



File Code: 1570; 1950
Date: 9/13/20

Paul Engelmeyer
Portland Audubon Society/Tem Mile Creek Sanctuary
PO Box 496
Yachats, OR 97498

email: [REDACTED]

Dear Mr. Engelmeyer:

This letter is in response to your objection (#20-06-12-0009-218(B)) to the draft Decision Notice (DN) and Finding of No Significant Impact (FONSI) for the Deadwood Creek Restoration Project, Central Coast Ranger District, Siuslaw National Forest. I have read your objection and reviewed the project record, the draft DN/FONSI, and the final Environmental Assessment (EA). My review of your objection was conducted in accordance with the regulation at 36 CFR 218 (2013).

PROJECT DESCRIPTION

On May 29, 2020 a legal notice was published in the *Eugene Register Guard* announcing the public notice of a draft decision notice (DN), finding of no significant impact (FONSI) and objection filing period for Deadwood Creek Restoration Project Environmental Assessment (EA). The project is located on the Central Coast Ranger District of the Siuslaw National Forest. In the draft DN/FONSI, the Responsible Official selected the Proposed Action, modified Alternative 2, which authorizes the following activities:

- Treat approximately 8,532 acres of vegetation with commercial and non-commercial treatments;
- Restore stream shade to about 7.3 miles of stream;
- Add large woody debris to about 18 miles of stream to improve complexity and structure;
- Restore natural hydrologic processes on depositional floodplain areas of about 11 acres of riparian area, and fell and leave about 4,200 riparian plantation trees;
- Improve aquatic habitat by replacing aging, failing and undersized culverts;
- Maintaining or reconstructing about 74 miles of non-key forest roads;
- Replacing (add to the NF System roads) approximately 3.81 miles of previously decommissioned roads, which received no treatment and are needed for long-term management;
- Store 11.5 miles of non-key forest roads, and decommission about 1.7 miles of non-key forest roads and about 24 miles of unauthorized road templates (legacy roads);
- Install 5 aquatic organism passages;
- Realign 0.3 miles of road 6300;
- Remove two bridges over Green Creek on roads 3279 and 3289;
- Reopen approximately 25.8 miles existing non-system roads and construct about 0.36 mile of new temporary use roads.

OBJECTION ISSUE DISCUSSION

Specific to your objection, you raised issues regarding wildlife impacts, particularly to the marbled



murrelet, northern spotted owl and marten and impacts to interior forest stands. Several conversations and meetings were held with the objectors; resolution was ultimately reached with one objector, AFRC. My response to the unresolved objection issues is enclosed.

Upon review of the project, I did find that one clarification is needed. It would be helpful if the final decision clarified that the Humboldt marten/coastal DPS marten, which is the species that the USFWS is proposing to list, is not found in the project area, and that instead, the project appropriately analyzes the Pacific marten. As such, I instruct the Responsible Official to include this clarification in the final decision.

CONCLUSION

I conducted my review of the record, final EA, and draft DN/FONSI. Based on my review, I conclude the following:

- The draft decision clearly describes the actions to be taken in sufficient detail that the reader can easily understand what will occur as a result of the draft decision.
- The draft decision considered a range of alternatives that was adequate to respond to the Purpose and Need. The purpose and need and alternatives considered in the final EA reflect a reasonable range of alternatives, consistent with law, regulation and policy.
- The draft decision is consistent with or moves toward attainment of Forest Plan standards and guidelines.
- The draft decision is consistent with all policy, regulation, law, direction, and the final EA contains adequate evidence to support the decision. The record and final decision contain site-specific documentation regarding resource conditions, and the Responsible Official's draft decision document is based on the record and reflects a reasonable conclusion.

This concludes my written review of the project. By copy of this letter and the enclosed response document, the Responsible Official may sign the decision after incorporating the clarification, then notify interested and affected persons in accordance with the regulation at 36 CFR 218.12 and 36 CFR 220.7(d). This written response is the final administrative review by the Forest Service or the Department of Agriculture [36 CFR 218.11(b)(2)].

Sincerely,

ROBERT SANCHEZ
Digitally signed by
ROBERT SANCHEZ
Date: 2020.09.13
14:55:18 -07'00'

ROBERT SANCHEZ
Forest Supervisor
Objection Reviewing Officer
Enclosure

cc: Michele Holman; Katherine Richardson; Katie Isacksen; Lawrence Fisher; Donni Vogel; Debbie Anderson; Heidi Hopkins

**Deadwood Creek Landscape Management Project
Final Environmental Assessment (EA)
Central Coast Ranger District
Siuslaw National Forest
Objection Statements
September 2020**

| Objector | Objection Number |
|--|-------------------------|
| American Forest Resource Council (AFRC) – objection resolved | #20-06-12-0005-218(B) |
| Greg Kennedy (GK) | #20-06-12-0006-218(B) |
| Portland Audubon Society/Paul Engelmeyer (PA) | #20-06-12-0009-218(B) |

During the objection resolution process, Objector AFRC agreed to withdraw their objection if the final decision notice did not incorporate any elements of Alternative 3, which the Responsible Official agreed to. As such, their objection issues have been resolved and are not included in this document.

