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August 15, 2022

Email: FS-comments-pacificnorthwest-siskiyou-wildrivers@usda.gov
Project website: https://www.fs.usda.gov/project/?project=62020

Re: Public Scoping Comments for the Slater Re-Open Project Environmental Assessment #62020

These public scoping comments for the Slater Re-Open Project Environmental Assessment (EA) #62020 described in the July 11, 2022 Scoping Notice, are submitted in behalf of Deer Creek Valley Natural Resources Conservation Association, also known as Deer Creek Association (DCA). Unfortunately, we did not receive a scoping notice in the mail or via email about this public comment period, despite our interest and participation in the Slater Fire Re-entry Project categorical exclusion from 2021. This perhaps is true for others who commented previously and may not have known about this opportunity to provide scoping comments.

The project is located southeast of the town of Cave Junction, in the Althouse Creek, Sucker Creek, East Fork Illinois River, West Fork Illinois River, and Indian Creek fifth-field watersheds.

Deer Creek Association's mission is to promote and protect environments and species that sustain the web of life and human communities.

Public lands that are included in the project area are used by our members, the Illinois Valley community, communities across southwestern Oregon and northern California, and countless tourists from across the nation and around the world. We rely on these natural communities to sustain our local and regional nature-based economy, to moderate climate extremes, provide clean water and air, vast carbon storage, and countless other life-sustaining essentials. These lands contribute directly to our members and supporters' quality of life, including scenic values, recreation opportunities, and places where families have formed lifetime and generational traditions. Our members and the public visit and use these lands for recreation, camping, hiking, bicycling, mushroom hunting, berry picking, observing plants and wildlife, and other values such as visual, spiritual well-being, peace of mind and so much more. These lands are irreplaceable as they contain some of the last remaining and rare natural ecosystems. Our members and the broader public will continue visiting these areas throughout our lifetime because we cherish the multitude of species and values of these natural communities.

We are very concerned about the potential adverse impacts of the proposed action. Some level of hazard tree treatment is necessary to protect public safety and maintain open access on roads—however, the ecological and visual adverse impacts of this project as currently proposed would far outweigh the public safety benefits. These adverse impacts are evident from the areas that have already

been cut under the previous Slater Fire Re-entry Project. We urge the Forest Service to not proceed with the same approach. A far less impacting proposal would achieve the stated goal of protecting the public, while also protecting the plethora of values these public lands provide.

Our community has a long history of working toward sustainable relationships with natural community ecosystems on our public lands. Our organization leaders have been part of a core planning team with USFS for a project in the Prospect Ranger District and entered into a MOU with the BLM in 2004 to develop the Natural Selection Alternative (NSA) for the 7,400-acre South Deer project in the Deer Creek watershed. The NSA was the first community alternative to successfully complete the full NEPA process in the Medford District, BLM and was chosen in the Decision Record as the best alternative for a section of land. (see Appendices 1 and 2 for two versions of the NSA)

The Natural Selection Alternative is an ideal alternative for meeting the stated purpose and need of mitigating roadside hazards in the Slater Fire project area to protect public safety. The NSA operates under an ecological philosophical framework that preserves the integrity of natural systems, processes, and species that are crucial for the long-term sustainability and productivity of our public lands. While product removal is not required under the NSA, and even deferred in rare, sensitive, and high-quality habitats, the NSA does allow for natural-selection-based extraction of products, as long as ecological considerations are adequately addressed. The NSA would allow for selective felling and/or removal of true roadside hazard trees, while preserving the scenic, ecological, and productive capacity of the landscape. The NSA would also optimize carbon sequestration across the landscape and best facilitate natural regeneration of the best site-adapted genetics.

The NSA meets all legal mandates. The flexibility of the NSA to take into consideration site-specific concerns makes it the ideal method for mitigating roadside hazards in the Slater Re-open Project, while complying with the Endangered Species Act, the Clean Water Act, the Northwest Forest Plan, the Northern Spotted Owl Recovery Plan, the O&C Act, and Executive Orders that direct all agencies to address climate change, rely on sound science, and seek meaningful public involvement under NEPA.

Please develop and consider in detail the Natural Selection Alternative for the Slater Re-open Project Environmental Assessment.

The Proposed Action Requires Preparation of an Environmental Impact Statement (EIS) Due to Significant Impacts to the Human and Natural Environment

One of the primary reasons people choose to live in and visit rural southwest Oregon is because of the wild and unique qualities of this place. The public lands within the project area provide innumerable benefits for people and wildlife. Not only does the project area hold immense value for surrounding local communities, the Klamath-Siskiyou Bioregion is globally renowned for exceptional biodiversity.

