

March 10, 2023

Jennifer Eberlien  
Regional Forester  
Pacific Southwest Regional Office  
Ecosystem Planning  
1323 Club Drive  
Vallejo, CA 94592  
Objections-pacific-southwest-regional-office@usda.gov



**RE: Bear Country Project**  
**Objection as per 36 CFR 218.8(d)**

- Project Name: Bear Country Project
- Responsible Officials: Forest Supervisor Rachel Smith
- Klamath National Forest, Scott Salmon Ranger District

Thank you for accepting this Objection pursuant to 36 CFR § 218 from the Klamath Forest Alliance (KFA) regarding elements of the Bear Country Project on the Klamath National Forest.

The issues covered in this Objection were discussed and raised in our October 21, 2021 comments regarding the Bear Country Project (R5 project) Environmental Assessment (EA) and in our previous Scoping Comments. Thus, KFA has standing to bring this objection as authorized at 36 CFR 218.8(d). In our comments we expressed numerous concerns and made recommendations regarding the treatments and project activities proposed, their impact on the environment, threatened and endangered species, mature and old forest habitats, Wild and Scenic Rivers and other substantive issues.

It is apparent that those concerns were not adequately addressed and our recommendations were not carried forward into project design. We urge the Klamath National Forest to work with us to reduce project level impacts and implement more effective, responsible forest management activities in the spectacular Salmon River watershed.

**Scope of this Objection**

As per 36 CFR § 218 this Objection applies to the following activities authorized in this project:

**Objection Point #1: The scope, scale, intensity and location of the activities proposed requires an Environmental Impact Statement.**

The importance of the Salmon River watershed from a biological, recreational, and cultural perspective, combined with the scale of activities proposed requires analysis through a full Environmental Impact Statement, rather than a less rigorous Environmental Assessment. The scope, scale and intensity of activities proposed, the presence of sensitive land use allocations

like Late Successional Forest, Wild and Scenic River designations, Critical Habitat for the Northern spotted owl and some of the last occupied northern spotted owl nest sites documented on the west side of the Klamath National Forest all require a more in-depth analysis of effects, impacts and current conditions.

**Suggested Remedy #1:** Withdraw the Draft Decision Notice and Finding of No Significant Impact for the Bear Country Project and publish a full Environmental Impact Statement.

**Objection Point #2: The Bear Country EA did not contain an appropriate range of alternatives as required under NEPA.**

The Bear Country Project EA did not provide an adequate range of alternatives as required by the National Environmental Policy Act (NEPA). In fact, the agency did not provide any range of alternatives. Only the agency's Proposed Action and a No Action Alternative were analyzed in the EA or considered in the Draft Decision Notice and FONSI. Because multiple substantive comments were received by the agency that identified many relevant issues of concern and appropriate management recommendations, a more comprehensive range of alternatives should have been considered.

Some of these issues identified in Scoping and EA comments included concern over Northern spotted owl impacts, the degradation of late successional habitat, impacts to Inventoried Roadless Areas, the certain increase in fire risks associated with canopy reduction and large tree removal, damage to both the North Fork and South Fork Wild and Scenic Salmon River and many others. These concerns were not adequately addressed in the EA, the Draft Decision Notice or supporting documents.

Providing a range of alternatives allows the public and Forest Service line officers to contrast and compare the alternatives and their outcomes to best meet the Purpose and Need of a given project. NEPA encourages public transparency, the inclusion of public concerns in land management projects, scientific rigor and creativity in both the design and implementation of federal land management projects. The process of considering a range of alternatives is intended to educate and inform the decision-making process, create a more rigorous, comprehensive NEPA analysis and to inform better decisions. Unfortunately, this was not done in the Bear Country Project.

The range of Alternatives considered were far from adequate given the importance, complexity and high habitat values found on this landscape and the proposed action alternative was not reflective of public input or a meaningful public involvement process. Furthermore, the EA did not incorporate or consider substantive and relevant public comments that identified multiple significant or relevant issues.

**Suggested Remedy #2:** The Draft Decision Notice and FONSI should be withdrawn and an Environmental Impact Statement published considering an appropriate range of alternatives, reflective of meaningful, substantive public comments. Further analysis with a range of

reasonable alternatives is necessary and should be completed in an Environmental Impact Statement.

**Objection Point #3: The Purpose and Need failed to identify a need to enhance and/or maintain habitat for the Northern spotted owl and recover the species**

The project area contains numerous important land use allocations intended specifically to enhance, maintain and protect northern spotted owl habitat including Critical Habitat Units, Late Successional Reserve forests and occupied Northern spotted owl cores and home ranges. These designations and the demographic support they provide to Northern spotted owl populations is important in the recovery of the species under the Endangered Species Act.

These objectives should have been clearly identified in the Purpose and Need. Unfortunately, this failure to adequately consider or prioritize the most important feature of these land use allocations, the recovery of the Northern spotted owl and their habitat is inconsistent with these land allocations and their designation. Given some of the land use allocations in question, the agency simply did not address the appropriate objectives and needs. In LSR forest, Critical Habitat, and in both Northern spotted owl cores and home ranges the agency is directed to enhance, maintain and protect northern spotted owl habitat.

The current Purpose and Need is far too limited and when considering both Northern spotted owls and late successional habitat, the project focuses only on reducing fire risks to these values, while other issues should most certainly also be emphasized in in LSR forest, Critical Habitat and occupied, or unoccupied home ranges. The currently very narrow focus has pushed the agency to log old forest habitats in LSR, Critical Habitat and occupied Northern spotted owl home ranges and does not constitute the “hard look” required in the NEPA process. The agency simply did not appropriately balance objectives promoting habitat protection and the maintenance of Northern spotted owl habitat in the analysis or in the action alternative. This insufficiency in the Purpose and Need led to the approval of project elements that Fish and Wildlife identified as “inconsistent with the 2011 Revised Recovery Plan and 2012 Critical Habitat Rule (USDI. 2022).

**Suggested Remedy #3:** Withdraw the Draft Decision Notice and FONSI for the Bear Country Project and publish an Environmental Impact Statement that identifies the need to enhance, maintain and protect existing Northern spotted owl habitats in LSR forest, Critical Habitat and in either occupied or currently unoccupied home ranges.

**Objection Point #4: Management proposed in the Black Inventoried Roadless Area was not adequately analyzed in the EA and is inconsistent with the 2001 Roadless Rule**

The Black Inventoried Roadless Area (IRA) encompasses about 6,565 acres of the Bear Country Project area and the Draft Decision Notice includes approximately 250 acres of commercial logging, 5.6 of commercial hazard tree removal along road 39N64 and along 3.5 miles of the

Black Bear Trail. Additionally, commercial hazard tree felling is proposed along the Sawyers Bar Road adjacent to the Portuguese IRA. All these activities will degrade IRA values.

These two roadless areas contain uniquely intact biological values, undisturbed wildlife habitats, and have been protected under the 2001 Roadless Area Conservation Rule. Unfortunately, the NEPA analysis for this project contains one short paragraph in the EA and an 18-page IRA Briefing Paper to analyze project effects, yet the actual project effects, the current conditions, the unique plant communities, wildlife habitats, and important recreational and scenic values went largely undisclosed, unmentioned, and unanalyzed.

The agency's NEPA analysis claims that the commercial logging proposed would "remove generally small diameter timber to maintain ecosystem composition and reduce the risk of uncharacteristic wildfire effects" (USDA. 2023 P. 80). To support these claims the agency identified trees up to 22" in diameter as "small diameter." (USDA. 2023a. P. 9).

The agency also identified a 70" diameter growth potential for Douglas fir and Ponderosa pine trees, which is being used to justify the current definition of small diameter in the NEPA analysis. Yet, this analysis is based on an insufficient sample size and unrealistic assumptions about vegetative succession, wildfire effects, and forest growth in the era of climate change. Stand exams in the planning area and used to inform this determination sampled only six trees over 60" in diameter and one tree up to 70" diameter. To infer growth potential based on seven trees is incredibly inappropriate, and the harsh, rocky and often exposed conditions found in large portions of the Black and Portuguese IRA do not often support trees of this stature. The growth potential would likely be much smaller than 70" throughout most of the Black and Portuguese IRAs and if anything will diminish further going forward into the future.

In fact, many of the habitats found in both the Black and Portuguese IRA are extremely rocky, with minimal productivity and limited conifer growth. They often contain extensive stands of chaparral, mixed hardwood stands, disjunct groves of gray pine, and scattered conifer stands mostly in lower slope positions, north and some east facing slopes. Many of these plant communities are adapted to occasional high severity fire effects and extremely droughty conditions. In this landscape, a 22" diameter tree, although far from the largest tree on the landscape, could not be accurately described as "small".

The agency also provided information claiming that few large trees up to 22" diameter would be removed, but the information was based on simulated thinning, not an actual timber sale mark or timber tally. Therefore, this information is highly speculative, cannot be verified on the ground, and does not constitute an appropriate NEPA analysis. Simply saying that simulated treatments maintained large tree cover, restored ecosystem composition and structure by reducing the risk of uncharacteristic wildfire effects, and maintained or improved one or more roadless areas characteristics, does not mean it is so, and no credible information was provided in the NEPA analysis to support this conclusion. These claims are highly speculative, while the importance of roadless areas from a conservation and connectivity standpoint is undisputed.

An actual timber tally or tree removal mark should be required to verify the claims in the IRA Briefing Paper.

Also highly speculative is the claim made throughout the IRA paper that unless treated with the proposed commercial logging prescriptions, high severity fire events will impact biological, recreational and scenic values in the Black and Portuguese IRAs. Nothing in the Updated IRA Briefing Paper demonstrates that proposed treatments will maintain or restore ecosystem composition, or reduce wildfire effects, especially when these fire effects are driven by terrain and weather, not fuel loading, composition or forest structure. If these areas burn under conditions that include heavy inversion layers, if they burn at night, if they back down the hillside, rather than race up it, or burn in the morning, evening or night time, rather than the heat of day, wildfire effects will be moderated. Assuming high severity fire effects based on fuel loading is highly inaccurate, subjective and simplistic. Utilizing these unfounded and overly generalized assumptions about future fire effects does not constitute a valid NEPA analysis or the “hard look” required.

Finally, the Bear Country Project authorizes the use of 12 existing landings and the reconstruction of 1.5 miles of existing temporary roads within Inventoried Roadless Area. We do not believe these approvals are consistent with the 2001 Roadless Rule and they do not support roadless area values or characteristics.

The Portuguese and Black IRAs contains unique biological values that the Bear Country Project EA fails to adequately consider or even mention in the analysis. The real-world impacts or effects of proposed commercial logging activities on roadless area values would be severe, yet they were hardly mentioned or analyzed in the EA or the IRA Briefing Paper. The logging proposed is inconsistent with the 2001 Roadless Area Conservation Rule and damaging to the values the roadless rule aimed to protect.

**Suggested Remedy #4:** Withdraw all commercial logging units and temporary road reconstruction inside the Black Inventoried Roadless Area.

**Objection Point #5: The EA failed to adequately consider Wild and Scenic River management within the Project Area**

The many important values of the Wild and Scenic Salmon River were not adequately considered, disclosed or addressed in the NEPA analysis for the Bear Country Project. In fact, virtually no information was provided regarding the many exceptional values of the Wild and Scenic segments of the Salmon River. Currently, the agency is claiming without supporting evidence that “No Section 7 review is required and there are no adverse effects to the Wild and Scenic River” (USDA. 2023 p. 81). Yet, the agency has not produced sufficient analysis to support these claims and significant adverse effects will occur if the project is implemented.