Wildlife Impacts

Overview and Objector’s Suggested Remedies: These objection issues surround the concern that this project does not adequately address the impacts to marbled murrelet (MAMU). Remedies offered include creating a no-cut buffer adjacent to occupied MAMU stands and drop or reduce the thinning regime for the 18 previously thinned stands.

Objector Statement #1: Objector states that “The scientific literature does not support the proposed thinning regimes for interior forest and sensitive species protection in alternative 3. A finding of no significant impact is not justified.” PA at 2¹.

Response: I find that the District accurately analyzed the effects of the alternatives on the marbled murrelet and documented the rationale for the FONSI.

The regulation at 36 CFR 220.7(3)(i) states the EA shall briefly provide sufficient evidence and analysis, including the environmental impacts of the proposed action and alternative(s), to determine whether to prepare either an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI) (40 CFR 1508.9). Further the regulation at 36 CFR 220.7(3)(iv) states the EA may discuss the direct, indirect, and cumulative impact(s) of the proposed action and any alternatives together in a comparative description or describe the impacts of each alternative separately.

The Deadwood Creek Restoration Project is consistent with the Biological Assessment Regarding Habitat Modification Projects that are Not Likely to Adversely Affect the Northern Spotted Owl (*Strix occidentalis caurina*), the Marbled Murrelet (*Brachyramphus marmoratus*), or their Critical Habitats within the North Coast Province, FY 2017-2018, proposed by the Northwest Oregon District, Bureau of Land Management and the Siuslaw National Forest.

Page 90 of the Biological Assessment (BA) lists the effects by activity type, i.e., light to moderate thinning, on marbled murrelets, and states the following:

¹ The citation AFRC at 2 refers to the objector, in this case American Forest Resource Council, and the page number, in this case page 2, where their issue can be found. This nomenclature is carried forward throughout this document.

“Light to moderate thinning treatments that are designed to improve forest health would have indirect beneficial effects on murrelets because such treatments would accelerate the growth of forest conditions needed by murrelets.

In stands that are not suitable habitat or do not contain nesting structure and are not within 300 feet of habitat within nesting structure or suitable habitat, light to moderate thinning activities would have no direct effect on murrelets because these areas do not currently contain any nesting structure and therefore are not used by murrelets.

Light to moderate thinning in young stands adjacent to nesting structure that would not remove components of the stand that are required for nesting **may effect but is not likely to adversely affect** murrelets because such a treatment would retain 40 percent or greater canopy cover and contain no to a few openings less than ¼ acre, both of these design features will reduce a post treatment berry flush, retain wind firmness to keep trees standing through winter storms, minimize microclimate changes to adjacent murrelet habitat that provides protection from the weather and encourages a climate that facilitates moss growth which is used as nest substrate.”

The EA also addressed the use of science and how the proposed project complies with the Recovery Plan. The EA at 67-68² addressed how the literature was reviewed and the factors that may affect the risks to marbled murrelets near forest edges or patches. The science behind thinning in young plantations was also addressed in the EA at 151-158. The draft DN/FONSI at 8 also addressed the concerns about science and documented how the project fully meets the requirements for protection of marbled murrelet, as documented in consultation with the US Fish and Wildlife Service.

Objector Statement #2: Objector states that “The threats to the species at the time of listing, which are still relevant today, are: habitat destruction and modification in the terrestrial environment from timber harvest and human development; increased forest “edge effects” from timber harvest; other anthropogenic factors, such as oil spills and fishing nets used in gill-net fisheries; new threats identified since listing include predation and various impacts to the marine environment.” Objector also notes that the recommendation from the 1997 MAMU Recovery Plan will not be met with the selected alternative. The objector states that “The lack of no-cut buffers in the preferred alternative remains inadequate to protect occupied stands and a FONSI is not warranted. The 40% and 60% canopy closure adjacent to identified occupied Murrelet stands is not protective enough.” PA at 3.

Response: I find that the Alternative 2 of the Deadwood Creek Restoration Project is consistent with the 1997 MAMU Recovery Plan and that a FONSI is supported.