> The Klamath-Siskiyou Ecoregion of northwest California and southwest Oregon has been regarded as an area of extraordinary biodiversity. Despite this recognition and the growing interest in the region's biological significance, the global importance and status of this ecoregion is underappreciated by the public, resource managers, and decision makers. We reviewed the conservation importance and status of the Klamath-Siskiyou Ecoregion relative to that of 30 temperate coniferous forest ecoregions in the United States and Canada and also compared the

results to a related global comparison of diverse forest ecoregions. Based on comparisons of species richness, endemism, unique evolutionary and ecological phenomena (e.g., species migrations, adaptive radiations), and global rarity of habitat types, we ranked the biodiversity of the Klamath-Siskiyou Ecoregion among the world's most outstanding temperate coniferous forests.[1]

Lininger, Jay. 2004. ***Fire History and Need for Fuel Management In Mixed Douglas-Fir Forests Of The Klamath-Siskiyou Region, Northwest California And Southwest Oregon, USA.***

2. GLOBAL IMPORTANCE OF KLAMATH-SISKIYOU FORESTS

Straddling the California-Oregon border, the 10-million-acre K-S region is one of the most ecologically unique regions on Earth (WWF 2003). It is transitional to the Great Basin, Oregon Coast Range, Cascades Range, Sierra Nevada, California Central Valley and the coastal region of northern California, sharing vegetative influences from each (Whittaker 1960, 1961). Thus, it features the greatest plant diversity of any geologic province in western North America (Sawyer and Keeler-Wolf 1995, Wagner 1997). Its temperate mixed-conifer forests cover steep mountainous topography and numerous environmental gradients associated with abrupt changes in bedrock geology, soils, elevation, slope, aspect and moisture (DellaSala and others 1999).

The conservation value of K-S forests is globally significant (Noss and Strittholt 1999). Over 25 percent of the region is unroaded. Roads and logging activities have fragmented three-quarters of forestlands in the KS. It nevertheless features the largest concentration of mature and old growth forests remaining in the Pacific Northwest, mostly on public lands managed by the U.S. Forest Service and Bureau of Land Management (Strittholt and DellaSala 2001). Approximately 50 percent of regional forests occur on privately owned lands, where the most extensive conversion of native forests into young tree plantations has occurred over the last 30 years (CBI 2001). Much of this private land intermingles with land managed by federal agencies in a "checkerboard" pattern (fig. 3). Incremental degradations of relatively unmanaged forests and unroaded areas in this region, whether by unnaturally severe wildfires or by acts of people, may have disproportionately negative effects on biological diversity at continental and global scales (Noss and Strittholt 1999).[2]

According to Dominick DellaSala, Ph.D. and now Chief Scientist at Wild-Heritage, a project of the Earth Island Institute, and award-winning author of over 200 peer reviewed studies and books.

Renowned for its extraordinary biological diversity, the Klamath-Siskiyou is among the top coniferous forests on Earth.

…

[1] DellaSala, D., Reid, S., Frest, T., Strittholt, J., Olson, D., 1999. A Global Perspective on the Biodiversity of the Klamath-Siskiyou Ecoregion. Natural Areas Journal. Volume 19 (4). 300-319.

[2] Lininger, Jay. 2004. *Fire History and Need For Fuel Management In Mixed Douglas-Fir Forests Of The Klamath-Siskiyou Region, Northwest California And Southwest Oregon, USA.*

The Klamath-Siskiyou tops the charts among coniferous forests globally with accolades such as Area of Global Botanical Significance, proposed World Heritage Site and International Biosphere Reserve, Global Centre of Plant Diversity, and Global 200 ecoregion as anointed by the World Conservation Union (or IUCN), scientists, and the World Wildlife Fund, respectively. More conifer species and endemic plants (found nowhere else) occur here than nearly any other temperate conifer forest on Earth. The region's roadless areas have been dubbed the Pacific Coastal Outback, reflecting its status as one of the wildest areas remaining near the Pacific coast of the United States.

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The region's remarkable biological diversity is the result of the interplay of ancient, complex geology; varied but stable (long-term) climate; and natural disturbances like wildland fire. Crisscrossing mountain ranges, sometimes called the Klamath Knot, along with varied topography allow plants with widely different environmental tolerances to persist in close proximity within this biome.

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Overlapping mountain ranges allow plants from distant areas to fit together like pieces in a jigsaw puzzle. The serpentine and ultramafic bedrock geology, produced by colliding tectonic plates that uplifted mountain ranges when dinosaurs roamed, provide for unusual soils: deficient in some nutrients, but highly toxic in others. Extreme soils here have served as a barrier against weed invasions and as a maternity ward for endemic plant species specializing on them; although this is changing due to human-caused climate disruptions.

The Klamath-Siskiyou Forests biome has several properties that may aid in weathering the coming climate storm. Its central position— sandwiched between the Coastal Mountains, Shasta Valley-Sierra, and Cascades—rugged terrain, and complexity of soils and microclimates might provide habitats of refuge for some species. However, climate-related models predict hotter summers—as much as 9 degrees F (5 degrees C) warmer—and drier conditions year-round by 2100. Potentially, there could be a diminishment in coastal fog; this could trigger extinction of 10 percent or more of the known moisture-loving plants, invertebrates, and salamanders here, and perhaps even the loss or heavy stress upon fog-dependent coastal redwoods.

