 86, No. 215, Nov. 10 2021, Rules and Regulations- USFWS, [Dec. 3 2012](#)

² [Green Ridge Landscape Restoration Project, EA Biological Evaluation and Wildlife Specialist's Report \(Wildlife Report\)](#), Table 8: General information about northern spotted owl territories in the project area, Sisters Ranger District, Deschutes National Forest, USDA.

³ [EA Wildlife Report](#), Table 8: General information about northern spotted owl territories in the project area

After implementation of treatments described in Alternative Three, the dispersal habitat in core use areas and in the home ranges of the territories would be reduced in the following way:

- Alder – core use area: 93 acres; home range: 141 acres
- Meadow Creek – core use area: 74 acres; home range: 169 acres
- Six Creek – core use area: 126 acres; home range: 288 acres⁴

Alternative Three with modifications also discusses the transition of 3,137 acres of dispersal habitat to the “Dispersal Habitat Maintenance” treatment type. This treatment type is broken down into different Plant Association Groups (“PAGs”) with canopy cover minimums—of these, in the selected alternative, only 297 acres fall into the category of 50% canopy cover retained and none retain 80% canopy cover.⁵

LandWatch does not support treatments that eliminate dispersal habitat in the core use areas and home ranges of the Alder, Meadow Creek, and Six Creek Project area territories, and requests the USFS transition all acreage currently proposed for treatment in the home range and the core use areas to be included in a new category of 80% canopy cover retainment, with the same Dispersal Habitat Maintenance treatment type of logging only small and medium diameter trees under 21 inches diameter at breast height (“DBH”).⁶ While dispersal habitat definition criteria in the Deschutes National Forest (DNF) for PAG mixed conifer wet is set at a canopy cover of 40%, we still suggest a minimum of 80%, for several reasons.

Protected NSO dispersal habitat is an essential ecological and management component for successful NSO populations.⁷ For one, NSO dispersal habitat supports the transience and colonization phases of dispersal which includes nesting, roosting, and foraging habitat (“NRF”), and, according to the Wildlife Report, nesting/roosting and foraging habitats comprise a very small proportion of the DNF already.⁸ Therefore, with so many dispersal habitat treatments that include potential NRF, and with so little forest-wide NRF currently designated, LandWatch suggests the 80% canopy coverage for the acreage in home range and core use Project NSO territory areas.

An 80% canopy cover for dispersal habitat is further supported by studies that analyzed and questioned DNF’s data that informed the selection of 40% canopy cover for dispersal habitat. The study the DNF based its designation on did not actually use juvenile owl resource selection

⁴ [EA Wildlife Report](#), Table 11: Dispersal habitat in the core use areas of territories that occur in the project area, by alternative; Table 12: Dispersal habitat in the home ranges of territories that occur in the project area, by alternative

⁵ [Draft Decision Notice and Finding of No Significant Impact for the Green Ridge Landscape Restoration Project](#), Sisters Ranger District, Deschutes National Forest, USDA, p. 3

⁶ [Id. at 2](#)

⁷ [Buchanan, In My Opinion: Managing habitat for dispersing northern spotted owls—are the current management strategies adequate?](#) Wildlife Society Bulletin 2004, 32(4):1333-1245, Wildlife report, 28-29

⁸ [Wildlife report](#), 28-29

data, and only two studies have since tested for this data. These studies found that: “juveniles strongly select for old forest with closed canopy (>70 percent canopy cover) and large-diameter trees (>20 inch DBH), which are similar forest conditions selected by adult spotted owls for nesting and roosting.”⁹ This study concluded that canopy covers of 40% or less are “unlikely to be sufficient to facilitate juvenile movements on the landscape... stands managed for dispersing spotted owls should be at least 80 percent canopy cover and have large average tree diameter.”¹⁰ Data collected by the U.S. Fish and Wildlife Service (“USFWS”) to complete the 2011 recovery plan for spotted owl further supports these statements, as it found “availability of suitable forest cover was critical for territory acquisition and sustained occupancy by spotted owls,” and sufficient canopy cover is an essential element of NSO dispersal and survival.¹¹

The land use plans guiding the conservation and management of NSO also support conserving dispersal habitat. Dispersal habitat is part of NSO critical habitat designations as defined by the USFWS final rule for critical habitat designations, which set primary constituent elements (“PCEs”) for the specific characteristics that make NSO NRF and dispersal habitat.¹² This rule also directs the USFS to adhere to the Revised Recovery Plan to restore NSO critical habitat, and includes Special Management Considerations (“SMCs”) that cross-reference Recovery Plan recovery actions 10 and 32 to “(1) Conserve older stands that contain the conditions to support northern spotted owl occupancy or high-value northern spotted owl habitat as described in Recovery Actions 10 and 32,” in addition to other SMCs that promote retaining existing NSO habitat like large trees and snags.¹³

The Recovery Plan Recovery Actions 10 and 32 include specific guidelines that direct the USFS to preserve spotted owl habitat to serve the purpose and intent of the NWFP itself. Recovery Action 10 states: “Conserve spotted owl sites and high value spotted owl habitat to provide additional demographic support to the spotted owl population.”¹⁴ This urges *preserving* historic and known spotted owl sites “for conservation and/or maintenance of *existing* levels of habitat. The prioritization factors to consider are reproductive status and site condition. The site conservation priorities for reproductive status are:

- Known sites with reproductive pairs;

⁹ [Damon B. Lesmeister, Raymond J. Davis, Peter H. Singleton, and J. David Wiens, “Chapter 4: Northern Spotted Owl Habitat and Populations: Status and Threats.”](#) Synthesis of Science to Inform Land Management Within the Northwest Forest Plan Area, GENERAL TECHNICAL REPORT PNW-GTR-966, citing: Miller et al. 1997, Sovern et al. 2015., p 253

