

Objections to the Gold Butterfly Draft SEIS ROD by FOB (lead objector), AWR, WEG, NEC, and the Goheens

Date: January 15, 2022

Sent via email to: appeals-northern-regional-office@usda.gov

Objection Reviewing Officer
USDA Forest Service Northern Region
26 Fort Missoula Road
Missoula, MT 59804

Re: Gold Butterfly Project SEIS Objection

Pursuant to 36 CFR 218 Subparts A and C, this is an objection to the Draft Supplemental Environmental Impact Statement (SEIS) and Draft Record of Decision (ROD) for the Gold Butterfly Project, on the Stevensville Ranger District, Bitterroot National Forest (BNF). The Responsible Official is Forest Supervisor Matt Anderson. This objection is filed on behalf of Friends of the Bitterroot, WildEarth Guardians, Alliance for the Wild Rockies, Gail H. Goheen and Steven S. Goheen (“Objectors”).

The Draft SEIS ROD selects EIS Alternative 2 with three modifications. The Final EIS description of Alternative 2 is immediately below, and the Draft SEIS ROD’s changes to that are presented immediately after.

FEIS Alternative 2:

- Regeneration harvest treatments on an estimated 2,081 acres and intermediate harvest treatment on approximately 3,540 acres removing commercial products totaling an estimated volume of 34 million board feet/67,000 hundred cubic feet.
- Non-harvest fuel treatments include prescribed burning as well as piling and burning without commercial harvest on an estimated 1,766 acres of upper, mid- and low-elevation forest.
- Approximately 4,843 acres of commercial harvest, or 86 percent of the total treated, will occur within the Wildland Urban Interface (WUI). An estimated 805 acres noncommercial treatments, or 46 percent, will occur in the WUI.
- Approximately 392 acres of intermediate harvest in dry site old growth is included. These treatments will retain old growth characteristics. In addition, there are 359 acres of regeneration harvest in old growth that remove those acres from being old growth; these treatments are in areas for priority fuel reduction needs for WUI as well as promotion of retaining mature whitebark pine trees with planting of whitebark.
- Thirty-six of the proposed regeneration harvest units will contribute to a total of 14 openings over 40 acres.
- Decommissioning work on approximately 22.3 miles of roads that are no longer needed for future management, and 21.3 miles of Intermittent Stored Service (storage) on roads that are needed for future management of forest resources.
- Decommissioning of non-system (undetermined) roads on 16.5 miles.

- Adding approximately 16.5 miles of non-system (undetermined) roads that already exist on the landscape to the National Forest System Roads (NFSR) network for current and future use for management; this also is the entire amount of roads to be stored.
- Construction of approximately 6.4 miles of permanent road and 17.3 miles of temporary road in order to implement silvicultural prescriptions and to provide for product removal.
- Application of Best Management Practices (BMP) on 32.4 miles of haul road as part of the timber sale to help reduce potential sediment runoff and improve water quality.
- Watershed and other road work not associated with road storage or decommissioning:
- The Burnt Fork and Willow Creek trailheads are proposed to be moved lower in the drainages to address watershed concerns, with the associated 2.4 miles of road being converted to the NFS trail system:
 - Willow Creek (364) and Gold Creek (969) Roads will receive BMP improvements, which include rock lined ditches, riprap protected catch basins, and sediment traps; and
 - Road maintenance work includes reconditioning 22.8 miles of road surface.

Draft SEIS ROD modifications to Alternative 2:

1. Convert 14 units, 266 acres with proposed regeneration harvest treatments in old growth, including clearcuts with leave trees (11 acres), seed tree cuts (99 acres), and shelterwood cuts (156 acres), to a commercial intermediate treatment. An intermediate treatment would retain and perpetuate old growth characteristics in ponderosa pine and/or Douglas-fir stands by leaving most of the large green trees and snags while removing mostly co-dominant and intermediate trees that show symptoms of susceptibility to western spruce budworm and/or other insects and diseases. In addition, the intermediate treatments could strategically create canopy openings around dominant ponderosa pine trees to encourage natural regeneration of ponderosa pine.

This modification applies to the following units containing old growth: 17, 18, 24a, 25a, 25b, 25c, 25d, 28, 30a, 30b, 30c, 30d, 53, 58a

2. Convert two units with a proposed regeneration harvest treatment of clearcut with leave trees (154 acres) in old growth to a non-commercial treatment. Non-commercial treatments would remove target specie(s) within a unit up to a certain diameter limit. Treatments would favor retaining larger trees and whitebark pine maintaining old growth characteristics.

This modification applies to the following units containing old growth: 13b, 93

No other units containing old growth under Alternative 2 were proposed for treatment through regeneration harvest. Note, some treatment units other than those discussed above within the project area under Alternative 2 do contain old growth. However, these units were already proposed for treatment with maintenance burn, intermediate or non-commercial harvest methods. Based on the modifications discussed above, all

treatment units containing old growth would retain their old growth status under the selected alternative.

3. Convert 37 units with proposed regeneration harvest openings greater than 40 acres to be 40 acres or less.

This modification applies to the following units: 11, 13b, 15a, 17, 18, 19a, 23b, 25a, 25b, 25c, 25d, 25e, 27, 30a, 30b, 30c, 30d, 35, 36a, 36b, 48a, 52, 53, 54, 56., 58a, 58b, 62b, 75, 76, 82, 93, 134a, 115a, 177a, 134a.

Table 1 Summary of Changes to Units Containing Old Growth

Treatment Unit	OG Acres in Unit	Original Treatment Prescription in Alt 2	Modified Treatment Prescription
17	14	Shelterwood	Commercial Intermediate Treatment
18	2	Shelterwood	Commercial Intermediate Treatment
23a	2	Clearcut with Leave Trees	This unit removed from consideration

Treatment Unit	OG Acres in Unit	Original Treatment Prescription in Alt 2	Modified Treatment Prescription
24a	10	Shelterwood	Commercial Intermediate Treatment
25a	9	Seed Tree	Commercial Intermediate Treatment
25b	8	Seed Tree	Commercial Intermediate Treatment
25c	16	Shelterwood	Commercial Intermediate Treatment
28	5	Clearcut with Leave Tree	The portion of old growth was dropped from treatment
30a	15	Seed Tree	Commercial Intermediate Treatment
30b	16	Clearcut with Leave Tree	Commercial Intermediate Treatment
30c	18	Seed Tree	Commercial Intermediate Treatment
30d	6	Clearcut with Leave Tree	Commercial Intermediate Treatment
53	13	Shelterwood	Commercial Intermediate Treatment
58a	4	Shelterwood	Commercial Intermediate Treatment
13b	46	Clearcut with Leave Tree	Non-commercial Intermediate Treatment with 12" DBH limit
93	65	Clearcut with Leave Tree	Non-commercial Intermediate Treatment with 12" DBH limit

Authorized Activities

Details of Modified Alternative 2 are summarized below. For more detail, refer to the description of alternatives beginning on Page 1 of Chapter 2 in the Gold Butterfly EIS. The following Table 2 shows the treatment types and acres I am authorizing for the Gold Butterfly project.

Vegetation Treatments

A unit table is included in Appendix E of the draft record of decision (ROD). Vegetation actions include:

- Regeneration harvest treatments on an estimated 908 acres and intermediate harvest treatment on approximately 4376 acres removing commercial products.
- Non-harvest fuel treatments include prescribed burning as well as piling and burning without commercial harvest on an estimated 1,766 acres of upper, mid- and low-elevation forest.
- Approximately 5,116 acres of commercial harvest, or 96 percent of the total treated, will occur within the Wildland Urban Interface (WUI). An estimated 1,126 acres non-commercial treatments, or 54 percent, will occur in the WUI.
- Approximately 285 acres of intermediate harvest in old growth is included. These stands will retain old growth characteristics following treatment.

Road Management Activities

Detailed road actions are included in Appendix F. Road management actions include:

- Decommissioning work on approximately 22.3 miles of roads that are no longer needed for future management, and 21.3 miles of Intermittent Stored Service (storage) on roads that are needed for future management of forest resources.
- Decommissioning of non-system (undetermined) roads on 16.5 miles.
- Adding approximately 16.5 miles of non-system (undetermined) roads that already exist on the landscape to the National Forest System Roads (NFSR) network for current and future use for management; These roads would be placed into intermittent stored service following timber sale activities.
- Construction of approximately 6.4 miles of permanent road and 17.3 miles of temporary road in order to implement silvicultural prescriptions and to provide for product removal.
- Application of Best Management Practices (BMP) on 32.4 miles of haul road as part of the timber sale to help reduce potential sediment runoff and improve water quality.
- Watershed and other road work not associated with road storage or decommissioning:
- The Burnt Fork and Willow Creek trailheads are proposed to be moved lower in the drainages to address watershed concerns, with the associated 2.4 miles of road being converted to the NFS trail system:

- Willow Creek (364) and Gold Creek (969) Roads will receive BMP improvements, which include rock lined ditches, riprap protected catch basins, and sediment traps; and
- Road maintenance work includes reconditioning 22.8 miles of road surface.

Table 2 Summary of Vegetation Treatment Acres in the Selected Alternative

Activity	Selected Alternative
TOTAL COMMERCIAL HARVEST	5,284
Clearcut with Leave Trees	425
Shelterwood	85
Seed Tree	101
Group Selection	297
Commercial thin	1,281
Sanitation	485
Improvement	2610
TOTAL NON-COMMERCIAL	7,360
Plantation Thinning	577
Mechanical Thinning / Fuel Reduction	64
Planting	908
Non-commercial thinning associated with timber harvest units	4,857
Meadow Restoration	84
Whitebark pine Daylighting	870
TOTAL PRESCRIBED FIRE	5,771
Prescribed fire associated with commercial harvest	5,282
Maintenance Burn	489

The selected action includes the implementation of design features found in Appendix A. These measures represent all practicable means to avoid or minimize environmental harm while meeting the project purpose and need. Additionally, the Bitterroot National Forest will oversee maintenance responsibilities for the entire gravel section of Willow Creek Road during project

implementation. Maintenance responsibilities will be formalized with the Ravalli County Board of Commissioners through a Schedule A Road Maintenance Agreement. The Bitterroot National Forest is also committed to working with the Ravalli County Board of Commissioners to seek solutions for maintenance and repair of the paved portion of Willow Creek Road.

Implementation of the Selected Alternative, as modified, will require a project-specific forest plan amendment to the 1987 Bitterroot Forest Plan to suspend certain Forest Plan standards relating to elk habitat effectiveness and thermal cover and modify management area standards for old growth. Discussion concerning the plan amendment and its effects is found in Appendix B of the Gold Butterfly draft ROD.

1. INTRODUCTION

Objectors previously submitted comments on the project, including a July 11, 2017 letter responding to the Forest Service's proposal from Friends of the Bitterroot (FOB) and Alliance for the Wild Rockies (AWR); a December 8, 2017 letter by Jim Miller on behalf of FOB; a November 29, 2017 letter from AWR regarding the Alternative Workshop; a November 30, 2017 letter from WildEarth Guardians regarding the Alternative Workshop; a July 30, 2018 letter from Friends of the Bitterroot and Alliance for the Wild Rockies commenting on the Draft EIS; a July 17, 2017 letter from WildEarth Guardians and others at the scoping phase; letters from Gail and Stephen Goheen dated July, 2017; a July 30, 2018 letter from Gail and Stephen Goheen commenting on the Draft EIS, a July 30, 2018 letter from WildEarth Guardians and others commenting on the Draft EIS. We fully incorporate those previous comments into this objection.

We also fully incorporate the comments of FOB members into this objection. Specifically these include: Larry Campbell July 12, 2017 comments; Jeff Lonn comments of July 5, 2017; comments of Van Keele dated January 27, 2017; undated comments by Jeff Lonn regarding the Alternatives Workshop; comments of Larry Campbell regarding Alternative Development dated December 4, 2017; undated comments by Michele Dieterich regarding the Alternatives Workshop; comments of Gary Milner regarding November 30, 2017 open house; comments of Michael Hoyt dated December 6, 2017 regarding November 30, 2017 open house; DEIS comments of Michael Hoyt dated July 2018; undated letter from Jeff Lonn commenting on the Draft EIS; undated letter from Van Keele commenting on the Draft EIS and; July 30, 2018 letter from Larry Campbell commenting on the Draft EIS.

We incorporate by reference the Objections of the Gold Butterfly project filed by Friends of the Bitterroot, Gail and Stephen Goheen, Michael Hoyt, Larry Campbell, Gary Milner, and Van Keele, all of which still stand. We also incorporate by reference, previous comments on the Gold Butterfly Supplemental Environmental Impact Statement (SEIS) by Friends of the Bitterroot, Michele Dietrich, Larry Campbell, Gail Goheen, Alliance for the Wild Rockies, Michael Hoyt, and Jeff Lonn.

The following objections address the Gold Butterfly SIES Draft ROD and its proposal for a site-specific Forest Plan amendment to Old Growth (OG) standards on the Gold Butterfly project

and a site-specific Forest Plan amendment to suspend the standards for elk habitat effectiveness and thermal cover as detailed in the SEIS Draft ROD pp. 13.

The Gold Butterfly project, covers approximately 55,147 acres, includes 5,284 acres of commercial harvest. 266 acres of OG are proposed for commercial intermediate cuts. 154 acres of OG are planned for non-commercial treatment. 37 units, containing a total of 1,099 acres, are recommended for regeneration harvesting to openings 40 acres or less.

The Forest Service proposes amendments to three Forest Plan standards: an amendment to old-growth (OG) standards, suspension of the standard for elk habitat effectiveness (EHE), and suspension of the standard for thermal cover. (Draft SEIS ROD pp. 2-5)

We find the SEIS Draft ROD inadequate and oppose those proposed amendments for the following reasons.

2. COMPLIANCE WITH NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

Several violations of NEPA were discussed in FOB/AWR DEIS comments at pp. 2-6, FEIS objections at pp. 4-5 which still have standing, and SEIS comments at pp. 2, 4, 7-9, 14.

We incorporate those comments/objections into this objection.

Remedy: Withdraw the SEIS Draft ROD and prepare a new, more rigorous Supplemental EIS which includes genuine responses to comments and objections.

3. PROPOSED FOREST PLAN AMENDMENTS

This issue was discussed in FOB/AWR DEIS comments at pp. 80-81, FOB/AWR scoping comments at p. 5, FOB/AWR DSEIS comments at pp. 2, 4, 7-8. We incorporate those comments into this objection. We also incorporate previous objections to the FEIS at pp. 68-71, all of which still have standing.

Old Growth

Old growth was discussed in detail in FOB/AWR DEIS comments at pp. 6-15, in scoping comments at p. 2, FEIS objections at pp. 6-11 which still have standing, and SEIS comments at pp. 1-9, 13-14, 16. Included were discussions of old-growth associated wildlife in FOB/AWR DEIS comments, FEIS objections which still have standing, and SEIS comments. We incorporate those comments/objections into this objection and add the following discussion.

Reducing the Percentage of Old Growth

Among the many supporting documents for the EIS is 3.7 Wildlife (Wild-001). Contained within that document is the following:

The Forest Plan also provides standards for old growth maintenance in each Management Area within each third order drainage. The Gold Butterfly project proposes treatments in MAs 1, 2 and 3a. For MA 1, old growth stands should be 40 acres or larger, distributed over the management area. Within each 3rd order drainage, 3% of the suitable timberland will

be maintained in old growth. This standard is the same for MAs 2, 3a and 3c, except 8% of the suitable timberland will be maintained in old growth. There are no standards for old growth retention within other MAs, such as MA 5 or 8a. The timber stand is the unit of delineation for old growth habitat. In practice, if a stand of old growth habitat is less than 40 acres, it is still managed as old growth. (WILD-001 p. 6)

Of particular interest is the last sentence which states, "In practice, if a stand of old growth habitat is less than 40 acres, it is still managed as old growth."

That contradicts one of the purported reasons the site-specific amendment by adopting Green et al. for determining old-growth standards.

The Final SEIS states:

Management area direction related to old growth would also be modified per Green et al. (1992 errata 2011). Management Areas 1, 2, and 3a each have a standard related to old growth stand size. The requirement to only designate stands sized 40-acres and larger when maintaining old growth in a third order drainage would be modified for the Gold Butterfly Project. Stand size is not identified in Green et al. as a driving factor in whether a stand should be classified as old growth because even small patch sizes provide important ecological values and increase ecosystem diversity. However, **the required percentage of old growth to be maintained within each Management Area would not be modified.** (p. 4) (Emphasis added)

MA 1 requires about three percent old growth retention, while MAs 2 and 3 require about eight percent. In MA 3b, the standard is to maintain 50 percent of old growth in fisheries areas and 25 percent in non-fisheries areas. **The weighted average of Forest Plan Management Area standards was intended to maintain about 10 percent old growth habitat in suitable lands within management areas 1, 2, 3a, 3b, and 3c1. These percentage requirements for each Management Area would not be modified.** (p. 7) (Emphasis added)

The Forest Plan requirement only designates stand sizes 40-acres or larger as old-growth; however, it seems the statement included in WILD-001, "In practice, if a stand of old growth habitat is less than 40 acres, it is still managed as old growth." precludes the need to adopt Green et al. so that the BNF can manage old-growth stands less than 40-acres in size as old growth.