Prior to European occupation, old forests covered up to two-thirds of the Pacific Northwest region. Today, less than 20 percent remains, due to industrial logging. Habitat fragmentation impacts many of the remaining stands, where intact habitat tends to be of insufficient size and scope to provide adequately for a range of animal species. These forests generally support over 1,000 species of plants, invertebrates, and wildlife; are among the most carbon-dense ecosystems on earth, important in ameliorating climate change; purify drinking water; and perform a myriad of life-giving services to people and wildlife.

…

In sum, the biome features the following:

• approximately 3,500 plant species, including 281 endemics;

• nearly two-thirds of the entire California floristic province on just 10 percent of the land mass of California;

• as many as 40 conifer species, one of three regions globally with such richness;

• up to 114 species of butterfly, one of three such areas in western North America;

• dragonflies, flightless beetles, arthropods, and bees are also thought to be exceptionally rich—but are far less catalogued;

• at least 235 mollusk taxa, including at least 60 percent that are endemic;

• nearly 80 percent of all amphibian and reptile species in the Pacific Northwest;

• one of the highest diversities of dwarf mistletoe (11 taxa) in the United States;

• one of the greatest concentrations of ultramafic bedrock and serpentine geology in western North America.

Clearly, the Klamath-Siskiyou Forests biome is a region where the whole is greater than the sum of its parts.[3]

Given the globally significant qualities of this unique bioregion as a powerhouse of biodiversity and carbon storage and sequestration capacity, the context of the proposed Slater Re-Open Project expands well beyond the local context. The proposed action would convert thousands of acres of rare, natural, fire-adapted complex ecosystems within the Klamath-Siskiyous into degraded, flammable, inferior tree plantations that hold little to no ecological or human community values. This ribbon of destruction would weave 400-foot clearcut swaths through the rare, wild, and complex early seral ecosystems that were just rebirthed in the 2020 Slater Fire. No longer would visitors who drive along these roads be able to fully experience and enjoy the amazing natural processes and wild resilience of these lands, and instead would be left to look at ugly and disturbing stumps, scars of lost legacies. Then likely replaced with unnatural plantations, these wild places would never be the same. This project would rob current and future generations of an incredible opportunity to experience the beautiful processes of post-fire regeneration and rejuvenation that has already begun.

There is a large body of scientific data showing that the fire-adapted ecosystems on these public lands are incredibly resilient to wildfire, even high severity wildfire. Studies, like the ones below, are showing that wildfires, even large fires like the Slater Fire, are essential for ecosystem health and in shaping the unique biodiversity that this bioregion is globally renowned for.

DellaSala, D., Hanson, CT. 2015. ***Large Infrequent Fires Are Essential to Forest Dynamics and Biodiversity in Dry Forests of Western North America.***

An Ecosystem Perspective on Large Fires

Large fires (landscape scale) of infrequent occurrence (decades to centuries for a particular area) are natural disturbance agents that shape a remarkable fire-dependent biota of dry forests in western North America. Decades of fire ecology studies show most fires, including very large

[3] DellaSala 2013. *Klamath-Siskiyou Forests.*

ones, are quite beneficial ecologically, yet their importance in shaping biodiversity of dry forests is greatly underappreciated.

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Complex Early Seral Forests

Fire in older forests create complex early forests that link the pioneer stage of forest development to older forest structures through time (Donato et al., 2012). Characteristic features include abundant dead trees; live trees that survived the fire, along with shrub and forb growth; and natural conifer, oak (Quercus spp.), and aspen (Populus spp.) regeneration (DellaSala et al., 2014; Swanson et al., 2011). Such forests rival in structural complexity and taxa richness the more heralded old-growth forests (Figure 3). They are considered among the rarest and most threatened forests in many regions of western North America due to fire suppression and because a substantial portion of them are almost always logged following a fire. Logging can impact forest rejuvenation for decades to centuries, since the forest benefits through time from the pulse of biological activity and the biological legacies created by mixed-severity fire (Donato et al., 2012).

Especially important to many wildlife species is the unique habitat mosaic created by large and small patches of severe fire within mixed-severity fire complexes. In western North America forests, for instance, large fire patches are selected for nesting, roosting, and foraging by black-backed woodpeckers (Picoides arcticus), which are nearly restricted to such conditions. Severely burned patches are even selected as foraging habitat by spotted owls (Strix occidentalis), if they are not logged (Clark et al., 2011, 2013; Hutto et al., 2015). Severe burns also create a 'pulse' of biological activity most prominently associated with high densities of large dead trees (if the fire burned through a mature forest) used by hundreds of wildlife species. The dead trees (snags) are vital for forest renewal as they anchor soils, shade seedlings from intense sunlight, provide habitat for scores of insect-eating bats and birds, and lifeboat a forest from young- to old-growth forest (Donato et al., 2012).[4]

DellaSalla et al. 2015 <u>The Ecological Importance of Mixed Severity Fires: Nature's Phoenix</u>