¹⁰ [Id. \(Lesmeister\) at 282](#)

¹¹ [Id.](#)

¹² [Wildlife Report](#) p. 26

¹³ [Wildlife Report](#) p. 25; [Endangered and Threatened Wildlife and Plants: Designation of Revised Critical Habitat for the Northern Spotted Owl. USFWS 2012](#), pg. 71910, [Rule 2021](#); [Revised Recovery Plan for the Northern Spotted Owl \(*Strix occidentalis caurina*\)](#), USFWS Region 1, 2011 p. III-43, III-67

¹⁴ [Id. \(Recovery Plan\) at p. III-43](#)

- Known sites with pairs;
- Known sites with resident singles; and
- Historic sites with reproductive pairs, pairs, and resident singles, respectively.”¹⁵

This action item also states that “[a]s a general rule, forest management activities that are likely to diminish a home range’s capability to support spotted owl occupancy, survival and reproduction in the long-term should be discouraged.”¹⁶

The Wildlife Report Table 9 gives a summary of the Project area individuals, pairs, and their breeding status per territory. Notably, there were pairs and individuals present in all units but Six Creek, which had individuals but also the presence of barred owls from 2012-2020. In Metolius and Meadow Creek, the wildlife staff members from the Sisters Ranger District were unable to classify the breeding status in its inventory and monitoring. In Alder, there were several pairs and the noted presence of fledged young. It is unclear why Castle Rock was not included in the survey results provided in the EA. The Recovery Plan points out that historic sites are to be prioritized even when unoccupied, stating:

It is not uncommon for an occupied spotted owl site to be unoccupied in subsequent years, only to be re-occupied by the same or different spotted owls two, three or even more years later. While temporarily unoccupied, these sites provide conservation value to the species by providing habitat that can be used by spotted owls on nearby sites while also providing viable locations on which future pairs or territorial singles can establish territories.¹⁷

Further, in a study on NSO survival and success, while barred owl management was a top priority, the other priority to address declines in NSO populations was “the importance of maintaining habitat across the range of the northern spotted owl regardless of occupancy to provide areas for recolonization and dispersal”¹⁸ Therefore, Staff’s inability to classify NSO breeding status in the Metolius Basin and Meadow Creek territories, and the status of barred owls in the Six Creek, would not change these territories as priority areas for conservation and maintenance of existing levels of habitat.

¹⁵ [Id.](#)

¹⁶ [Id.](#)

¹⁷ [Id.](#); [Dugger, Wagner, Anthony, Olson, Gail. \(2009\). The Relationship Between Habitat Characteristics and Demographic Performance of Northern Spotted Owls in Southern Oregon.](#) The Condor. 107. 863-878. 10.1650/7824.1.

¹⁸ [Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for the Northern Spotted Owl \(USFWS Rule, 2021\)](#); Franklin, Dugger, Lesmeister, Davis, Wiens, White, Nichols, Hines, Yackulic, Schwarz, Ackers, Andrews, Bailey, Bown, Burgher, Burnham, Carlson, Chestnut, Conner, Dilione, Forsman, Glenn, Gremel, Hamm, Herterr, Higley, Horn, Jenkins, Kendall, Lamphear, Christopher, McDonald, Reid, Rockweit, Simon, Sovern, Swingle, Wise, [Range-wide declines of northern spotted owl populations in the Pacific Northwest: A meta-analysis](#), Biological Conservation 256, Elsevier, 2021, p. 18

Recovery Action 10 therefore supports conserving and maintaining the existing levels of habitat for the Project area NSO territories, as known and historic sites with singles, pairs, reproductive pairs, and fledged young are all present. The owls rely on the full spectrum of their critical habitat, including dispersal habitat, for species success, underlining the importance of preserving the home ranges and core use areas of dispersal habitat for the Alder, Meadow Creek, and Six Creeks territories with the retention of 80% canopy cover.

Recovery action 32 similarly supports conservation of NSO habitat:

Because spotted owl recovery requires well distributed, older and more structurally complex multi-layered conifer forests... land managers should work with the Service as described below to maintain and restore such habitat while allowing for other threats, such as fire and insects, to be addressed by restoration management actions. These high-quality spotted owl habitat stands are characterized as having large diameter trees, high amounts of canopy cover, and decadence components such as broken-topped live trees, mistletoe, cavities, large snags, and fallen trees.¹⁹

Recovery Action 32 points to two different studies that provide scientific support for the need for old growth forests and high canopy coverage in owl core areas and NRF habitat to nurture NSO territory populations.²⁰ The owls rely on the full spectrum of their critical habitat, including dispersal habitat, for species success, underlying the importance of protecting the home ranges and core use areas of dispersal habitat for the Alder, Meadow Creek, and Six Creeks territories with the retention of 80% canopy cover under Recovery Action 32.