Unfortunately, like Inventoried Roadless Areas, the agency failed to adequately consider this important land use allocation or the effects of project activities on Wild and Scenic River

segments. Also, like Inventoried Roadless Areas, the issue of Wild and Scenic River management consists of one short paragraph in the EA. Additionally, since the agency claims that no Section 7 Review is required, the agency provided no supplemental analysis or Resource Report pertaining to Wild and Scenic River management.

Despite being the dominant feature of the planning area, the Wild and Scenic Salmon River, North Fork Salmon River and South Fork Salmon River were not appropriately addressed in the NEPA process. Virtually the entire analysis consists of stating that “the proposed action would not occur with the bed and banks of either Fork of the River.” (USDA. 2023 P. 80-81). Yet, the impact of this project to the Wild and Scenic North and South Fork Salmon River is severe and the project does not have to impact the waterway directly to affect its values.

The EA addresses the Salmon River’s (including the main stem, South Fork, and North Fork) status as a National Wild and Scenic River, in a sole paragraph that states the rivers “single Outstandingly Remarkable Value for the Wild and Scenic River is anadromous fishery.” This description is inadequate in terms of assessing project impacts and ignores the river’s once robust and unique anadromous fish populations including Spring Chinook, coho salmon, lamprey, and sturgeon. It also does not include the most recent population data and trends for Salmon River fisheries and ignores the Salmon River’s unique anadromous fishery values.

The National Wild and Scenic Rivers Act requires federal agencies to manage designated rivers to protect and enhance the values for which the river was designated. California’s state designated rivers, including the salmon, were added to the federal system when the Interior Secretary approved a petition by the Governor of California in 1981. The recognized outstanding value of the Salmon and other state protected rivers were anadromous fisheries.

Section 10 of The National Wild and Scenic River Act also requires the Forest Service to manage the river with a “primary emphasis” on the protection of “its esthetic, scenic, historic, archeologic and scientific features.” This statutory requirement for “primary emphasis” in management is partially translated into the Klamath National Forest’s Forest Plan (2010 Update) at 4-77, 4-118, and 4- 121: “Management of the outstandingly remarkable values shall be the driving management intent....”

Although the Forest Plan limits its “driving management intent” to the outstandingly remarkable values, the Forest Service is nonetheless required by law to give primary emphasis to protecting the rivers’ esthetic, scenic, historic, archaeological, and scientific features, which are inclusive of and more expansive than the outstandingly remarkable anadromous fisheries value identified for the two designated rivers that are directly affected by the project.

There is no information in the project record that indicates the Forest Service has given primary emphasis to protecting these values and features as required by the Wild and Scenic Rivers Act, or that the Forest Service’s management of the outstandingly remarkable values is the driving management intent as required by the Forest Plan.

There has been no federal assessment of other potential but likely outstanding values of the Salmon River. The 1983 Nationwide Rivers Inventory identified likely outstanding scenery, recreation, wildlife, and historic values for the Salmon River (including its forks). Potential project impacts on these values should have been assessed in the EA and the project adjusted to avoid impacts or measures taken to fully mitigate the impacts, yet these issues were not considered. Additional values of the Salmon River that achieve “outstandingly remarkable” status include: Whitewater recreation, scenery, and cultural values.

Project activities proposed within the Recreational and Scenic River corridor boundaries appear to include skyline commercial thinning, manual thinning, ground-based commercial thinning, temporary new road and existing roadbed construction, helicopter commercial thinning, ridgetop mastication/chipping, and underburning. Although all of these activities are allowed under Recreational and Scenic River classification management guidelines, the activities are not allowed if they harm and fail to enhance the river’s outstanding fishery value or are inconsistent with the “primary emphasis” of Wild and Scenic River management for the designated streams “esthetic, scenic, historic, archeologic, and scientific features.” The logging proposed will be visible from the river corridor which will damage esthetic, scenic, and scientific features. Other constraints include visual quality objectives tied to Recreational and Scenic classifications. The visual quality objective (VQO) for Recreational Rivers is partial retention. The Scenic River VQO is Retention. We do not believe these VQOs are being met.

All of the North Fork and most of the South Fork in the project area are classified as Recreational Rivers. A short segment of the South Fork from St. Claire Creek to the Cecilville Bridge is classified as a Scenic River. Although many of the project activities would be allowed under Recreational and Scenic classifications, the mandate to protect and enhance the river’s outstandingly remarkable anadromous fish values remains paramount, along with a primary emphasis on other river values. Activities permitted under Recreational or Scenic classifications would be prohibited if they harm the river’s outstandingly remarkable anadromous fishery or other river values. Indeed, the standard under the NWSRA is to “protect and enhance” outstanding values. The “and” between “protect and enhance” mandates that project activities enhance values as well as protect them. The EA has largely failed to make the case that any of the project activities would enhance or protect the river’s anadromous fish values or other important river values as a “primary emphasis.” In fact, the EA states outright that “Watershed restoration is not the primary purpose and need for the Bear Country Project.” (USDA. 2023 P. 174).

**Suggested Remedy #5:** Withdrawal all commercial logging units, road construction and road reconstruction within or visible from the Wild and Scenic North Fork and South Fork Salmon River corridor.

**Objection Point #6:** The EA failed to adequately consider project activities that are inconsistent with the NW Forest Plan and KNF Forest Plan in regard to LSR management.

Late Successional Reserves (LSRs) were designated, *“To protect and enhance conditions of late-successional and old-growth forest ecosystems, which serve as habitat for late-successional old-growth related species including the northern spotted owl. These reserves are designed to maintain a functional, interacting late- successional and old-growth forest ecosystem.”* Given these very clear objectives, the agency must work to protect, enhance, and develop habitat in the quantity and distribution necessary to provide for the long-term recovery of northern spotted owl and other late-successional dependent species.

To comply with LSR standards, the agency must specifically retain not only the largest trees, but also dense canopy, standing snags, coarse downed wood and old forests over 80 years of age. None of which is being done in the Bear Country Project. Removing large trees with late successional characteristics and opening forest canopies is contrary to the management directives for LSR forest, the Northwest Forest Plan and the Klamath National Forest Land Resource Management Plan. The activities proposed in the Bear Country Project actively degrade the NSO habitat specifically meant for protection and enhancement.

Currently, the Eddy Gulch LSR contains relatively well-connected nesting, roosting, foraging and dispersal habitat in a pattern that suggests high habitat fitness potential for the Northern spotted owl. (USDI. 2022 P. 49). Yet, the Bear Country Project would have significant, largely unanalyzed impacts to Late Successional Reserve (LSR) forests in the Salmon River watershed. According to the Biological Opinion portions of the Bear Country Project are inconsistent with LSR Standards and Guidelines for the Klamath National Forest, the NW Forest Plan and the intent of the Northern spotted owl Recovery Plan. (USDI. 2022 P. 120-121)

In particular, Fish and Wildlife found that commercial thinning in the Maintain and Improve Late Seral treatment units due to their location “primarily in nesting/roosting habitat in mid to lower slope positions of the currently occupied KL-1014 and KL-1013, including near and along Matthews Creek” is not consistent with LSR Standards and Guidelines. (USDI.2022 120-121). In total the Biological Opinion identifies 1,095 acres of late successional habitat degraded by the ironically named Maintain and Improve Late Seral Health prescriptions. (USDI. 2022 P. 110). The agency is directed in LSR forest to protect and enhance late successional forest values, yet was determined to “likely adversely affect” the NSO in these prescriptions and throughout this project.

In LSR forest treatments that remove, downgrade or degrade NSO habitat conditions, the diminished or deficient habitat conditions must recover habitat complexity, canopy cover and other NSO habitat elements in no more than 20 years. Unfortunately, habitat in the Bear Country Project will be permanently removed in strategic fuelbreaks, constituting a permanent habitat loss to 223 acres of nesting/roosting and 701 acres of foraging habitat. (USDA. 2021b. P.70), of that total, 167 acres of nesting/roosting habitat and 323 acres of foraging habitat would be removed in LSR forest (USDA. 2021b. P. 99). This permanent loss of habitat is inconsistent with LSR management under the Klamath National Forest Plan and the NW Forest Plan.



Although the Forest Service claims very few large trees will be removed in treatment areas, Fish and Wildlife recommended a 30" diameter limit in key NSO areas (USDA. 2021b. p.7 &8), which the Forest Service refused to implement. The Bear Country Project is inconsistent with LSR management due to impacts to late successional habitat including increased fragmentation, loss of late successional habitat, impacts to northern spotted owl home ranges, habitat downgrades, habitat removals, loss of large trees, a dramatic reduction in canopy cover, loss of habitat complexity, increased competition with barred owls, and other significant effects.

The scoping notice states, *"Stands that currently contain the structural components to be considered late-successional are in some cases experiencing a level of mortality that may prohibit the function of this habitat in the longer term. Treatment prescriptions that are designed to reduce inter-tree competition while preserving key structural components can result in a stand that functions as late-successional habitat for a longer period of time."*

In our Scoping comments we asked that these supposed conditions be more clearly articulated. Where are these conditions occurring? In what specific units or areas? What is the actual effect of tree mortality related to competition, stand conditions, bark beetle outbreaks and natural disturbance processes? The EA failed to answer these questions. Our on-the-ground unit monitoring for the Bear Country Timber Sale revealed very few, if any, large patches of disturbance or competition induced mortality in the project area. We also found no indication that natural mortality agents were creating mortality on anywhere near the scale identified in the Bear Country EA. Although the agency makes these claims, they are not evident on the landscape and no analysis was provided to support these otherwise unsubstantiated claims of increased mortality and subsequent loss of late successional forest habitat functionality.

The scoping notice states that, *"Active management to restore ecosystem function of late-successional habitat through combinations of hand and mechanical treatments along with prescribed fire are recognized as the most effective way to promote diversity of forest types and the spatial heterogeneity necessary to reduce tendency toward large-scale fire regime and forest structure shifts and further habitat loss (Lesmeister 2019)."* Yet, no prescribed fire is proposed in the Bear Country Project in LSR forest.

In the Draft EA, the Purpose and Need also quotes Lesmeister (2019) stating that *"(w)ithin the Klamath-Siskiyou ecoregion, flexible and multi- scale land management approaches that promote diversity of forest types will likely enhance conservation of a range of species requiring different forest conditions for long-term persistence."* (USDA 2021 P. 13). The agency is ignoring the totality of Lesmeister 2019 and is misleading the public with faulty analysis. A closer reading of Lesmeister 2019 states that active management can degrade habitat suitability and may not decrease fire severity. More specifically, many of the findings in Lesmeister 2019 directly contradict the interpretation utilized by the Klamath National Forest in this project. In this specific instance, the Klamath National Forest is manipulating science, misrepresenting applicable research and misleading the public in regard to important fire science conducted in our region.

Here is the full quote with the portions of the quote removed in the EA highlighted in bold:

*“Within the Klamath-Siskiyou ecoregion, flexible and multi-scale land management approaches that promote diversity of forest types will likely enhance conservation of a range of species requiring different forest conditions for long-term persistence. **An integral component of these approaches could include resistance strategies (i.e., no active management) to protect high-value older forest (Millar et al. 2007) and prescribed fire to promote and maintain a mix of forest conditions** in this landscape characterized by mixed-ownership and mixed-severity fire regime. Ultimately, spatial heterogeneity that includes the buffering effects of northern spotted owl nesting/roosting habitat may serve as a stabilizing mechanism to climate change and reduce tendency toward large-scale catastrophic regime shifts.” (USDA 2021)*

According to the Lesmeister 2019 paper, protecting large blocks of northern spotted owl habitat can enhance fire resistance and benefit biodiversity, while the EA claims these very same stands must be logged due to supposed issues with forest density, canopy cover, fire risk and biodiversity loss. These claims are directly contradicted by the very research used to justify the Purpose and Need for this project. Below are quotes directly from Lesmeister 2019 (emphasis added).