In sum, while big, intense fires may initially seem damaging to the untrained eye, they soon result in the fire phoenix, triggered initially by an explosion of germinating seed banks long dormant before the first flames but that soon colonize in fire's aftermath, and the natural and beneficial changes in soil chemistry that prepare the way for new growth. Fire's perpetual occurrence means plants and wildlife have had a lot of time to coexist with it as a persistent agent of change and are quite resilient after it; many species actually depend on intense fire to germinate successfully (e.g., Odion et al. 2010; see Chapter 7). Some tree species are even labeled as mixed-severity fire indicators because they require severely burned patches in the midst of moderately burned areas to recruit successfully (Marcoux et al. 2015). Other species, like certain conifers, have produced unique adaptations to resist fires of moderate to high intensity, such as thick, fire-resistant tree bark acquired over eons of natural selection. Witness

[4] DellaSala, D., Hanson, CT. 2015. *Large Infrequent Fires Are Essential to Forest Dynamics and Biodiversity in Dry Forests of Western North America.*

giant sequoia: Even when young it is perhaps the most fire-resistant conifer in the world, capable of surviving intense fire that scorches almost the entire tree crown. Numerous birds, small mammals, big game, invertebrates, and aquatic species prosper in postfire landscapes because the renewed plant growth brings a pulse of biological activity (Chapters 3—6). The ensuing biological legacies include fire-killed trees that then provide nesting and foraging sites, hiding cover, and "nurse logs" for seedlings. Resprouting native flowering shrubs also provide habitat for birds and small mammals that nest and den in montane chaparral, and for flying insects that are attracted to the flowers of the native shrubs and that, in turn, provide food for bats and fly-catching birds. Woody debris also assists in the development of stream channel morphology and hiding cover for aquatic organisms, providing food for native fish.[5]

Hanson, Chad, Ph.D. 2010, The *Myth of "Catastrophic" Wildfire: A New Ecological Paradigm of Forest Health*

- *Patches of high-intensity fire (where most or all trees are killed) support the highest levels of native biodiversity of any forest type in western U.S. conifer forests, including many rare and imperiled species that live only in high-intensity patches. Even Spotted Owls depend upon significant patches of high-intensity fire in their territories in order to maintain habitat for their small mammal prey base. These areas are ecological treasures.*

  …
- *Ton for ton, dead trees ("snags") are far more important ecologically than live trees, and there are far too few large snags and logs to support native wildlife in most areas. Recent anecdotal reports of forest "destroyed" by beetles are wildly misleading and inaccurate.*

- *High-intensity fire burns cleaner than low-intensity, and produces fewer particulates.*

- *Current forests, including old-growth forests, are carbon sinks, meaning that they are absorbing more of the greenhouse gas CO2 than they are emitting. High-intensity wildland fire promotes high levels of carbon sequestration. Old-growth conifer forests cannot function as carbon sinks without fire. Without large, intense wildland fires to cycle nutrients and rejuvenate the productivity of the soil, forests can become carbon sources after about 600 years of age.*
- *Ecologically "healthy forests" are those that have an abundance of low-, moderate-, and high-intensity fire effects, and an abundance of large snags. We need more, not less, fire and large dead trees and downed logs to keep our forest ecosystems healthy.*

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Page 13-14:

Myth 4

Where high-intensity patches occur, the forest will not regenerate naturally due to soil damage or lack of seed sources from surviving conifers.

Fact 4

[5] DellaSalla et al. 2015 The Ecological Importance of Mixed Severity Fires: Nature's Phoenix Preface xxxi

Forest growth and regeneration is vigorous after high-intensity fire, and fire-adapted forests need fire to maintain productivity. In the few places wherein post-fire conifer regeneration does not quickly occur, these areas provide important montane chaparral habitat, which has declined due to fire suppression.

.... On the whole, though, high-intensity fires are soon followed by vigorous forest regeneration.

By contrast, in the very long absence of large fires commonly thought of as "catastrophic", forests can lose so much of their productivity that, ultimately, sites lose the ability to support forest at all. Wardle et al. (2004) concluded the following: "Our results have several implications. First, they suggest that the decline of natural forests, which is often observed in the long-term absence of catastrophic disturbance [including wildland fires], may arise through increasing limitation by [phosphorus] and reduced performance of the decomposer subsystem... Second, the results show that the maximal biomass phase (and associated rates of ecosystem processes) attained after primary or secondary succession cannot be maintained in the long-term absence of major disturbances." [6]

Dominick DellaSala 2019 ***Fire-mediated Biological Legacies in Dry Forested Ecosystems of the Pacific Northwest, USA*** provides important and relevant information to the Slater Re-entry Project.

3.1 What are Biological Legacies? Biological legacies are the type, quantities, and patterns of biotic structures and organisms present before a disturbance that transfer their functions over to the post-disturbance environment (Franklin et al. 2002; Dale et al. 2005). Large (landscape-scale) fires of mixed-severity effects within dry-fire adapted Ponderosa pine (Pinus ponderosa) and mixed conifer forests of the Pacific Northwest USA, the subject of this chapter, generate pulses of biological legacies that can sustain ecosystems for decades to centuries (Franklin et al. 2000; Lindenmayer et al. 2008; Swanson et al. 2011; Donato et al. 2012; DellaSala and Hanson 2015). Whereas forest managers have focused mainly on legacies at the stand level, legacies also exist at landscape scales and as plant and wildlife populations persisting before and after a disturbance. Therefore, scale and context matter in managing legacies for biodiversity benefits.