LandWatch acknowledges that Recovery Actions 10 and 32 contain provisions to manage NSO territories against large scale disturbance events like wildfire. However, the language of these provisions is important to consider against the wall-to-wall nature of the proposed treatments in this project, the impact of the overall reduction of NSO habitat in the short term, and the ability to predict and measure the long-term benefits against the known short-term harms. Recovery Action 10 supports some levels of vegetation management that can result in short term harms if the actions are to improve the long-term habitat of the owls. This is conditioned with the caveat that “such a process should occur where a determination is made that these longer-term goals outweigh short-term impacts.”²¹ Similarly, Recovery Action 32 notes that the USFS, in dry forests, must “actively manage habitat to meet the overlapping goals of spotted owl recovery, restoration of dry forest structure, composition and process including fire, insects and disease.”²²

¹⁹ [Recovery Plan](#) at III-67

²⁰ [Recovery Plan](#) III-67; [Forsman et al. \(2011\)](#); [Dugger et al. \(2009\)](#)

²¹ [Recovery Plan](#), Action 10 at III-43

²² [Recovery Plan](#), Action 32 at III-67

LandWatch believes the scale of this project, the number of treatments in wet, mixed conifer forests as opposed to dry ponderosa forests, and the likelihood of another large-scale fire in the treated area does *not* meet the balance where longer-term goals outweigh the short-term impacts, nor does it reflect an appropriate balance of overlapping goals for NSO recovery and protection against wildfire. The Project EA describes short-term as “during on-the-ground implementation and within approximately 1-5 years after on-the-ground implementation” and long-term as “approximately 50-100 years after implementation.”²³ The Project will remove nearly half of the NSO dispersal habitat acres in the short-term, reducing the habitat from 5,073 to 2,908 acres.²⁴

This raises several concerns, as there is little in the Wildlife Report to explain how populations react and rebound from losses at this scale, and LandWatch could not find peer reviewed literature to support dramatic reductions in dispersal habitat for long-term NSO population benefits. Further, the Recovery Plan states “[w]hile we recognized that dispersal plays an important role in population performance, we elected not to formally model dispersal habitat. This is because relatively little is known about habitat selection during dispersal and, more importantly, the likely influences of habitat conditions on dispersal success.”²⁵ To LandWatch, this represents how there is much research to be done on habitat and dispersal success before conclusions can be made on long term benefits that outweigh short term harms—especially here, where the proposed alternative project activities would be likely to adversely affect northern spotted owl and its critical habitat.²⁶ Therefore, as stated in LandWatch’s proposed solution, LandWatch asks the forest service to conduct fewer dispersal habitat treatments.

Interestingly, the Project’s Wildlife Report specifically points to the dry forest restoration treatments from the 2012 Recovery Plan as guiding NSO management efforts, though the NSO habitats in the Project area also include wet mixed conifer (“PST”) areas, which is where NSO thrive. The Lower Metolius Watershed Analysis, conducted in 2017 to analyze the project area, identified three important focus areas, the first being “Northern Spotted Owl – Mixed Conifer Forests: protect, maintain, and restore the best areas for owl habitat.”²⁷ The Project Wildlife Report further supports protecting and maintaining dispersal habitat in PST mixed conifer forests, stating “the PST forest type was and is the most- well-suited and well-adapted forest type to serve as spotted owl habitat in the past and in the future. It likely historically served as dispersal or suitable habitat for the species.”²⁸ The report then, however, goes on to say “[a]ll action alternatives include removal of dispersal habitat in this forest type.”²⁹ The north and south maps for alternative three included with the final Project EA show a decent amount of proposed

²³ [EA](#), p. 39

²⁴ [Draft Decision Notice and Finding of No Significant Impact for the Green Ridge Landscape Restoration Project](#), Sisters Ranger District, Deschutes National Forest, USDA

²⁵ [Recovery Plan](#) at C-15

²⁶ [Draft Decision Notice](#), p 14; [EA](#), 173

²⁷ [EA](#), p. 7

²⁸ [EA](#), p. 38

²⁹ [Id.](#)

mixed conifer restoration treatments that overlap with NSO dispersal habitat.³⁰ This means that the dry forest justifications for risk reduction do not apply here (with NWFP LSR and Recovery Plan items 10 and 32), so the treatments in NSO mixed conifer habitat has little support in the many binding and guiding plans, especially in the dispersal habitat that intersects with known territories' home range and core use areas.

Further, the justifications of Recovery Action 10 and 32 that allow for treatments that harm NSO in the short term to manage for large scale disturbance events like fire in the long term do not meet the required balance thresholds. In a study titled “Fire Probability, Fuel Treatments Effectiveness and Ecological Tradeoffs in Western U.S. Public Forests,” the authors note that “if fire do not affect treated areas while fuels are reduced, treatment impacts on watersheds are not counterbalanced by benefits from reduction in fire impacts.”³¹ This study found that the probability of high severity and high-moderate severity fires affecting treated areas in their window of effectiveness was very low, concluding that in “92-98% of treated areas, fuel treatment impacts on watershed processes are not likely to be counterbalanced by a reduction in higher-severity fire.”³² A 28 year study on breeding dispersals also found that while nesting habitat has been lost due to wildfire, very little loss of forest due to wildfire has actually occurred in the dispersal areas studied.³³

Additional studies support that relying on the risk of fire to NSO as a justification for short-term harm to the species is questionable at best. As we stated in our previous comment, a mega-analysis was done on the research and literature studying high severity fire effects on NSO, and this analysis found that: “articles reporting adverse impacts of high-severity fire on Spotted Owls were pervasively confounded by post-fire logging, and in some cases by a methodological bias.”³⁴ As such, it was not clear if owls were absent because of the fire, or because of the intensive logging following an extreme fire event. A 2020 study comes closest to answering this question, as it included study areas both with and without post fire logging, finding that “NSO were found living in and foraging into burned areas while avoiding post-fire logged areas.”³⁵ The research supports that burned spotted owl habitat is actually very good spotted owl habitat, as it

³⁰ [EA Draft Decision](#), Maps 1 and 2

³¹ [Rhodes, Jonathan & Baker, William. \(2008\). Fire Probability, Fuel Treatment Effectiveness and Ecological Tradeoffs in Western U.S. Public Forests.](#) The Open Forest Science Journal. 1. 10.2174/1874398600801010001.