The regulation at 36 CFR 220.7(b)(3)(i) states the EA shall briefly provide sufficient evidence and analysis, including the environmental impacts of the proposed action and alternative(s), to determine whether to prepare either an EIS or a FONSI (40 CFR 1508.9). Further the regulation at 36 CFR 220.7(b)(3)(iv) states the EA may discuss the direct, indirect, and cumulative impact(s) of the proposed action and any alternatives together in a comparative description or describe the impacts of each alternative separately.

² The citation draft Decision Notice (DN) at 4 refers to the document, in this case the draft DN and the page number, in this case page 4, where the information can be found. This nomenclature is carried forward throughout this document.

Alternative 2 is consistent with the 1997 MAMU Recovery Plan as well as the Biological Assessment Regarding Habitat Modification Projects that are Not Likely to Adversely Affect the Northern Spotted Owl (*Strix occidentalis caurina*), the Marbled Murrelet (*Brachyramphus marmoratus*), or their Critical Habitats within the North Coast Province, FY 2017-2018, proposed by the Northwest Oregon District, Bureau of Land Management and the Siuslaw National Forest.

The EA states that "...in young stands, \leq 80 years old, the 1997 Recovery Plan stresses the need to use silvicultural practices to promote the development young conifer stands before entering the "recruitment" stage which is 80+ years old. Once young stands enter the "recruitment" 80+ year old age class, commercial thinning is usually no longer an option to expedite development of large trees and decrease vulnerability to fire, wind, predators, or other fragmentation effects. Young plantations located within no-cut buffers, would most likely enter in to the "recruitment" phase untreated, and what if any implications would that have to restoring marbled murrelet habitat?" EA at 116.

In Alternative 2 of the Deadwood project, the EA states that "no proposed action would result in clearcut type edges. All known occupied habitat and un-surveyed suitable nesting structure or habitat is abated with light to moderate thinning and buffered with seasonal and daily timing restrictions. By definition, light to moderate thinning maintains current habitat functionality after treatment (e.g., suitable habitat retains nesting habitat components) and residual trees would not go below 40% canopy cover retention, in order to create a soft edge between a treated stand and interior forest habitat." EA at 116.

In addition, the EA states that the Forest "...is not aware of any data which indicates typical seasonal restrictions are ineffective or inadequately protecting nesting marbled murrelets or nesting habitat." EA at 116.

The purpose and need, and future effects of applying no-cut buffers left permanently in the project area as proposed under Alternative 3 was considered and analyzed. EA at 116. The EA states that "Given the current state of marbled murrelet habitat in Deadwood Creek and desired future conditions in the project area, the application of buffers is not likely to provide benefits which outweigh their long-term negative aspects towards promoting interconnectivity of young plantation to existing mature or interior forest nesting habitat." EA at 116. The analysis of wildlife effects under Alternative 3 (Final EA, Section 3.5.4.5) describes the potential beneficial and adverse effects of creating long-term murrelet buffers composed primarily of young plantations that will be deferred from stands proposed for commercial thinning in Alternative 2. Consultation with the USFWS resulted in concurrence that the project actions are Not Likely to Adversely Affect (NLAA) and that no additional mitigation measures (such as no-cut buffers) were required to maintain NLAA. EA at 115 and 118.

Retention of the young plantation buffers would, in the long-term, develop some favorable habitat conditions, but at a slower rate than the thinned stands in Alternative 2 are anticipated to achieve over the next several decades. EA at 117-118.

The draft DN/FONSI at 4 notes that "Alternative 3 may protect the marbled murrelet in the additional 145 acres of no-cut buffers to a slightly higher level. However, Alternative 2 still provides for the protection at the level that implementation is not likely to adversely affect the marbled murrelet."

Finally, the draft DN/FONSI at 4 states that “The additional 145 acres that would not be treated in Alternative 3 would develop old growth characteristics over time, but this would not be available as habitat in an expedited manner. This means that Alternative 3 does not meet the purpose and need for terrestrial restoration to the extent of Alternative 2 even though the extent is admittedly a slight amount.”

Because the project complies with the Recovery Plan and the USFWS concurred with the determinations by the Forest, I find that the Recovery Plan recommendations will be met and that the marbled murrelet will be adequately protected.

Objector Statement #3: Objector states that the Forest is violating the Endangered Species Act sections 7 and 9 if this project proceeds. The objector notes that the proposed action will increase berry flush that in turn will increase corvids and jays that will prey on juvenile murrelets or decrease them from nesting attempts. This would result in incidental take. PA at 4.