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3.8 Legacy Management

Ecosystems are not only more complex than we know, they are more complex than we can know.

(Former U.S. Forest Service Chief, Jack Ward Thomas (but the quote has more historical origins))

Given the importance of legacies, can management mimic natural landscape patterns and disturbance processes responsible for legacies? This question has been central to much research, trial and error management (often without trials), and considerable controversy. In the Pacific Northwest, most of the older forests have been logged (Strittholt et al. 2006) and therefore there is not much room for trial and error management, particularly practices that

[6] Hanson, Chad, Ph.D. 2010, The *Myth of "Catastrophic" Wildfire: A New Ecological Paradigm of Forest Health*

further degrade these forests and the post-fire conditions that replenish them over time. For instance, complex-early seral forests are now considered a rare type because they are almost always logged following a fire (DellaSala et al. 2015c).[7]

The proposed actions would significantly degrade the natural regeneration and wild quality of these lands, converting rare, complex early seral ecosystems into artificial, flammable tree plantations. Cutting down biological legacies that hold irreplaceable genetics and ecological values, including living and dead trees 60 inches in diameter, appears to be proposed in substantial, but unquantified, numbers under this project. There does not appear to be a diameter limit, which means that an unknown number of old-growth, legacy trees would be cut and sold, likely at rock bottom prices, while no amount of money could ever buy them back. Extracting the wealth of this frontline community would leave our public lands and the species and people who depend on them greatly impoverished by the enormous impacts. If implemented as currently proposed, this project would have irreversible and significant adverse impacts to the human and natural communities that are inextricably interconnected to, and dependent upon, these lands.

Strittholt, J. and Rustigian, H. 2004. ***Ecological Issues Underlying Proposals to Conduct Salvage Logging in Areas Burned in the Biscuit Fire.*** Conservation Biology Institute January 2004.

Scientific Review of Fire, Recovery, and Post-Fire Management

- It is very important to distinguish between natural stand-replacing fire regimes from other regions where past fire suppression has shifted the natural understory fire regime to one of stand-replacement.
- Due to steep climatic and edaphic gradients and rugged topography, fire frequencies and severities have been highly variable in the Klamath-Siskiyou region and standreplacing fires are common.
- Wildfire always favors some species and negatively impacts others; therefore, a full historical mix of species across the landscape depends on a shifting mosaic over space and time by major ecosystem drivers such as fire.
- Wildfires are one of the most important sources of landscape heterogeneity that determines the composition, structure, and function of large stand-replacing forest systems.
- Dead and dying trees provide important ecological functions to natural forest ecosystems.
- Post-fire salvage logging causes many of the same impacts to natural biodiversity as do green tree harvests.
- The elimination of post-fire habitat and regenerative processes by human intervention has made this habitat type rare.
- Any contention that an immediate, and aggressive post-fire response is needed to protect forests is unfounded.
- Natural post-fire recovery is generally rapid with no deleterious consequences; therefore, active post-fire rehabilitation of any kind is usually not needed, and may even be counter-productive.

[7] DellaSala, D. 2019 *Fire-mediated Biological Legacies in Dry Forested Ecosystems of the Pacific Northwest, USA*

- The notion that salvage logging and post-fire restoration (e.g., replanting, erosion and invasive species control) are intimately connected ecologically is a fallacy.
- Information on the environmental effects of post-fire salvage logging is severely limited, but what does exist overwhelmingly supports the position that post-fire salvage logging is at best benign but more typically damaging to biodiversity values and natural forest recovery.
- There is no scientific evidence that supports the claim that post-fire salvage and replanting of conifers reduces the intensity and severity of subsequent fires. On the contrary, post-fire logging has been shown to actually increase future fire risk because of the buildup of fine combustible fuels over the short-term.
- Natural post-fire recovery (including the dominance of shrubs and hardwoods in some areas) is important in the natural succession of conifer forests and their longterm sustainability. Many of these early successional species, which initially compete with young conifers, serve to (1) rapidly stabilize soils after fire, (2) fix nitrogen, (3) provide important soil mycorrhizae, (4) prevent establishment of invasive exotics, and (5) provide valuable wildlife cover and food. vii
- There is no ecological justification for post-fire salvage logging in any post-fire environment and most definitely not in the Biscuit Fire where so many important biodiversity values are rare and at risk.
- Post-fire salvage logging may be chosen as a management option on purely economic grounds, and it may be possible to minimize the ecological costs in some instances.[8]

The science provided in these comments is only a small fraction of what is available to help inform the agency of the potential adverse impacts that would result from implementing the proposed post-fire logging project. We ask that you abandon the current strategy and instead work with affected communities and conservation organizations to best achieve the goal of protecting public safety and allowing safe utilization of Forest Service roads, while minimizing the ecological and visual impacts.