³² [Id.](#) at 3

³³ Julianna M. A. Jenkins, Damon B. Lesmeister, Eric D. Forsman, Katie M. Dugger, Steven H. Ackers, L. Steven Andrews, Chris E. McCafferty, M. Shane Pruett, Janice A. Reid, Stan G. Sovern, Rob B. Horn, Scott A. Gremel, J. David Wiens, and Zhiqiang Yang, “[Social status, forest disturbance, and Barred Owls shape long-term trends in breeding dispersal distance of Northern Spotted Owls.](#)” The Condor, Ornithological Applications. Volume 121, 2019.

³⁴ Hanson, C.T.; Lee, D.E.; Bond, M.L. [Disentangling Post-Fire Logging and High-Severity Fire Effects for Spotted Owls.](#) Birds 2021, 2, 147–157. <https://doi.org/10.3390/birds2020011>

³⁵ Jones, G.M., Kramer, H.A., Whitmore, S.A. *et al.* [Habitat selection by spotted owls after a megafire reflects their adaptation to historical frequent-fire regimes.](#) *Landscape Ecol* 35, 1199–1213 (2020).

regenerates a multistory canopy that meet spotted owl needs, without any silviculture interventions.³⁶ In this Project, the risks to NSO in the current dispersal treatments are known: the treatments will likely adversely affect NSO critical habitat. The treatments cannot be justified in the name of fire as the short-term harm is not balanced by the long-term benefit.

For these reasons, LandWatch request the USFS reduce logging in NSO dispersal habitat that is within the home range and core use areas of the Project NSO territories, especially that in PST, so 80% canopy cover is retained for these dispersal areas.

- b. *Reduce logging in NSO dispersal habitat that intersects with Late-Successional Reserves allocations and apply the same treatments used in LSOG—hand thinning of trees less than 8 inches*

The Northwest Forest Plan (“NWFP”), and the watershed specific mapping of Late-Successional Reserves (“LSR”) in the Metolius Late Successional Reserve Assessment, strongly support excluding silviculture treatments in LSR areas. The clear intent and purpose of LSR is to “protect and enhance late-successional and old-growth forest conditions which serve as habitat for late-successional and old-growth forest related species,” with no programmed timber harvest allowed in the reserves.³⁷ Further in the NWFP, and as stated in our previous comment, “these reserves represent a network of existing old-growth forests that are retained in their natural condition with natural processes, such as fire, allowed to function to the extent possible.”³⁸

The selected Project alternative proposes 6,633 acres of treatment in LSR— meaning a third of the proposed treatments are within reserves the NWFP identified for conservation and enhancement of late successional and old growth forest characteristics, with the intent to exclude these areas from logging.³⁹ The Wildlife Report states that “most timber harvest and other silvicultural activities occur in Matrix,” but the released acreages reflect extensive treatments in LSR.⁴⁰ Of these LSR treatments, 1,572 acres are in NSO dispersal territory, and hand thinning is only occurring in 261 acres (which does not overlap with the NSO dispersal habitat).⁴¹ As discussed throughout this section of the objection, both scientific studies and guiding land use plans designate LSR and NSO critical habitat as areas to protect and withhold silviculture treatments; therefore, we ask that the intersection of NSO dispersal habitat and LSR be treated

³⁶ [Id.](#)

³⁷ [ROD 6; NWFP- Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl](#)- Attachment A to the ROD for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl, (1994), A-4

³⁸ [Id.](#) (NWFP, LSR S&G 1994), B-4

³⁹ [Draft Decision](#), p. 8

⁴⁰ [Wildlife Report](#), p. 31

⁴¹ [Draft Decision](#), p. 8

with the same treatments as Late-Successional and Old Growth forests (“LSOG”)—hand thinning of trees less than 8 inches, in order to retain undisturbed critical habitat for NSO.

LandWatch acknowledges that the NWFP does allow for thinning in LSR east of the Cascades to manage for fire.⁴² This, however, is conditioned in several ways, such as focusing on younger plantation stands in LSR, making sure “the scale of... other treatments should not generally result in degeneration of currently suitable owl habitat or other late successional conditions” and only allowing thinning in older stands if: “(1) the proposed management activities will *clearly result* in greater *assurance* of long-term maintenance of habitat, (2) the activities are clearly needed to reduce risks, and (3) the activities will not prevent the Late-Successional Reserves from playing an effective role in the objectives for which they were established (emphasis added).⁴³ Additionally, the Metolius Late Successional Reserve Assessment, conducted in 1996, identified management strategy areas (“MCAs”), the one related to NSO being to “[m]anage forested areas to provide healthy northern spotted owl dispersal habitat and habitat for other late successional and old-growth species.”⁴⁴ This management strategy acknowledges the need for reduced stand density to protect against wildfire, but also looks to plantations as the area to manage for late successional and old growth habitat.⁴⁵

While the Project’s interdisciplinary team found the Metolius LSR Analysis objectives from 1996 still applied to the Project area today, LandWatch reiterates its comments submitted on the Draft EA and its comments above.

The research cited and explained in the previous section of this objection on logging in NSO habitat demonstrates the very low probability of preventing the risk of future wildfire by conducting treatments. Since the proposed treatments will necessarily in the short term go against the other main objectives of LSR as critical NSO habitat, these treatments are not justified. As stated above, 92-98% of forests treated to prevent wildfire will not encounter fire in a period of time where the treatments reduce the wildfire risk.⁴⁶

A recent study reiterated this point, stating:

Clearly, the strategy of trying to maintain more dense, late-successional forest habitat by reducing fire does not work if the method for reducing fire adversely affects far more of this forest habitat than would high severity fire, and the high-

⁴² [NWFP S&G](#) (1994), C-12

⁴³ [NWFP S&G](#), C-12- East Cascades

⁴⁴ [EA](#), p. 7

⁴⁵ [Id. \(EA\)](#), p. 8

⁴⁶ Rhodes, Jonathan & Baker, William. (2008). [Fire Probability, Fuel Treatment Effectiveness and Ecological Tradeoffs in Western U.S. Public Forests](#). The Open Forest Science Journal. 1. 10.2174/1874398600801010001.; NWFP S&G C-12

severity fire might occur anyway because it is largely controlled by climate and weather... the combination of thinning and maintenance reduced 6.7 times more late successional forest than it increased.⁴⁷

These studies make clear that the proposed treatments for reducing fire risk do not meet the LSR guidelines set out in the NWFP of clearly resulting in the assurance of long-term habitat benefits.