Please note the above asserts, "..., the required percentage of old growth to be maintained within each Management Area would not be modified." ... "These percentage requirements for each Management Area would not be modified."

Text included in the Draft SEIS ROD Appendix B contradicts that statement.

The management area standards for management areas 1, 2, and 3a, that require a minimum old growth stand size of 40 acres will be modified as follows:

Management Area 1/2/3a (chapter Wildlife and Fish) (2) ~~Old growth stands should be 40 acres and larger, distributed over the management area.~~ About 3 percent of Management Area 1/2/3a suitable timberland, in each third order drainage will be

maintained in old growth. Vegetation management activities should provide 40-acre stands of old growth by coordinating management activities in this area with activities in adjacent management areas and with intermingled riparian and unsuitable management areas (USDA, 1979). (Strikethrough text to be removed, underlined text to be added.) (p.4)

The current old-growth standards for Management Areas 1, 2, and 3a are:

Management Area 1 (chapter Wildlife and Fish) (2) Old growth stands should be 40 acres and larger, distributed over the management area. About 3 percent of Management Area 1 suitable timberland, in each third order drainage will be maintained in old growth. Provide 40-acre stands of old growth by coordinating management activities in this area with activities in adjacent management areas and with intermingled riparian and unsuitable management areas (USDA, 1979).

Management Area 2 (chapter Wildlife and Fish) (2) Old growth stands should be 40 acres and larger, distributed over the management area. About 8 percent of the Management Area 2 suitable timberland, in each third order drainage, will be maintained in old growth. Provide 40-acre stands of old growth by coordinating management activities in this area with activities in adjacent management areas and intermingled riparian and unsuitable areas (USDA, 1979).

Management Area 3a (chapter Wildlife and Fish) (2) Old growth units should be 40 acres and larger, distributed over the management area. About 8 percent of the Management Area 3a suitable timberland in each third order drainage will be maintained in old growth. Provide 40-acre stands of old growth by coordinating management activities in this area with activities in adjacent management areas especially Management Area 3b, riparian areas (USDA, 1979). (Draft SEIS ROD pp. 3-4)

The reduction in the percentage of old growth in management areas 2 and 3a from 8% to 3% is a direct contradiction to the above noted assertion in the Final SEIS that, "..., the required percentage of old growth to be maintained within each Management Area would not be modified."

Given the dearth of old growth on the BNF, it is difficult to believe that reducing the percentage of old growth in 2 and 3a will allow the Forest Service to maintain anywhere near 10 percent old-growth habitat in management areas 1, 2, 3a, 3b, and 3c.

For the Agency to attempt to slip such a reduction into the Draft SEIS ROD, after affirming it would not do so, is deceitful and dishonest.

Remedies: The Agency must not reduce the percentage of old growth in Management Areas 2 and 3a and continue to follow the directives of the Forest Plan (1987).

It appears there was no mapping of old-growth Lodgepole, spruce, or subalpine fir in the project area. Analysis and mapping of those species must be completed and made public before management activities in the project area commence.

Failure to Prove the Proposed Management Actions in Old Growth Do No Harm

Neither the Final SEIS nor Draft SIES ROD offer evidence that the management actions proposed in old growth will “do no harm” or that they are effective.

The Forest Service now wishes to amend the old-growth standards of the Forest Plan (1987) by adopting the definitions proposed by Green et al. (1992, errata 2011), claiming that those are the best-available science. The Agency admits that it has illegally used Green et al. criteria since it was published.

..., the Bitterroot has been using Green et al. criteria to inventory and monitor old growth since this best science became available. Monitoring informs us whether we are meeting Forest Plan goals and desired conditions. (Draft SEIS, p. ii)

If one of the reasons Green et al. has been in use was to enable monitoring, then a reasonable person could rightly assume that examination of management actions in old growth has taken place multiple times during the ensuing 30-year period since the Forest Service adapted Green et al. Therefore, the results of that monitoring should have been offered as supporting evidence for the management actions in old growth proposed by the Agency. Such supporting evidence has not been presented.

In addition, the Draft SEIS (p. 20) states:

“A project-specific amendment to support using the old growth definitions in Green et al. for the Gold Butterfly project rather than the existing Plan old growth criteria would not result in negative direct or indirect effects to old growth or to wildlife species associated with mature or over-mature forest structure.” (Final SEIS p. 23)

Without supporting evidence that statement does not constitute a “hard look” as required by NEPA. The Draft SEIS and Draft SEIS ROD include no documentation which indicates the Agency performed any research or post-project monitoring of similar, past BNF management actions that allow for a comparison of effects on old-growth-dependent species between the Forest Plan (1987) old-growth treatments and the proposed Green et al. amendment old-growth treatments.

Courts have held that a “hard look” includes studying not only research which affirms a specific management action but analyzing research which contradicts that same action.

“NEPA’s ‘hard look’ obligation requires agencies to consider potential environmental impacts, including all foreseeable direct and indirect impacts, and should involve a discussion of adverse impacts that does not improperly minimize negative side effects.” (WildEarth Guardians v. U.S. Bureau of Land Mgmt., 2020 WL 2104760, at 3 (D. Mont. 2020)) (quotations and citations omitted).

NEPA’s “hard look” requirement does not permit “a soft touch or brush-off of negative effects.” (Native Ecosystems Council v. U.S. Forest Serv., 428 F.3d 1233, 1241 (9th Cir. 2005)).

In the case, *Ecology Center inc. v. Austin* (2005), the 9th Circuit Court held that "... the Forest Service's decision to treat old growth violates, both NFMA and NEPA," Specifically, the Court said that:

"While Ecology Center does not offer proof that the proposed treatment causes the harms it fears, the Service does not offer proof that the proposed treatment benefits—or at least does not harm—old-growth dependent species. Ecology Center argues that because the Forest Service has not assessed the effects of old-growth treatment on dependent species, the Service cannot be reasonably certain that treating old-growth is consistent with NFMA's substantive mandate to ensure species diversity and viability. As a result, especially given the scientific uncertainty surrounding the treatment of old-growth stands, the Forest Service's decision to treat additional old-growth stands was arbitrary and capricious.

"The EIS did not address in any meaningful way the various uncertainties surrounding the scientific evidence" upon which the decision to treat the Lolo National Forest old-growth rests. (*Seattle Audubon Soc'y v. Espy*, 998 F.2d 699, 704 (9th Cir. 1993)). Although the EIS identifies the public's concerns regarding the impact of treatment on dependent species as "key" or "driving" issues, the EIS does not actually explain in any detail the bases of those concerns, much less address them. ... The EIS discusses in detail only the Service's own reasons for proposing treatment, and it treats the prediction that treatment will benefit old-growth dependent species as a fact instead of an untested and debated hypothesis. Even if the Service considered these issues but concluded that it need not or could not "undertake further scientific study" regarding the impact of treatment on dependent species, it should have "explain[ed] in the EIS why such an undertaking [wa]s not necessary or feasible." *Id.* For these reasons, we also find that the Service's analysis of the impact of treating old-growth to be inadequate under NEPA."

The current BNF Forest Plan (1987) states:

The amount and distribution of old growth will be used to ensure sufficient habitat for the maintenance of viable populations of existing native and desirable non-native vertebrate species¹, including two indicator species, the pine marten, and the pileated woodpecker. (FP p. II-19)

The Draft SEIS states:

This project-specific amendment would not affect the amount of habitat available for species such as pileated woodpeckers or marten that are associated with habitat components that are most common in mature or over-mature forests. (Drafts SEIS p. ii)

Then, the Final SEIS states:

Pileated woodpeckers and marten are not old growth dependent species. They are associated with mature and over-mature forests that contain habitat components such as large trees, large snags and down woody material that are often found in old growth forests, but also utilize younger forests that contain some of those habitat components.

¹ Desirable non-native vertebrate species are not defined in the BNF Forest Plan (1987)

Therefore, forests that do not meet the old growth definitions can and do provide habitat that contributes to the viability of these species at several scales.

Suitable habitat for pileated woodpeckers typically includes dry to moderately moist forests in older seral stages, and usually contains old growth, mature, saw timber, or multi storied structural components. While pileated woodpeckers are often associated with mature forests (Conner 1979, Conner 1980, Shackelford, and Conner 1997), the presence of large trees or snags for nesting is reported to be more important than forest age (Kirk and Naylor 1996, Giese, and Cuthbert 2003). Pileated woodpeckers may be able to do well in younger and more fragmented forests that retain abundant remnant (older) structure (Mellen et al. 1992). (Final SEIS p. 22)

The BNF Forest Plan assumes the pileated woodpecker has a strong enough relationship with old-growth forest to be used as an indicator species. The Final SEIS claims the Green amendment would not affect the amount of habitat available for the pileated woodpecker but then asserts it doesn't matter anyway because the pileated woodpecker is not an old-growth dependent species. That seems to contradict the BNF Forest Plan (1987).

The research cited by the Agency stipulates:

Suitable habitat for pileated woodpeckers typically includes dry to moderately moist forests in older seral stages, and usually contains old growth, mature, saw timber, or multi storied structural components. While pileated woodpeckers are often associated with mature forests (Conner 1979, Conner 1980, Shackelford, and Conner 1997), the presence of large trees or snags for nesting is reported to be more important than forest age (Kirk and Naylor 1996, Giese and Cuthbert 2003). (Final SEIS p. 22)

What the Forest Service neglects to mention is that, although mature forests which contain large trees and snags seem to be more important than forest age for pileated woodpecker viability, old-growth areas are more likely (when compared to a forest in general) to contain large trees and snags.

Rather than acknowledge the pileated woodpecker is an indicator species for old growth, the Agency asserts the pileated woodpecker is not dependent upon old-growth. This appears to be an attempt to divert attention from the importance of old-growth areas.

Recent studies, including one just published in Science, conclude:

A slow death is creeping through Earth's forests and other green landscapes. As animals are killed by hunters or forced away by logging, for example, the plants that depend on them to carry their seeds begin to disappear. Over time, trees and other plants may vanish. Climate change is accelerating this process, a new study suggests—and it may ultimately harm not just biodiversity, but the ability of ecosystems to store carbon and provide food and clean water. (Science, January 13, 2022)²

² Fricke, E.C. et al. (2022) The effects of defaunation on plants' capacity to track climate change, <https://www.science.org/doi/10.1126/science.abk3510>

The research looked at how crucial seed dispersal is for plant survival.

“Plants by definition stay put, so they’ve always relied on animals for seed and pollen transport,” said Prof Carlos Peres of the University of East Anglia, who was not involved in the study. “Yet humans have systematically driven wide-ranging large-bodied seed dispersers to extinction in both history and prehistory, and we continue to decimate their populations to this day, particularly in the tropics.” (Attachment D, The Guardian, January 13, 2022)

The Forest Service discounts such studies simply because the conclusions are contrary to ones held by the Agency. Ignoring contradictory research is not taking a hard look at scientific evidence.

It is understood that experts have differing hypotheses regarding the effects treating old-growth has on dependent species. Here the Forest Service proposes to continue treating old-growth stands without first taking the time to verify what the on-the-ground effects have actually been in old-growth previously treated using similar management actions. Considering the Agency’s responsibilities under NFMA, this is arbitrary and capricious.

It is worth noting the EPA found similar deficiencies to the ones we address. Based on the EIS and the Draft SEIS, the EPA pointed out that between 1987 and 2018 there was no monitoring for indicator species (marten and pileated woodpecker), thus there are no baseline and trend estimates and evidence to sustain those species. In fact, the EPA requested a commitment to conduct baseline indicator monitoring per the current Forest Plan (1987) prior to initiating the Bold Butterfly Project.

In light of the BNFS stating plans to next tackle amending the Forest Service Plan, the EPA also indicates “this monitoring will be needed Forest-wide before initiating a process to generate the next Forest Plan.”

Without baseline population and trend estimates for the Project area, it is unclear how the Forest is evaluating whether the Forest’s application of Green et al. since 1992 has resulted in old growth habitat sufficient to sustain populations of the Forest’s indicator species, pileated woodpecker and pine marten. The EPA recommends the Final SEIS more clearly explain how impacts to these two species are being evaluated and discuss the limitations of the analysis. Additionally, we recommend the Final SEIS Record of Decision commit to conduct baseline indicator species population monitoring per the Forest Plan prior to initiating the Gold Butterfly Project. This monitoring will be needed Forest-wide before initiating the process to generate the next Forest Plan. (Attachment C, EPA, Region 8, letter to Matt Anderson dated August 9, 2021)

We agree with the EPA that the Final SEIS should have more clearly explained how impacts to these two species are being evaluated and discuss the limitations of the analysis. We also agree that the Final SEIS ROD should have committed to conducting baseline indicator species population monitoring per the Forest Plan prior to initiating the Gold Butterfly Project.

We noted that, although the Final SEIS (Appendix C) included responses to comments related to the Draft SEIS, apparently no answers were made in response to those of the EPA, at least none

that were made public. A reasonable person could therefore assume the comments of the EPA were ignored by the Forest Service.

Remedies: The Forest Service must take a “hard look” at not only research which supports its proposed, specific management actions but analyze research which contradicts those same actions. Furthermore, the Agency must prove the management actions it proposes will do no harm.

Those EPA recommendations must be followed prior to this project’s management actions.

Proposed Site-specific Old-growth Amendment Reduces the Amount Old Growth

The Final SEIS declares:

“The Bitterroot Forest Plan (p. VI-24) defines old growth as: A forest stand with 15 trees per acre greater than 20 inches dbh (6 inches in lodgepole pine) and canopy closure that is 75 percent of site potential. The stand is uneven-age or multistoried. There should be 1.5 snags per acre greater than 6 inches dbh; 0.5 snags per acre greater than 20 inches dbh; and 25 tons per acre of down material greater than 6 inches diameter. Heart rot and broken tops are common, and mosses and lichens are present.” (FSEIS p. 2)

A comparison of the Plan definition to that of Green et al. gives the impression the reason the BNF wants to adopt Green et al. (1992, errata 2011) as the standard is because Green et al. allows the removal of more trees per acre than the current Forest Plan.

For example, in the ponderosa pine, Douglas-fir, and western larch forest type, the Forest Plan states that a forest stand with 15 trees per acre greater than 20” DBH may be old growth. Green, et al. (1992, errata 2011) states that 8 trees per acre 21” DBH may be old growth. (Green et al. pp. 23, 24)

The Final SEIS declares: “The withdrawn Record of Decision specified that all treatment units containing old growth would retain their old growth status under the selected alternative. This is the intended management in old growth stands in moving forward with this project.” (FSEIS pp. I-2)

Because the FSEIS declares that “... all treatment units containing old growth would retain their old growth status...” after treatment, it is logically possible for a stand to “retain old-growth status” with only 8 (21”) trees per acre instead of the 15 (21”) trees required by the current Forest Plan.

Another example is, in the lodgepole pine forest type, the Plan proclaims that a forest stand with 15 trees per acre greater than 6” DBH may be old growth. Green, et al. (1992, errata 2011) states that 10 trees per acre 13” DBH (moderately cool to cool, dry to wet environments - Green et al. at 25) or 30 trees per acre 9” DBH (cold, moderately dry environments - Green et al. p. 29) may be old growth.

Because the Final SEIS declares that “... all treatment units containing old growth would retain their old growth status...” after treatment, it is logically possible for a stand to “retain old-

growth status” with only 10 (13”) trees per acre instead of the 15 (6”) trees required by the current Forest Plan.

Not only does Green allow for the removal of more trees per acre in this scenario, but to qualify for old-growth status, lodgepole pine stands must have larger (13” vs. 6”) trees or more (30 vs. 15) trees than required under the current plan. Both of those factors will limit the number of acres (of lodgepole pine) available for old-growth status.

The Agency appears to disregard the fact that Green et al. was establishing “minimums,” not advocating that old-growth stands should be reduced to that minimum.

“... old growth is valuable for a whole host of resource reasons such as habitat for certain animal and plants, for aesthetics, for spiritual reasons, for environmental protection, for research purposes, for production of unique resources such as very large trees. Unusual natural communities, etc., the resource values associated with potential old growth stands need to be considered in making allocations.”

“At the same time, there may be some stands with trees so large or so old that they are unique. We should always maintain a good representation of these very old unique and outstanding stands, because they are irreplaceable within human life spans. Remember to value the truly unique and outstanding, wherever it may be.” (Green, et al. p. 12)

Many scientists have provided management recommendations for old growth. It is now generally accepted that all or nearly all, old, large trees should be retained. (Hessburg, 2015) (Fiedler, 2007) (Wales, 2006) (Rapp, 2003)

Other than Green et al., little meaningful discussion of other research is part the Draft SEIS or Final SEIS. That omission seems to indicate the proposed amendment will be used to cut, rather than preserve, old growth.