We request that the project scope not include the felling or removal of living trees that survived the Slater fire, as they are crucial for wildlife habitat, seed sources for natural regeneration, and represent the most fire resilient relics on the landscape. These living trees, unless obviously structurally compromised, also pose very little public safety risk, while providing irreplaceable biological values in the post-fire landscape. To remove these trees will only compound the loss of living forest canopy, reduce future structural complexity, impact wildlife, eliminate potential seed sources for regeneration, and homogenize high severity burn patches.

We also request to retain all snags near the roads that are leaning away from the road or do not otherwise pose a safety risk. These snags, which support a vast array of species and provide long-term benefits until they are again recycled into new topsoil that supports new life, are crucial for the natural regeneration of these ecosystems. These snags, many of which will likely remain standing for decades, if not centuries, also help stabilize the soil, moderate climate, retain moisture, and provide a whole host of

[8] Strittholt, J. and Rustigian, H. 2004. *Ecological Issues Underlying Proposals to Conduct Salvage Logging in Areas Burned in the Biscuit Fire.* Conservation Biology Institute January 2004.

other benefits. There is no ecological or public safety justification for this drastic roadside logging proposal.

Only trees that have been structurally compromised, are in imminent danger of failure, and constitute a clear public safety risk should be felled. We recommend not using the Smith and Cluck Guide for predicting mortality rates because it is not well suited to the Klamath-Siskiyou Mountains, where trees with relatively high levels of canopy scorch tend to survive at a higher rate than in the drier forests of California where the guide was developed. For example, the predicted probability of mortality rate identified in the Hood et al. 2020 research demonstrates that most, if not all, of the living trees in the Slater Fire area are not public safety hazards and would be unnecessary removed under the Smith and Cluck Guide.

We recognize that in living here and in exploring the backcountry wildlands, we assume some risks. We do not expect, nor desire, federal agencies to remove a 400-foot buffer of all trees along the road to protect us from potential "hazards." The expectation that remote Forest Service road systems will be completely free of hazardous snags in the future is unattainable, unrealistic and cannot be maintained. Every forest road in the region contains some snags or hazard trees. Only those obvious hazard trees that are severely burned and leaning over the roadway should be selectively identified and felled to protect the public and keep the roads clear. Selective felling of individual hazard trees will help retain the ecological and visual qualities of these lands, as opposed to clearcutting 200-foot swaths on either side of the road. We are seeing the devastating impacts of these same kinds of post-fire roadside "hazard" projects being hastily implemented across the fire-affected west without adequate analysis of impacts, consideration of a reasonable range of alternatives, and meaningful public involvement.

NEPA's purpose:

> NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA. 40 C.F.R. § 1500.1(b).

The scoping notice is vague and the map fails to provide specific units within the project area. The roads and lands within the project area holds important values to the public, particularly the nearby community of Takilma and the broader Illinois Valley, and the limited scoping information provided makes it difficult for the public to fully engage in this process. NEPA requires meaningful public involvement and encourages substantive public comment, neither of which can be facilitated when the public is not able to understand where and what is being proposed and not able to communicate about site-specific units with the agency. Please provide in the EA a detailed map with unit numbers. Please also set up a public meeting and public field trip to visit areas that has already been completed, as well as to visit units proposed for treatment under this project. Please provide an extended public comment period when the EA is released to help facilitate adequate and meaningful public participation. This extended comment period is reasonable for such a large-scale project covering over 200 miles of roads and over 9,600 acres of treasured public lands.

Please consider in detail in the EA the impacts of the alternatives on fire hazards. The method of clearcutting along the roads and converting what are currently natural areas, into artificially replanted tree plantations along the roads would greatly increase fire hazards and threaten public safety.

> Our findings suggest intensive plantation forestry characterized by young forests and spatially homogenized fuels, rather than pre-fire biomass, were significant drivers of wildfire severity. This has implications for perceptions of wildfire risk, shared fire management responsibilities, and developing fire resilience for multiple objectives in multi-owner landscapes.[9]

Given that plantation forestry and young forests significantly increase wildfire severity, and that roads greatly increase the likelihood of human caused ignitions, the proposed conversion to plantations after clearcutting along the roads would not only have devastating ecological impacts, but it would also significantly increase fire hazards along roads, creating public safety risks and high fire-fighting costs. This public safety risk meets the criteria for significance.

The following study by Donato et al. 2006 was conducted in the 2002 Biscuit Fire footprint, comparing logged and unlogged areas.