Response: I find that my staff accurately analyzed Alternatives 2 and 3, and their effects on the marbled murrelet.

Section 7 of the Endangered Species Act of 1973 (ESA) requires all federal agencies, in consultation with the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS), to ensure that their actions are not likely to jeopardize the continued existence of listed threatened, endangered, or proposed species, or adversely modify their habitat. A biological evaluation (BE)/assessment must be completed for all Forest Service planned, funded, executed or permitted programs and activities to determine their possible effects to species listed under the ESA (Forest Service Manual (FSM) 2672.4). The BE/BA should include a risk assessment of the potential effects of the project to each Threatened or Endangered species according to procedures outlined in FSM 2672.42.

The Deadwood Creek Restoration Project is consistent with the Biological Assessment Regarding Habitat Modification Projects that are Not Likely to Adversely Affect the Northern Spotted Owl (*Strix occidentalis caurina*), the Marbled Murrelet (*Brachyramphus marmoratus*), or their Critical Habitats within the North Coast Province, FY 2017-2018, proposed by the Northwest Oregon District, Bureau of Land Management and the Siuslaw National Forest. Additionally, Page 90 of the BA addresses berry flush in the Effects by Activity Type, i.e. Regeneration Harvest and Heavy Thinning, on Marbled Murrelets and states:

“Regeneration harvest or heavy thinning in stands that are not suitable habitat or do not contain nesting structure and are beyond 300 feet from stands with nesting structure or suitable habitat, would have no effect on murrelets because these areas do not currently contain any nesting structure or buffer habitat and therefore are not used by murrelets.

Fragmentation of the landscape attracts higher numbers of Stellar’s jays, a known predator of murrelets. Increases in murrelet nest predation have been documented when openings are producing/causing/resulting in berry productions (Zharikov et al. 2006, p. 117). The increased time Stellar’s jays spend foraging for berries and insects in open stands may also result in more time for location of murrelet nest in an adjacent stand. Additionally, if there is an intermingling canopy of the treated and adjacent stand, regeneration harvest could reduce wind firmness and change the microclimate of the adjacent remaining stand. Therefore, the murrelet recovery plan recommends a 300-600 foot forested buffer around murrelet habitat to help maintain successful murrelet nesting.

Regeneration harvest or heavy thinning of non-habitat between 300 feet and .5 mile from suitable habitat or nesting structure *may affect but is not likely to adversely affect* marbled murrelets if conducted following the Standards.” BA at 90.

The Deadwood Creek Restoration Project does not propose regeneration harvest or heavy thinning within 300 feet of suitable habitat or nesting structure as noted in the EA at 108, which states that “Scattered within the commercial units will be about 206 acres of early seral transitory (non-commercial) gap placements of 1 acre or less, beyond 300 feet of mature habitat. Gap creation plus underplanting in thinned stands while also maintaining unthinned areas within the plantations, will all contribute to diversification of stand structure, species composition, and complexity.”

The EA at 111-112 notes that “These activities will occur within stands that are currently primarily alder. A few stands have small regenerating conifer but these trees do not currently provide any habitat for marbled murrelet. No new openings will be created within the 300-foot buffer area of suitable nesting habitat. Because there will be no habitat removed in suitable nesting or buffer habitat as a result of this activity, early seral habitat creation may affect but is not likely to adversely affect murrelets or their critical habitat.”

Light to moderate thinning proposed outside of the 206 acres of early seral treatments was addressed: “The light to moderate thinning proposed in this *alternative may affect but is not likely to adversely affect* murrelets or their critical habitat because such treatments retain nest structure and habitat, and canopy cover in all units will be maintained at 40% or greater canopy cover post-thinning (including gap placement and coarse wood creation), with no gaps within 300 feet of suitable habitat. These design features are expected to reduce a post treatment berry flush, retain wind firmness to keep trees standing through winter storms, maintain visual screening from predators, minimize microclimate changes to adjacent murrelet habitat that provides protection from the weather and encourages a climate that facilitates moss growth which is used as nest substrate.” EA at 109-110; see also EA Appendix E at 20-21. The potential to attract corvids was also addressed in the EA at 110-111, 114-115 and 116-118.

Objector Statement #4: Objector states “the Forest Service's finding that the project is "not likely to adversely affect" Marbled Murrelets is not supported by the science in the agency's record and is thus arbitrary and capricious.” In addition, objector states that “absent explicit authorization by USFWS in an incidental take statement, the Forest Service will also violate section 7 in addition to section 9 by proceeding with the Deadwood Creek project absent formal consultation and issuance of a biological opinion and incidental take statement by USFWS.” PA at 5.