For example, the Mud Creek Final EA, Appendix B (p. 22) states: “... while Green et al. (1992, errata 2011) and the Forest Plan provide minimum criteria for identifying old growth, that does not mean all stands will be treated and harvested to the minimum criteria numbers.” That wording from the Mud Creek project (which also incorporates the Green et al. site-specific amendment) indicates that some old-growth stands in the Mud Creek project area will be cut to the Green et al. minimum.

DellaSala and Baker, two widely respected Ph. Ds, declare that “... the Forest Service proposes controversial measures that are not scientifically founded. The agency omits the vast majority of the scientific literature that supports large-tree protections in regions where large tree populations remain at greatly reduced numbers ...” (DellaSala, 2020)

In reply to FOB’s Draft SEIS comments:

The DSEIS relies heavily on Green et. al, boldly asserting that it represents the “best available science” regarding old growth. The DSEIS also indicates that Green, et al has been updated four times, with the most recent being in 2011. The fact that Green et al has been accepted by a number of national forest[s] to support its self-serving goals does not in and of itself demonstrate that it qualifies as the “best available science.” Other significant scientific peer reviewed supporting documentation and authority has not been

demonstrated. Furthermore, the fact that the original publication was 28 years ago, and even the most recent updates are at least 10 years old on its face, implies that this evidence may not be the “best available” science. This is especially true given the fact that climate change has exponentially accelerated over recent years.

“The Draft SEIS states, “... the project-specific amendment improves the method for measuring the amount of old growth in the project area and evaluating project effects, by modifying the criteria used to identify old growth based on better scientific information than was used in 1987 when the Bitterroot Plan was developed.” (DSEIS at 5). It is curious the Forest Service understands that scientific information improves (becomes more rigorous) over time when it suits Agency objectives, in this case the BNF claim that Green et al. is better science than was available in 1987. However, the FS does not concede that better science, based upon more recent research, is now available. Recent science indicates that forest which are not managed (i.e., no management activities) appear to be more resilient and sequester more carbon, and that old growth areas are complex ecosystems, not just trees. Please explain why the FS alleges the belief that newer scientific information is better but, in many instances (e.g., cumulative impacts and global warming), acts as if that is not true.” (FSEIS, Appendix C – Response to Comments, pp. 24-25)

The Final SEIS responded (in part):

The 2012 Planning Rule does not require the Forest Service [to] develop additional scientific information to inform planning. Rather it says planning should be based on scientific information that is already available. New studies or the development of new information is not required for planning unless required by other laws or regulation. In the context of the best available scientific information in the planning rule, “available” means that the information currently exists in a form useful for the planning process without further data collection, modification, or validation. (FSEIS, Appendix C – Response to Comments, p. 25)

We believe that response is a purposeful misinterpretation of the 2012 Planning Rule as amended. Claiming “the 2012 Planning Rule does not require the Forest Service [to] develop additional scientific information” does not exempt the Agency from using (or learning from) scientific information and/or research that others have published. Furthermore, even if the interpretation is legally correct, it applies only to planning, not to implementation. Other laws and regulations **do require the use of the “best available” science.**

The current BNF Forest Plan (1987) states:

Long rotations will be prescribed to meet old-growth requirement on suitable timberland in Management Areas 1, 2, 3a, and 3c.

Old-growth stands may be logged and regenerated when other stands have achieved old-growth status. (FP p. II-20)

The Draft SEIS ROD fails to document those long rotations are being implemented in the Gold Butterfly project area or that other old-growth stands exist which therefore allow old-growth management activities (logging) in this project area.

Remedy: The Forest Service must disclose the historic range of variability of old growth on the BNF and update the forest-wide inventory to accurately reflect the amount and distribution of old growth. In addition, the Agency must document the long-rotation periods for logging in the area included in the Gold Butterfly project and prove that enough other old-growth stands exist to allow for the old-growth management actions proposed in this project.

4. FOREST SERVICE SYSTEMATICALLY EXEMPTS PROJECTS FROM FOREST PLAN STANDARDS

This was discussed in FOB/AWR DEIS comments at pp. 25,27-28,53, 74, 80-81, FEIS objections at pp. 8, 15, 34 which still have standing, and SEIS comments at pp. 4, 6-8, 14, 16.

We incorporate those comments/objections into this objection.

The Gold Butterfly project Draft SEIS ROD makes changes to the FEIS ROD and the FSEIS, as described in:

Gold Butterfly Project-Specific Plan Amendment (Draft SEIS ROD, Appendix B, https://www.fs.usda.gov/nfs/11558/www/nepa/106518_FSPLT3_5743093.pdf)

The term “Forest Plan Amendment” is a misleading use of the singular form. In fact, there are three Forest Plan standards that proposed for amendment: EHE, thermal cover, and old growth.

As Table 1 (below) shows, the BNF has a 20-year history of using site-specific amendments to allow it to ignore Forest Plan (1987) standards. We believe the serial use of amendments that cumulatively include a large area is significant runs afoul of NFMA.

Project	Acres	Site-specific Amendments	District	Year
Burned Area Recovery Project	unknown	Snag Retention, EHE in Laird Creek, Thermal Cover in Skalkaho Rye	Darby, Sula, West Fork	2001
Slate/Hughes Watershed Restoration and Travel Management	unknown	EHE	West Fork	2002
Middle East Fork Hazardous Fuels Project	25,800	CWD, Snag Retention, Thermal Cover, Unsuitable Lands	Sula	2006
Hackey Claremont Fuels Reduction	3,131	EHE CWD	Stevensville	2008
Trapper Bunkhouse Land Stewardship Project	23,140	EHE CWD Thermal Cover	Darby	2008
Lower West Fork Project	38,400	EHE CWD Thermal Cover	West Fork	2010
Larry Bass Project	1,200	Thermal Cover CWD	Stevensville	2012
Three Saddle Vegetation Management	6,300	EHE CWD	Stevensville	2013
Darby Lumber Lands Watershed Improvement Travel Management Project	28,758	EHE	Darby	2015
Meadow Vapor	11,090	EHE CWD Thermal Cover	Sula	2017
Darby Lumber Lands Phase 2	27,453	EHE Thermal Cover	Darby	2018
Gold Butterfly	55,147	EHE Thermal Cover OG	Stevensville	2018 2022
Westside Vegetation Treatment	5,700	EHE CWD Visual Quality	Darby	2018
Mud Creek	48,486	EHE CWD Elk Thermal cover and road density OG	West Fork	2021 2022

Table 1 - List of past BNF Projects that Include Site-Specific FP Amendments

The Draft SEIS ROD states:

“The amendment applies to the Gold Butterfly project activities only. It does not apply to future project activities or other proposed activities elsewhere on the forest. The project area is 55,147 acres, which is approximately 3 percent of the Bitterroot National Forest.” (Draft SEIS ROD, Appendix B, p. 2)

“As an amendment that applies to only this project, it is not considered a significant change to the plan for purposes of the NFMA.” (Draft SEIS ROD, Appendix B, p. 1)

Effective date (§ 219.17(a)(3): This forest plan amendment will be effective immediately after the decision is signed pursuant to 36 CFR 219.17(a)(3). (Draft SEIS ROD, Appendix B, p. 5)

The beginning date informs the public when the amendments begin but says nothing about when they end. When would the project specific amendments end? If the answer is when the project ends, how is that determined? We believe such information is necessary and must be publicized.

The Gold Butterfly project is the largest proposed on the BNF in about 20 years making it significant by itself. However, it is only a fraction of the serial “project-specific” amendments to the BNF Forest Plan that have been implemented across the Forest.

Appendix B (p. 3) mentions “repeated project-specific amendments.” While the FEIS or FSEIS do not disclose relevant information regarding “repeated project specific amendments,” nearly every BNF timber sale contains these same exemptions from the rules. We therefore assume there will be more.

The serial use of project specific amendments causes a “significant change” to the Forest Plan. Individual project-specific amendments in conjunction with previous and future site-specific amendments, effectively invalidate standards as seen with the EHE example below. Accounting from all from past, current, and foreseeable future project-specific amendments for cumulative effects should be performed and publicized.

Because the Forest Service failed to explain what conditions within the project area supported selection of a site-specific amendment over a forest-wide amendment, the agency’s decision to make site-specific amendments was arbitrary and capricious. A site-specific amendment must be based on unusual or unique aspects of the site itself when compared to the forest generally.

The BNF is in process of developing forest-wide Forest Plan amendments for elk hiding effectiveness (EHE), coarse woody debris (CWD), old growth (OG) and snag retention. We suggest it would be prudent to wait for results of that analysis before deciding if:

“... an amendment that applies to only this project, [it] is not considered a significant change to the plan for purposes of the NFMA” (Draft SEIS ROD, Appendix B, p.1).

Remedy: The Forest Service should not proceed with this or any other project until it has completed the forest-wide Forest Plan Amendment Process.

EHE amendment

The SEIS, Appendix D, p. 5, states:

“Cumulative Impact of Elk Habitat Effectiveness and Habitat Objectives Amendment, There have been 10 project-specific amendments (one more anticipated with reasonably foreseeable projects (Darby Lumber Lands II)) related to EHE since the Forest Plan was approved in 1987.”

Unlike the SEIS analysis of cumulative effects from a change in old-growth standards, there is no disclosure of reasonably foreseeable need for future amendments to EHE or thermal cover standards in spite of the acknowledgment that there is “non-compliance with this [EHE] standard in 110 drainages (out of 386 drainages across the forest).” (SEIS, Appendix D, p. 4)

It appears that the BNF has already used project specific EHE amendments on at least 12 projects (see EHE list above), totaling more than 200,000 acres, not counting the 55,000-acre Gold Butterfly project. Addition of the proposed EHE amendment for the Gold-Butterfly project would increase the total to over 250,000 acres. This is significant. For comparison, the BNF’s total suitable timberland is 389,820 acres (Forest Plan 1987, p. III-2). The SEIS does not appear to disclose reasonably foreseeable use of EHE amendments but anticipates that the 143,983-acre Bitterroot Front project will require a project specific old-growth amendment. Addition of a Bitterroot Front acreage EHE project specific amendments would result in a total over 390,000 acres.

The Draft SEIS ROD, Appendix B, p. 2, states:

“Forest-wide standard for Elk Habitat Effectiveness (Forest Plan pp. II-21, F.1.e.(14)): Manage roads through the Travel Plan process to attain or maintain 50 percent or higher elk habitat effectiveness (Lyon, 1983) in currently roaded third order drainages. Drainages where more than 25 percent of roads are in place are considered roaded. Maintain 60 percent or higher elk habitat effectiveness in drainages where less than 25 percent of the roads have been built.”

The meaning of this standard presumes there is some final road building plan and road placement map. Without such, the meaning of “25 percent” seems arbitrary. Twenty five percent of what? No such map or plan is disclosed in the FEIS or SEIS, so it is impossible to determine what the standard actually requires or how far out of compliance the amendment would place the project area.

The Draft SEIS ROD says:

“The purpose of the plan standards that are being suspended in this plan amendment is to constrain management actions that may preclude achievement of forest-wide and management area goals and objectives for elk and big game habitat. Despite repeated project-specific amendments suspending these standards, the Forest Plan objective of maintaining the current (1987) level of big-game hunting opportunities has been achieved. The number of hunters, as well as the number of elk, continues to increase, and the general hunting season has remained at five weeks.” (Draft SEIS ROD, Appendix B, p. 3)

What impacts to big game other than elk result from reducing the protection of “big game habitat?” Such information deserves analysis and disclosure.

The Forest Service may possibly show a maintenance of elk populations, but the Forest Plan requires maintenance of habitat and thermal cover.

Montana Fish, Wildlife & Parks emphasizes the importance of habitat over elk population numbers as the correct measure of elk security, even though FWP supported the Stonewall project.

“At oral argument, Plaintiffs persuasively explained why habitat preservation is different from elk population numbers. Put simply, the Forest Plan seeks to preserve habitat in order to keep elk on public land during hunting season – a consideration not reflected in sheer population.” (Alliance for the Wild Rockies, et al. v. Leanne Martin, et al. – Case 9:20-cv-000179-DWM)

How much relevance do elk numbers and hunter numbers have in assessing the “objective of maintaining the current (1987) level of big-game hunting opportunities”? The elk have learned to migrate in a timely way, to nearby large private ranches that are not open to most hunters. When elk habitat effectiveness is reduced on public land the phenomenon of elk migrating to private secure habitat increases, thereby reducing hunting opportunities. The metrics used for assessing big game hunting opportunity are not sufficient, leaving achievement of the objective unknown and essentially unanalyzed. A map of nearby private elk refugia in relation to the project area and out of compliance BNF third order drainages would give us a start on good information to be able to understand the situation.

Remedy: The Forest Service must withdraw this amendment because it does not ensure that elk hiding effectiveness (EHE) is adequate.

Thermal cover amendment

“There have been 7 project-specific amendments related to thermal and hiding cover.” (FSEIS, Appendix D. p. 5) The BNF project specific amendments to the Elk Thermal Cover standard have been used already on at least 127,083 acres, not including the large BAR project or proposed 55,147 acres of the Gold Butterfly project. Thermal cover is getting whittled away across a wide area due to serial use of project specific thermal cover exemptions. It takes a long time, many generations of elk, to grow thermal cover. This is a significant impact to habitat for the elk and for the Plan objectives. We need a map showing the cumulative use of project specific suspension of thermal cover protections required by the Forest Plan.

In a December 13, 2020, Court Order and Opinion by the U.S. District Court of Montana, the Judge found,

“While the Forest Service effectively shows a maintenance of elk populations, the Plan requires maintenance of habitat and cover. That tension is only made more apparent when one considers that the Forest Service has actively avoided complying with any metric related to elk habitat or cover.” (Alliance for the Wild Rockies, et al. v. Leanne Martin, et al. – Case 9:20-cv-000179-DWM)

Remedy: The Forest Service must ensure that thermal cover is maintained and not diminished by management actions proposed for this project.

Cumulative Effects

In above-referenced case, the judge found that the Forest Service did not conduct a cumulative effects analysis which included “past, present, and reasonably foreseeable future actions” which are part of other projects.

“NEPA always requires that an environmental analysis for a single project consider the cumulative impacts of that project together with ‘past, present, and reasonably foreseeable future actions.’” Native Ecosystems Council, 304 F.3d at 895 (citing 40 CFR § 1508.7 (2019)). This applies to reasonably foreseeable forest plan amendments. Id. at 896. “Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.” 40 C.F.R. § 1508.7 (2019).

Therefore, the judge ruled:

..., it was arbitrary and capricious for the Forest Service to not consider the site-specific amendment in the Middleman Project in its cumulative effects analysis. (Alliance for the Wild Rockies, et al. vs. Leanne Martin, et al. – Case 9:20-cv-000179-DWM)

The Gold Butterfly documents fail to disclose a thorough analysis of a forest-wide cumulative effect of past, present, and reasonably foreseeable future projects on the Bitterroot Forest. Two, already proposed future projects cover a substantial portion of the Bitterroot Forest, the Bitterroot Front Project and the Eastside Project. The FEIS, FSEIS, and Draft SEIS ROD include no meaningful cumulative-effects analysis of the management actions included in those projects or other past and current projects. That is a violation of NEPA requirements.

Remedies: The Forest Service must comply with NEPA regulations by completing and disclosing a forest-wide, comprehensive, cumulative analysis of the effects from management actions proposed for this project.

The Forest Service should not proceed with this or any other project until it has completed the forest-wide Forest Plan Amendment Process.

A Gold Butterfly project EIS alternative which does not require project specific amendments should be developed and a more thorough no-action alternative, including maps, should be analyzed and disclosed.

5. EXCESSIVE ROAD SYSTEM, ACCESS MANAGEMENT, AND TRAVEL MANAGEMENT

This issue was discussed in detail in FOB/AWR DEIS comments at pp. 16-24, FOB/AWR scoping comments at pp. 1-2, 4-5, FOB/AWR FEIS objections at pp. 11-22, which still have standing, and were covered in FOB/AWR DSIES comments. WildEarth Guardians scoping DEIS comments, FEIS

objections, and DSEIS comments also raised numerous road related issues. We incorporate those comments/objections into this objection.

6. WHITEBARK PINE

This was discussed in FOB/AWR FEIS objections at pp. 7, 9 which still stands, and in the FOB/AWR Draft SEIS comments at p. 14. We incorporate those comments/objections into this object and add the following discussion.

In August 2021, a Biological Assessment (BA) of whitebark pine for the Gold Butterfly project (PF Supp BOTANY 002, referred to as BA herein) was released following a proposal by USFWS to list whitebark pine as threatened under the ESA. This is new information, allowing new public comment during the objection process.

Issues Specific to Whitebark Pine

The Gold Butterfly whitebark BA, FSEIS, and FEIS fail to completely analyze effects, including cumulative effects, of the project on whitebark pine. They also fail to demonstrate that the project will not be detrimental to whitebark and fail to show that the project will follow the USFWS proposed rule and conservation measures:

The proposed ESA 4(d) rule would provide the following protections for whitebark pine: *Prohibit removing, cutting, digging up, damaging, or destroying whitebark pine on Federal lands.* USFWS recommended conservation measures for whitebark are: *“Avoid removing or damaging plus trees; Avoid timber cutting or ground disturbance in stands with healthy reproductive populations.”* (BA, p. 16).