***“Our results indicate that northern spotted owl habitat can buffer the negative effects of climate change by enhancing biodiversity and resistance to high-severity fires, which are predicted to increase in frequency and extent with climate change. Within this region, protecting large blocks of old forests could be an integral component of management plans that successfully maintain variability of forests in this mixed-ownership and mixed severity fire regime landscape and enhance conservation of many species.”*** (Lesmeister 2019).

The Bear Country EA also assumes that the proposed logging activities would enhance northern spotted owl habitat conditions and reduce fire risks. Again Lesmeister 2019 disagrees:

***“Active management actions that include mechanical treatments degrade suitability of forests for nesting and roosting by northern spotted owls (Lesmeister et al. 2018) and may not always decrease risk of high-severity fire. Further, considering trends and forecasts for earlier spring snowmelt and longer fire seasons, climate change may exacerbate the effects of wildfire (Dale et al. 2001, Westerling et al. 2006), and thus the framed conundrum between northern spotted owl habitat and fire management in mixed-severity regimes. Our results indicate that older forest in late-successional reserves (i.e., northern spotted owl nesting/roosting habitat) with no active management can serve as a buffer to the effects of climate change and associated increase in wildfire occurrence. These multi-storied old forests in these environments enhance biodiversity and have the highest probability to persist through fire even in weather conditions associated with high fire activity.”*** (Lesmeister 2019).

Lesmeister also identifies prescribed fire (and by extension managed wildfire) as the most effective way to mitigate wildfire intensity, but no prescribed fire is proposed in LSR forest habitats in the Bear Country Project EA.

*“Fuel-reduction treatments such as mechanical thinning can effectively reduce fire severity in the short term, but these treatments, by themselves, may not effectively mitigate long-term dynamics of fire behavior under severe weather conditions and may not restore the natural complexity of historical stand and landscape structure (Schoennagel et al. 2004). On the other hand, prescribed fire that mimics severity and return intervals of natural fire regimes in forests that historically experienced fire can result in landscapes that are both self-regulating and resilient to fire (Parks et al. 2015). Prescribed fire is generally considered to be the most effective way to reduce the likelihood of high-severity fire in combination with mechanical treatments (Stephens et al. 2009). (Lesmeister 2019).*

The Late Successional Reserve system was set up by the Northwest Forest Plan decades ago because old-growth and mature forests need to remain standing in order to support hundreds of species including the northern spotted owl. These forest stands have long been recognized as critical to species survival. Our organizations agree with DellaSala et al 2015, in their assessment of the importance of the reserve system:

*We believe that federal agencies should instead build on the NWFP to ensure continuing success in the Pacific Northwest. We urge federal land managers to (1) protect all remaining late-successional/old-growth forests; (2) identify climate refugia for at-risk species; (3) maintain or increase stream buffers and landscape connectivity; (4) decommission and repair failing roads to improve water quality; (5) reduce fire risk in fire-prone tree plantations; and (6) prevent logging after fires in areas of high conservation value. In many respects, the NWFP is instructive for managers considering similar large-scale conservation efforts.*

We urge project planners to forgo logging in nesting/roosting habitat and mature natural stands throughout the project area and within the Eddy Gulch LSR, as directed and as guided by the best available science.

**Suggested Remedy #6:** Cancel all commercial logging units in Late Successional Reserve forest including treatments that remove, degrade or downgrade habitat, as well as, Maintain and Improve Late Seral Treatments that will maintain minimum NSO habitat conditions, but have been identified by Fish and Wildlife to create adverse effects in key NSO habitats.

**Objection Point #7: The Bear Country Project is inconsistent with management recommendations for LSR forest in the Klamath National Forest LSR Assessment.**

The project proposes old forest logging, downgrading and eliminating suitable northern spotted owl habitat and new road construction, none of which is not consistent with the needs, attributes or guidelines identified for LSR forest. The guidance and information provided in the applicable Watershed Analyses, the Klamath National Forest LSR Assessment and the Northwest Forest Plan demonstrate that these activities would have detrimental impacts.

This includes logging in stands well over 80 years old throughout the planning area and logging trees well over 20” in diameter, both of which are inconsistent with LSR Standards and

Guidelines and the mandates of the NW Forest Plan. According to the agency the impacts of commercial logging are mitigated by the implementation of Recovery Action 10 and 32. Also according to the Forest Service no logging will occur in areas identified as Recovery Action 32 stands (USDA. 2022 P. 4), but our monitoring efforts and the determination of Fish and Wildlife in the Biological Opinion demonstrate inconsistency with the intent of Recovery Action 32 throughout this project. (USDI. 2021 P. 82).

The agency justifies logging in areas or in ways that are inconsistent with LSR management by highlighting the important late successional values of the stands proposed for logging. This does nothing but demonstrate the high level of habitat in question. For example, in the Regional Offices LSR concurrence letter the agency states that trees over 26" in diameter would be removed in a stand dominated by "very large Douglas fir trees, averaging 17 trees per acre between 32 and 48 in dbh." (USDA. 2022 P. 4). These are the stands that Fish and Wildlife determined to be inconsistent with Recovery Action 32, the 2012 Revised Recovery Plan and 2012 Critical Habitat Rule. They contain high quality habitat that will be degraded and is likely to increase negative interactions between the resident barred owl (whose habitat will be impacted) and nearby occupied NSO home ranges, who will then be affected by dispersing barred owls.

Unfortunately, the agency committed to this proposal before receiving the Biological Opinion from Fish and Wildlife and anticipated "receiving a final Biological Opinion that requires no changes to project design (USDA. 2022 P. 5). The final Biological Opinion determined the project was "likely to adversely affect" the NSO and its Critical Habitat and included recommendations to mitigate these impacts. One of which was to drop those units described above in the Maintain and Promote Late Seral treatment units that remove large trees in naturally closed stands representing high quality habitat. The Forest Service responded by releasing a Draft Decision Record and FONSI that both fails to adequately address LSR management and fails to incorporate the concerns of Fish and Wildlife in the Biological Opinion.

The KNF LSR Assessment also specifically identifies important considerations for management in the Eddy Gulch LSR. These include recommendations to protect late successional habitat stating, "*The protection and management of existing late and mid-seral vegetation will be important if more late successional habitat is desired.*" (USDA 1999 P. 2-44). Unfortunately, the Bear Country Project proposes commercial logging in significant mature, old-growth and late successional forest currently providing nesting, roosting and foraging (NRF) habitat for the Northern spotted owl. The treatments proposed in the Bear Country EA would degrade habitat values in the old-growth and late successional forests by removing large trees, reducing canopy cover, limiting future snag and downed wood recruitment by capturing mortality, and simplifying currently complex habitat structures. They will also remove, downgrade and eliminate suitable NSO habitat including nesting and roosting habitat and foraging areas. The extent of NSO impacts associated with this project led Fish and Wildlife to determine that the project is "likely to adversely affect" the NSO. We could not agree more and believe that virtually no attempt was made by the KNF to reduce these impacts.

Additionally, according to the LSR Assessment “generally, road construction for silviculture, salvage and other activities is not recommended” (USDA 1999 P. 2-31). Yet, the EA proposes 5 miles of new road construction and 15 miles of road reconstruction. It is well documented that even temporary road construction has significant impacts that are very similar to permanent road construction.

The level of habitat removal and degradation proposed in the Bear Country Project and the number of natural, late successional stands targeted for commercial logging is in direct conflict with LSR management. All NSO habitat removal and old forest logging must be canceled in the upcoming Decision Memo or more fully analyzed in an EIS analysis.

**Suggested Remedy #7:** Cancel all commercial logging units in Late Successional Reserve forest including treatments that remove, degrade or downgrade habitat, as well as, Maintain and Improve Late Seral Treatments that will maintain minimum NSO habitat conditions, but have been identified by Fish and Wildlife to create adverse effects in key NSO habitats.

**Objection Point #8: The Bear Country Project is inconsistent with management recommendations for LSR forest in the Lower South Fork Watershed Analysis.**

The Lower South Fork Watershed Analysis was published to provide guidance for activities in the lower South Fork Salmon River watershed. The Watershed Analysis identifies seven owl sites within the Eddy Gulch LSR (USDA 1997 P. 1-3). We are greatly concerned by the impact of project activities that would remove and degrade habitat conditions in these sites and limit potential habitat within the LSR by fragmenting habitat with damaging logging treatments.

The Northwest Forest Plan provides for the protection of old-growth fragments where little habitat remains, creating a minimum standard of 15% old-growth in a given watershed (USDA 1997 P. 5-9). Currently, the Lower South Fork watershed contains 19% old-growth (USDA 1997 P. 5-10) and any reduction in that habitat would begin creating concerns for compliance with the Standards and Guidelines for the Northwest Forest Plan. The Watershed Analysis continues by stating that, *“old growth accounts for 19% of the Federal lands in the watershed. With the current trends in large scale disturbance it is important to protect the remaining old growth stands and promote the development of old-growth characteristics in other conifer stands.”* (USDA 1997 P. 5-11). Unfortunately, the Bear Country Project fails to protect old-growth stands and would instead degrade, downgrade and remove habitat, leading to declines in already limited old-growth forest habitat. Treated stands would be deficient in standing snags, downed wood, future snag and wood recruitment, canopy coverage, large trees and interlocking canopy structures. Forest managers are also targeting mistletoe trees for removal, eliminating important nesting and roosting habitat for the NSO and other species such as the Pacific fisher.

These impacts are particularly important in the South Fork Salmon River watershed because the area *“contains a large proportion of sites not capable of growing dense stands of large trees”*(USDA 1997 P. 3-10). Numerous stands targeted for logging in the Bear Country Project

currently consist of large, old trees, dense canopy and complex forest growing from relatively uncommon and productive growing conditions.

According to the South Fork WA, the potential for dense, old forest conditions to develop is limited in this watershed and the Bear Country Project as proposed would degrade numerous of these increasingly rare stands by removing canopy, large, old trees and habitat complexity.

The South Fork WA identifies fragmentation as a significant problem in the watershed creating impacts to dispersal habitat and predation (USDA 1997 P. 5-13).

**Suggested Remedy #9:** Commercial logging in stands over 80 years of age, that includes canopy reduction, large tree removal, habitat downgrading and removal should be canceled to meet the recommendations of the South Fork Watershed Analysis and to retain habitat connectivity in these watersheds. Additionally, all habitats supporting late successional conditions and suitable habitat for the NSO should be canceled in the South Fork Salmon River watershed to continue meeting and exceeding the minimum threshold.

**Objection Point #10: The NEPA analysis fails to consider significant impacts to Endangered, Threatened, and Sensitive Species.**

The Biological Opinion from Fish and Wildlife found that the Bear Country Project would create a “likely to adversely affect” determination for the Northern spotted owl. Yet, the EA and other NEPA documents fail to accurately or adequately consider the clear, adverse effects to the Northern spotted owl associated with the implementation of the Bear Country Project.

The Biological Assessment published by the Klamath National Forest identifies significant adverse effects associated with the removal of 218 acres of nesting/foraging and 667 acres of foraging habitat (USDI. 2022 P. 72). In addition, 3,696 acres of nesting/roosting and 2,912 acres of foraging will be degraded by project activities (USDI. 2022 P. 73). The agency also identified significant adverse effects associated with the location of Maintain and Improve Late Seral and Promote Late Seral treatment units in high quality habitat, in mid-slope positions, and in areas where barred owl populations have been documented.