Response: I find that the Deadwood Creek Restoration project is compliant with the Endangered Species Act.

The regulation at 36 CFR 220.7(b)(3)(i) requires that an EA include a discussion of the environmental effects of the proposed action. Section 7 of the ESA requires all federal agencies, in consultation with the USFWS and NMFS, to ensure that their actions are not likely to jeopardize the continued existence of listed threatened, endangered, or proposed species, or adversely modify their habitat. A BE/BA must be completed for all Forest Service planned, funded, executed or permitted programs and activities to determine their possible effects to species listed under the ESA (FSM 2672.4). The BE/BA should include

a risk assessment of the potential effects of the project to each Threatened or Endangered species according to procedures outlined in FSM 2672.42.

The EA states that “Consultation with the USFWS has been conducted for the marbled murrelet and critical habitat for all activities in programmatic and project-specific consultations. Danger tree removal was consulted on in the programmatic consultation, Likely to Adversely Affect (LAA) Habitat Modification BO 01EOFW00-2016-F-0136 (February 2016). The following programmatic consultation document includes all other activities proposed in the Deadwood Creek Restoration Project: Not Likely to Adversely Affect (NLAA) Habitat Modification LOC 01EOFW00-2017-I-0105 (December 2016).” EA at 188.

The EA also states that the “Project is compliant with the Endangered Species Act. Appendix A includes the [Project Design Criteria] PDCs, which are developed to ensure the project is consistent with ESA requirements. Effects to Federally listed species are detailed in the Threatened, Endangered, or Proposed ESA Listed Species section of this report.” EA at 189.

Objector Statement #5: Objector states that the Project has an adverse effect on these recovery goals #4 and #5 of the Marbled Murrelet Recovery Plan, believing that suitable habitat will be impacted and fragmented, and individuals and their potential productivity will be adversely impacted in portions of their range. PA at 6.

Response: I find that the Deadwood Creek Restoration Project is consistent with and implements the 1997 MAMU Recovery Plan.

The regulation at 36 CFR 220.7(b)(3) requires that an EA include a discussion of the environmental effects of the proposed action and any alternatives, including disclosing the direct, indirect and cumulative effects.

Section 7 of the ESA requires all federal agencies, in consultation with the USFWS and NMFS, to ensure that their actions are not likely to jeopardize the continued existence of listed threatened, endangered, or proposed species, or adversely modify their habitat. A biological evaluation/assessment must be completed for all Forest Service planned, funded, executed or permitted programs and activities to determine their possible effects to species listed under the ESA (FSM 2672.4). The BE/BA should include a risk assessment of the potential effects of the project to each T&E species according to procedures outlined in FSM 2672.42.

Alternative 2, modified, does not have an adverse effect on the recovery goals of the 1997 Marbled Murrelet Recovery Plan. Alternative 2 of the Deadwood Creek Restoration Project implements Recovery Objectives 4 and 5 by; “promoting the development young conifer stands before entering the “recruitment” stage which is 80+ years old. Once young stands enter the “recruitment” 80+ year old age class, commercial thinning is usually no longer an option to expedite development of large trees and decrease vulnerability to fire, wind, predators, or other fragmentation effects.” EA at 116.

The Deadwood project further implements specific management recommendations of the 1997 Marbled Murrelet Plan by including short-term actions for stabilizing the population, and longer-term actions for increasing population growth and distribution. Short term actions include: (1) maintaining occupied habitat; (2) maintaining large blocks of suitable habitat; (3) maintaining and enhancing buffer habitat; and (4) decreasing risks of loss of nesting habitat due to fire and windthrow. Long term actions

include: silvicultural techniques that might increase the speed of habitat development and the structural qualities of the habitat. 1997 MAMU Recovery Plan at 121-122.

See also the response to Objector Statement #2.

Objector Statement #6: Objector states that “the SNF has not monitored the impacts of a 40% Canopy Cover on moss mat abundance/development when compared to interior forest conditions. Without such monitoring, an informed analysis is impossible, and failure to take the precautionary approach involves great, irreversible risks for MAMU recovery.” PA at 7.

Response: I find that the District accurately analyzed the effects of the alternatives on marbled murrelet habitat, including moss mat abundance/development.

The regulation at 36 CFR 220.7(b)(1) requires that an EA briefly describe the need for action. The regulation at 36 CFR 220.7(b)(3) requires that an EA include a discussion of the environmental effects of the proposed action and any alternatives, including disclosing the direct, indirect and cumulative effects.