Further, the NWFP itself acknowledges that letting stands age naturally is often most beneficial to spotted owl habitat, stating “[LSR] forest communities are the result of a unique interaction of disturbance, regeneration, succession, and climate that can never be recreated in their entirety through management. The structure, species composition, and function of these forests are, in their entirety, not fully understood.”⁴⁸ The USFS also acknowledges that stands created by silviculture will not necessarily develop in the same way as stands growing naturally over the last 1,000 years.⁴⁹ Additional studies found that, due to the increased competition with Barred Owls, “it would be wise to preserve as much high-quality habitat in late-successional forests for Spotted Owls as possible, distributed over as large an area as possible.”⁵⁰

For these reasons, LandWatch asks that in the important intersection of LSR and NSO dispersal habitat, the Project changes its silviculture treatments to hand thinning only, taking trees 8 inches DBH or less.

c. Consultation with the US Fish and Wildlife Service

Finally, consultation with the US Fish and Wildlife Service is required; the EA reports that “[c]onsultation on effects to northern spotted owl and northern spotted owl critical habitat is currently ongoing with US Fish and Wildlife Service.” The findings of this consultation are essential to the NSO analysis. The failure to disclose this information during the NEPA process prevents the public from knowing whether the agency has conducted an informed decision-making process, running afoul of NEPA and the spirit of meaningful public participation in the management of public land resources.

⁴⁷ Odion, Dennis & Hanson, Chad & Dellasala, Dominick & Baker, William & Bond, Monica. (2014). [Effects of Fire and Commercial Thinning on Future Habitat of the Northern Spotted Owl](#). The Open Orthopaedics Journal. 8. 37-51. 10.2174/1874213001407010037.

⁴⁸ [NWFP S&G](#), B-5

⁴⁹ [Id.](#)

⁵⁰ [Forsman, et.al, 2011](#), Cooper Ornithological Society

2. Minimum Buffers for Ground-Based Mechanical Treatments in Riparian Reserves

The Project area includes 2,012 acres of Riparian Reserves, a “land allocation [that] was established as a key element of the Aquatic Conservation Strategy where riparian-dependent resources receive primary emphasis.”⁵¹

LandWatch has two primary requests for proposed treatments within Riparian Reserves: 1) to increase minimum buffers for ground-based mechanical treatments within Riparian Reserves to a *minimum* 200 feet for all fish-bearing streams, 150 feet for perennial non-fish-bearing streams, and 100 feet for intermittent streams; and 2) to only conduct hand thinning treatments in all 38 acres of proposed hardwood units.

The Final EA’s Table 4 shows the USFS initially identified 1,699 acres of Riparian Reserves for potential treatment, or roughly 84% of Riparian Reserve acres within the project area. The EA describes that the proposed “[e]cological vegetative treatments in the Riparian Reserves in the Green Ridge Project are designed to improve stand health, grow large trees, release hardwood species, and reduce fuel loads” and that “[t]hese treatments which serve to meet NWFP Aquatic Conservation Strategy Objectives have to be carefully designed in the RR so as not to detrimentally impact soils or negatively impact water quality.”⁵²

Under the EA’s Alternative 3, the foundation for the agency's proposed Alternative 3 modified, 895 acres of Riparian Reserves or ephemeral drainages are proposed for treatment with ground-based motorized equipment (see Tables 83 and 84)—an alarming 45% of all Riparian Reserves within the project area and roughly two thirds of all proposed treatment acres in Riparian Reserves.⁵³ In other words, the primary management actions proposed for “ecological vegetative treatments” in Riparian Reserves will be conducted by ground-based machines. The proposed use of ground-based machinery for treatments within Riparian Reserves buffers is in direct conflict with both Aquatic Conservation Strategy (“ACS”) objectives and Land and Resource Management Plan (“LRMP”) management direction to design management strategies that primarily emphasize riparian-dependent resources.

The EA states:

Studies have shown vegetated riparian buffers to be effective at protecting water quality, habitat, and biota for streams. In these studies effective buffer widths have varied depending on environmental conditions and logging operations, and without site specific considerations, a generalized buffer of approximately 100

⁵¹ [Fish Report](#), p. 5

⁵² [EA](#), p. 248

⁵³ [EA](#), p. 253; 259, 263

feet is considered effective (Sweeny and Newbold 2014; Rashin et al. 2006; Richardson et al. 2012; Wenger 1999).⁵⁴

Yet, for ephemeral and intermittent streams within Riparian Reserves, the USFS proposes ground-based tree removal as close as 50 feet to streams, and even closer in hardwood units—prescriptions that are dramatically smaller than the buffer distance cited by the USFS in the same paragraph.⁵⁵

To justify the smaller buffers proposed for ground-based mechanical treatments, the USFS appears to primarily rely on one study from 2006, stating that:

An assessment of surface erosion and sediment routing in Washington State by Rashin et al. (2006) done during the first two years following harvest indicated that a 10 m (33 ft) setback for ground disturbance can be expected to prevent sediment delivery to streams from about 95 percent of harvest-related erosion features.”⁵⁶

However, a review by numerous authors in the USFS’s Inland Native Fish Strategy Environmental Assessment (“INFISH”) reported that “non-channelized sediment flow rarely travels more than 300 feet and that 200-to-300-foot riparian 'filter strips' are generally effective at protecting streams from sediment from non-channelized flow”⁵⁷ Recent planning efforts have further affirmed these prescriptions, including the draft forest plan revision for the Blue Mountains, where the USFS asserted that “research has shown that effective vegetated filter strips need to be at least 200 to 300 feet wide to effectively capture sediment mobilizing by overland flow from outside the riparian management area.”⁵⁸ Yet here, the USFS claims that buffers as small as 30-50 feet wide are adequate for capturing sediment.