The BA assures that protection will be achieved through the project design features (BA, p. 10):

“If whitebark pine is found in any treatment units, trees 3” diameter at breast height or greater, would be avoided to the extent possible. All healthy and reproducing populations (cone-bearing or mature trees) of whitebark pine are to be avoided during vegetation management activities; unless it is to specifically benefit the species and discussed with a Forest Service Botanist. Mature cone bearing and trees showing rust resistance should be preserved. Whitebark pine (Pinus albicaulis) will be maintained and/or promoted in all stands where it occurs. Damage to existing whitebark pine individuals will be minimized to the extent possible.

However, it appears that insufficient data were collected to provide this protection. BA (p. 12) states: *“The project area was **partially** surveyed in 2012, 2013, 2016, and 2017 for rare plants. The surveys that were conducted confirmed the presence of whitebark pine in the project area.”*

If inventories are incomplete, how will whitebark be protected in the treatment units? How do you know where healthy cone-bearing trees are present? Keane et al (2017, p. 3) state that the first step in whitebark pine restoration is to *“Assess condition. Conduct assessments that document the status and trend of whitebark pine forests within regions.”*

That whitebark will be “*avoided to the extent possible*” and “*damage minimized to the extent possible*” (BA, p. 10) are not reassuring considering whitebark is proposed to be listed as a threatened species under the ESA. BA (p. 15) states: “*Treatments will likely damage or kill some whitebark*”. The ESA will not exempt the destruction of seedlings nor of non-healthy and non-reproducing populations. The ESA requires that you fully analyze the effects of your activities on whitebark pines. While critical whitebark habitat has not yet been identified by the USFWS, it likely will be before project completion in 8-10 years.

The Biological Assessment (BA) for Whitebark Pine (PF-SUPP-BOTANY-002) concluded (p.16):

*“The implementation of the Gold Butterfly Project as proposed is **not likely to jeopardize** the continued existence of whitebark pine. This determination is based on the following rationale:*

- *Whitebark pine will be avoided to the extent possible, especially larger trees 3” dbh and greater would be avoided to the extent possible and reproducing populations (cone-bearing or mature trees) of whitebark pine are to be avoided during vegetation management activities (see project design features).*
- *Proposed activities would not increase any of the primary stressors of whitebark pine: white pine blister rust, mountain pine beetle, altered fire regimes, or the effect of climate change; but would decrease the likelihood of another landscape level mountain pine beetle epidemic and reduce the potential for catastrophic fire by introducing greater heterogeneity to the landscape.*
- *The proposed action may beneficially affect whitebark pine habitat conditions by reversing a negative trend of vegetation encroachment created by the absence of fire and reducing the risk of a stand replacing fire in the units. Any impacts to limited individuals would be offset by the benefits of returning controlled fire to the project area and thus creating higher-quality habitat conditions for whitebark pine.*

The BA (p. 15-16) also admits detrimental effects of the project: *There are a multitude of past, present, and future actions across the Forest that could have limited negative impacts to localized populations of whitebark pine. Activities that will remove or damage individuals or groups of trees include timber harvest, vegetation management, road work, and fire suppression.*

Therefore, benefits of the project to whitebark pine appear to be speculative, but detrimental effects are certain. Neither Keane (2021), Keane and others (2017), nor Larson and Kipfmüller (2012) advocate for a reduction in mixed severity wildfire, including stand-replacing wildfire, as a whitebark restoration technique. In fact, Keane (2021) suggested that mixed-severity wildfire, including stand replacing fires, are beneficial to whitebark. Keane et al (2017; p. 78) recommended avoiding “treatments designed only to reduce disturbance agents, such as fuel treatments. Embrace a holistic wildland fire policy that balances losses with gains in competition-free burned areas.” Larson and Kipfmüller (2012) state: “The implication of fire suppression as a widespread cause of declines of whitebark pine communities may be inaccurate for much of the range of the species and could result in misguided restoration efforts. Suggestions that the current mountain pine beetle outbreaks are unnatural must be firmly placed within the context of the extremely short historical record relative to the pace of forest dynamics in whitebark pine communities. ... The fundamental message we hope to

convey is that management of whitebark pine communities, although urgent, must be approached cautiously ... lest generalizations blur recognition of the mechanisms driving declines of this singular species and lead to more harm than good.” Similarly, the whitebark summary on the Federal Register (2020) similarly states, “we do not know at what scale the impacts of fire exclusion and resultant forest succession have affected whitebark pine”.

There is no evidence in the scientific literature that your activities will decrease the likelihood of another MPB epidemic, and in fact, some studies (e.g., Six et al, 2014, 2018, 2021; Kichas et al, 2020) found that the opposite might be true. According to Larson and Kipfmüller (2012), MPB outbreaks may be beneficial for whitebark.

How do you propose to “promote whitebark in all stands where it occurs”? You provide no evidence that commercial whitebark daylighting is an effective tool in promoting whitebark and, in fact, it may be deleterious. How do you know that the lodgepole and subalpine fir that you propose to remove are not living in symbiosis with the whitebark? Keane (2021) and Keane et al (2017) stated that proactive silvicultural work is less effective and much more costly than managing wildfire to “do the work” (Keane, 2021). They also stressed the importance of mycorrhizal fungi to seedling survival. Mycorrhizal fungi are often negatively impacted by tree-cutting, soil compaction, mechanical disturbance, woody debris removal, and removal of understory plants (Keane et al, 2017); all result from commercial timber harvest. Six et al. (2021) suggested “Where silvicultural practices are applied, they should be implemented with caution ... Anthropogenic change is creating or enhancing a number of stressors on forests. To aid forests in adapting to these stressors, we need to move beyond traditional spacing and age class prescriptions and take into account the genetic variability within and among populations and the impact our actions may have on adaptive potential and forest trajectories.” Pfister et al. (1977) noted that Whitebark pine habitat types are very low in productivity and recommended that they be left alone.

While the BA states that **non-commercial** daylighting has been shown to be beneficial, there are no data showing that commercial logging is beneficial. The BA states that some units with whitebark are being treated for research, but obviously the research is ongoing, and so commercial activities should be kept out of all non-research whitebark units until more is known. Instead, use them as a control for the research. Please disclose which units will be used for research.

BA (p. 11-12) states that in units 6, 7, 10, 55, 59, 80, 90, 103, and 107, whitebark pine was found but the areas’ elevation “*is too low for this species.*” What evidence do you have for this statement? Flanary and Keane (2019) found that whitebark in southwest Montana had expanded to lower elevations, with no evidence that it was moving upward as expected from climate change.

The BA (p. 15-16) states:

“The cumulative effects of the proposed action on rare plants are unknown. Invasive plants have also caused a decline in habitat quality. The proposed action alternatives would contribute to invasive plant spread in the project area by disturbing the soil and opening the forest canopy, in and near areas, where invasive plants are found. Hand piling, landings,

and new road construction cause the most detrimental disturbances for rare plant species. Soil disturbance would occur between 1% and 14% within units that have rare plant populations and habitat. These numbers do not take into account hand piling that would occur in some of those units which would increase the percentage and make it much higher.”

NEPA requires the analysis of cumulative effects on all rare plants, including whitebark.

The Federal Register Whitebark summary (2020) stated: *“the rate of decline appeared to be most sensitive to the rate of white pine blister rust spread, the presence of genetically resistant individuals (whether natural or due to conservation efforts), and the level of regeneration.”*

While the Gold Butterfly project treatments may not increase blister rust spread, they could negatively affect whitebark genetics and the level of regeneration.

BA (p. 16) states:

“Under the Forest Plan and Green et.al, regarding old growth, there would be no effect to whitebark pine since stand exams show that there is no old growth within those whitebark pine stands within the project area. Tree ring dating showed that the oldest trees were 110 years of age.”

However, the BA (p. 10) admits that the area has only been partially surveyed for rare plants that include whitebark pine. Until inventories are complete, there is no basis for this claim.

BA (p. 16) restates USFWS recommended conservation measures for whitebark:

“Avoid removing or damaging plus trees; Avoid timber cutting or ground disturbance in stands with healthy reproductive populations.”

You have not completed inventories and so occurrences of plus trees (rust-resistant trees) are unknown. Commercial timber harvest always results in extensive ground disturbance that is likely detrimental to mycorrhizal fungi. Mycorrhizal fungi are important to seedling survival (Keane, 2021).

Remedies:

It is clear that whitebark pine preservation and restoration are complex, and the effects of silvicultural treatments are largely unknown, especially in the face of climate change.

- First, whitebark pine inventories must be completed before project approval. BA (p. 14) states that inventories have not been done in commercial harvest units 75, 76, or 185. Note that unit 76 is a regeneration unit.
- Second, abandon the commercial harvest and road building in all whitebark units that are not being used for research. These include 5, 63, 71, 72, 77, 79, 82, 93, 183 (BA, p. 12-14).
- Third, disclose which units will be used for research, and what activities will be studied.

7. WILDLIFE VIABILITY

This issue was discussed in FOB/AWR DEIS comments at pp. 24-25, FEIS objections at pp-22-23, which still have standing, and covered in our DSEIS comments. We incorporate those comments/objections into this objection and add the following discussion.

Snag Retention

This issue was discussed in FOB/AWR DEIS comments at pp. 24-25. We incorporate those comments, the discussion in FOB/AWR objection, which still stands pp. 22-24, SEIS comments at pp. 6-8, and add the following discussion.

In FOB's SEIS comments we asked how project activities will comply with forest plan standard #3, "All snags that do not present an unacceptable safety risk will be retained" (pp. 6-7). Snags are an important element to wildlife including but not limited to grizzly bears, pileated woodpeckers, fishers, martens, and wolverine.

BNF does not have a strong track record of retaining snags. In the spring of 2018, fire fighters cut down over 20 snags in an old-growth forest that had burned in the Roaring Lion Fire. The snags were not near trails or traveled areas. The exercise was to increase their pay rate not training in basic fire-fighting. One tree they cut was still alive. It was nearly 600 years old. When this was brought to the attention of District Ranger, E. Winthers, he stated that the tree was 80% dead.

Upon further investigation of the area, we found at least 20 snags had been cut and two had been blown up with dynamite. One contained a pileated woodpecker cavity with broken shells.



600-year-old living ponderosa pine cut during fire training exercises



Pileated woodpecker (an indicator species) cavity in a cut snag, eggshells present

In the spring of 2021, the crew was back and cut at least ten large snags. One was next to Camas Creek a bull trout stream. The snag was cut to fall across the stream as shown in the two following photos. This is in violation of riparian standards and streamside regulations.





Another large, 364-year-old, snag felled in the Mud Creek project area 2021.

We are concerned that project activities will violate Forest plan Snag Retention standard #3 and affect wildlife populations in violation of NFMA and the ESA.

Our earlier objection and FOB SEIS comments, pp. 6-8, also discuss large coarse woody debris and its effects on wildlife. Forest Plan Old Growth standards increase the size of coarse woody debris in old-growth areas to promote wildlife viability. The forest plan standards protect mature stands as well as old growth with the 20-inch dbh rule, allowing for larger size CWD standards in these areas which is good for wildlife. Forest plan standards state “as many as 15 trees per acre” so we question BNF assumption that it precludes the use of Green et al to mark areas of old, large trees, and old growth for preservation. Suspending the larger CWD old growth standards is in violation of NFMA and the ESA. It affects indicator species and sensitive species like wolverine and fisher.

Remedy: Retain Forest Plan old growth standards and modify project activities to retain snags and large coarse woody debris as per the forest plan to protect wildlife viability.

Canada Lynx (Threatened Species)

Canada lynx were discussed in FOB/AWR DEIS comments at pp. 25-28, FOB/AWR FEIS objections at pp 24-26, which still have standing, and covered in our DSIES comments at pp. 9-10. We incorporate those comments/objections into this objection.

Wolverine (Sensitive; Under litigation for proposed listing under ESA)

This issue was discussed in FOB/AWR DEIS comments at pp. 28-31, WildEarth Guardians/AWR/Goheen DEIS comments at pp. 2, 5, 11-12, and FOB/AWR objection pp. 26-27, and FOB SEIS comments pp. 8-11. We incorporate those comments/objection which still stands into this objection and add the following discussion.

DROD claims in Appendix C p 1:

On October 13, 2020, USFWS withdrew the proposed rule to list the Distinct Population Segment of the wolverine occurring in the contiguous United States as a threatened species (USDI Fish and Wildlife Service 2020).

As a result of the USFWS action, the wolverine is no longer proposed for listing, but remains a Sensitive species in the Northern Region. There are currently no BNF Plan (USDA Forest Service 1987) standards for the management of wolverine habitat and no conservation plan or strategy has been adopted. The original effects determination for implementation of selected alternative was **not likely to jeopardize** wolverines across their range because the project would have discountable effects to a small area of wolverine habitat. In summary, since the wolverine is no longer proposed for listing by USFWS but is still a Region 1 sensitive species, the effects determination in the Gold Butterfly Project is changed to “may impact individual wolverines or their habitat, but would not likely contribute to a trend towards Federal listing or loss of viability to population or species.”

The wolverine is under litigation for proposed listing as a threatened species under the ESA. This case has already been won in court once (2016) and is in the courts again from 2020. This is an 8–10-year project and a decision will be made mid-project. The FS should err on the side of caution and in deference to preserving wildlife habitat. The Horsefly ruling states, “If there is any doubt on this claim, institutionalized caution must be applied, and “the benefit of the doubt [must be given] to the species. *Conner v. Burford*, 848 F.2d 1441, 1454 (9th Cir. 1988); *see also Swan View Coal. v. Barbouletos*, 2008 WL 5682094, at *15 (D. Mont. 2008).”

There has been no project formal or informal consultation regarding the wolverine, a species proposed for listing under the ESA. The FS didn’t even include the wolverine in its Biological Assessment and the programmatic Biological Opinion for Wolverine is seven years old. Since its completion in 2014, breeding wolverines have been found in the project area (see wolverine watchers report 2021). Wolverine are dependent on intact habitat, mature forests, and are sensitive to roads and recreation which we have established in previous comments and objection.

The response to comments, Appendix C compares old growth in the project area using Greene et al and old growth using the Forest Plan and claim to find much more with Greene et al. “The application of the Green et al. criteria for identifying old growth in the Gold Butterfly project area results in more old growth acres designated than would the application of the Forest Plan definition.” (FSEIS, Appendix C, Response to Comments p. 9).

However, they use the glossary definition of old growth not the standards which state, “as many as 15 trees per acre” and they miss the idea of 40-acre stands which are to establish connected habitats and force islands of old growth to be connected with mature stands recruiting new old growth and creating intact areas for species like wolverine, fisher, and marten. We note this in activities on the Como project which protected areas around old growth to create the 40-acre requirement. It was used to protect more old growth and mature stands rather than eliminate old-growth areas smaller than 40 acres. As stated in FOB Draft SEIS comments p. 3, the recent Buckhorn project used Green et al. to age-date what would be considered old growth via forest plan standards, thus allowing them to increase large tree harvest. These examples, bring into question the idea that using Green will identify more old growth. The old growth amendment (SEIS Draft ROD, Appendix B, pp. 3-4) changes the percentages of old growth to be maintained from 8% to 3% in management areas 2 and 3a. If more old growth will be identified with the new definition, why is there a need to reduce the percentages?

As stated in our Draft SEIS comments (pp. 10-11), Wolverine are dependent on canopy cover to slow spring melt and road-free areas of connected habitat. This project will most certainly reduce or remove wolverine habitat. Removing the 40-acre connected old-growth habitat which can be creatively worked with riparian areas and neighboring management areas will also negatively affect wolverine occupying the area.

The FEIS fails to take a hard look at cumulative impacts to wolverines and properly incorporate best available science in violation of NEPA. The FEIS also, fails to ensure viable populations are being maintained on the BNF, in violation of NFMA.

Grizzly Bear

This issue was discussed in FOB/AWR DEIS comments at p. 31, FOB/AWR FEIS objections at p. 28, which still has standing, and our DSEIS at pp. 11-14. Given the Forest Service failed to address our comments in its supplemental analysis, we incorporate those comments/objections into this objection and add the following discussion.

Agency fails to disclose and fully analyze the methodology and rationale used to change the determination of grizzly bears from “may be present” to “not present” in the project area.