> Postfire logging significantly increased both fine and coarse downed woody fuel loads (Fig. 1B). This wood was composed of unmerchantable material (e.g., branches), and far exceeded expectations for fuel loads generated by postfire logging (4, 5). In terms of short-term fire risk, a reburn in logged stands would likely exhibit elevated rates of fire spread, fireline intensity, and soil heating impacts (6).
>
> …
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> the lowest fire risk strategy may be to leave dead trees standing as long as possible (where they are less available to surface flames), allowing for aerial decay and slow, episodic input to surface fuel loads over decades. Our data show that postfire logging, by removing naturally seeded conifers and increasing surface fuel loads, can be counterproductive to goals of forest regeneration and fuel reduction. In addition, forest regeneration is not necessarily in crisis across all burned forest landscapes.[10]

Not only would post-fire logging hinder regeneration and increase fire risks, it would also create other externalized costs to the public, especially considering that taxpayer funding is in large part, or entirely, paying for this project. In contrast to the proposed clearcut/plantation approach, nature will do a great job of restoration and regeneration of the burned areas if humans can do as little damage as possible in mitigating roadside hazard trees to provide for our safety needs.

An economic analysis must be conducted and disclosed to the public of each alternative in the EA in order for the public to be able to know what is being proposed and to provide substantive comments. For example, please analyze and disclose the economic and ecological tradeoffs of natural vs. artificial regeneration. If selective felling of trees that pose an immediate risk of falling on the roads is done instead of the aggressive clearcutting proposal, the seeds in the soil that are waiting to sprout would have a much better chance of naturally regenerating. Natural regeneration is ideal for innumerable reasons, not least of all the lowest cost to the public, the persistence of irreplaceable, site-adapted genetics, and optimal productivity.

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[9] Zald, H. and Dunn, C., 2018. Severe fire weather and intensive forest management increase fire severity in a multi-ownership landscape. Ecological Applications, 0(0), 2018, pp. 1–13

[10] Donato, D. C., J. B. Fontaine, J. L. Campbell, W. D. Robinson, J. B. Kauffman, B. E. Law. 2006. *Post-Wildfire Logging Hinders Regeneration and Increases Fire Risk.* 20 JANUARY 2006 VOL 311 SCIENCE

> **Key Finding:** Early seral forest produced by clear-felling (clear-cutting) lacks the structural complexity of a fire-produced forest as there are few if any large trees left to provide legacy structures for wildlife. Native shrubs also tend to be eliminated through mechanical or chemical (herbicides) means after logging. Clear-felling and related forestry activities are not equivalent to fire-generated complex early seral forests in any form (Bond, 2015; DellaSala et al., 2015a; Hutto et al., 2015; Swanson et al., 2011)[11]

An EIS is necessary to also evaluate the impacts of the proposed logging, which includes a whole suite of damaging activities, such as skidding, yarding, landing creation, road construction and renovation, heavy equipment operations, slash treatment, log transport, and so forth. Tree yarding has significant direct, indirect, and cumulative impacts when implemented on the scale and in the manner proposed. Based on the previous implementation of the Slater Reentry Project, tree yarding will be ground based, dragging logs across fire affected soils, doing significant damage to sensitive fire affected soil resources, and nearby streams. The impacts of these logging activities would reasonably be more severe in an already disturbed landscape like the proposed project area. The adverse impacts to soil, hydrology, and survival of threatened and endangered species are especially important to consider.

The Pacific Northwest region "represents some of the highest carbon density forests in the world, which can store carbon in trees for 800 y or more."[12] Please also analyze the carbon emissions that would result from this project under each alternative and whether it complies with the recent Executive Orders to combat climate change, protect mature and old growth forests, make decisions guided by sound science, and meaningfully engage the public. The agency must consider the current direction to review agency actions taken in the past 4 years and whether this project can be approved before those agency reviews have been completed.

We are concerned that economic motivations are driving the project more than public safety, particularly in conservation-based land use allocations, such as within Late Successional Reserves, Riparian Reserves, and important designated Backcountry Recreation and Botanical areas. The scoping notice did not say how the project would be modified to account for different land use allocations, which is an important consideration for the public to be able to provide substantive comments. Please include this information in the EA. This information is essential for the public to be able to understand and comment on the proposed action.

A complete economic cost-benefit analysis is needed in the EA that analyzes the economic tradeoffs of short-term timber profits for large corporations versus the long-term adverse impacts to a whole host of values, including the scenic and recreational qualities of the Illinois Valley. As one of the only cutover routes from Interstate 5 to the world-renowned Redwoods and Pacific Ocean, the Illinois Valley has an ever-growing recreation and tourism economy that continues to suffer from the cumulative impacts of unsustainable and unsightly forest management practices on public and private lands. The proposed post-fire logging would cumulatively add to these impacts, affecting a wide range of businesses, landowners, and stakeholders who depend on the amenity-based economy. Please analyze and disclose

[11] DellaSala, D., Hanson, CT. 2015. *Large Infrequent Fires Are Essential to Forest Dynamics and Biodiversity in Dry Forests of Western North America.*

[12] Law, B., Hudiburg, T., Berner, L., Kent, J., Buottea, P., Harmon, M. 2018. *Land use strategies to mitigate climate change in carbon dense temperate forests.*

these cumulative impacts in the EA. Please also prepare an EA that considers alternatives that retain the natural beauty of the post-fire landscape and prioritize ecological health over timber volume production.