Within the 38 acres of hardwood stands proposed for mechanical ground-based treatments, the proposed ground-based mechanical treatment buffer of 30 feet is alarming. Given the relatively small unit size of these treatment areas, it's unclear why alternative management actions were not considered in detail, including the use of hand thinning similar to what is proposed for 268 acres of meadow habitats.⁵⁹

⁵⁴ [Id.](#), p. 263

⁵⁵ [Id.](#), see discussion of buffer distances on p. 263

⁵⁶ [Fish Report](#), p. 29

⁵⁷ USDA, Forest Service. 1995. [Inland Native Fish Strategy Environmental Assessment, Decision Notice and Finding of No Significant Impact](#), Intermountain, Northern and Pacific Northwest Regions.

⁵⁸ [Land Management Plans for the Malheur, Umatilla, and Wallowa-Whitman National Forests, Final Environmental Impact Statement, Volume 2 Chapter 3, Biological Environment](#). USDA, Forest Service, Pacific Northwest Region (2018). p. 86

⁵⁹ [Draft Decision Notice and Finding of No Significant Impact for the Green Ridge Landscape Restoration Project](#), p. 1

The Fish Report provides an overview of some of the risks of relying on ground-based machinery for treatments in Riparian Reserves, describing that “[g]round-based activities in Riparian Reserve and ephemeral draws can detrimentally impact a portion of the soils in the disturbed areas and because they’re adjacent to waterbodies, they have the potential to increase sedimentation to waterbodies, impact riparian vegetation and reduce future instream wood recruitment.”⁶⁰ Yet the USFS failed to prescribe appropriate buffers to prevent these very scenarios from happening, paving the way for increased sediment loads and impacts to riparian vegetation.

The Fish Report further describes the original intent behind the Riparian Reserve land use allocation, describing that it was “established as a key element of the Aquatic Conservation Strategy *where riparian-dependent resources receive primary emphasis*.”⁶¹ (emphasis added). Yet, in describing proposed management actions in Riparian Reserves, the EA describes elsewhere that “[s]ilvicultural treatments in Riparian Reserves are based primarily on the upland treatment in which the reserve is located. Resource Protection Measures would be applied to ACS values.”⁶² The clear implication being that riparian-dependent resources are not the primary emphasis of proposed actions in Riparian Reserves.

ACS objective 4 directs the USFS to “[m]aintain and restore water quality necessary to support healthy riparian, aquatic, and wetland ecosystems. Water quality must remain within the range that maintains the biological, physical, and chemical integrity of the system and benefits survival, growth, reproduction, and migration of individuals composing aquatic and riparian communities.”⁶³ To meet this objective the USFS has stated that:

Project Design Criteria, BMPs and contract regulations restrict road use to existing authorized roads during periods of suitable soil conditions and require equipment inspection and maintenance and a spill kit on-site for emergencies. No new roads would be constructed, only 0.9 miles of temporary road would be used in the Riparian Reserve, and landings in Riparian Reserves would be restricted to existing disturbed surfaces. Therefore, the project would maintain the water quality necessary to support healthy riparian, aquatic and wetland ecosystems in the project area and the Lower Metolius Watershed.⁶⁴

However, the EA only discusses construction of new roads, temporary roads, and landings, failing to consider the impact of ground-based machinery driving through roughly half of the

⁶⁰ [Fish Report](#), p. 21

⁶¹ [Fish Report](#), p. 5

⁶² [EA](#), p. 44

⁶³ [EA](#), p. 251

⁶⁴ [Id.](#), p. 251

Riparian Reserve acres in the project area, in close proximity to streams and at distances well below recommended buffers for mitigating impacts to water quality. And while the EA describes that new logging actions—such as the construction of landings—will target previously disturbed areas, the Riparian Reserve acres proposed for treatment are exposed to potential new disturbances from ground-based mechanical activities.

ACS Objective 5 directs the USFS to “[m]aintain and restore the sediment regime under which aquatic ecosystems evolved. Elements of the sediment regime include the timing, volume, rate, and character of sediment input, storage, and transport.”⁶⁵ To meet this objective, the USFS has stated that:

Ground-based equipment would be restricted to areas at least 50 ft from intermittent streams and 150 ft from perennial or fish-bearing streams. Project Design Criteria, BMPs and contract regulations requiring the maintenance of road drainage and restriction of ground-based operations to periods that wouldn’t create runoff and would prevent logging operations from contributing to sedimentation.⁶⁶

As discussed above, these buffer distances are in conflict with broadly supported buffers recommended by INFISH and in other agency planning efforts to reduce or eliminate the threat of increased sediment loads entering streams.

Numerous studies have documented the impacts to fish habitat from loss of riparian vegetation related to timber treatments, including increased stream temperature, loss of cover, increased erosion, a widening and shallowing of the stream channel, and reduction or loss of perennial flow.