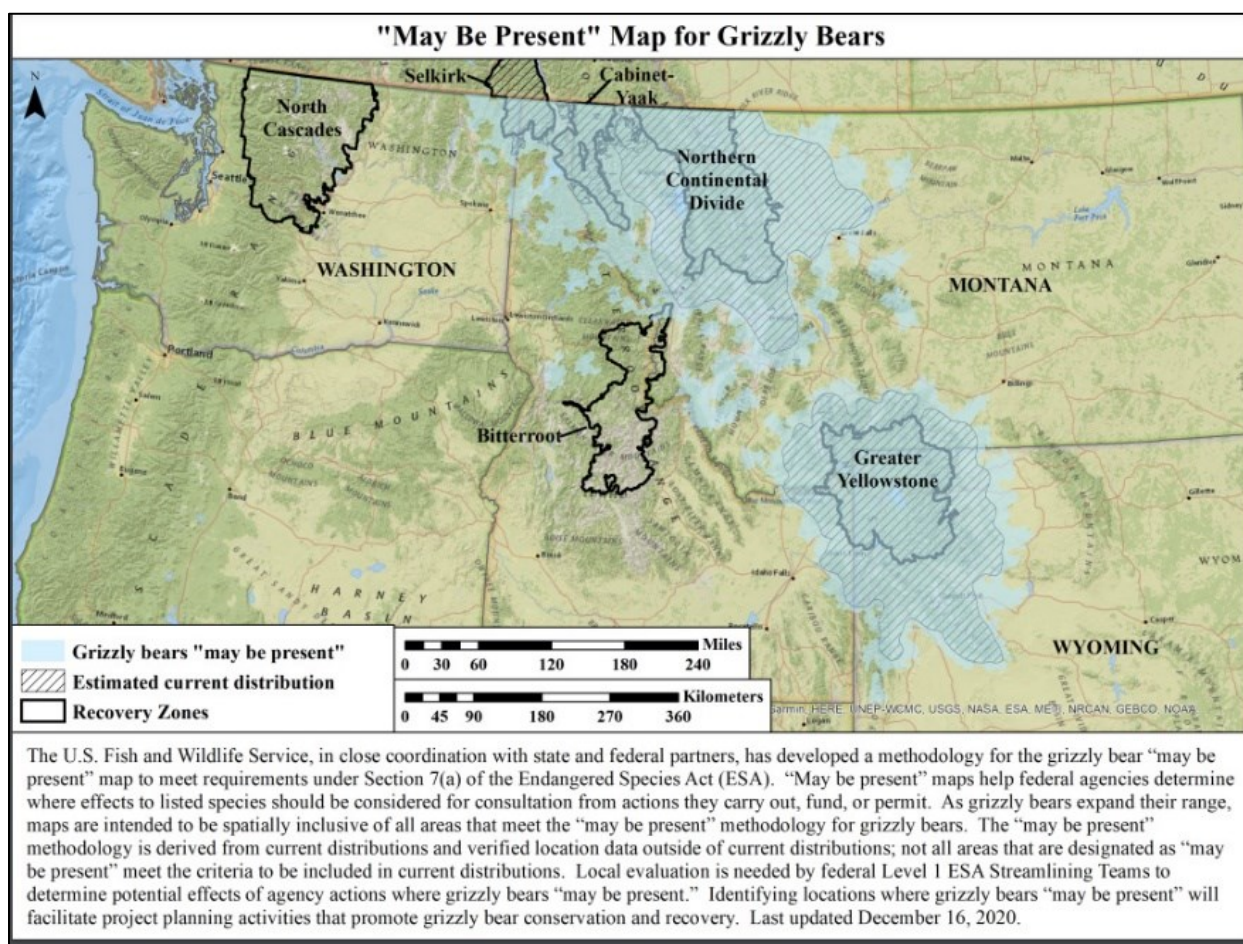
In November of 2020, USFWS presented the methodology for determining where grizzly bears “may be present” to the IGBC. The methodology is outlined in this slide.

Methodology

- 10 year window
- 12 digit HUCs
- "Turning on HUCs"
 - One or more sighting turns on HUC in which sighting(s) occurred and all adjacent HUCs
 - One or more radio-collared location turns on HUC in which location occurred
- Annual updates to "may be present"

Following this methodology, grizzly bears "may be present" in the Gold Butterfly Project area. The Stevensville golf course where a bear was captured in 2018 is located in the same HUC as the Gold Butterfly Project. The Burnt Fork drainage leads directly to the golf course. This is not reflected in the December 2020 map (below) of where grizzlies "may be present." Given the frequent sightings of grizzly bears this past year, we request the Forest Service disclose any recent evidence of grizzly bear presence in its response to our objection and

update the project analysis accordingly.



It is difficult to discern exact locations due to low resolution, but the updated GB wildlife report states, "This updated grizzly bear may be present map did not include any portion of the Gold Butterfly project area (WILD-001-Specialist Report Updated, p. 38)." May be present methodology relies on "verified location data outside current distributions (ibid p. 38)." There is nothing more "verified" than a captured bear on the golf course. As such it is arbitrary and capricious for the Forest Service or the USFWS to claim that grizzly bears are not present in the project area.

After DNA sampling for one season, USFWS admitted it was a learning process. Cattle destroyed some snag traps and they determined that traps should be left out throughout the season rather than intermittently (NCDE subcommittee presentation April 29, 2021). No snag traps were located in or near the project area. The updated wildlife report states, “No other grizzly bears were detected in the Sapphires (J. Fortin-Noreus, pers. comm). Based on this lack of detections of grizzly bears or sign, it is highly likely that grizzlies do not currently occupy the project area, and that any grizzlies that occur there would probably be transient bears (ibid p. 39).” To be clear, the “may be present” status does not rely upon or imply grizzly bear occupation, as the agency acknowledges stating “the description of grizzly bears as ‘may be present’ for project planning purposes does not mean those locations are considered ‘occupied range’ (areas in which grizzly bears have established home ranges and continuously reside)” (PF-SUPP-WILD 008, p. 2). In fact, one primary purpose of identifying where bears may be present is to aid the Forest Service in its duty to contribute to the recovery of threatened or endangered species, which includes areas that may provide opportunities for transient bears to find, utilize and eventually occupy secure habitat within the Bitterroot Ecosystem. As such, transient bears and their ability to colonize new areas in between recovery areas is of paramount importance and one that greatly affects grizzly bear recovery. Evidence clearly shows grizzly bears continue to establish and utilize areas of connectivity within the Bitterroot National Forest, and the Forest Service must not only avoid hindering such use but take proactive steps to preserve and increase secure habitat to bolster grizzly bear recovery. The USFWS five-year review of grizzly bear status concluded that connectivity between recovery areas and the eventual occupation of the Bitterroot Ecosystem is important for the recovery of the bear in the lower 48. Project activities are likely to adversely affect connectivity and the ability of outliers to use and eventually occupy the area. The forest plan Biological Opinion (BiOp) 2021 determines the forest plan as implemented “may affect” and is “likely to adversely affect grizzly bears”.

Further, it is arbitrary and capricious for the Forest Service to assert an absence of grizzly bears in the project area when sampling remains intermittent, random, and relegated to the very north and very south areas of the range on the BNF. How do you know bears are not present if you have not implemented scientifically valid and consistent monitoring protocols to ensure proper sampling within the project area? To be clear the methodology for establishing “may be present” is to be updated annually, which requires the agency to implement a robust grizzly bear monitoring program, without which renders false any determination that bears are not present in the project area. As it stands, the USFWS “May be Present” grizzly bear map is currently out of date and will be throughout the 8–10-year project.

Remedy: Due to the importance of the Sapphires as a linkage zone and their verified use over time, use the established methodology as written to determine grizzly bears “may be present” in the project area. Further, the Forest Service must coordinate with the USFWS to establish a long-term, grizzly bear monitoring program to document and verify bear presence throughout the Sapphire Range.

BNF fails to analyze the direct, indirect, and cumulative effects of project activities on the recovery of the grizzly bear in the lower 48.

We discussed this in our DEIS objection (p. 29) which still stands and add the following discussion.

According to the Supplemental ROD (p. 18), “The selected alternative would have no effect to grizzly bear because the entire project area is outside the latest USFWS grizzly bear may be present area (PF-SUPP-WILD-009 and PF-SUPP-WILD-030).” As stated above, the methodology created by USFWS to determine “may be present” was not used in this determination. That methodology also includes annual evaluation during a 10-year project. To disregard analysis of effects of project activities on the recovery of the grizzly bear violates both NEPA and the Endangered Species Act (ESA).

The 2020 Forest Plan BiOp for grizzly bears (not including the site-specific suspension of old growth standards in GB) determined that the Forest Plan “*may affect, likely to adversely affect* grizzly bears. (2021 BO, p. 1).” BNF has plans for a programmatic forest wide amendment for EHE, thermal cover, old growth, snag retention, and CWD requirements (<https://www.fs.usda.gov/project/?project=57302>) which will require another consultation with USFWS.

The Final SEIS (p. 23) states that: “A project-specific amendment to support using the old growth definitions in Green et al. for the Gold Butterfly project rather than the existing Plan old growth criteria would not result in negative direct or indirect effects to old growth or to wildlife species associated with mature or over-mature forest structure”. Here the agency fails to take a hard look at the suspension of the 40-acre old growth standard and how that affects wildlife like grizzly bears that rely on intact, connected, road-free areas which are abundant in the Gold Butterfly project area and will be irreparably fragmented due to project activities.

The agency cannot rely solely on the Dec 2020 FWS May be Present Map to determine the potential impacts to grizzly bears in the project area as sightings continue to occur. There was a recent grizzly sighting by retired agency personnel at St Mary’s Lookout and a Hungry Horse article discusses a female that might have taken up residence near Deerlodge. When a male grizzly bear was captured on the Whitetail Golf Course north of Stevensville in 2018, Montana FWP bear specialist Jamie Jonkel was quoted in a Missoulian article saying:

“He probably came south through the Garnet Range, got across the Clark Fork (River) and I-90. There are a handful of spots that allow for passage around Rock Creek and Clinton and Drummond. If they find those—bang—they’re south of I-90 and into the Sapphires.”

In our SEIS comments (pp. 11-14) we ask BNF to consider the new denning habitat report by Bader and Seiracki 2021 and the map we provided overlaying their findings on the GB project area. As you can see in Figure 1 below the road free areas in the project area provide extensive medium and high-quality denning habitat that will be fragmented by road building, thinning, and openings of up to 39 acres. This map is a further refinement of the one provided in our comments and is based in part from a new report by Seiracki and Bader that identifies and displays Grizzly Bear Management Units (GBMU) throughout the Bitterroot and Lolo and parts of Beaverhead Deerlodge National Forests (Attachment A1). Figure 1 displays the Burnt Fork

GBMU and part of the Sleeping Child GBMU with identified secure habitat, all of which must be considered, protected, and preserved in the project area to encourage connectivity and grizzly bear recovery.

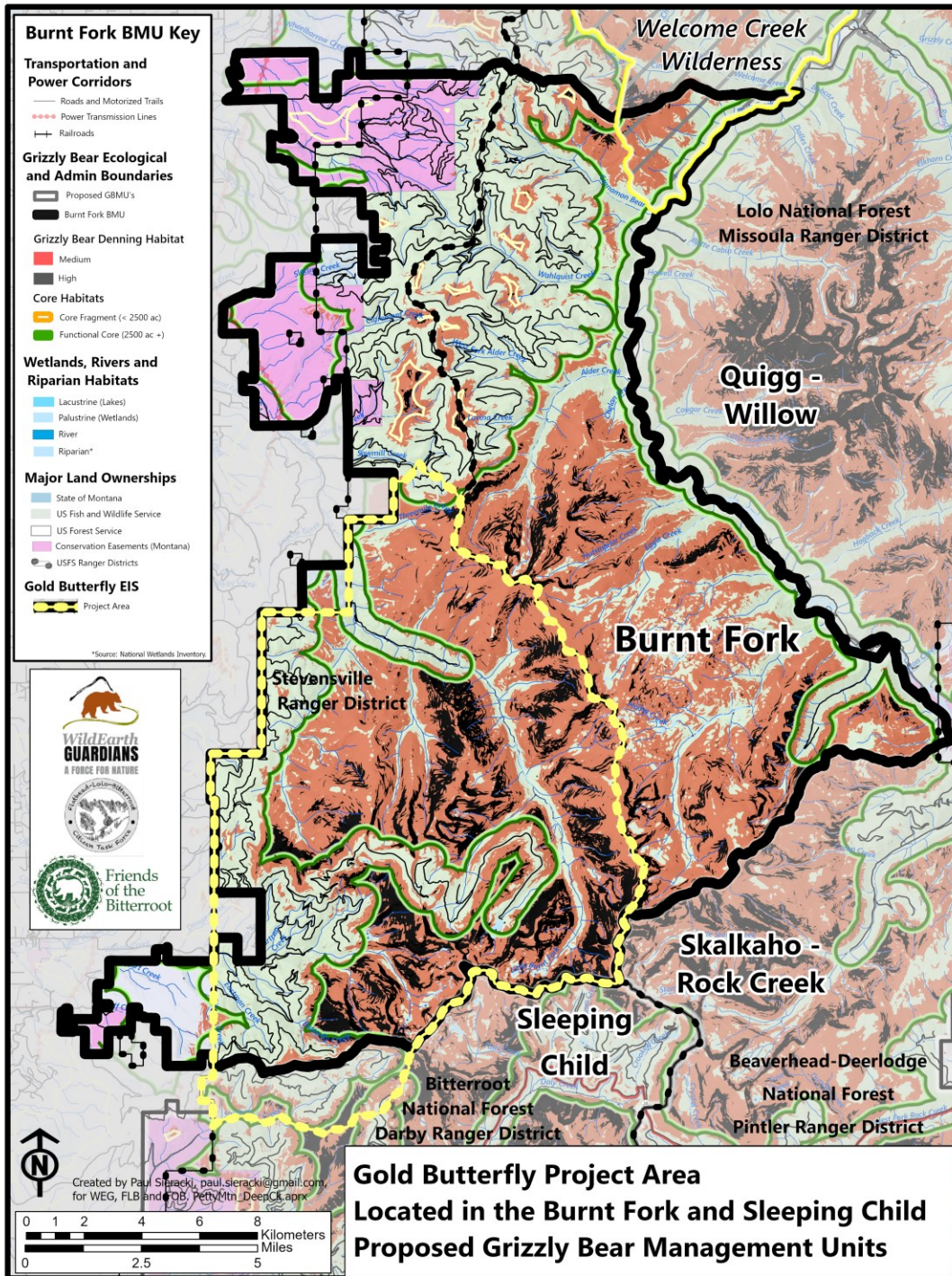


Figure 1. Map of Burnt Fork BMU with Secure Grizzly Bear Habitat

Any reduction of habitat security within the project area will reduce its effectiveness for the purposes of grizzly bear connectivity, this is especially true within high-quality secure habitat. A factor the Forest Service fails to address in its analysis. Further, project activities outside medium and high-quality denning habitat will still have significant impacts on den selection and habitat security due to total reductions within the entire Burnt Fork BMU. Altogether, the project activities will most certainly hinder the ability of grizzly bears to utilize the area both to establish new home ranges for both male and female bear, as well as provide secure habitat for the purposes of connectivity that is crucial for species recovery. Such harm clearly constitutes a violation of the ESA.

As we made clear in our previous objection (p. 28), Schwartz et al. (2010) noted that management for grizzly bears requires provisions for security areas and limits of road densities between security areas. Otherwise, grizzly bear mortality risks will be high as bears attempt to move across highly roaded landscapes to other security areas. The forest plan lacks direction regarding road densities on this project because it has abandoned Elk Habitat Effectiveness (EHE) standards and plans to build many miles of temporary roads which are not included in the BiOp. The 2021 BiOp points out that road density was measured using linear vs the moving window method. The moving window method is more accurate because it measures density specific to areas vs over a broader scale.

The 2021 Biological Opinion discusses road designations and changes in the Travel Plan of 2016 (2021 BO at p. 6). The documentation states that many of the closures were completed administratively while remaining closures will be conducted on a site-specific basis during project analysis (ibid at p. 7). Yet, the Forest Service fails to demonstrate the effectiveness of those administrative closures or disclose their physical condition. In fact, the Supp DROD mentions a field trip where illegal off-road use is discussed (p. 11). Illegal off-road travel is rampant in the project area. Adding more roads, temporary or otherwise, will offer more opportunities for off road violations as pictured below in Figure 2. Project documentation does not analyze unauthorized motorized use and its effects on grizzly bears.

The agency also fails to specify exactly which roads were administratively amended during travel planning in the project area or any proposed changes under the selected alternative. Exactly how do the added system roads affect the travel plan? We have not seen this specific information. It has not been disclosed in project documentation. These omissions fail to meet NEPA's hard-look requirements.



Figure 2. Documented Unauthorized Motorized Use within the Gold Butterfly Project Area.

Research confirms adverse impacts of roads on grizzly bears (Mace et al. 1996, Mace et al. 1999, Proctor et al. 2018). Impacts associated with roads and excessive road densities impede connectivity by affecting grizzly bear population and habitat use patterns. Analysis of roads and trails in the project area must include a consideration of how proposed actions might affect grizzly bear recovery and their ability to connect to and establish a population in the Bitterroot Ecosystem. It must also assure the public and USFWS that changes to roads in the project area do not conflict with travel planning designations or ignore the expectation to fulfill proposed changes in project specific actions.