Please include in the EA the direct, indirect, and cumulative impacts to the endangered species present in the project area, such as the Northern spotted owl, Coho salmon, and potentially the Humboldt marten, as well as the presence of "candidate" ESA species like the Pacific fisher and monarch butterfly. Please also include the impacts to the many unique botanical values of the region and the significant connectivity values in the Siskiyou Crest region.

NEPA Requires Disclosure of Site-Specific Information

Project implementation requires a site-specific decision. Site-specific decisions require site-specific analysis. Analyzing and disclosing site-specific impacts is critical because where (and when and how) activities occur on a landscape strongly determines the nature of the impact. For example, disturbance of the same amount of surface area could have drastically different impacts depending on where, when, and how that disturbance occurs. Fragmentation is another good example of how important location data is to determining site-specific impacts. Impacts to streams, soils, wildlife, botany, recreation, and other community values are also highly variable depending on location and cannot be adequately analyzed without site-specific review.

To ensure its purposes of informed decisions and meaningful public participation are met, NEPA contains myriad requirements that will not apply to a post-hoc implementation plan. NEPA requires a detailed, site-specific analysis of the direct, indirect, and cumulative impacts of the proposed action and—importantly—of alternatives to it, including the alternative of no action. 40 C.F.R. §§ 1502.14, 1502.16, 1508.8, 1508.9 (requiring EAs to evaluate alternatives). For an EA, CEQ regulations require that agencies disclose environmental impacts, provide evidence and analysis sufficient to determine whether the action may have significant impacts, discuss and analyze alternatives. 40 C.F.R. § 1508.9.

The EA should provide detailed, site-specific analysis, in order to allow the public opportunity for meaningful comment.

The Scoping Notice fails to provide significant site-specific information necessary for the public to provide substantive, meaningful comment on the proposal. For example, the Scoping Notice fails to identify specific land use allocations found within the planning area, and does not provide spatial information or maps denoting the location of these areas in relation to proposed project activities. Please provide this information in the EA and identify how the Standards and Guideline for each management area will be implemented. If there are alternatives analyzed that include the felling and/or removal of living trees, please disclose the number of live trees targeted for removal within each unit, the number and distribution of trees by size and age class, Northern spotted owl cores affected, and other relevant information for the public and decision-maker. Please also include any anticipated commercial timber volume under each alternative if applicable.

Please do not use uniform prescriptions for hazard tree removal, and instead analyze a range of alternatives that rely on site-specific information and considerations. Computer models should not be relied on for estimating tree mortality and burn severity, and must be field verified.

Please consider using a more flexible approach tailored to the specific terrain, circumstance, and location in proximity or relationship to the road. If trees or snags are not true public safety hazards they should not be cut, and if treatment areas can be reduced while not compromising public safety they should be reduced. Treatment size and configurations should reflect slope, location in relation to the road, terrain and maximum hazard tree height. We believe that treatment areas could be designed to reflect site specific public safety needs and could range from 0' to a maximum of 200' from a Forest Service road. By reducing the number of trees or snags felled, yarded and removed, environmental impacts will be greatly reduced, while also meeting the Purpose and Need to the highest possible degree.

Please utilize a flexible treatment design protocol across the planning area and throughout the project area, including matrix lands. This will most effectively meet the Purpose and Need and at the same time, this sort of flexible design protocol, developed through addressing actual site-specific public safety needs, is necessary to meet Northwest Forest Plan mandates and Siskiyou National Forest LRMP Standards and Guidelines in LSR forest, Botanical Areas, Designated Backcountry Areas, Riparian Reserves and Special Wildlife Sites.

Conclusion

Although roadside hazard felling is necessary to some extent within the planning area, care should be taken to ensure this activity is done in a manner consistent with LRMP Standards and Guidelines, the Northwest Forest Plan, the Aquatic Conservation Strategy, the Endangered Species Act, and the project's specific Purpose and Need. This requires a flexible, ecologically sensitive approach that maximizes ecological values, while reducing public safety risks along Forest Service roads. We believe the Natural Selection Alternative would provide this flexible, ecologically sensitive approach that maximizes a wide range of values, while reducing public safety risks.

Studies of the fire ecology of this area have found that high severity burned areas, even large patches, if unlogged, produce complex, early seral, snag dominated ecosystems that are unparalleled in biodiversity. Please allow the Slater fire footprint to become a global demonstration site of natural, post-fire regeneration and use this opportunity to study, research, and monitor natural processes in action.

Please keep us informed of further developments for this project.

Thank you for consideration of these comments,

Sincerely,

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PO Box 670
Selma, OR 97538
DeerCreekAssociation@outlook.com

The following appendices and references are submitted as attachments via email on August 15, 2022.

Appendices

Appendix 1: *Natural Selection Alternative (NSA) for the Medford District BLM, South Deer Landscape Management Project* (EA #OR 110-05-10)

Appendix 2: DCA's *Proposed DRAFT Natural Selection Alternative for Clean Slate Forest Management Project Scoping* (Camp 2017 CS DRAFT NSA 12.22.17.pdf)

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