*“We consider the effects of the Maintain and Improve Late Seral and Promote Late Seral treatments in foraging habitat adverse to NSO (1,012 acres). This is because of the continuity of treatment and the location of the treatments in NSO cores and home ranges (consistent with our effect determination above for the Maintain Late Seral treatment in nesting/roosting habitat). Thinning that reduces basal area and canopy cover in foraging habitat to just above minimum thresholds, followed by understory fuels treatments, will reduce and remove trees, downed wood, snags, and overall forest structure to the degree the stand will still function as foraging habitat but the habitat quality will be significantly reduced.” (USDI. 2022 P. 84)*

The Fish and Wildlife Service recommended the following conservation measures, none of which the agency implemented in the Bear Country Project. 1) Either not treat or utilize non-

commercial treatments in Maintain and Improve Late Seral treatment units. (USDI. 2022 P. 120). 2) Utilize a 30" diameter limit in these stands, which the Forest Service also did not implement. (USDI. 2022 P. 7-8).

The Northern spotted owl Recovery Plan identifies barred owls and the single largest threat to the Northern spotted owl, yet project activities are likely to increase competition between the two species by degrading habitats and prey bases utilized by both species (USDI. 2022. P. 42). Several studies have shown that the presence of barred owls often shifts Northern spotted owl occupancy upslope and into areas with more marginal habitat conditions (USDI. 2022 P. 42). These impacts are expected by Fish and Wildlife in the Matthews and West Matthews areas, yet are not adequately considered by the Forest Service. Additionally, many of the locations upslope and in more marginal habitats are being targeted for either suitable habitat downgrades or removal through commercial logging. Fish and Wildlife believes it is likely that when high quality habitats currently occupied by barred owls is commercially logged, the likelihood of barred owls moving to new habitats and competing with neighboring owls is high (USDI. 2022 P. 96 & 117). It is also likely that Northern spotted owls subjected to commercial thinning operations will suffer from site abandonment or avoid these areas for nesting, roosting, foraging and dispersal. (USDI. 2022 P. 69).

The Biological Opinion identifies both short and long term impacts associated with project activity to NSO habitat, behavior, prey abundance and distribution. *"These adverse effects are from a loss or reduction of habitat structure and complexity. These effects will occur in NRF habitat from strategic control features and maintaining/improving late seral habitat, and additional treatments that promote late seral conditions in NSO foraging habitat. Habitat modifications will include reducing and removing dominant, codominant, intermediate, and small size class trees; canopy closure and cover; snags; downed wood; and shrubs. The reduction or loss of these habitat elements will remove or reduce potential perch sites, reduce thermoregulation or roost sites, reduce habitat elements for flying squirrels, and reduce overall habitat quality. There will be a loss and simplification of vertical and horizontal structure that provides hiding cover and habitat for prey."* (USDI. 2022 P. 90).

The current NEPA analysis fails to adequately consider the impact of project activities on threatened and endangered species including the Northern spotted owl and falsely claims benefits to Northern spotted owl populations and habitats. Much of the analysis in the Biological Opinion contradicts the analysis of effects by the Forest Service and demonstrates significant, widespread adverse effects that went unaddressed in the EA and supporting documents.

**Suggested Remedy #10:** Withdraw the Bear Country Draft Decision Notice and FONSI and produce an Environmental Impact Statement that adequately addresses the impact of project activities on threatened, endangered and Sensitive species.

**Objection Point #11: The Bear Country Project fails to adequately protect or conserve occupied, high value Northern spotted owl habitat.**

According the Draft EA, three NSO Activity Centers located within the planning area were determined to have current or recent occupancy and reproduction (USDA 2021 P. 9). According to the 2019 Klamath National Forest Monitoring Report these three Activity Centers are also some of the only occupied NSO sites on the Klamath National Forest to support reproduction in recent years (USDA 2020). Yet, just like the previously withdrawn Crawford Timber Sale, the Klamath National Forest has proposed late successional forest logging either within nest cores, home ranges or in adjacent suitable habitat. Many stands proposed for logging would degrade habitat for these last reproductive pairs, impacting their viability on this landscape, the principal zone of productivity for the NSO, and perhaps the last stronghold in the region.

It is likely that given the location of these activity centers, many of the stands proposed for logging are being actively utilized by these pairs as nesting, roosting, foraging or dispersal. These occupied, invaluable NSO habitats should be deferred from treatment to promote NSO recovery and provide demographic support to the waning NSO populations.

The occupied nest sites and home ranges in the planning area should be the highest priority for protection as the Recovery Plan states. While the Draft EA recognizes three northern spotted owl activity nest cores with high value habitat all of the Activity Centers, nest cores and home ranges, and suitable habitat in the project area serve as high value habitat. All units or treatments that remove, downgrade or degrade habitat in the project area and in activity centers, especially those with recent reproduction, should be withdrawn from the project.

By definition, high value habitat is important for maintaining spotted owls on the landscape. This includes areas meeting the definition of high-quality habitat, but also areas with current and historic use by spotted owls that may not meet the definition of high-quality habitat. Currently, the Bear Country project area is offering important demographic support to northern spotted owls, based on occupancy and habitat quality. It is also clearly a significant population given the rarity of regular occupancy and reproduction throughout the species range and in its last strongholds in the Klamath Provinces.

Working towards recovery for the NSO requires maintaining suitable habitat and habitat connectivity. This is particularly important for dispersing juveniles that must find currently unoccupied habitat on the landscape. Recovery would mean retaining the largest oldest trees on the landscape, especially those with mistletoe, even if within unoccupied habitat. This will allow for the dispersal of juveniles and the avoidance of barred owls.

Recovery would also require retaining adequate canopy cover and all mature, complex and natural forest habitats. The project targets large trees across the landscape and especially in Riparian Reserves (a 26' dbh limit is only offered in N/R habitat) and further threatens to bring overall forest canopy down to 30% and 40% in units throughout the project area. It also targets 2,365 acres of natural stands with commercial treatments and only 610 acres of commercial thinning in timber plantations. These plantations are the most altered and least resilient portions of the landscape, but natural stands are predominantly targeted for commercial logging prescriptions.



Habitat loss and population declines remain steep, and reproductive pairs have become extremely rare. These declines and the troubling trends in both occupancy and reproduction demonstrate a need in the Bear Country Planning Area and throughout the Klamath National Forest and Klamath Provinces to protect and maintain existing NSO habitat, including Nesting, Roosting and Foraging habitat and dispersal habitat. It also demonstrates that recently reproductive pairs should be buffered from impacts to their home range from commercial timber sale activity and further disturbance.

To avert extinction and recover the species, existing habitat must be retained and potential habitat that is currently unsuitable should be restored through either a passive or active restoration strategy, especially in LSR, Riparian Reserve and Critical Habitat areas. This approach will more strategically and effectively maintain existing habitat and sustain the species in the long term.

The area includes numerous recently occupied Northern spotted owl sites and additional “historic” NSO sites, many of which are currently deficient in Nesting and Roosting habitat, yet will be proposed for habitat degradation, downgrades and removal. This includes owl cores with high-value ranking, high quality habitat and occupied owl sites where Fish and Wildlife “does not encourage active management” (USDI. 2022 P. 81).

The Bear Country Project fails to adequately protect and/or conserve occupied, high value Northern spotted owl habitat. Three occupied northern spotted owl home ranges would be impacted by logging treatments and other treatments in habitat occupied by barred owls may increase the likelihood of barred owls invading occupied NSO habitat.

**Suggested Remedy #11:** Withdraw all commercial logging units within occupied NSO cores and in all home ranges currently deficient in suitable habitat.

**Objection Point #12: The Bear Country Project fails to consider project level impacts to habitat connectivity.**

Connectivity is a significant and relevant issue that went almost entirely unanalyzed in the EA. Habitat connectivity is of particular importance due to the geographic location of the planning area. Located largely in watersheds draining Blue Ridge, the planning area separates the North and South Fork Salmon River watersheds. These watersheds contain important wildlife habitats and also connect major wildland cores in the Trinity Alps Wilderness, Russian Wilderness and Marble Mountains Wilderness. Dividing the two main forks of the Salmon River, Blue Ridge and the surrounding watersheds are particularly important from both a localized and a regional connectivity perspective. This importance was not unanalyzed in the EA and presents a failure under NEPA to adequately analyze the direct and cumulative impacts of project activities.

We are very concerned by the impact of the Bear Country Project on wildlife connectivity within the project area. Two Forest Sensitive species American Marten and Pacific Fisher and one Candidate Species that is state threatened, the California Wolverine, could be using the project

area along with the Threatened northern spotted owl. These species are all reliant on forest connectivity to sustain populations, encourage dispersal and maintain genetic diversity.

### **Northern spotted owl:**

The Bear Country project area and the Eddy LSR serve as an important corridor between the Trinity Alps Wilderness, the Russian Wilderness and the Marble Mountain Wilderness Areas. In our Scoping comments we requested a full NEPA analysis of connectivity and the Bear Country Project's effect on large-scale landscape permeability, connectivity, and species dispersal. The NEPA documents failed to adequately consider the specific value of this important habitat linkage and its contribution to local and region habitat connectivity. Given the location of LSR forest in the project area, project activities should have more completely analyzed for impacts to connectivity within both the LSR network and the larger landscape. This analysis did not adequately occur in the Bear Country Project EA.

Due to continued degradation to habitat and range-wide barred owl encroachment, connectivity for the spotted owl is a particular concern in LSR forest and in all suitable habitat. Our organizations are particularly concerned by the natural or native forest logging in older forest stands proposed in this project area resulting in a *"may effect and is likely to adversely affect"* determination for the owl and its Critical Habitat. Habitat such as the north facing slopes and canyon bottoms on Matthews Creek, Butcher Creek, Argus Creek, and on the North Fork Salmon River between Forks of Salmon and Little North Fork are vital northern spotted owl habitats targeted for commercial logging that would harm northern spotted owl habitat.

Currently nearly all stands in the Matthews, Butcher, and Argus Watersheds supporting Nesting, Roosting and Foraging Habitat would be impacted by commercial logging and habitat downgrades in the Bear Country Project. This logging and the subsequent habitat removals, downgrades and degradation it creates would significantly impact connectivity and dispersal for late successional species in the planning area and in the Salmon River watershed. More specifically, the project would affect the connectivity corridors specifically identified by the Klamath National Forest in the Lower South Fork Watershed Analysis.

We are also concerned by the projects impact on the bottleneck of late successional habitat connectivity in the South Fork Salmon River watershed. The impact would be severe in Matthews Creek and Butcher Creek due to habitat downgrades and removals to the vast majority of nesting/roosting habitats remaining in the South Fork watershed. In all these units late successional habitat conditions would be significantly impacted. This bottleneck in late successional habitat is the only reasonable corridor across the South Fork Salmon River connecting Blue Ridge to habitat in the Trinity Alps Wilderness Area and the surrounding watersheds. The impacts to this corridor and others along the North Fork Salmon River went entirely unanalyzed in the EA.

This connectivity is important for species survival and persistence, for dispersal and to allow the northern spotted owl to move across the landscape in response to climate change, wildfires,

and barred owls. In short, protecting the connectivity habitat in the region is important for not only species persistence, but also for long- term recovery of the NSO.

### **Pacific fisher**

Habitat suitability and connectivity for the NSO also translates into habitat for a wide variety of other species requiring late successional forest habitats. For example, nesting, roosting, and foraging habitat for the NSO is often viewed as a proxy for the denning habitat required by the Pacific fisher. Currently, Pacific fisher surveys have not been conducted for this project and the impact of late successional logging on this species was not adequately analyzed. Population numbers in the area are unknown, use patterns and denning areas within the planning area have not been identified and the cumulative impacts have not been adequately addressed.