For example, logging and thinning in riparian areas increases water temperature that can become chronic or acutely lethal to native fish species especially salmonids that are adapted to cold water. Yonce et al. (2021) reported:

The effects of timber harvest on the thermal regime of streams have been observed globally...Reduction in baseflow, which can occur due to soil compaction during harvest, may also reduce the capacity to absorb increased thermal inputs. Preventing these adverse effects was a motivating factor in the development of riparian buffer management practices for forestry. Riparian buffers influence water temperature through shading that reduces direct insolation to streams, and secondary effects on microclimate (air temperature and wind)

⁶⁵ [Id.](#), p. 251

⁶⁶ [Id.](#), p. 251

within the buffer are also important. Additional benefits of buffers include reducing peak storm runoff, maintaining stable baseflow, and potentially filtering out sediment, nutrients, and other pollutant loads from the surrounding area.⁶⁷

The biological impacts of additional sediment loads over extended periods of time from timber harvest and roads have been known for decades and are well documented in the literature. Bjorn and Reiser (1991) summarized that:

Sedimentation affects fish habitat quality by increasing fines which embed gravels and substrates. Embedded gravels reduce spawning habitat by making gravel difficult to lift, reduces dissolved oxygen to incubating eggs, and covers rearing fish. Turbidity affects fish production by reducing production of aquatic insects and plankton, and foraging efficiency of fish. Sediment fills interstitial spaces between rocks in the substrate, reduces habitable area in streams, and when it exceeds 20 percent of the total area on the substrate, can smother fish and frog eggs and increase mortality (Bjornn and Reiser 1991).⁶⁸

May and Lee (2004) stated that “increases in coarse sediment supply can be associated with sharp reductions in salmonid habitat and productivity” and reported that streams with discontinuous flow caused by sediment increases reduced survival by crowding fish into smaller areas with reduced food availability.⁶⁹ The additional bedload of both fine sediments and coarser sediment delivered to streams fills in the channel, decreasing pool depth, channel complexity, and changing the channel profile to a shallow, wide profile.

Recent research by Kampf et al. (2021) on intermittent and ephemeral streams indicates that these nonperennial streams drain almost 60% of forested lands and are the primary connectors with aquatic systems. The authors stated that “land uses that modify flow regimes in these streams can affect sediment and organic matter transport and distribution, stream temperature dynamics, and biogeochemical processing.”⁷⁰

⁶⁷ Yonce, H.N., S. Saumya, J.B. Butcher, T.E. Johnson, S.H. Julius and S.D. LeDuc. 2021. [Forest riparian buffers reduce timber harvesting effects on stream temperature, but additional climate adaptation strategies are likely needed under future conditions](#). Journal of Water and Climate Change 12 (5): 1404–1419.

⁶⁸ Bjornn, T.C. and D.W. Reiser. 1991. [Habitat requirements of salmonids in streams](#). In Meehan, W. (Ed). Influences of forest and rangeland management on salmonid fishes and their habitats. American Fisheries Society Special Publication 19.

⁶⁹ May, C.L. and D.C. Lee. 2004. [The Relationships among In-Channel Sediment Storage, Pool Depth, and Summer Survival of Juvenile Salmonids in Oregon Coast Range Streams](#). North American Journal of Fisheries Management 24:761–774.

⁷⁰ Kampf, S.A., K.A. Dwire, M.P. Fairchild, J. Dunham, C.D. Snyder, K.L. Jaeger, C.H. Luce, J.C. Hammond, C. Wilson, M.A. Zimmer, and M. Sidell. 2021. [Managing nonperennial headwater streams in temperate forests of the United States](#). Forest Ecology and Management 497 (2021) 119523.

Even selective logging increases fine sediments along with increased water temperatures and these changes in habitat quality are found decades after logging activities have ceased.^{71 72 73}

Here, the EA's Fish Report states that the long-term impacts of past logging and road building projects on aquatic habitats today are unknown for the project area (see Fish Report p. 15, "The effects of past road building and timber harvest activities are present on the landscape and near streams. The extent of lasting effects from these past activities on stream channels is unknown."⁷⁴ Yet the EA still concludes that "[w]ater quality would not be affected by the Green Ridge project because sedimentation, water temperature, and chemical contamination effects are not predicted."⁷⁵ Without an accurate baseline and understanding of the long term impacts from historic logging and road projects, it's unclear how the USFS justifies and supports a conclusion that water quality would not be affected.

For these reasons, LandWatch asks that the Project increases minimum buffers for ground-based mechanical treatments within Riparian Reserves to a minimum 200 feet for all fish-bearing streams, 150 feet for perennial non-fish-bearing streams, and 100 feet for intermittent streams; and 2) only conduct hand thinning treatments in all 38 acres of proposed hardwood units.

3. Roads and Travel Management

Current road density in the project area was reported in the Draft EA to be a whopping 5.6 miles per square mile (216.88 miles of roads divided by 38.54 square miles in project area).⁷⁶

LandWatch has two primary requests for project road and travel management decisions: 1) recalculate road densities based on whether ML 1-5 roads, temporary roads, and illegal user-created roads within the project area are physically open or closed to public motorized use, and

⁷¹ Kreutzweiser, D.P., S.S. Capell, and K.P. Good.2005. [Effects of fine sediment inputs from a logging road on stream insect communities: A large-scale experimental approach in a Canadian headwater stream](#). Aquatic Ecology 39(1):55-66.; Miserendino, L. and Masi, C. 2010. [The effects of land use on environmental features and functional organization of macroinvertebrate communities in Patagonian low order streams](#). Ecological Indicators, 10(2): 311-319.; Guenther, S., T. Gomi, and R. Moore, R. 2014. [Stream and bed temperature variability in a coastal headwater catchment: influences of surface-subsurface interactions and partial-retention forest harvesting](#). Hydrological Processes, 28: 1238–1249.