The Forest Service is aware of the best way to provide secure grizzly bear habitat is to ensure motorized road densities do not exceed specific thresholds for open and total routes. Further, the most effective way to achieve those density standards is through physical decommissioning of roads and motorized trails, such as was in place on the Flathead National Forest under Amendment 19 until the agency attempted to weaken those protections in its revised forest plan. Notably, the federal Missoula District Court struck down the supporting Plan's biological opinion finding that in regards to grizzly bears the Revised Plan (decision) was arbitrary and capricious to the extent it did not consider the impacts of its departure from Amendment 19's motorized density and reclamation standards, did not consider the impact on the entire grizzly population, did not adequately explain the adoption of the 2011 baseline conditions, and

adopted a flawed surrogate in its take statement concerning grizzly bears. (see Attachment A2 and A2a). We caution the Bitterroot National Forest not to follow a similarly flawed BiOp, especially given that Amendment 19 standards were based in part upon the scientific information concerning security from roads and road density requirements for grizzly bears as found in Mace and Manley, 1993 and Mace et. al., 1996. In fact, while the current EHE standards for road densities don't go as far as Amendment 19, the agency continues to use them to prevent degradation of critical habitat for threatened species.

In a letter to district ranger Steve Brown and Supervisor Matt Anderson dated November 20, 2021, we asked that a recent complaint be considered in project analysis and all attachments be included in the record. (Attachment A3). It is not mentioned in project documentation. The complaint (Attachment A4) asks USFWS to act on a ROD and subsequent rule concerning the reintroduction of grizzly bears in the Bitterroot Ecosystem. Its outcome will affect Bitterroot National Forest lands and emphasize their importance to connectivity. It should have been considered in the 8–10-year project analysis. The FEIS on Bitterroot Reintroduction states that regardless of what action is taken, research will be done on connectivity between recovery areas. The project analysis fails to consider in any reasonable fashion the importance of the Burnt Fork drainage in the context of grizzly bear connectivity, and the agency has yet to complete any analysis of linkage zones between the NCDE, the GYE and the Bitterroot Recovery Area.

The FEIS and Supplemental FEIS do not demonstrate that project implementation is consistent with the best available science, nor does it take a hard look at direct indirect and cumulative effects of the project on grizzly bears, so the FEIS violates the ESA, NFMA, and NEPA.

Remedy: Delay project decision until BNF is able to consider the court case, the GBMU map, and the denning map/report and to take a hard look at the direct, indirect, and cumulative effects of project activities on the recovery of grizzly bears in the lower 48.

Supplemental FSEIS fails to analyze the direct, indirect, and cumulative effects of new trapping laws on grizzly bears, wolverine, and lynx.

We mentioned this in FOB SEIS comments (p 13). Roads, temporary, stored, closed or open allow trappers access to more areas. These effects to non-target wildlife have not been analyzed in project documentation. As such, the Forest Service fails to respond to our comments or provide sufficient analysis as NEPA requires.

Remedy: Correct the deficiencies noted here in a revised Supplemental EIS.

Fisher (Sensitive)

This issue was discussed in FOB/AWR DEIS comments at pp. 31-33 and in FOB/AWR scoping comments at p. 3, FOB/AWR FEIS objections at p. 28 which still stand, and our DSEIS comments at p. 8. We incorporate those comments/objections into this objection.

Pine Marten (Management Indicator Species)

This issue was discussed in FOB/AWR DEIS comments at pp. 33-34, FOB/AWR FEIS objections p. 29 which still stand, and our DSEIS comments at pp. 5-6, 8. We incorporate those comments/objections into this objection.

Migratory Bird Treaty Act (MBTA)

Under the Forest Land Birds section of Appendix C (Changed Circumstances) of the draft ROD, the Forest briefly discusses the Migratory Bird Treaty Act (MBTA) and a monitoring/survey program:

Forest Land Birds

Additional information on the Migratory Bird Act [*sic*] with respect to Forest Land Birds in the Gold Butterfly Project area includes recent surveys by the Northern Region Forest Land Bird monitoring. Since the inception of this monitoring program in 1994, more than 20 permanently marked point-count transects have been established on the Bitterroot National Forest (BNF). Beginning in 2008, the Integrated Monitoring in Bird Conservation Regions (IMBCR) coordinated by the Bird Conservancy of the Rockies (McLaren et al. 2021) continued this long-term monitoring of birds to the present. IMBCR conducts statistically rigorous surveys based on probabilistic sampling to approximate population and trend estimates for over 300 avian species in various strata. Many bird species on the BNF show increasing or decreasing trends regardless of strata, while the trend direction for others varies between strata (see file PF-SUPP-WILD-011). Generally, these long-term monitoring data suggest stability in the overall bird community, and likely in the broader assemblage of forest communities on the BNF. Thus, management of the NF has tended toward maintaining natural habitats in some combination which is suitable for migratory birds.

This draft decision was released on December 16, 2021. On December 3rd, the Biden Administration's reversal of the previous administration's interpretation of the MBTA went into effect. The Trump Administration's interpretation of "incidental take" had, in effect, severely weakened the century-old law, which, according to the *National Law Review*, protects "approximately 90 percent of all birds occurring in North America"

(<https://www.natlawreview.com/article/revocation-trump-administration-s-migratory-bird-treaty-act-rule-takes-effect>).

While the December 3rd date is shortly before the release of the draft ROD, the decision was made public on October 4th and anticipated since at least the spring of 2021 (if not since Biden's election win), giving the FS time to make any changes they deemed necessary under the restored MBTA. Whether or not changes were made in anticipation of the reversal, we are pleased to see that Design Features (Draft SEIS ROD, Appendix A) include some protections for Northern Goshawks, Flammulated Owls, Red-tailed Hawks, Great Gray Owls, and Barred Owls. However, there is little indication of how the FS will locate the nest trees of these birds; the survey provided, from the Integrated Monitoring in Bird Conservation Regions (IMBCR) doesn't appear to be very helpful.

Some of the IMBCR lists provided in the EIS SUPP-WILD-011 cover the entire state or the entire BNF, including the Idaho portions. The lists for the BNF include one for the entire Forest, one for Roaded/Managed areas, and one for Roadless/Wilderness areas. The lists are not very useful in determining the populations or nesting trees of specific birds in the Gold-Butterfly project area. They are simply too broad. Furthermore, of the species for which protections are planned, two, the Great Gray Owl and the Flammulated Owl (a Montana Species of Concern) are not even listed in the IMBCR data. Therefore, it is unclear how the promised protections can be effectively implemented for most of the species.

Furthermore, the IMBCR data about bird populations increasing or decreasing is not very reassuring in light of the increasing challenges, chief among them climate change and habitat loss or fragmentation, faced by birds. The trends for many birds are likely to be far more negative in the future. The dramatic loss of bird species has been in the news in recent years. In 2019, the Cornell Lab of Ornithology reported:

The first-ever comprehensive assessment of net population changes in the U.S. and Canada reveals across-the-board declines that scientists call “staggering.” All told, the North American bird population is down by 2.9 billion breeding adults, with devastating losses among birds in every biome. Forests alone have lost 1 billion birds. Grassland bird populations collectively have declined by 53%, or another 720 million birds. (<https://www.birds.cornell.edu/home/bring-birds-back/>)

Some of the places to which birds migrate may not have the same protections for birds, such as the MBTA, as we in North America do. *The Los Angeles Times* reports on a study which “compared the routes of 1,451 migratory bird species with the protections afforded them in different countries around the world has found that 91% of them have inadequate protected areas for at least part of their annual cycles” (<https://www.latimes.com/science/sciencenow/la-sci-sn-migratory-birds-unprotected-20151203-story.html>).

The BNF should use all the protective power it has to protect birds who inhabit the Forest. One way to do so is to preserve as many old-growth stands and trees as possible. Matthew Betts, a professor in the College of Forestry at Oregon State University, says, “Managers hoping to combat the effects of climate change on species’ populations may now have an additional tool – maintaining and restoring old-growth forest” (qtd. in <https://today.oregonstate.edu/news/complex-old-growth-forests-may-protect-some-bird-species-warming-climate>). Harvesting any old-growth trees runs counter to protecting the birds that live in or pass through our Forest.

Pileated Woodpecker (Management Indicator Species)

This issue was discussed in FOB/AWR DEIS comments at pp. 34-39, FOB/AWR FEIS objections at p. 29 which stall stand, and our DSEIS comments at pp. 5-6, 8. We incorporate those comments/objections into this objection and add the following discussion.

The Pileated Woodpecker is a Management Indicator Species for old-growth forests. According to the Gold Butterfly Draft Environmental Impact Statement, in Montana these woodpeckers

“are considered to be potentially at risk because of limited and/or declining numbers, range and/or habitat, even though they may be abundant in some areas” (Draft EIS, p. 129). According to the updated Specialist Report for Wildlife, “The Forest does not have population estimates for pileated woodpeckers within the Gold Butterfly area, but pileated woodpeckers are known to occur” (Draft EIS, p. 125). The Report says that suitable habitat for the woodpecker across the project is low, largely because of the “high percentage of the Project area that is over 6800’ elevation” (Draft EIS, p. 125). Further, the Report indicates that “Suitable habitat for pileated woodpeckers was classified and mapped through a query of the R1 VMap dataset” (Draft EIS, p. 125). Given the suggested inaccuracy of that dataset in determining Flammulated Owl habitat, as per the above discussion, the results for Pileated Woodpeckers should be examined carefully, especially as the Forest indicates that “the treatments proposed in this alternative would reduce the quality of pileated woodpecker habitat by removing live and dead conifers in a variety of size classes” (SEIS WILD-001-Specialist Report Updated, p. 111). The expected reduction in quality of habitat makes it very important to have a more accurate population estimate than provided by the R1 VMap dataset and the vague IMBCR survey, which is not specific to the Gold Butterfly project area.

An additional reason Pileated Owls habitat is low is that regeneration cuts from decades ago have limited the number of large snags suitable for nesting or foraging. According to the Specialist Report, “Good pileated habitat occurs at lower to mid elevations across the Project area in stands that have not been previously harvested using regeneration prescriptions (SEIS WILD-001-Specialist Report Updated, p. 110). This suggests that future habitat will be impacted by any regeneration cuts taking place in the Gold Butterfly project area.

Flammulated Owl (Sensitive)

This issue was discussed in FOB/AWR DEIS comments at p. 43 and FOB/ARW FEIS objections at p. 30 which still stand. We incorporate those comments/objections into this objection and add the following discussion.

In the Final SEIS, Updated Wildlife Specialist Report, the FS says, “The Forest does not have population estimates for flammulated owls within the Gold Butterfly project area (SEIS WILD-001-Specialist Report Updated, p. 69). Given the dependence of this Montana Species of Concern on old-growth stands, the FS needs to do more to determine the numbers of owls in the project area, particularly in old-growth stands. However, despite the Flammulated Owl not being listed under the IMBCR survey lists, the FS does have some idea of nesting areas for this bird. The same section of the Updated Wildlife Specialist Report says that surveys have found Flammulated Owls at two sites in the project area. It also refers to the results of a Flammulated Owl habitat query of the R1 VMap dataset. However, the query did not mark as habitat the two areas where the owls have been detected repeatedly, so the FS says, “habitat for flammulated owls may be underestimated by the query” (SEIS WILD-001-Specialist Report Updated, p. 70). Yet, in the *Activities within the Cumulative Effects Area* section of the same Specialist Report, the FS refers to the query it admits may underestimate habitat: “The flammulated owl habitat query of the R1 VMap dataset identified about 1,687 acres (1.8%) of suitable habitat within the cumulative effects area (PF-WILD-030; PF-WILD-059)” (SEIS WILD-001-Specialist Report

Updated, p. 69). If the query results are questionable, they should not be used to determine Flammulated Owl habitat.

Instead, when considering the relationship between Flammulated Owls and old-growth stands, the Forest should give great weight to the findings of Reynolds and Linkhart (1992), cited in the Special Report, which show that “where forests surrounding nests were described or photographed, all nests were in, or adjacent to, mature or old-growth stands (Hanna 1941, Bull and Anderson 1978, Cannings et al. 1978, Hasenyager et al. 1979, Cannings 1982, Bloom 1983, Reynolds and Linkhart 1984, Reynolds and Linkhart 1987, Fix 1986, Goggans 1986, Hayward 1986, Howie and Ritcey 1987, McCallum and Gehlbach 1988)” (SEIS WILD-001-Specialist Report Updated, p. 69). While the Special Report continues by citing two sources that found nests in partially cut forest that retained large trees, the number of sources cited by the Reynolds and Linkhart article suggests that Flammulated Owls most often nest in or near mature or old-growth stands.

An additional concern about the impact of the Gold Butterfly project on Flammulated Owls is that under the Draft Decision, Appendix A, Design Features, prescribed burns can be implemented during the owls’ breeding season. Does the FS have any evidence that nesting Flammulated Owls are not disturbed by prescribed fire, both while the fire is being set and during the fire? Without evidence to the contrary, it seems logical that such activities would disturb the owls during the sensitive breeding period. We believe this Design Feature should be modified to say that no activities will occur near active nests from May 15 to August 31.

Northern Goshawk

This issue was discussed in FOB/AWR DEIS comments at pp. 39-40. We incorporate those comments into this objection.

Black-backed Woodpecker (Sensitive)

This issue was discussed in FOB/AWR DEIS comments at pp. 40-43 and FOB/ARW FEIS objections at pp. 29-30 which still stand. We incorporate those comments/objections into this objection.

Boreal Toad (Sensitive)

This issue was discussed in FOB/AWR DEIS comments at pp. 43-44 and FOB/ARW FEIS objections at p. 30 which still stand. We incorporate those comments/objections into this objection.

Bighorn Sheep

This issue was discussed in FOB/AWR DEIS comments at p. 45 and FOB/ARW FEIS objections at p. 30 which still stand. We incorporate those comments/objections into this objection.

Elk and other Big Game

This issue was discussed in FOB/AWR DEIS comments at pp. 45-46 and FOB/ARW FEIS objections at pp. 30-31 which still stand. We incorporate those comments/objections into this objection and incorporate our Objection section on Forest Plan Amendments.

8. FRAGMENTATION AND CORRIDORS

This issue was discussed in FOB/AWR DEIS comments at pp. 46-47 and FOB/ARW FEIS objections at p. 31 which still stand. We incorporate those comments/objections into this objection.

9. WATER QUALITY AND FISHERIES

This issue was discussed in FOB/AWR DEIS comments at pp. 47-50, in FOB/AWR scoping comments at pp. 2, 4, and additionally in FOB/AWR DEIS comments under the heading “Excessive Road System, Access Management, and Travel Management.” We incorporate those comments and the further discussion in the FOB/AWR FEIS DROD objection at pp. 31-35 which still stands into this objection and add the following discussion.

Agency fails to analyze the direct, indirect, and cumulative effects of project activities to water quality, fisheries, and the recovery of bull trout including considering alternatives to reduce effects.

The Draft SIES ROD (p. 2) states:

“Sediment levels in Willow Creek are higher than historic conditions due to human activities. The primary source of sedimentation in the project area is in the lower FS section of Willow Creek where NFSR (National Forest System Road) 364 parallels the creek for several miles. In some locations, road drainage is not functioning properly, and sediment is being delivered into the stream. Willow Creek is listed as sediment impaired by the State of Montana Department of Environmental Quality and contains a population of bull trout, a federally threatened species.”

Poorly maintained roads are degrading bull trout critical habitat, water quality, and fisheries. Project documentation implies that logging operations included in other purpose and need statements are necessary to fund or spur BMP repairs to existing roads. Yet logging operations cause degradation to bull trout habitat and streams. With new funding opportunities for recreation and recent funding of the Great American Outdoors Act, monies are available to bring the existing roads to BMP standards benefiting bull trout and water quality without adding the detrimental effects of road building and logging operations. Why was this not analyzed as an alternative?

Project documentation continues to promote log hauling over fire disturbance for bull trout even though they should expect high severity fire driven by weather will happen regardless of

project activities. We would like to add the following information for our objection refuting the idea that bull trout can adapt better to logging and roads than fire. After the Bitterroot fires of 2000, debris flows immediately after the fire were troublesome but in the long term, the effects were positive. Studies done a decade after the fire showed native fish populations increasing and non-native fish declining especially in areas of high intensity fire as soon as three years after the fire (Clancy et al 2012 presentation). Rieman and Clayton 1997 also offer the following information:

a) Although wildfires may create important changes in watershed processes often considered harmful for fish or fish habitats, the spatial and temporal nature of disturbance is important. Fire and the associated hydrologic effects can be characterized as “pulsed” disturbances (*sensu* Yount and Niemi 1990) as opposed to the more chronic or “press” effects linked to permanent road networks. Species such as bull trout and redband trout appear to have been well adapted to such pulsed disturbance. The population characteristics that provide for resilience in the face of such events, however, likely depend on large, well-connected, and spatially complex habitats that can be lost through chronic effects of other management. Critical elements to resilience and persistence of many populations for these and similar species will be maintaining and restoring complex habitats across a network of streams and watersheds. Intensive land management could make that a difficult job.