Similar to the NSO, the impact of commercial logging prescriptions on fisher habitat, denning areas and habitat connectivity in the Bear Country Project would be severe. Large tree removal, canopy reduction, the loss of late successional characteristics, the removal of mistletoe trees and the simplification of habitat through commercial logging would have lasting negative impacts that went largely unanalyzed, unmitigated and unaddressed in the Bear Country Project EA.

During field monitoring for this project, Klamath Forest Alliance documented a Pacific fisher just below Matthews Creek in the South Fork Salmon River watershed. Recently the KNF has also documented fisher in this area (USDA. 2021a P. 30) and it is possible that at a minimum this populations uses numerous old forest logging units proposed in the planning area. It is also likely that additional fisher home ranges overlap in the project area and the existing old forests targeted for logging provide important connectivity habitat connecting distinct populations in the Salmon River as well as connecting the Trinity Alps to the Marble Mountains Wilderness.

A source population, the Pacific fisher habitat in the Salmon River watershed is ideally located to provide habitat linkage between the Trinity, Salmon, Klamath and Scott River populations (Spencer 2019). The connectivity provided in the planning area and the importance of Pacific fisher habitat in the area was not adequately explored in the EA.

### **Marten**

The planning area also contains habitat for the marten and was mentioned a total of once in the EA. Despite the total lack of analysis for this species, significant habitat exists within the planning area at higher elevations. The Bear Country Planning Area connects the North and South Fork Salmon River Watershed to the Russian Wilderness Area and throughout the larger Marble Mountains and Trinity Alps Wilderness Areas.

Recent research demonstrates that the Salmon River area and the surrounding high country is highly important in providing connectivity habitat for marten populations (Spencer 2019). The removal of large, old trees, the reduction of late successional stand characteristics, the loss of

forest floor habitat complexity, the loss of canopy and the reduction in both snag and downed wood habitat associated with commercial logging would significantly degrade habitat conditions for the marten and was not adequately addressed in the EA.

## **Wolverine**

The wolverine is also suspected to utilize the Salmon River watershed and surrounding habitats. The larger Trinity Alps, Marble Mountains and Russian Wilderness complex provides potential, but unconfirmed habitat for the wolverine. There have been ten documented historic detections on the Klamath National Forest, but no recent detections (USDA 2019a P. 29). The Bear Country Planning Area is located directly within a major connectivity corridor linking together these important habitats. Opening forest canopies would certainly remove habitat structure needed for cover, denning, or resting. The cumulative impact of proposed project activities on the wolverine are potential significant and have not been adequately analyzed.

**Suggested Remedy #12:** Withdraw the Bear Country Draft Decision Notice and produce an EIS adequately considering the impact of project activities on habitat connectivity in the planning area for the Northern spotted owl, Pacific fisher, marten, and wolverine.

## **Objection Point #13: The Bear Country Project has significant, unanalyzed project-level effects on barred owl/northern spotted owl interactions and competition.**

Despite being the largest contributor to Northern spotted owl declines throughout the range of the species, barred owls and their impact on Northern spotted owls were not adequately considered in the NEPA documents. Clearly, the Bear Country Timber Sale will have significant, largely unanalyzed impacts to barred owl and Northern spotted owl interactions and competition for nesting sites, prey sources, and habitat (USDI. 2022 p. 42).

Unfortunately, the EA does not adequately address these concerns, but the Biological Opinion documents numerous adverse effects related to barred owl interactions. According to the Biological Opinion, *“Treatments will remove, reduce or degrade nesting, roosting, and foraging habitat and some high-quality habitat from areas likely to be used by NSOs. Based on this, and the current presence of barred owls in the action area, we conclude the direct or indirect influence of barred owls is a significant factor in determining the effects of this project on NSO. Implementation is not expected to appreciably reduce the amount of nesting, roosting, or foraging habitat in key NSO use areas, but it will significantly affect these habitat types in the KL1013 and KL1014 territories and likely exacerbate competitive interactions between the two species.”* (USDI. 2022 P. 96).

Fish and Wildlife recommended either dropping these units or implementing non-commercial fuels reduction to reduce negative impacts, Yet, the Forest Service did not implement these recommendations and instead proposed logging and degrading these high quality habitats, despite the compounding effect this might have on barred owl/northern spotted owl interactions. Fish and Wildlife claims that *“It is possible the treatments may modify habitat*

*conditions such that barred owls may shift to other sites that are occupied by NSOs.” More specifically, the claim that “The adverse effects to NSO habitat in two territories known to be occupied by barred owls could result in those owls shifting to other portions of the action area or other occupied NSO territories. Should this occur, NSO numbers or distribution in the action area could also shift or be reduced.” ( BIOP 116-117).*

Meanwhile, the Forest Service simply ignored these impacts in the NEPA documents and falsely claims potentially negative interactions *“may be mitigated because existing high value NR habitat and RA 32 stands would be conserved and proposed treatments that affect NRF in areas of high relative habitat suitability are intended to increase structural complexity and quality of late seral stands while protecting and maintaining NRF functionality post-treatment.” (USDA. 2021b. P. 72).*

Fish and Wildlife disagrees stating that *“treatment units are considered high quality under Recovery Action 32” (USDI. 2022 P. 120).* The Biological Opinion recommends either not treating these stands or using non-commercial treatments to reduce adverse effects and competition between NSO and barred owls in these high quality sites. Unfortunately, the Forest Service ignored these recommendations, committed to their faulty analysis and proposed commercial treatments that will degrade habitat and increase negative interactions between the two species.

It is clear that in areas where *“NSO and barred owls compete directly for resources, maintaining larger amounts of older forest (nesting/roosting habitat) may help NSOs persist in the short term” (USDI. 2022 P. 44).* Yet, significant high quality habitat, in favorable slope positions, would be degraded by commercial logging activities increasing competitive interactions between the two species and adversely affecting the Northern spotted owl.

The Forest Service acknowledges that barred owls have been present in the planning area since 2011 and have been documented regularly since that time. (USDA. 2021b. P.79).

**Suggested Remedy #13:** Protect, enhance, or maintain all suitable Northern spotted owl habitat in the planning area and withdraw all Maintain and Enhance Late Seral treatment units including those identified by Fish and Wildlife on Matthews Creek that will increase barred owl/NSO competition.

#### **Objection Point #14: Project activities are inconsistent with the 2011 Revised Recovery Plan and the 2012 Critical Habitat Rule for the Northern spotted owl**

The level of impact to high quality NSO habitat proposed in the Bear Country Project is inconsistent with the 2011 Revised Recovery Plan and the 2012 Critical Habitat Rule for the Northern spotted owl. These impacts will reduce, degrade or remove suitable habitat in LSR forest, in Critical Habitat Units, in high quality habitats, in undisclosed Recovery Action 32 stands, in occupied sites, and in stands of contiguous Nesting, Roosting and Foraging habitat. Many of the stands targeted for logging are also located in favorable slope positions and

locations where they are likely to remain resilient to drought, climate change and wildfire events. Some of these habitats would be removed in perpetuity and would not be allowed to recover important habitat components for the NSO. Additional habitats will be degraded to the lowest level of suitable habitat with implications for NSO occupancy and barred owl competition.

According to the Biological Opinion for this project, *“Many areas of NSO habitat (including critical habitat) do not require active management. And, active forest management in these areas could negatively impact NSOs. The Service does not encourage active management in areas of high-quality NSO habitat or occupied NSO sites. We do encourage management actions that maintain and restore ecological function where appropriate. This can include forest stands that are not on a trajectory to develop into high-value habitat (USDI FWS 2012 p. 71881). The Service also encourages focusing active management in younger forest, lower quality NSO habitat, or where ecological conditions are most departed from the natural or desired range of variability (USDI FWS 2012 p. 71882). Given this, some of the treatments in nesting/roosting habitat are considered inconsistent with the recommendations in the 2011 Revised Recovery Plan and 2012 Critical Habitat Rule.” (USDI. 2022 P. 81).*

The document goes on to describe the misleadingly identified Maintain and Improve Late Seral commercial logging units and their impacts, *“The resultant basal areas of 150-200 sqft/ac, at least 60 percent canopy cover and the retention of under and midstory trees that provide stand complexity and temperature regulation will continue to provide nesting/roosting habitat, but the quality will be reduced for approximately 5-20 years. These stand metrics are considered the minimum thresholds for supporting nesting/roosting habitat function. The treatments, given their placement and continuity, are relatively inconsistent with the intent of Recovery Action 32 because they are situated in nesting/roosting habitat, and occupied NSO territories. The purpose of this thinning treatment is to reduce fuel loading and reduce the risk of stand replacing wildfire, which can help protect the habitat. We do expect adverse effects given the primary placement in NSO territories, the continuity with other treated nesting/roosting and foraging habitat, and the location of the treatments at lower and mid slope positions.” (USDI. 2022 P. 82).*

The project will treat 5,417 suitable acres of Critical Habitat. In total, 1095 acres of Maintain and Improve Late Seral Health treatments will be degraded in Critical Habitat within the Planning Area. Additionally, through the *“the removal of 172 acres and reduced quality of 418 acres of nesting/roosting (PBF 2); and the removal of 301 acres and reduced quality of 677 acres of foraging habitat (PBF 3), the Service concludes the proposed action may affect and is likely to adversely affect NSO critical habitat in the short- and long-term.”*

*The adverse effects will result from: 1) the long-term, permanent removal of PBFs from strategic fuelbreaks, and 2) contiguous treatments in lower and mid-slope suitable habitat, primarily in NSO territories, which will remove or reduce habitat quality for NSO and their prey. The effects of the various thinning treatments the structure of critical habitat and the simplification that*

*can occur by reducing or removing stand complexity (large and small trees, canopy cover and closure, within-stand layering, snags, and downed wood”)* (USDI. 2022 P. 117).

According to the Forest Service, “Based on the above assessment of direct, indirect, and cumulative effects, implementation of the proposed activities for the Bear Country project **may affect and is likely to adversely affect** the northern spotted owl and northern spotted owl critical habitat.” (USDA. 2021b. P.101). Additionally, Fish and Wildlife consultation in the Biological Opinion also found that the “proposed action may effect and is likely to adversely affect NSO critical habitat in the short-and long-term.” (USDI. 2022 P. 117). We agree and object to the treatments proposed due to the inconsistency with both the 2012 Critical Habitat Rule and the 2011 Revised Recovery Plan.

**Suggested Remedy #14:** Withdraw all commercial logging units in Critical Habitat for the NSO.

**Objection Point #15: RA-32 habitat was not appropriately identified or protected in the Bear Country Project.**

Although the Forest Service claims to have adequately surveyed the planning area for Recovery Action 32 stands supporting high quality Northern spotted owl habitat. Our comments and monitoring efforts demonstrated otherwise. Apparently, the Fish and Wildlife Service agreed with us in the Biological Opinion for this project, stating that some of the proposed treatments do not “*meet the intent of Recovery Action 32 to conserve and maintain high value habitat for the NSO*” (BIOP P. 120).

*They then continued by stating that the Forest Service should “consider a treatment revision to either not treat or utilize non-commercial thinning, in the Maintain and Improve Late Seral treatment units with NEPA ID-80 (115 acres), NEPA ID-81 (153 acres), and NEPA ID-63 (111 acres). These units are located “primarily in nesting/roosting habitat in mid and lower slope positions of the currently unoccupied KL-1014 and KL- 1013 territories, including near and along Matthews Creek. These territories are occupied by barred owls, and the treatment units are considered high quality under Recovery Action 32. The retention of the units, or a lighter thinning treatment to reduce understory fuels, would better provide and contribute to maintaining the current nesting/roosting habitat complexity. It would reduce the overall adverse effects to nesting/roosting and high quality habitats in these two territories, and reduce the overall disturbance to the habitat in these areas currently occupied by barred owls. Not treating these areas, or implementing a lighter thinning treatment, could reduce the potential for barred owls to shift or move to other occupied NSO territories in the action area because the level of habitat modification and disturbance would be reduced.” (USDI. 2022 P. 120).*

The Forest Service failed to incorporate the “conservation recommendations” into the planning process and approved these damaging timber sale prescriptions in high quality Northern spotted owl habitat.