⁷² Miserendino, L. and Masi, C. 2010. [The effects of land use on environmental features and functional organization of macroinvertebrate communities in Patagonian low order streams](#). Ecological Indicators, 10(2): 311-319.

⁷³ Guenther, S., T. Gomi, and R. Moore, R. 2012. [Stream and bed temperature variability in a coastal headwater catchment: influences of surface-subsurface interactions and partial-retention forest harvesting](#). Hydrological Processes, 28: 1238–1249

⁷⁴ [Fish Report](#), p. 15

⁷⁵ [EA](#), p. 521

⁷⁶ [Draft EA](#), p. 305; 307

2) incorporate additional road decommissioning to comply with the forest plan road density standards and objectives.

The comparison chart and analysis on page 326 of the Final EA continues to artificially reduce the project area road density by excluding the 22.77 miles of Maintenance Level (“ML”) 1 roads that exist on the landscape, resulting in an inaccurate—albeit still far above the forest plan standards and objectives—road density of 5.0 miles per square mile (194.1 miles of roads divided by 38.54 square miles in the project area).⁷⁷

The USFS must provide a true and accurate accounting of road densities in the project area that includes roads that are physically open on the ground (ML 1 roads, temporary roads, and illegal user-created roads) and not just roads that are “administratively” open pursuant to the Travel Management Rule and Motor Vehicle Use Maps (ML 2-5 roads). Unfortunately, many of the ML 1 “closed” roads on the forest are not in fact closed, and many are driven by members of the public.

For example, road 1152-700 (“road 700”)—an ML 1 road that should be closed to public motorized use—is in fact physically open to motorized use on the ground. The attached Google Earth KMZ file included with this objection provides geolocated photos at five discrete locations along road 700. The photographs, from June 17, 2022, show road 700 is physically open to motor vehicles and receiving regular use. Figure 1 below shows one of these photos at the southern entrance to road 700, at the intersection of road 700 and road 1152-000.



Figure 1. Photograph of the southern entrance to ML 1 Road 1152-700—taken at the intersection of Road 1152-700 and Road 1152-000—demonstrating that road 1152-700 is physically open to motor vehicles and receiving regular use.

⁷⁷ [EA](#), p. 326

Road 700 is indicative of how the existing, baseline road density calculation relied upon in the EA is inaccurate and fails to consider whether a road is physically open and currently being used by public motorists. Further, temporary roads associated with past projects across the Forest are also not physically closed and are similarly driven on by the public. As a project area with a high level of public use, including by off-road vehicles and with a known history of poaching, there may also be illegal user-created roads in the project area. Information on all these road categories (ML 1 roads, temporary roads, and illegal user-created roads) is obtainable and should be included in the road density analysis. A failure to accurately inventory and assess road densities on the ground in the project area runs afoul of NEPA's requirement to disclose baseline environmental conditions.

The Forest Plan sets a standard for open road densities in deer summer range at 2.5 miles per square mile in order to achieve habitat effectiveness for mule deer.⁷⁸ Mule deer summer range is defined as “the entire Forest outside of Deer Habitat Management Areas.”⁷⁹ (See also Deschutes LRMP at TS-12: “Some management areas include open road density guidelines. If not included in the management area direction, the deer summer range guideline of 2.5 miles per square mile, as an average over the entire implementation unit, is assumed.”) In deer winter range (MA 7), “[t]arget open road densities shall average 1.0 – 2.5 miles per square mile in each Implementation Unit, unless impacts to deer can be avoided or the proposed project would result in a net benefit to deer habitat.”⁸⁰

All three action alternatives in the Final EA continue to result in open road densities in the Project area that would be out of compliance with Forest Plan road density standards, despite the overall decreases to open road density proposed in the action alternatives.⁸¹ Put simply, significantly more road closures and decommissioning must be included in the Project in order for it to comply with Forest Plan standards.

For these reasons, LandWatch asks that 1) recalculate road densities based on whether ML 1-5 roads, temporary roads, and illegal user-created roads within the project area are physically open or closed to public motorized use, and 2) to incorporate additional road decommissioning to comply with the forest plan road density standards and objectives.

⁷⁸ [Deschutes Land and Resource Management Plan](#), p. 4-58

⁷⁹ [Id.](#), p. 4-58

⁸⁰ [Id.](#), p. 4-115

⁸¹ [Draft Decision Notice and Finding of No Significant Impact for the Green Ridge Landscape Restoration Project](#), p. 9

Sincerely,

A handwritten signature in black ink, appearing to read 'Jeremy Austin', with a stylized, cursive script.

Jeremy Austin
Wild Lands & Water Program Manager
Central Oregon LandWatch
2843 NW Lolo Dr. Ste. 200, Bend, OR 97703
(541) 647-2930 | jeremy@colw.org

Cc: Ben Gordon
Executive Director
Central Oregon LandWatch
Ben@colw.org

Kristen Sabo
Environmental Planner and Attorney
Central Oregon LandWatch
kristen@colw.org

Attachments (as stated)

ATTACHMENT 1
Literature and Supporting Documents

[Google Drive link to access documents](#)

Also see zipped folder titled “Final Objection Attachments” attached to objection submission email sent by Jeremy Austin on June 24, 2022 with the email title “Green Ridge Landscape Restoration Project Objection.”

ATTACHMENT 2
Road 1152-700 Google Earth KMZ with Photographs

See zipped folder titled “Final Objection Attachments” attached to objection submission email sent by Jeremy Austin on June 24, 2022 with the email title “Green Ridge Landscape Restoration Project Objection.”