The EA at 109-110 states that “The light to moderate thinning proposed in this *alternative may affect but is not likely to adversely affect* murrelets or their critical habitat because such treatments retain nest structure and habitat, and canopy cover in all units will be maintained at 40% or greater canopy cover post-thinning (including gap placement and coarse wood creation), with no gaps within 300 feet of suitable habitat. These design features are expected to reduce a post treatment berry flush, retain wind firmness to keep trees standing through winter storms, maintain visual screening from predators, minimize microclimate changes to adjacent murrelet habitat that provides protection from the weather and encourages a climate that facilitates moss growth which is used as nest substrate.”

In addition, the response to comments notes that “These design features are expected to reduce a post treatment berry flush, retain wind firmness to keep trees standing through winter storms, maintain visual screening from predators, minimize microclimate changes to adjacent murrelet habitat that provides protection from the weather and encourages a climate that facilitates moss growth which is used as nest substrate (effects to Marbled Murrelet and Critical Habitat section 3.5.4.3.3 Alternative 2). Short-term declines of low and tall shrubs and ground floor bryophytes would likely occur, but would be limited with use of skyline equipment. In most instances, low and tall shrubs, and bryophytes are anticipated to return at or near pre-treatment levels within 5 years after a thinning or gap is created. Moss and epiphytes in mid and upper canopy levels in mature stands next to a thinned unit are considered to have already adjusted to most microclimate conditions as a result of historical clearcuts conducted decades ago. Long-term, moss and epiphytes should increase in thinned stands of plantation as upper crowns expand and future mid-story canopy develops intra-stand complexity. (3.5.4.4.2 Cumulative Effects to Marbled Murrelet Critical Habitat).” EA Appendix E at 20-21.

Objector Statement #7: Objector states that current scientific literature suggests that nest predation is a dominant driver for murrelets demographics and forest alteration increases predation risk that this project will have a negative impact on the local murrelets populations. This objector also states that reducing edge habitats and the high value of uncut buffers around suitable habitat are reasons that Alternative 2 is not the appropriate choice for murrelets. Objector is concerned that the Forest ignored Alternative 3 without adequate justification or scientific support. PA at 8.

Response: I find that the District accurately analyzed the action alternatives and their effects on the marbled murrelet, and that Alternative 3 was fully considered.

The regulation at 36 CFR 220.7(b)(3) requires that an EA include a discussion of the environmental effects of the proposed action and any alternatives, including disclosing the direct, indirect and cumulative effects.

Alternative 3 was proposed in order to address the potential impacts to interior forests, including the potential for nest predation. EA at 14. The EA at 22-25 documents that Alternative 3 was fully developed as an action alternative and the effects were fully considered. EA at Chapter 3.

The Deadwood Creek Restoration Project is consistent with the Biological Assessment Regarding Habitat Modification Projects that are Not Likely to Adversely Affect the Northern Spotted Owl (*Strix occidentalis caurina*), the Marbled Murrelet (*Brachyramphus marmoratus*), or their Critical Habitats within the North Coast Province, FY 2017-2018, proposed by the Northwest Oregon District, Bureau of Land Management and the Siuslaw National Forest.

The EA at 67 notes that "...the scientific literature varies widely as to the distance from an edge for measuring edge influences on marbled murrelet nesting success (Nelson and Hamer, 1995, Manley and Nelson, 1999, Bradley, 2002, Burger, 2002, Luginbuhl, et. al, 2001, Marzluff, et. al. 2000, Raphael, et. al. 2002b, Malt and Lank, 2007, 2009, Hebert and Golightly 2006, 2007, Peery et. al. 2004, 2006 list). Raphael, et. al., 2002 found rates of predation are higher within 50 meters of a forest edge but this relationship varies with proximity to human activity and with the structure of the adjacent regenerating forest. The author also found that predation increased with proximity to forest edges especially when the matrix contained human settlements and recreation areas, compared to bordering regenerating forests. Marbled murrelets are known to nest within 150 ft (46 m) of forest edges and in small, often isolated patches of suitable trees. The data summarized by McShane et al. (2004) showed 75 percent of all nests were within 164 ft (50 m) of forest edges. Most of these edges were natural edges (streams, wetlands, natural forest gaps, and avalanche chutes) but almost a third of all nests were close to edges created by human activities."

The EA goes on to state that "The amount or intensity of influence depends on the 'edge contrast' or how sharply the two adjacent habitats differ (Bannerman, 1998). Many of the papers' authors summarized effects of hard edges or regeneration cuts vs. light thinning, or they did not specify the type of edge. Depending on the severity of the edge and proximity to interior habitat, impacts can include 1) risk of windthrow to mature habitat or habitat buffer, 2) microclimate changes leading to desiccation of important habitat characteristics such as epiphyte growth (i.e. moss) cover on branches, and 3) increase of predators (i.e. corvids, etc.) due to lack of visual screening to mature habitat, and increased forage (berries, etc.) available to corvids." EA at 67.