**Suggested Remedy #15:** Units 80, 81, 113, 120, 141, 139, 125, 138, 56, 124, 123, 359, 71, 73 are either adjacent to or embedded with Recover Action 32 and should be withdrawn.

**Objection Point #16: Cumulative effects were not adequately addressed in the NEPA documents.**

Given the massive scale of the Bear Country Project sufficient analysis was not given in the EA to accurately determine cumulative effects. Not only is the scale of the project significant, but many of the habitats proposed for commercial logging treatments contain important scenic and biological values. The intensity of treatments proposed would also degrade these important values and would create lasting cumulative impacts that went largely unanalyzed in the NEPA documents.

An objective view of the Bear Country Project demonstrates that the commercial logging proposed would only compound the already extreme cumulative impacts associated with previous management activities. Yet, the EA failed to see the reality that additional commercial logging and road construction would only increase the cumulative impacts on a watershed scale. The cumulative impacts of commercial logging, road construction, landing construction, road reconstruction and fireline reconstruction proposed in the Bear Country Project would increase soil impacts, surface erosion rates, sedimentation, wildlife impacts, hydrological impacts, forest fragmentation, noxious weed spread, and other lasting environmental impacts.

The EA fell short at considering the cumulative impacts. Routinely the agency ignores a thorough look at cumulative effects and instead assumes without merit, that commercial logging operations would sustain minimal short-term impacts, but would provide lasting benefits to habitat values, fire resilience, NSO, forest health, etc. This perspective is not supported by applicable science.

**Suggested Remedy #16:** The Draft Decision Notice and FONSI should be withdrawn and an EIS produced that adequately considers cumulative effects.

**Objection Point #17: Riparian Reserve logging is not warranted and violates the ACS.**

Salmon River is a key watershed and the river's water quality should be one of the issues of "primary emphasis" when managing the Wild and Scenic River. This means that even streams outside Wild and Scenic River corridor should be managed for the benefit of the river's fisheries and water quality. For all practical purposes, to meet the agency's objectives in the Wild and Scenic River, these important attributes or Outstandingly Remarkable Values must be managed on a watershed scale, not just in the Wild and Scenic River corridor.

Additionally, Riparian Reserves in the Salmon River watershed are some of the most productive, sensitive and diverse sites in the area. They provide important habitat for aquatic species including listed fish species and terrestrial species such as the willow flycatcher, Pacific fisher, Humboldt marten, black bear, elk, ring-tailed cats and other species. Riparian Areas tend to



support complex structural conditions and the close proximity of water is highly important for wildlife. Riparian Reserves were set up under the NW Forest Plan not only to protect riparian species and their habitat, but also to provide connectivity for terrestrial wildlife. These are both vital functions of Riparian Reserves and both aquatic habitat conditions and connectivity for terrestrial wildlife must be enhanced by agency actions. The 900 acres of Riparian Reserve logging in the Bear Country Project does not achieve these important goals and would degrade aquatic and terrestrial habitat conditions in the planning area.

It is falsely assumed in the EA that untreated stands would be impacted by future high severity fire events. Yet, this statement is pure conjecture and does not reflect the reality of mixed severity fire on this landscape. In any given wildfire and certainly in the average wildfire in the Klamath-Siskiyou Mountains, the majority of acres in nearly any fire perimeter contains low to moderate severity fire. High severity fire is general between 1% and 10% high severity. Publicly available soil burn severity maps demonstrate that even the extreme, wind drive Slater Fire, burned at only 3% high severity.

Furthermore, Riparian Reserves often act as fire refugia and generally burn at lower severity than the surrounding landscapes (Taylor 1998 & Downing et al., 2021). The density of riparian forests is a natural adaptation to the sites aquatic nature and to both readily available water conditions and slope position. Being located in canyon bottoms, these areas are also the most likely to benefit from heavy smoke inversions when active fires are burning (Estes 2017). These characteristics tend to moderate fire severity in riparian reserves, especially those in heavily incised canyons where topographic features shelter the riparian area from heavy solar exposure and excessive winds. These conditions also tend to elevate humidity levels along stream corridors and benefit from persistent smoke inversions.

According to the 2019 KNF Monitoring Report recent fires on the KNF have burned less severely in riparian areas and are *not* acting as “wicks” or “chimneys” that increase burn severity. On the contrary, *“The data show that a relatively small portion of the fire areas burned at a high soil severity, ranging between one and seven percent with an average of three percent. Low or very low severity burn accounts for 72 percent of the fire areas. The percentage of perennial stream length with high severity burns ranges between 0.2 and three percent with an average of one percent, which is less than half of the percentages for the larger fire area. Because perennial streams burn at a lower severity than the adjacent uplands there is no evidence that riparian reserves on the Klamath National Forest act as a wick for high-intensity fire. Unlike perennial streams, the percent of high severity burn in intermittent streams is nearly the same as for the entire fire area. Intermittent streams burn at a higher severity than perennial streams, but not higher than upland areas as would be expected if wicking was occurring. The data and analysis can be found in the Klamath National Forest Five-year Report to the Water Board (USDA 2020b).”* (USDA 2020).

In most locations, rather than being “overly dense” and therefore a “fire hazard,” they are naturally more dense, more productive, more cool and moist, contain more water resources and grow in largely closed canopy forest conditions with dense vegetation and multiple canopy

layers. It is undisputable that the forests of the region can sustain closed stands, especially in productive sites (like Riparian Reserves) and it is also undisputable that Riparian Reserves are the most likely locations on the landscape to support closed forest habitats. Logging to reduce density, eliminate or reduce canopy layering and open forest canopy in Riparian Reserves is often misguided and works against the natural tendency of this environment, undermines its function as natural fire refugia and makes these stands hotter, drier and more fire prone. Natural mortality in dense mid seral stands will only encourage more beneficial habitat conditions by generating snag and downed wood habitat both, which should be abundant in stream corridors and Riparian Reserves.

The streams in the Bear Country Project Area are key watersheds, critical for the survival of wild salmon and are also listed as water quality limited under the Clean Water Act. We remind project planners that the Salmon River watershed is one of the most important tributaries of the Klamath River and the Salmon River maintains both the only viable spring chinook salmon population in the watershed and the last completely wild salmon and steelhead runs. The Salmon River and its fisheries benefit from cold-water tributaries and from mature or late successional forests in river and stream corridors. Numerous tributary streams proposed for Riparian Reserve logging would be degraded by project activities, reducing functionality of the Riparian Reserve network and impacting aquatic or watershed values.

We are concerned with the cumulative effects of past, current and future projects as well as the amount of treatment proposed, including commercial logging activities within Riparian Reserves, road use, road construction, reconstruction of Level 1 and non-system roads and landing construction. We are also concerned that the cumulative watershed impact of the Bear Country Project does not comply with the Clean Water Act, TMDL plans, the Aquatic Conservation Strategy and the Endangered Species Act.

Finally, we are concerned with the amount of untreated Legacy Sediment Sites on the KNF and the ability of the KNF to follow through with its responsibilities to comply with the water quality waivers from the California State Water Control Board. The agency identified legacy sediment sites for treatment, yet does not disclose the historic failure to follow through with the treatment of legacy sediment sites during timber sale implementation. Water quality waivers have been provided in the past contingent on the treatment of these sites, yet in many circumstances the logging and road construction took place and the mitigation of legacy sediment site never occurred, creating a significant backlog for legacy site treatment. Given the backlog of Legacy Sediment Sites left untreated in the Westside Project alone, no more water quality permits should be offered to the KNF until previous obligations are met and all previously approved Legacy Sediment Site remediation has been fully implemented.

**Suggested Remedy #17:** The scale of the project, the intensity of impacts and the agencies previous failure to follow through with water quality waiver requirements should require the completion of a full Environmental Impact Statement (EIS) and a full analysis of compliance with previous water quality waivers. A realistic, site-specific analysis of watershed, fishery, and water

quality impacts was not undertaken in the Draft EA and is not sufficient to support a Decision Memo. Additionally, all commercial logging in Riparian Reserves should be withdrawn.

**Objection Point #18: The Bear Country Project is inconsistent with the Motor Vehicle Use Map for the Klamath National Forest.**

It is important to note that the KNFs Travel Management Planning process states that needed road decommissioning would be addressed during site specific planning and that Sub-part (a) of the travel rule (identify minimum sustainable transportation system) would be implemented via site-specific projects, yet the Bear Country Project does not include the necessary road decommissioning. The Forest Service cannot simultaneously refuse to implement Sub-part (a) of the travel rule at both the Forest and the watershed or project scale.

The Draft EA fails to consider a minimum road network analysis, while at the same time producing maps and considering the utilization of non-system roads, decommissioned roads, and previously built “temporary” roads in project design. Numerous roads that are not part of the official road network and have not been approved for motorized use in the Motor Vehicle Use Map (MVUM) are being proposed for reconstruction in this project. Additionally, five miles of new “temporary” road construction is being proposed, meanwhile the project level road inventory and road decommissioning is not implemented in the Bear Country Project.

Roads not approved in the MVUM should not be utilized in Bear Country Project. For all administrative purposes, these are not roads and they are not approved for use. Only roads currently approved for use in the MVUM should be considered in the Bear Country Project. Any previous road template within the planning area that is not included in the MVUM authorizations should be eliminated from consideration or any use of this road system for project activities should be considered new road construction.

Similarly, utilizing previous road templates that have not been approved for use in the MVUM as skid trails is not benign and is not consistent with authorizations in the MVUM that assumed these routes would passively re-vegetate, restore hydrological function, and mitigate previous soil damage. This restoration cannot take place if additional yarding, road construction, landing reconstruction or timber hauling activities take place, and therefore is not consistent with previous analysis or authorizations in the MVUM.

**Suggested Remedy #18:** Utilize only roads approved for use in the KNF MVUM and cancel all new road construction and reconstruction of previously used “temporary” roads.

**Objection Point #19: NEPA analysis failed to adequately consider the climate and biodiversity impacts.**

The Draft EA speaks to the changing climate nearly a dozen times, however it does not at all address the project’s impacts on the climate and biodiversity emergency in anyway. More importantly searching the EA demonstrates that the words “carbon,” “sequestration,”

“greenhouse gases” and “carbon storage” are never mentioned in the analysis and therefore never addressed. Additionally, the agency released a Climate Change Literature Review, which perpetuates misinformation about commercial thinning and carbon storage in general, but does not adequately address the site-specific climate and carbon issues associated with old forest logging in the Bear Country Timber Sale or utilize the best available science.

Our Scoping and EA comments provided abundant science and information on these issues, and this relevant issue was ignored in agency analysis, or the lack thereof. This demonstrates a failure to even remotely analyze the very real and pressing issue of climate change and the potential benefits of old forest protection as a climate mitigation strategy.

The Biden Administration recently issued an “Executive Order (EO) on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis” which stated: “the policy of [the] Administration [is] to listen to the science; to improve public health and protect our environment [...] to reduce greenhouse gas emissions; [and] to bolster resilience to the impacts of climate change.”