A paper by the Western Montana Level 1 Bull Trout Team (Riggers et al. 2001) states:

a) Habitat conditions are another factor that has changed significantly. In general, fish habitat quality is much less diverse and complex than historic, and native fish populations are therefore less fit and less resilient to watershed disturbances. Roads, more than any other factor, are responsible for the majority of stream habitat degradation on National Forest Lands in this area (USDA 1997). Historically roads were not present in watersheds and did not affect hydrologic or erosional patterns. Now, however, extensive road networks in many of our watersheds contribute chronic sediment inputs to stream systems and these effects are exacerbated when fires remove the vegetation that filters road runoff.

b) ... the real risk to fisheries is not the direct effects of fire itself, but rather the existing condition of our watersheds, fish communities, and stream networks, and the impacts we impart as a result of fighting fires. There, attempting to reduce fire risk as a way to reduce risks to native fish populations is really subverting the issues. If we are sincere about wanting to reduce risks to fisheries associated with future fires, we ought to be removing barriers, reducing road densities, reducing exotic fish populations, and re-assessing how we fight fires. At the same time, we should recognize the vital role that fires play in stream systems and attempt to get to a point where we can let fire play a more natural role in these ecosystems.

c) ...we believe, in most cases, proposed projects that involve large-scale thinning, construction of large fuel breaks, or salvage logging as tools to reduce fuel loadings with the intent of reducing negative effects to watersheds and the aquatic ecosystem are largely unsubstantiated. Post-fire activities such as these that increase the probability of chronic sediment inputs to aquatic systems pose far greater threats to both salmonid and

amphibian populations and aquatic ecosystem integrity than do fires and other natural events that may be associated with undesired forest stand condition (Frissell and Bayles 1996).

The Flathead Lake Biological Station has been studying the aquatic environment in the Crown of the Continent ecosystem for decades. Hauer et al. (2007) found that:

“Streams of watersheds with logging have increased nutrient loading, first as SRP and NO₃, which is rapidly taken up by stream periphyton. This leads to increased algal growth that is directly correlated with the quantity of logging within the watershed. The increased periphyton increases particulate organic matter in transport as the algal biomass is sloughed into the stream. We observed this as increased TP and TN in logged watershed streams. Other studies in the CCE have shown that increased sediment loading and an incorporation of fines into spawning gravel, especially during the summer and fall base flow period, has a dramatic effect on the success of spawning by bull trout (*Salvelinus confluentus*). Experiments have shown that as the percentage of fines increases from 20% to 40% there is >80% decrease in successful fry emergence.”

Hauer, et al. (1999) also found that bull trout streams in wilderness habitats had consistent ratios of large to small and attached to unattached large woody debris. However, bull trout streams in watersheds with logging activity had substantial variation in these ratios. They identified logging as creating the most substantive change in stream habitats.

“The implications of this study for forest managers are twofold: (i) with riparian logging comes increased unpredictability in the frequency of size, attachment, and stability of the LWD and (ii) maintaining the appropriate ratios of size frequency, orientation, and bank attachment, as well as rate of delivery, storage, and transport of LWD to streams, is essential to maintaining historic LWD characteristics and dynamics. Our data suggest that exclusion of logging from riparian zones may be necessary to maintain natural stream morphology and habitat features. Likewise, careful upland management is also necessary to prevent cumulative effects that result in altered water flow regimes and sediment delivery regimes. While not specifically evaluated in this study, in general, it appears that patterns of upland logging space and time may have cumulative effects that could additionally alter the balance of LWD delivery, storage, and transport in fluvial systems. These issues will be critical for forest managers attempting to prevent future detrimental environmental change or setting restoration goals for degraded bull trout spawning streams.”

Kirk, M.A. et al. (2021) state:

“..., we found that streams with intact forest cover at the watershed level had low thermal sensitivities, which slowed rates of projected warming. As a result, streams with forested watersheds were predicted to have smaller declines in thermal integrity and lower extirpation probabilities of brook trout. Additionally, non-native brown trout were not predicted to expand distributions under projected warming, suggesting minimal synergistic effects between non-native species and climate change. Forest cover buffers headwater streams from the effects of global change, similar to how groundwater inputs reduce the

rate of stream warming. Forest restoration at riparian and watershed levels should help mitigate thermal-induced degradation of cold-water aquatic resources.”

The Draft SEIS ROD (p. 7) states, “In response to concerns regarding road use and management, I have reviewed the potential impacts to water quality and fishes and explored alternative haul routes.” Log truck traffic on Willow Creek road is the main contributor of sediment delivery to the impaired stream. Alternative haul routes have been explored but none have been found. The agency explores other haul routes which are non-existent but does not consider reducing the number of trucks needed for the project by reducing logging activities.

The Draft SEIS ROD also (p. 7) states, “My decision to implement road BMP improvements will result in estimated road-related sediment reductions of 47-61% in the Willow Creek watershed as a long-term result of the proposed activities. But just three years after the Westside Project was completed, the roads look like this (Figure 3).

The Draft SEIS ROD (p. 9) claims, “the selected alternative focuses on improving the drainage and implementing Best Management Practices on the main travel routes that are currently open to public use and pose the highest risk to water quality and fisheries.” But it does not consider or analyze the illegal offroad use that is rampant in the project area as shown in the following photo (Figure 4).



Figure 3 – Lack of BMP maintenance



Figure 4 – Illegal offroad use

The recent history of poor road maintenance, continued off-road shenanigans, and more roads including stored roads that allow more off-road infractions affect the recovery of bull trout and are in violation of the forest-wide management objective to maintain and enhance fish habitat

by requiring high standards for construction and maintenance and reducing sediment from existing roads (Forest Plan, p. II-5).

The USFWS Biological Opinion (BiOp) 2019 determined the project *may affect, and is likely to adversely affect*, bull trout. The terms and conditions in the BiOp require monitoring, maintenance of BMPs, marking riparian areas as well as areas prone to slide as in the road failure of 1918, decommissioning roads and constant diligence. Considering the BMP track record in the area and the recent Willow Creek road failure, due diligence does not seem to be common practice on the forest. A trip to the Darby Lumber Lands II produced a report showing many of these violations (see Attachment B). The forest also violated SMZ regulations as noted in the report. The design features in Draft SEIS ROD, Appendix A also call for constant vigilance. But we have seen that even simple, easily executed design features are not followed. In the Westside Project, burn piles are still a mess right next to trails and tree markings have not been taken care of as per the forest plan.



Tree markings visible from trail



Burn pile right next to Coulee Trail

More egregious are the following two pictures.



Logging right next to a year-round pond on the Westside Project.
Note the stump just to the left of the pond.



Road conditions during log hauling operations on the DLL2 project.

The 2019 BiOp also states that these two repairs must be made within two years of the included incidental take statement: removal of the North Fork Willow Creek culvert and the upgrade of the culvert where FSR 364 crosses Willow Creek. Project documentation does not mention these repairs being completed. On the Mud Creek project, culvert replacements were approved but never completed from a previous project and the fisheries report stated they would probably never be done. Funding seems readily available for logging but not for improving fisheries.

Finally, we want to reaffirm our FEIS Objection p. 16.

“... Forest Service explains that Willow Creek is extremely cold, which delays Westslope cutthroat spawning until mid-June when the temperatures finally reach 10 degrees Celsius, so the analysis assumes impacts to fish eggs and fry emergence from road-related sedimentation would occur at levels typically observed in June or later rather than earlier in the spring when sedimentation is higher. (FEIS at 82). Yet, the FEIS fails to provide data showing the temperature trends for Willow Creek and if those may be increasing or are expected to increase as a result of climate change. Should Willow Creek warm sooner than June, cutthroat spawning could occur earlier, which in turn would make fish eggs and fry emergence more susceptible to road-related sedimentation.”

This is not remedied in new project documentation.

We are still awaiting reliable estimates of sediment transferred to streams because of log haul and other road use. As requested in our comments and original (FEIS) objection. And the Draft SEIS ROD does not demonstrate consistency with Forest Plan MA Standard 3b(12): “manage roads so open road mileage adjacent to fisheries and streams is limited to the current level.”

The Forest Service has acknowledged there are bull trout in Willow Creek. However, we are unaware of the Agency documenting the actual presence of bull trout in that waterbody.

In addition, we are concerned that the reconstruction of the Butterfly Creek Road (13111) is in violation of SMZ rules. The Draft SEIS ROD does not include an analysis of the effects of this reconstruction on bull trout.

Remedies: Delay decision until after completion of a full analysis of direct, indirect, and cumulative effects to the recovery of bull trout including analysis of illegal offroad use and BNF history of road maintenance. Analyze an alternative that improves roads with recreation monies without relying on logging activities. Explore and disclose funding acquired for roads and road repair in the project area.

The Forest Service must use eDNA monitoring to document the presence of bull trout in Willow Creek before, during, and after management actions related to the Gold Butterfly Project. Given the amount of sedimentation likely to impact Willow Creek during management actions, we are convinced such monitoring is essential to the long-term viability of bull trout.

10. PUBLIC HEALTH AND SAFETY

This issue was discussed extensively in the Gail and Stephen Goheen comments on the Draft EIS. We incorporate those comments into this objection and also incorporate by reference the Objection, which still have standing, of the Gold Butterfly project filed by Gail and Stephen Goheen within this Objection.

The Forest Service responses to comments indicates the agency doesn't take seriously public safety, air quality, and impacts to residents' quality of life, especially along the Willow Creek road.

The Forest Service fails to explore the impacts of abandoned vermiculite mine

This issue was discussed in FOB's Draft SEIS comments, p. 21. We incorporate those references into this objection and add the following discussion.

Our comments stated:

"The top of Skalkaho Mountain, in the Sapphire Mountains about ten miles directly east of Hamilton, exposes an extraordinary igneous intrusion almost identical to the Rainy Creek stock near Libby." (Roadside Geology of Montana, Hyndman and Thomas, p.199) A deposit of vermiculite occurs within that igneous complex.

Mining vermiculite near Libby has ceased but continues to cause one of the most deadly environmental disasters in the U.S.

Near the Libby vermiculite mine they have special firefighting teams with containerized air assigned to fight fires due to amphibole asbestos in the tree bark and elsewhere that would go into the smoke. <https://nbcmontana.com/news/local/possibility-of-asbestos-prompts-extra-precautions-for-firefighters-near-libby>

The presence of (amphibole) asbestos at the Hamilton vermiculite mine has not been tested, but should be assumed to occur until proven otherwise, as is indicated by the following statement. "Several early attempts to mine vermiculite in the Skalkaho intrusion went poorly. While at one time that seemed unfortunate, now it is clear that we narrowly escaped having another major environmental disaster." (Roadside Geology of Montana, Hyndman and Thomas, p.199)

There has been a significant patch of bare ground created by mining and exploration up there for decades. If there is asbestos present the wind would have distributed it to some unknown extent and fire would liberate it into the smoke. Roads cut into the ultramafic complex also expose soil and rock possibly containing amphibole asbestos.

Even though the area is generally downwind of the Bitterroot Valley an east wind or katabatic wind could carry asbestos fibers, if present, into the Valley. Smoke from fires in the area could also settle into the Valley. (FOB Draft SEIS comments, p. 21)

The Agency's response to those comments was:

Gordon L. Zucker, Dr. Engineering Sciences Technical Director from Montana Tech analyzed vermiculite samples from the now closed and reclaimed mine in the Gold Butterfly area.

“The only conclusion we can reach in regard to the present regulations cited above is that there is so little tremolite or other fibrous minerals present in Western Vermiculite’s ore that it is highly unlikely that any such fibers will be found in air samples collected during mining or processing the ore.”

This is in stark contrast to what can be said for the massive vermiculite deposits that were not only mined but also processed in the Libby area. This coupled with the extremely high levels of fine asbestos fibers associated with the type of vermiculite found at Libby, plus the air inversions associated with the Libby area, caused the severe health impacts on the population.

We find that response inadequate because it includes no date when the analysis was conducted, how it was conducted, or any data from the investigation. The Forest Service response offers no proof that management activities proposed as part of this project will not release harmful particles into the local area which could negatively affect human health.

11. CLIMATE CHANGE AND CARBON SEQUESTRATION

This issue was discussed in FOB/AWR DEIS comments at pp. 50-52, FOB/AWR scoping comments at p. 3, 5, FOB/AWR FEIS objections at pp. 35-51 which still have standing, and our comments on the DSEIS at pp. 14-17, 20. We incorporate those comments/objections into this objection and add the following discussion.

FOB’s Draft SEIS comment, p. 14 states:

DSEIS does not consider recent national direction. Issued on August 1, 2016, this directive from Executive Office of the President, Council on Environmental Quality has been reimplemented as national direction. [See 86 Fed Reg. 10252 (Feb. 19, 2021).]

The 2016 CEQ guidance acknowledges, “changes in our climate caused by elevated concentrations of greenhouse gases in the atmosphere are reasonably anticipated to endanger the public health and public welfare of current and future generations.” It directs federal agencies to consider the extent to which a proposed action such as this project would contribute to climate change. It rejects as inappropriate any notion that this project is of too small a scale for such consideration:

“Climate change results from the incremental addition of GHG emissions from millions of individual sources, which collectively have a large impact on a global scale. CEQ recognizes that the totality of climate change impacts is not attributable to any single action, but is exacerbated by a series of actions including actions taken pursuant to decisions of the Federal Government. Therefore, a statement that emissions from a proposed Federal action represent only a small fraction of global emissions is essentially a statement about the nature of the climate change challenge, and is not an appropriate basis for deciding whether or to what extent to consider climate change impacts under NEPA. Moreover, these comparisons are also not an appropriate method for characterizing the potential impacts associated with a proposed action and its alternatives and mitigations because this approach does not reveal anything beyond the nature of the climate change challenge

itself: the fact that diverse individual sources of emissions each make a relatively small addition to global atmospheric GHG concentrations that collectively have a large impact.”³

Please quantify GHG emissions as required by law. The agency can only use a qualitative method if tools, methodologies, or data inputs are not reasonably available. If that is the case, there needs to be rationale as to why a quantitative analysis is not warranted. Quantitative tools are readily available, so the FS must comply.⁴

Forest Service response: Forest carbon losses associated with timber harvests have been small compared to the total amount of carbon stored in the Forest, resulting in a loss of about 0.1 percent of non-soil carbon from 1990 to 2011. This does not account for the continued storage of harvested carbon in wood products or the effect of substitution of the use of wood products instead of concrete or metal which produce more greenhouse gases. The biggest influence on current carbon dynamics on the Bitterroot National Forest is the legacy of forest fire alongside intensive timber harvesting and land clearing for agriculture during the 19th century, followed by a period of forest recovery and more sustainable forest management beginning in the early to mid-20th century, which continues to promote a carbon sink today (Birdsey et al. 2006 in Bitterroot Carbon Assessment). However, stands on the Bitterroot National Forest are now middle to older aged. The rate of carbon uptake and sequestration generally decline as forests age. Accordingly, projections from the RPA assessment indicate a potential age-related decline in forest carbon stocks in the Northern Region (all land ownerships) beginning in the 2020s. On the Bitterroot Forest, the percentage of forest greater than 80 years old was 64.1 percent in 2011.

We find that response unacceptable for the following reasons.

- First, the response ignores the fact that the proposed management actions not only remove carbon currently stored in trees but that the same management actions disturb the soil to such a degree that a substantial amount of soil carbon is also lost. (Achat 2015). In addition, in Oregon the wood products sector was found to be the greatest contributor to CO₂ emissions. (See this document’s Appendix A). The probability that Montana’s wood products sector is any less of a contributor to CO₂ emissions is miniscule.
- Second, the response sidesteps the fact that the carbon sequestration ability of the forest is reduced, both short- and long-term by the proposed management actions.
- Third, most rigorous and recent scientific research refutes the insinuation that the continued storage of harvested carbon in wood products is meaningful to any degree. (See this document’s Appendix A)
- Fourth, the Agency does not backup its declaration that “concrete or metal which produce more greenhouse gases.”
- Fifth, blaming the current carbon dynamics on previous practices misses the point, which is that CEQ directives and the current Washington administration require the Agency to take corrective action, now.

³ Fed Reg. 10252 (Feb. 19, 2021) - <https://www.govinfo.gov/content/pkg/FR-2021-02-19/pdf/2021-03355.pdf>

⁴ Greenhouse Gas (GHG) Accounting Tools - <https://ceq.doe.gov/guidance/ghg-accounting-tools.html>

- Sixth, the assertion that because BNF forests are “middle and older aged the rate of carbon uptake is declining has been shown by recent rigorous scientific studies to not only be false but that the opposite is true.