The draft DN/FONSI at 2-4 documents the rationale for selecting Alternative 2 as modified, and documents full consideration of Alternative 3.

Objector Statement #8: Objector states that this project did not consider the impacts to the northern Spotted Owl, flying squirrels or the Humboldt marten. PA at 9.

Response: I find that the EA considered the impacts to the northern spotted owl. Management Indicator Species and Region 6 Sensitive Species, as well as Threatened, Proposed and Endangered

Species are properly analyzed in the Deadwood Creek Restoration Project. I also find that the analysis and conclusions for the marten need a minor clarification.

The regulation at 36 CFR 220.7(b)(3) requires that an EA include a discussion of the environmental effects of the proposed action and any alternatives, including disclosing the direct, indirect and cumulative effects.

The discussion of impacts to the northern spotted owl can be found in the EA at 68 and 119-127. The Deadwood Creek Restoration Project is consistent with the Biological Assessment Regarding Habitat Modification Projects that are Not Likely to Adversely Affect the Northern Spotted Owl (*Strix occidentalis caurina*), the Marbled Murrelet (*Brachyramphus marmoratus*), or their Critical Habitats within the North Coast Province, FY 2017-2018, proposed by the Northwest Oregon District, Bureau of Land Management and the Siuslaw National Forest.

Flying squirrels are not Management Indicator Species, Region 6 Sensitive Species, or Threatened, Proposed or Endangered and therefore analysis is not required. However, because flying squirrels are an important prey species for spotted owls and rely on dead and down wood, habitat characteristics of the species were considered in the Deadwood Creek Restoration. EA at 79 and 119.

The EA documents that neither the Humboldt marten nor their habitat are found in the project area, thus further analysis is not warranted. EA at 64-65. The Humboldt marten is also known as the coastal marten. As stated in the EA at 72: "The USFWS is proposing to list the coastal distinct population segment (DPS) of the Pacific marten (*Martes caurina*), known as the coastal marten (*Martes caurina humboldtensis*), as a threatened species under the Endangered Species Act. The coastal marten is in the weasel family and is native to forests of coastal Oregon and coastal California, but dune habitat associated with this DPS is not present in the project area. Therefore, this DPS will not be discussed or analyzed further in this document because the coastal marten is considered absent from the project area. The Pacific marten is discussed as a MIS and sensitive species." EA at 72. The project, as noted in the previous sentence, does analyze the Pacific marten (non-coastal DPS).

It would be helpful if the final decision clarified that the Humboldt marten/coastal DPS marten, which is the species that the USFWS is proposing to list, is not found in the project area, and that instead, the project appropriately analyzes the Pacific marten. As such, I instruct the Responsible Official to include this clarification in the final decision.

Objector Statement #9: Objector states that 18 identified units should not be further thinned; they are ecologically moving in the right direction, some have 60 TPA and the canopy is closed, some are adjacent to occupied murrelet stands, and any thinning would increase a berry flush which would lead to increases in corvid abundance. Objector also states that predator increases are likely to impact murrelet nesting success into the future and that Alternative 2 does not address this impact. PA at 9.

Response: I find that the District adequately analyzed the effects of thinning the units of concern by the objector.

Please see the responses to Objector Statement #1, #2, #3 and #6.

Final Remedies/Resolutions for Wildlife Impacts: As noted in the response to Objector Statement #8, it would be helpful if the final decision clarified that the Humboldt marten/coastal DPS marten, which is

the species that the USFWS is proposing to list, is not found in the project area, and that instead, the project appropriately analyzes the Pacific marten. As such, I instruct the Responsible Official to include this clarification in the final decision.

Roads

Overview and Objector's Suggested Remedies: These objection issues surround the concern that Alternative 2 does not address interior forest conditions or the impacts of roads on those conditions. The remedy offered is to develop a road analysis that addresses priority road treatments to help improve interior road conditions.

Objector Statement #10: Objector states that Alternative 2 does not adequately address a reduction in road impacts in relationship to interior forest conditions. PA at 9.

Response: I find that Alternative 2, modified, adequately addresses road impacts on interior forest conditions.

The regulation at 36 CFR 220.7(b)(3)(iv) states the EA may discuss the direct, indirect, and cumulative impact(s) of the proposed action and any alternatives together in a comparative description or describe the impacts of each alternative separately.