President Biden also issued Executive Order 14072 “Strengthening Forests, Communities, and Local Economies,” which requires federal land managers to inventory, protect and preserve mature and old forests on federal lands as an effective climate mitigation strategy. This Executive Order was followed by Secretarial Memorandum 1077-004, *Climate Resilience and Carbon Stewardship of America’s National Forests and Grasslands* to meet some of the obligations of the Department of Agriculture imposed by EO 14072. Both the EA and supplemental Climate Change Literature Reviews are silent on addressing the key points of these Executive Orders and Secretarial Memorandum, and are in fact, not consistent with their directives.

Nationally, this project has been identified as one of the worst timber sales on federal land in the country, from a climate and carbon storage perspective. This is largely due to the current emphasis of the project on mature and old forest logging includes logging in 2,365 acres of natural forest stands and only 610 acres in existing plantations. <https://www.climate-forests.org/worth-more-standing>

The Forest Service must quantify impacts of the project relating to the climate emergency. In the forthcoming NEPA document please do not say that “direct and indirect impacts to national and global greenhouse gas (GHG) emissions and climate change as a whole are negligible” or that “the proposed action’s contribution to cumulative effects on global greenhouse gasses and climate change would also be negligible.”

This region is renowned for its biodiversity including some of the most diverse temperate conifer forests in the world. The Bear Country Project EA did not consider the unique biodiversity, stand conditions or plant assemblages found within the planning area and its global significance in terms of biodiversity.

The area is also renowned as a carbon sink of international significance and supports vast tracts of natural, diversified mixed conifer forest, including many locations in the Salmon River watershed and the Bear Country Planning Area. These intact carbon rich forests should be protected as effective climate mitigation, but many of these stands are proposed for heavy commercial logging. Again, according to the Forest Service Region 5:

*“The ability of the Region’s forestlands to sequester and store carbon has become a matter of national and international significance. Human additions of greenhouse gases to the atmosphere are altering the climate, and federal land management agencies like the Forest Service are expected to play a major role in U.S. adaptation and mitigation responses to global warming. Mitigation responses revolve around the maintenance and enhancement of carbon sequestration processes on forestlands”. Ecological Restoration Implementation Plan pg. 2*

Numerous studies have shown that commercial logging has adverse effects on carbon sequestration and carbon stores. By removing large, commercially viable trees and removing extensive forest canopy carbon cycles would be heavily disrupted and excessive carbon pollution would be released in the process of turn native forest into two by fours.

Scientists also agree that *“large, old trees do not act simply as senescent carbon reservoirs but actively fix large amounts of carbon compared to smaller trees; at the extreme, a single big tree can add the same amount of carbon to the forest within a year as is contained in an entire mid-sized tree”* (Stephenson et al 2013). Yet, the Bear Country Project EA fails to identify a reasonable diameter limit of 20” DBH and proposes logging old, fire resistant, carbon dense trees, dramatically reducing canopy cover and releasing large amounts of carbon. Although in many situations the largest trees in a stand may not be removed in the logging operations, the majority of actively stored carbon would be.

Using simulation modeling, researchers showed that for every unit of carbon expended to reduce wildfire combustion (e.g., thinning), the cost to the atmosphere from removal was ~3 units of carbon (Campbell et al. 2012). Likewise, in a synthesis of emissions estimated from natural disturbances vs. logging, Harris et al. (2016) concluded that carbon loss from logging of western forests released ~4-5 times more emissions than wildfire and insects combined. Yet despite these concerns, protections for large trees (dead or alive) were recently removed in eastern Oregon and Washington even though large trees contain the majority of above ground carbon stored in the forest (Mildrexler et al. 2020). Likewise, Law (2018) found that the largest producer of carbon pollution in the state of Oregon was not transportation, but rather commercial logging and the wood products industry.

Some researchers have begun warning of a dangerous feedback system (or “landscape trap” Lindenmeyer et al. 2011) where logging contributes to global emissions that in turn result in rising temperatures that overtime threaten to convert ecosystems due to climate induced fire events. The Bear Country Project is just such a project in that it would release abundant carbon stores, fanning the flames of climate change, and encouraging more extreme fire weather, while claiming to reduce fire risks. Yet instead of reducing risks, the project would increase the

underlying emissions by removing large trees and significant canopy cover in treated stands. These activities would contribute significantly to the root cause of wildfire increases, while claiming to address the symptoms. The approach will not work in the short or long-term and would leave us worse off than before treatment.

When compared to other National Forests the Klamath National Forest is 14<sup>th</sup> in carbon density and the old forest stands both in the Salmon River watershed and specifically in the planning area provide a vital biological role by storing vast quantities of atmospheric carbon and buffering against climate change and its worst effects.

Other researchers have identified the value of the Klamath-Siskiyou Mountains as climate refugia (Olson et al. 2012). Here unique microclimate and soil conditions are expected to maintain cool, moist habitats into the future, buffering many species from the most pronounced impact of climate change. These areas of climate refugia also contribute to connectivity, allowing species migration, dispersal and persistence. Unfortunately, many of these habitats are proposed for logging in the Bear Country Project.

The Salmon River watershed also provides micro and mesoreugia areas for the distribution of mesophilic, restricted-range species such as Del Norte salamanders, Pacific giant salamanders and numerous other species of millipedes, mollusks and cool, moist forest associated species (Olson. 2012). These areas are necessary for the maintenance of cool, moist habitat and for the persistence of mesophilic species in a changing climate. These refugia habitats include proposed units on the north facing slopes of Matthews Creek, Butcher Creek and others on the North Fork Salmon River.

Logging these units and other north facing slopes containing persistent, old forest as proposed in the Bear Country Project EA would significantly impact and degrade the climate refugia values and the potential for connectivity between cool, moist habitats. These units should be deferred from treatment and instead maintained as valuable climate refugia and important pockets of more resilient habitat. The integrity of these particular habitats as climate refugia, moisture sinks, carbon sinks and climate resilient forest habitat would be undermined by project activities that remove large trees over 20" in diameter, reduce canopy cover, and reduce the abundance and/or recruitment of snags and coarse downed wood. Coarse downed wood in particular is important for soil health and mycorrhizal associates, it also stores large volumes of water on site. The water storage and mycorrhizal associates facilitated by coarse downed wood in turn buffer against drought and climate change by maintaining nutrient processing and maintaining water storage through extended dry periods (Amaranthus. 1989).

The Bear Country Project identifies prescription parameters that would not adequately protect large, old trees, complex forest structure, canopy cover, snags, downed wood, long-term snag and downed wood recruitment, and other elements of complex forest habitat. Instead these habitat elements would be reduced in commercial logging units and in particular in natural stands subjected to commercial logging activities. As highlighted throughout our comments, large trees and contiguous forest stands with dense canopies are assisting both humans and

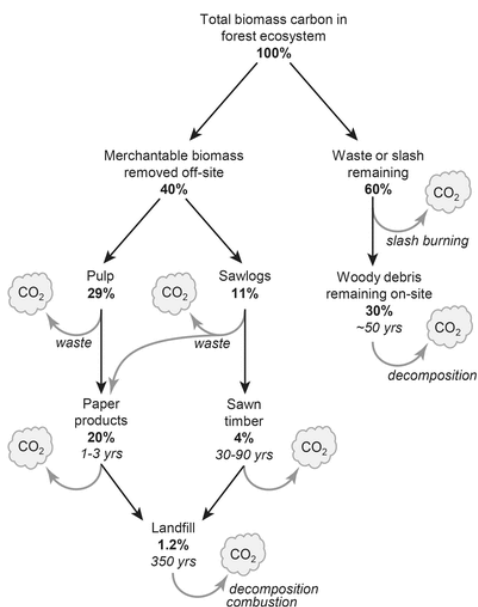
wildlife, buffering against changes in climate by maintaining stand complexity, shade, cool, moist habitats and old forest canopy. We urge project planners to recognize the importance of these elements and maintain them across the Bear Country.

### The Truth About Forest Products

The large amount of emissions caused by cutting, logging, hauling and milling was not adequately considered in the overly generalized and scientifically misleading Climate Change Literature Review. This review contained a very limited list of supporting citations for a “literature review” and excluded all science that did not support the Forest Service’s logging agenda.

For example, much of the carbon-storing biomass from trees is contained within the tops and branches, which are often burned or left to deteriorate. Then, a significant portion of the tree is lost during milling. Then the carbon emissions of hauling lumber to outlets and then manufacturing is another addition in the total emissions. Then include the actual lifespan of the product that is made from the wood that often ends up in a landfill. The myth —concerning wood products storing carbon in the long-term— that is perpetuated by the agency and timber industry needs to stop and take into account the reality of the carbon lost and emissions cast into the atmosphere to make wood products.

Transferring C from forest biomass to wood product carbon pools is inefficient and leads to an overall loss of C storage. C is lost when forests are harvested compared to old growth forests, “even when storage in wood products and landfill are included.” Additionally, C stocks are younger and have less longevity in logged forests compared to old growth forests.”



“Transfer of biomass carbon during harvesting and processing of wood products. Numbers in bold represent the proportion of the total biomass carbon in the forest that remains in each component. Numbers in italics are the average lifetime of the carbon pool (see data sources in [Appendix E](#): Table E1).” (Keith et al 2014)

Harvesting trees for wood products results in net emissions and is not an energy-neutral process (USGCRP, 2018). Logging as a way to shift C storage to wood products is erroneous and misguided. The NEPA documents do not address a special circumstance, and using the transfer of C storage from biomass to wood products is erroneous. Carbon emissions and impacts to both carbon stores and sequestration associated with large diameter tree removal and significant canopy reduction in the Bear Country Project will be significant and were not adequately addressed in the NEPA documents with the best available science. Additionally, no site specific information was provided on the actual effects of the Bear Country Timber Sale to carbon storage, greenhouse gas emissions and carbon sequestration.

**Suggested Remedy #19:** Withdraw the Bear Country Draft Decision Notice and FONSI and produce an EIS that adequately addresses the impact of project activities on climate change, carbon storage, carbon stocks, carbon sequestration and biodiversity loss.

**Objection Point #20: The Bear Country Project is inconsistent with President Biden’s recent Executive Orders and Secretary Vilsak’s recent Secretarial Memorandum**

As described above President Biden has signed three recent Executive Orders directing federal land managers to utilize the best available science in decision making, to protect mature and old growth forests for carbon storage and climate mitigation, and to protect natural habitats under the 30X 30 initiative. Additionally, Secretary of Interior Vilsak has issued Secretarial Memorandum to implement the directives surrounding the inventory and protecting of mature and old forests.

Unfortunately, none of these Executive Orders or Secretarial Memorandum are being considered or implemented in the Bear Country Project and in fact, they are largely inconsistent with these policies and directives from the Secretary of Interior and the President of the United States.

**Suggested Remedy #20:** Withdraw the Bear Country Draft Decision Notice and FONSI and produce an EIS with action alternatives consistent with recent Executive Orders and Secretarial Memorandum

**Objection Point #21: The NEPA documents and Biological Opinion for this project did not consider an accurate environmental baseline or analyze for the existing conditions on the landscape.**

By their own admission, the agency did not consider the effects to the environment of the recent 2021 wildfires in the NEPA documents. This, includes the adjacent River Complex Fire on the South Fork Salmon River and in the surrounding region. In fact, the Biological Assessment published by the Forest Service for this project admits that, “At the time of writing, the McCash,



River Complex, and Monument fires are still burning on or near the Klamath National Forest. The analysis below reflects the forest conditions prior to ignition, suppression, and associated repair of the 2021 wildfires". (USDA. 2021b. P. 9) The agency also admits that they did not "consider the River Complex in the Environmental baseline." (USDA. 2021b. P. 63).

**Suggested Remedy #21:** Withdraw the Bear Country Draft Decision Notice and FONSI and produce an EIS with an accurate environmental baseline and current conditions analysis. This analysis must include all recent wildfires and management activities.

**Objection Point #22: The NEPA documents do not consider the cumulative effects of the River Complex Fire.**

As stated above the Forest Service did not consider the effects of the River Complex Fire as part of the Environmental Baseline and failed to consider the implications of this fire in the cumulative effects analysis for the Bear Country Project.

**Suggested Remedy #22:** Withdraw the Bear Country Draft Decision Notice and FONSI and produce an EIS with an accurate environmental baseline and current conditions analysis. This analysis must include all recent wildfires including the 2021 River Complex Fire, which burned adjacent to the planning area in the South Fork Salmon River watershed.

**Objection Point #23: The Decision Record is inconsistent with the Response to Comments.**

The Response to Comments claims that units were canceled and/or reduce in size that do not appear to have been adjusted or dropped in the Decision Record. This includes

- Unit 108-According to the Response to comments this unit was reduced by 13 acres, but the polygon Draft EA Proposed Action map and the updated Proposed Action Map released with Decision Record do not reflect those changes.
- Unit 34-According to the Response to comments this unit was reduced by 104 acres, but the polygon Draft EA Proposed Action map and the updated Proposed Action Map released with Decision Record do not reflect those changes.

**Suggested Remedy #23:** Withdraw the Bear Country Project Draft Decision Notice and FONSI, and adjust all proposed commercial logging proposals to reflect the Response to Comments document.

Sincerely,

Luke Ruediger, Siskiyou Conservation Director  
Klamath Forest Alliance  
PO Box 1155  
Jacksonville, Oregon 97530



## References:

Amaranthus, M.P. & Parrish, D.S. & Perry, David. (1989). Decaying logs as moisture reservoirs after drought and wildfire in Stewardship of soil, air and water resources. *Proceedings of Watershed* 89. 191-194.

Campbell 2008, "Carbon Dynamics of a ponderosa pine plantation following thinning treatment in the northern Sierra Nevada."

Campbell, J.L., M.E. Harmon, Mitchell, S.R. 2012. Can fuel-reduction treatments really increase forest carbon storage in the western US by reducing future fire emissions? *Front. Ecol. Environ.* 10, 83–90. doi.org/10.1890/110057.

Cronin, J.T.; Turchin, P.; Hayes, J.L.; Steiner, C.A. 1999. Area-wide efficacy of a localized forest pest management practice. *Environmental Entomology* 28: 496-504

Davis, Raymond J.; Hollen, Bruce; Hobson, Jeremy; Gower, Julia E.; Keenum, David. 2016. Northwest Forest Plan—the first 20 years (1994–2013): status and trends of northern spotted owl habitats. Gen. Tech. Rep. PNW-GTR-929. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 54 p.

DellaSala, D.A., Hanson, C.T. 2015. The ecological importance of mixed severity fires: nature's phoenix. Elsevier, Boston.

Downing WM, Meigs GW, Gregory MJ, Krawchuk MA. Where and why do conifer forests persist in refugia through multiple fire events?. *Glob Change Biol.* 2021;27:3642–3656. <https://doi.org/10.1111/gcb.15655>

Estes, B. L., E. E. Knapp, C. N. Skinner, J. D. Miller, and H. K. Preisler. 2017. Factors influencing fire severity under moderate burning conditions in the Klamath Mountains, northern California, USA. *Ecosphere* 8(5):e01794. 10.1002/ecs2.1794

Law, Beverly E., Hudiburg, Tara W. Berner. Logan T., Kent. Jeffrey J., Buotte, Polly C., and Harmon. Mark E. 2018. Land Use Strategies to mitigate climate change in carbon dense temperate forests. *PNAS*. [www.pnas.org/cgi/doi/10.1073/pnas.1720064115](http://www.pnas.org/cgi/doi/10.1073/pnas.1720064115)

Lesmeister, D. B., S. G. Sovern, R. J. Davis, D. M. Bell, M. J. Gregory, and J. C. Vogeler. 2019. Mixed-severity wildfire and habitat of an old-forest obligate. *Ecosphere* 10(4):e02696. 10.1002/ecs2.2696

Lindenmayer, D.B., Hobbs, R.J., Likens, G.E., Krebs, C.J., Banks, S.C. 2011. Newly discovered landscape traps produce regimes shifts in wet forests. *Proc. Natl. Acad. Sci.* 108, 15887–15891. doi.org/10.1073/pnas.1110245108. .

Mildrexler, D.J., Berner, L.T., Law, B.E., Birdsey, R.A., Moomaw, W.R. 2020. Large trees dominate carbon storage in forests east of the Cascade Crest in the United States Pacific Northwest. *Front. For. Glob. Change.* 3, 594274. doi.org/10.3389/ffgc.2020.594274.

Olson, G.S., E.M. Glenn., R.G. Anthony, E.D. Forsman, J.A. Reid., P.J. Loschl., and W.J. Ripple. 2004. Modeling Demographic Performance of Northern Spotted Owls Relative to Forest Habitat in Oregon. *Journal of Wildlife Management* 68: 1039- 1053.

Spencer, W., J. Brice, D. DiPietro, J. Gallo, M. Reilly, H. Romsos. 2019. Habitat Connectivity for Fishers and Martens in the Klamath Basin Region of California and Oregon. Conservation Biology Institute. <https://doi.org/10.6084/m9.figshare.8411909>

Stephenson, N.L., A. J. Das, R. Condit, S. E. Russo, P. J. Baker, N. G. Beckman, D. A. Coomes, E. R. Lines, W. K. Morris, N. Rüger, E. Álvarez, C. Blundo, S. Bunyavejchewin, G. Chuyong, S. J. Davies, Á. Duque, C. N. Ewango, O. Flores, J. F. Franklin, H. R. Grau, Z. Hao, M. E. Harmon, S. P. Hubbell, D. Kenfack, Y. Lin *et al.* Rate of tree carbon accumulation increases continuously with tree size. *Nature* (2014) Received 05 August 2013 Accepted 27 November 2013 Published online 15 January 2014: Link accessed 9-6-19  
<http://www.nature.com/nature/journal/vaop/ncurrent/full/nature12914.html>

Taylor, A. H., & Skinner, C. N. (1998). Fire history and landscape dynamics in a late-successional reserve, Klamath Mountains, California, USA. *Forest Ecology and Management*, 111(2–3), 285–301. [https://doi.org/10.1016/S0378-1127\(98\)00342-9](https://doi.org/10.1016/S0378-1127(98)00342-9)

USDA. 1997. Lower South Fork of the Salmon River Ecosystem Analysis. Klamath National Forest, Siskiyou County, California. Scott/Salmon Ranger District, Fort Jones, California. July 1997.

USDA. 1999. Klamath National Forest Late Successional Reserve Forest Wide Assessment. Southwest Region 5. Klamath National Forest. January 1999.

USDA. 2019. Fiscal Year 2018 Monitoring and Evaluation Report. Klamath National Forest. Yreka, California. November 2019.

USDA. 2020. Fiscal Year 2019 Monitoring and Evaluation Report. Klamath National Forest. Yreka, California. November 2020.

USDA. 2021. Bear Country Project Environmental Assessment. Klamath National Forest, Siskiyou County, California. Scott/Salmon Ranger District, Fort Jones, California. June 2021.

USDA. 2021a. Bear Country Project Wildlife Biological Evaluation. Scott/Salmon Ranger District, Klamath National Forest, Fort Jones, California. July 2021.

USDA. 2021b. Bear Country Project Wildlife Biological Assessment. Scott/Salmon Ranger District, Klamath National Forest, Fort Jones, California. December 2021.

USDA. 2022. Regional Ecosystem Office Review of the Bear Country Project, Klamath National Forest. Regional Ecosystem Office, Regional Interagency Executive Committee. May 15, 2022.

USDA. 2023. Bear Country Project Environmental Assessment. Klamath National Forest, Siskiyou County, California. Scott/Salmon Ranger District, Fort Jones, California. January 2023.

USDA. 2023a. Bear Country Project Summary of Activity in Inventoried Roadless Area. Klamath National Forest, Siskiyou County, California. Scott/Salmon Ranger District, Fort Jones, California. February 6, 2023.

USDI. 2022. Transmittal of the Biological Opinion and Informal Consultation for the Bear Country Project. US Fish and Wildlife Service, Yreka, California. May 5, 2022.

**From:** [FS-objections-pacificsouthwest-regional-office](#)  
**To:** [Luke Ruediger](#)  
**Cc:** [Barrett, Bradley - FS, CA](#); [Fenstermacher, Daniel - FS, PA](#)  
**Subject:** RE: Bear Country Project Objection  
**Date:** Monday, March 13, 2023 1:00:00 PM  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[image003.png](#)  
[image004.png](#)

---

Hi Luke,

We looked into the error you highlighted regarding the email address in the draft decision notice. However, the legal notice which was published on 2/1/23 and the cover letter sent out announcing the availability of the draft decision contains the correct email address. Thanks, Jennifer



**Jennifer Marsolais**  
**Administrative Review Coordinator**

**Forest Service**  
**Pacific Southwest Region**  
**Ecosystem Planning**

p: 530-651-8848 (cell)  
[jennifer.marsolais@usda.gov](mailto:jennifer.marsolais@usda.gov)

100 Forni Road  
Placerville, CA 95667

[www.fs.fed.us](http://www.fs.fed.us)



**Caring for the land and serving people**

---

**From:** Luke Ruediger <siskiyoucrest@gmail.com>  
**Sent:** Friday, March 10, 2023 11:53 AM  
**To:** FS-objections-pacificsouthwest-regional-office <objections-pacificsouthwest-regional-office@usda.gov>  
**Subject:** Re: Bear Country Project Objection

Thanks, Luke

On Fri, Mar 10, 2023 at 11:39 AM FS-objections-pacificsouthwest-regional-office <[objections-pacificsouthwest-regional-office@usda.gov](mailto:objections-pacificsouthwest-regional-office@usda.gov)> wrote:

Hi Luke,

I wanted to confirm receipt of your objection. I also saw your note about the address listed in the Decision Notice and FONSI being incorrect. I need to look into this further, but wanted to at least acknowledge that your objection was received. We will be in touch soon. Thank you, Jennifer

**Jennifer Marsolais**



**Administrative Review Coordinator**

**Forest Service**

**Pacific Southwest Region**

**Ecosystem Planning**

**p: 530-651-8848 (cell)**

**[jennifer.marsolais@usda.gov](mailto:jennifer.marsolais@usda.gov)**

100 Forni Road  
Placerville, CA 95667

**[www.fs.fed.us](http://www.fs.fed.us)**



**Caring for the land and serving people**

---

**From:** Luke Ruediger <[siskiyoucrest@gmail.com](mailto:siskiyoucrest@gmail.com)>

**Sent:** Friday, March 10, 2023 11:15 AM

**To:** FS-objections-pacificsouthwest-regional-office <[objections-pacificsouthwest-regional-office@usda.gov](mailto:objections-pacificsouthwest-regional-office@usda.gov)>

**Subject:** Bear Country Project Objection

Please see the attached Objection for the Bear Country Project. Additionally, please confirm with me that this Objection has been received and is processed.

Thank you,

Luke Ruediger/Siskiyou Conservation Director

Klamath Forest Alliance

PO Box 1155

Jacksonville, Oregon 97530

PS the email you listed in the Draft Decision Notice and FONSI is incorrect and gets sent back as a mailer demon. You misspelled pacific northwest, so the email won't send. Not sure what you need to do to mitigate that problem. Is the current objection period valid if the contact provided is inaccurate?

This electronic message contains information generated by the USDA solely for the intended recipients. Any unauthorized interception of this message or the use or disclosure of the information it contains may violate the law and subject the violator to civil or criminal penalties. If you believe you have received this message in error, please notify the sender and delete the email immediately.