Interior forest habitat was identified as a key issue in the EA at 14 based on public comments to avoid adverse impacts and provide opportunities to recover interior forest 'blocks' of habitat to provide secure habitat for species needing rare old forest conditions. Alternative 3 was developed in response to these public comments and proposed no-cut buffers on the edge of some stands adjacent to interior forest habitat 'blocks' that are ≥ 150 acres.

The EA at 109 described the habitat benefits expected from the two thinning categories, while the EA at 110-111 disclosed effects of road construction and modification of the overall function of stands specifically with regard to increased edge, potential corridor attraction, increased berry production, changes in microclimate, and wind firmness. The analysis in the EA at 133 discussed decreasing road density within interior mature forest blocks and disclosed effects of non-commercial terrestrial habitat treatments on structural diversity, down wood and the potential development of mature habitat blocks as a result of the proposed project. The EA also notes the Assessment Report for Federal Lands in the Coast Range is an assessment of physical, biological, and social conditions in a 2.4 million-acre area within and adjacent to the Oregon Coast Province, and it provided a discussion of management opportunities that the Forest could consider. EA at 151.

Objector Statement #11: Objector states that Alternative 2 does not meet the need to improve interior forest conditions. PA at 9.

Response: I find that the District adequately addressed the purpose and need to reduce fragmentation and increase patch sizes of emerging late-successional forest conditions, and increase structural diversity thereby improving interior forest conditions.

The regulation at 36 CFR 220.7(b)(1) states an EA must include the need for the proposal and briefly describe the need for the proposal. The regulation at 36 CFR 220.7(b)(3)(i) requires that an EA include a

discussion of the environmental effects of the proposed action and any alternatives, including disclosing the direct, indirect and cumulative effects.

The EA at 10 and 11 documented the needs for the project, specifically related to the terrestrial needs of the project, which include restoring landscape patterns and restoring stand structure and composition. The need for change describes the expected changes at both 20 years and 100 years resulting from the proposed actions, including reduction of between-stand fragmentation, an increase of larger patches of late-successional forest, increased overall patch size resulting from individual patches growing together, increased tree growth rates and species diversity, and other changes that would start slowing when nearing 100 years after implementation. In the project record (and on the project's website), the document "Interior Forest Habitat Supporting Documentation" describes in detail how Alternative 3 was developed with the intent to improve interior forest conditions and address the issues raised by the public. This effort would result in an additional 145 acres not being treated when compared to Alternative 2. EA at 23.

The decision rationale documents that Alternative 2 addresses the need to improve interior forest conditions because by "light to moderate thinning maintains current habitat functionality after treatment (e.g., suitable habitat retains nesting habitat components) and residual trees would not go below 40% canopy cover retention, in order to create a soft edge between a treated stand and interior forest habitat." Draft DN at 3-4.

Final Remedies/Resolution for Roads: The impact of roads on interior forests was adequately addressed. No remedies or resolution is needed.

Climate Change

Overview and Objector's Suggested Remedies: This objection issue surrounds the concern that the EA does not adequately address climate change. The suggested remedy is to prepare an EIS to consider climate change.

Objector Statement #12: Objector states the EA does not adequately address climate change and that the District never indicated if the project would be carbon neutral. Objector states that the District must prepare an EIS in order to determine if the project is beneficial to listed and endangered species. GK at 1.

Response: I find the objector did not previously submit specific written comments concerning their belief that an EIS was needed for this project. However, I have reviewed the analysis and the findings and concur with the Responsible Officials' determination that a Finding of No Significant Impact is supported.

The regulation at 36 CFR 220.7(a) states an environmental assessment (EA) shall be prepared for proposals as described in §220.4(A) that are not categorically excluded from documentation (§220.6) and for which the need of an EIS has not been determined (§220.5). The regulation at 36 CFR 220.7(b)(3)(i) states the EA shall briefly provide sufficient evidence and analysis, including the environmental impacts of the proposed action and alternative(s), to determine whether to prepare either an EIS or a FONSI (40 CFR 1508.9). Finally, the regulation at 36 CFR 220.7(b)(3) requires that an EA include a discussion of the environmental effects of the proposed action and any alternatives, including disclosing the direct, indirect and cumulative effects.

The purpose of an Environmental Assessment is to determine whether to prepare either an EIS or a FONSI. The draft DN/FONSI at 6-11 documented consideration of the 10 intensity criteria the Responsible Official considered in concluding an EIS need not be prepared.

Climate change was addressed following the 2009 guidance from the Washington Office. The analysis for climate change can be found in Section 3.11.2 of the EA at 183-185.

Final Remedies/Resolution for Climate Change: Climate change was adequately addressed. No remedy or resolution is needed.