FOB’s Draft SEIS comment, pp. 14-16 states:

BNF fails to analyze the effects of the proposed old growth amendment on climate change and carbon sequestration. Large, old trees store disproportionately large amounts of carbon, as carbon storage dramatically increases with size (dbh) (Mildrexler et al, 2020; Stephenson et al, 2014). With future climate crises probable, retaining large, old trees will not only help mitigate or buffer climate change, but will benefit ecosystems in other ways through their biodiversity and resilience to fire, disease, and drought. Will using the proposed amendment result in more large trees cut than if the Forest Plan standards were used? Will using the proposed amendment result in more commercial timber production than using the Forest Plan old-growth standards? Numerous researchers (Campbell et al, 2011; Harris et al, 2016; Law and Warring, 2015; Law, et al, 2018; Reinhardt and Holsinger, 2010; Stenzel et al, 2019) have found that logging emits significant atmospheric carbon, much more than wildfires. Logging old forests in particular worsens climate change by releasing significant amounts of carbon and by preventing such forests from continuing to sequester carbon. As the Forest Service has admitted regarding mature forests in Alaska, such forests “likely store considerably more carbon compared to younger forests in this area (within the individual trees themselves as well as within the organic soil layer found in mature forests).” Forest Service, Tongass Land and Resource Management Plan, Final EIS (2016) at 3-14, excerpts attached as Attachment A. This is so because when a forest is cut down, the vast majority of the stored carbon in the forest is released over time as CO₂, thereby converting forests from a sink to a “source” or “emitter.” See, e.g., D. DellaSala, *The Tongass Rainforest as Alaska’s First Line of Climate Change Defense and Importance to the Paris Climate Change Agreements* (2016) at 5, attached as Attachment B. According to a 2019 IPCC report, deforestation causes climate pollution, and avoiding deforestation will reduce climate pollution. Intergovernmental Panel on Climate Change, *Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse gas fluxes in Terrestrial Ecosystems, Summary for Policymakers* (Aug. 2019) at 7, 23, attached as Attachment C. See also B. Law et al., *Land use strategies to mitigate climate change in carbon dense temperate forests*, *Proceedings of the Nat’l Academy of Sciences*, vol. 115, no. 14 (Apr. 3, 2018) at 3663 (“Proven strategies immediately available to mitigate carbon emissions from forest activities include ... reducing emissions from deforestation and degradation.”), (Attachment D).

A 2019 report found that protecting national forests in the American Northwest, including in Montana, would be an effective way to reduce the contribution of land management to climate pollution. The study concludes:

If we are to avert our current trajectory toward massive global change, we need to make land stewardship a higher societal priority. Preserving temperate forests in the western United States that have medium to high potential carbon sequestration and low future climate vulnerability could account for approximately 8 yr of regional fossil fuel emissions,

or 27–32% of the global mitigation potential previously identified for temperate and boreal forests, while also promoting ecosystem resilience and the maintenance of biodiversity.

P. Buotte et al., Carbon sequestration and biodiversity co-benefits of preserving forests in the western United States, *Ecological Applications*, Article e02039 (Oct. 2019) at 8, available at <https://esajournals.onlinelibrary.wiley.com/doi/pdf/10.1002/eap.2039> (last viewed July 29, 2021), and attached as Attachment E. This study was funded in part by the USDA. The coarse-scale map provided with the study indicates that there may be forest stands in the project area that are rated as “medium” or “high” priority for preservation to mitigate climate change. Id. at 4 (Figure 1).

Recent studies agree that maintaining forests rather than cutting them can help reduce the impacts of climate change. “Stakeholders and policy makers need to recognize that the way to maximize carbon storage and sequestration is to grow intact forest ecosystems where possible.” Moomaw, et al., *Intact Forests in the United States: Proforestation Mitigates Climate Change and Serves the Greatest Good*, *Frontiers in Forests and Global Change* (June 11, 2019) at 7, attached as Attachment F (emphasis added). One report concludes:

Allowing forests to reach their biological potential for growth and sequestration, maintaining large trees (Lutz et al 2018), reforesting recently cut lands, and afforestation of suitable areas will remove additional CO₂ from the atmosphere. Global vegetation stores of carbon are 50% of their potential including western forests because of harvest activities (Erb et al 2018). Clearly, western forests could do more to address climate change through carbon sequestration if allowed to grow longer.

T. Hudiburg *et al.*, Meeting GHG reduction targets requires accounting for all forest sector emissions, *Environ. Res. Lett.* 14 (2019) (emphasis added), attached as Attachment G.

Further, a June 2020 literature from leading experts on forest carbon storage reported:

There is absolutely no evidence that thinning forests increases biomass stored (Zhou et al. 2013). It takes decades to centuries for carbon to accumulate in forest vegetation and soils (Sun et al. 2004, Hudiburg et al. 2009, Schlesinger 2018), and it takes decades to centuries for dead wood to decompose. We must preserve medium to high biomass (carbon-dense) forest not only because of their carbon potential but also because they have the greatest biodiversity of forest species (Krankina et al. 2014, Buotte et al. 2019, 2020).

B. Law, et al., *The Status of Science on Forest Carbon Management to Mitigate Climate Change* (June 1, 2020), attached as Attachment D.

Together, these studies demonstrate the value of retaining old growth for sequestering atmospheric carbon and the harmful release of carbon from logging activities. As such it is imperative for the Forest Service to compare estimated carbon emissions and carbon sequestration using Green et al. standards versus the Forest Plan standards on the Gold Butterfly project, and in comparison, to the alternative we proposed.

Forest Service response: As discussed in the response to ‘Request to see comparison of Forest Plan definition old growth with Green et al. definition’ more old growth would be

identified and maintained using the Green et al definition, resulting in a higher level of storage of carbon in old growth forests.

Forest Service response: See sections 3.2 and 4.1 in Bitterroot Carbon Assessment for a discussion regarding the effects of Forest Aging. Forests are generally more productive when they are young to middle age and as stands age, their rate of carbon accumulation declines. Currently, the forests of the Bitterroot are middle aged and older. If the Forest continues on this aging trajectory, more stands will reach a slower growth stage in coming decades, potentially causing the rate of carbon accumulation to decline. The Gold Butterfly project would result in more acres of younger stands which will be able to store more carbon as they regenerate.

We find these responses unacceptable for the following reasons.

The Bitterroot Carbon Assessment (BCA), section 3.1, reveals that:

... The resulting disturbance maps indicate that fire has been the dominant disturbance type detected on the Bitterroot NF from 1990 to 2011, in terms of the total percentage of forested area disturbed over the period (Fig. 6a). However, according to the satellite imagery, fires affected a relatively small area of the forest during this time. With the exception of 2002, fire affected less than 3 percent of the total forested area of the Bitterroot NF in any single year from 1990 to 2011, and in total about 14 percent (approximately 82,686 ha) of the average forested area during this period (590,804 ha). Lesser disturbance was due to insect activity and in total about 1.3 percent (approximately 7,934 ha) of the average forested area from 1990 to 2011 (82,686 ha) was impacted by insect activity. The total amount of disturbed forest from all factors during this period was 15.7 percent, a total of 93,683 ha disturbed. Although the disturbances varied in intensity, they generally removed less than 75 percent of canopy cover (magnitude) (Fig. 6b). In total, only 2.8 percent of the forest had a disturbance that resulted in a canopy loss of greater than 75 percent from 1990 to 2012.

Although the Agency continues to promote logging and thinning as the best method to minimize “disturbance,” this Assessment shows the total amount of disturbance between 1990 and 2011 amounted to less than 2.8 percent of the forest (that resulted in canopy loss >75%. (Bitterroot Carbon Assessment, pp. 11-12)

Refuting declarations that logging and thinning increases a forest’s ability to sequester carbon, the BCA states:

..., several decades may be needed to recover the carbon removed depending on the type of the harvest (e.g., clear-cut versus partial cut), as well as the conditions prior the harvest (e.g., forest type and amount of carbon) (Raymond et al., 2015). (Bitterroot Carbon Assessment, p. 14)

Given the increasing rate of global warming, waiting “several decades” to sequester carbon is not acceptable.

The Agency continues to declare that younger forests sequester more carbon than older forests.

Forests are generally most productive when they are young to middle age, then productivity peaks and declines or stabilizes as the forest canopy closes and as the stand experiences increased respiration and mortality of older trees (Pregitzer & Euskirchen, 2004; He et al., 2012), as indicated by the in NPP-age curves (Fig. 9b), derived in part from FIA data). (Bitterroot Carbon Assessment, p. 14)

..., the forests of the Bitterroot NF are mostly middle-aged and older. As of 2011, 64.1% of the Forest was greater than 80 years old; 35.9% of the forest was less than 80 years old (Fig. 9a). If the Forest continues on this aging trajectory, more stands will reach a slower growth stage in coming decades (Fig. 9b), potentially causing the rate [of] carbon accumulation to decline and the Forest may eventually transition to a steady state in the future. It is also important to note that once biomass carbon stocks approach maximum levels, ecosystem carbon stocks can continue to increase for many decades as dead organic matter and soil carbon stocks continue to accumulate (Luyssaert et al., 2008). Furthermore, while past and present aging trends can inform future conditions, the applicability may be limited, because potential changes in management activities or disturbances could affect future stand age and forest growth rates (Williams et al., 2012). (Bitterroot Carbon Assessment, pp. 18-19)

The BCA makes the point that: “It is also important to note that once biomass carbon stocks approach maximum levels, ecosystem carbon stocks can continue to increase for many decades as dead organic matter and soil carbon stocks continue to accumulate (Luyssaert et al., 2008).”

That claim has been contradicted by vast amounts of recent scientific research. In fact, the opposite is now generally accepted by the majority of scientists, at least those not associated or funded by the timber industry. (Bitterroot Carbon Assessment, p. 19)

However, the Forest Service ignores the salient point that even after biomass carbon stocks (trees and other vegetation) approach maximum levels, carbon sequestration in organic matter and soil continues to increase.

Remedy: The Draft SEIS ROD must be withdrawn and a complete analysis of the project’s effect on global warming and carbon sequestration performed.

12. FIRE SUPPRESSION AND FIRE ECOLOGY

This issue was discussed in FOB/AWR DEIS comments at pp. 52-57, FOB/AWR scoping comments at p. 2, and FOB/AWR FEIS objections at pp. 51-62 which still have standing. We incorporate those comments/objections into this objection.

13. FOREST “VEGETATION” AND “RESILIENCE”

This issue was discussed in FOB/AWR DEIS comments at pp. 57-60, FOB/AWR FEIS objections at 63-68, which still have standing, and our DSEIS comments at pp. 14-16. We incorporate those comments/objections into this objection.

14. SCIENTIFIC INTEGRITY

This issue was discussed in much detail in FOB/AWR DEIS comments at pp. 60-67 and FOB/AWR FEIS objections at 68 which still have standing. We incorporate those comments/objections into this objection.

15. SOIL PRODUCTIVITY

This issue was discussed in FOB/AWR DEIS comments at pp. 67-79 and FOB/AWR FEIS objections at p. 68 which still have standing. We incorporate those comments/objections into this objection.

16. ROADLESS EXPANSE

This issue was discussed in FOB/AWR DEIS comments at pp. 79-80, FOB/AWR scoping comments at p. 3, 5, and FOB/AWR FEIS objections at p. 68 which still have standing. We incorporate those comments/objections into this objection.

17. WEEDS

This issue was discussed in FOB/AWR DEIS comments at p. 81 and FOB/AWR FEIS objections at pp. 71-72 which still have standing. We incorporate those comments/objections into this objection.

18. ECONOMICS

FOB/AWR comments on the DEIS mentioned the lack of economic analysis (p. 80). Economics was also raised in the context of long-term road maintenance (p. 20), the costs of following up consistent with the proposed management regime (p. 58), in context of the Willow Creek road maintenance (p. 81), and in other regards (including p. 82). As was the case with other issues, several comments were largely ignored. FOB/AWR also filed FEIS objections at pp. 72-73 which still have standing. We incorporate those comments/objections into this objection and add the following discussion.

The most important economic issue is the significant shortfall in funds to do the project (as shown in the Economic Analysis which hasn't been updated). Besides not covering costs regarding the additional public health and safety issues (discussed in our previous comments and objections), all of which will be very real (relating to dust, road repair, bridge issue, etc.), there will not be nearly enough money to do the restoration work which the Agency asserts is planned within the Project boundaries. What that means is, in the end, most of the Forest Service's ecological goal commitments cannot and will not be achieved. The remediation for bull trout, forest rehab, etc., is doomed to fail. The Project as planned (except for the timber harvesting) is inherently a fallacy.

19. SCENERY

This issue was discussed in FOB/AWR DEIS comments at pp. 82-83 and FOB/AWR FEIS objections at p. 73 which still have standing. We incorporate those comments/objections into this objection.

20. MONITORING

This issue was raised in FOB/AWR scoping comments at pp. 3-4, AWR/FOB FEIS objections at p. 73 which still have standing, and our DSEIS comments at p. 8. We incorporate those comments/objections into this objection.

21. ALTERNATIVES

This issue of appropriate inclusion of and consideration of a reasonable alternative to the Forest Service's proposed action was raised in: FOB/AWR July 30, 2018, comments on the DEIS at pp. 1-3, 11, 18, 19, 24, 58; a November 29, 2017 letter from AWR regarding the Alternative Workshop; a November 30, 2017, letter from WildEarth Guardians regarding the Alternative Workshop; an undated comment by Jeff Lonn regarding the Alternatives Workshop; the December 4, 2017, comments of Larry Campbell regarding Alternative Development; the undated comments of Michele Dieterich regarding the Alternatives Workshop. We incorporate those comments into this objection and add the following discussion; FOB/AWR FEIS objections at pp. 73-74 and FOB/AWR DSEIS comments at pp. 4, 14.

22. VIOLATION OF HEALTHY FOREST RESTORATION ACT (HFRA)

This issue was discussed in FOB/AWR FEIS objections at pp. 74-75 which still have standing, and FOB/AWR DSEIS comments at pp. 4, 21. We incorporate those comments/objections into this objection and add the following discussion.

Wildland Urbane Interface Issues

"This project is proposed under Healthy Forests Restoration Act (HFRA; 16 USC §6591) authority." (Gold Butterfly scoping letter)

"96% percent of treated acres would occur within the Wildland-Urban Interface." (Draft SEIS ROD, p.8)

The Draft SEIS ROD discloses that a change was made to the WUI map and definition used for the Gold Butterfly project:

The Gold Butterfly Project analysis initially used a previous version of the CWPP and I have decided to utilize the most current information available to use from our county and state partners. This new information remains within the scope and range of effects considered in the original analysis.

This document, the 2009 CWPP map, was reviewed and incorporated by reference into the 2017 Ravalli Pre-Disaster Mitigation Plan and is the most current text describing the authoritative layer by the county and state. The CWPP map can be found on page 5 in Appendix E of the Bitterroot Community Wildfire Protection Plan Update, <https://ravalli.us/507/Document-Library>. This plan also reflects on how the county and others developed the maps and how their at-risk communities and WUI is defined in the Healthy Forests Restoration Act (HFRA).

For the purposes of the CWPP, the Wildland Urban Interface (WUI) is defined as the zone where structures or other human development meets to intermingle with undeveloped wildland or vegetative fuels. The width of the zone is determined on a site-specific basis to protect values at risk from wildland fire. The Wildland-Urban Interface has been identified by the Bitterroot Community Wildfire Protection Plan (CWPP) on the Bitterroot National Forest as 1 to 1½ mile deep along the forest boundary.” (Draft SEIS ROD, Appendix C, p. 2)

HFRA, the relevant federal law, defines a “wildland-urban interface” as:

- (A) an area within or adjacent to an at-risk community that is identified in recommendations to the Secretary in a community wildfire protection plan; or
- (B) in the case of any area for which a community wildfire protection plan is not in effect
 - (i) an area extending ½-mile from the boundary of an at-risk community;
 - (ii) an area within 1½ miles of the boundary of an at-risk community, including any land that:
 - (I) has a sustained slope that creates the potential for wildfire behavior endangering the at-risk community;
 - (II) has a geographic feature that aids in creating an effective fire break, such as a road or ridge top; or (III) is in condition class 3, as documented by the Secretary in the project-specific environmental analysis; and
 - (iii) an area that is adjacent to an evacuation route for an at-risk community that the Secretary determines, in cooperation with the at-risk community, requires hazardous fuel reduction to provide safer evacuation from the at-risk community.”

The Wildland-Urban Interface has been identified by the Ravalli County Bitterroot Community Wildfire Protection Plan (CWPP) on the Bitterroot National Forest as 1 to 1½ mile deep along the forest boundary.

Ravalli County CWPP describes the WUI as:

Decades of fire suppression have altered the fire dependent ecosystem in which we live and have inadvertently created heavy fuels that are more susceptible to intense burning. Despite the number of acres burned in 2000, over 1.3 million acres of state, private, and national forest land in the Bitterroot are in a condition that could contribute to future catastrophic wildfires. Treatment of hazardous fuels is one of the most proactive ways to reduce the potential impacts from wildland fire. Treating fuels reduces the fire risk in an area, while increasing the chance that fire protection agencies can control a fire before it gets out of hand. Defensible space practices and forest fuel treatments are effective ways of protecting residential homes, neighborhoods, communities, and watersheds. At-Risk Ravalli County communities include: Florence, Stevensville, Victor, Pinesdale, Corvallis,

Hamilton, Darby, West Fork, Sula, and other areas where numerous residents live in the Wildland Urban Interface in Ravalli County that meet the above mentioned criteria. (CWPP 2009) (EIS Supporting Documents, Fire-001, p.2)

The Gold Butterfly Draft SEIS ROD does not appear to display the WUI map used for project analysis. The BNF puts the burden of finding the CWPP WUI map onto the public, requiring computer access and several-step navigation of the Ravalli County website to view a key piece of information.

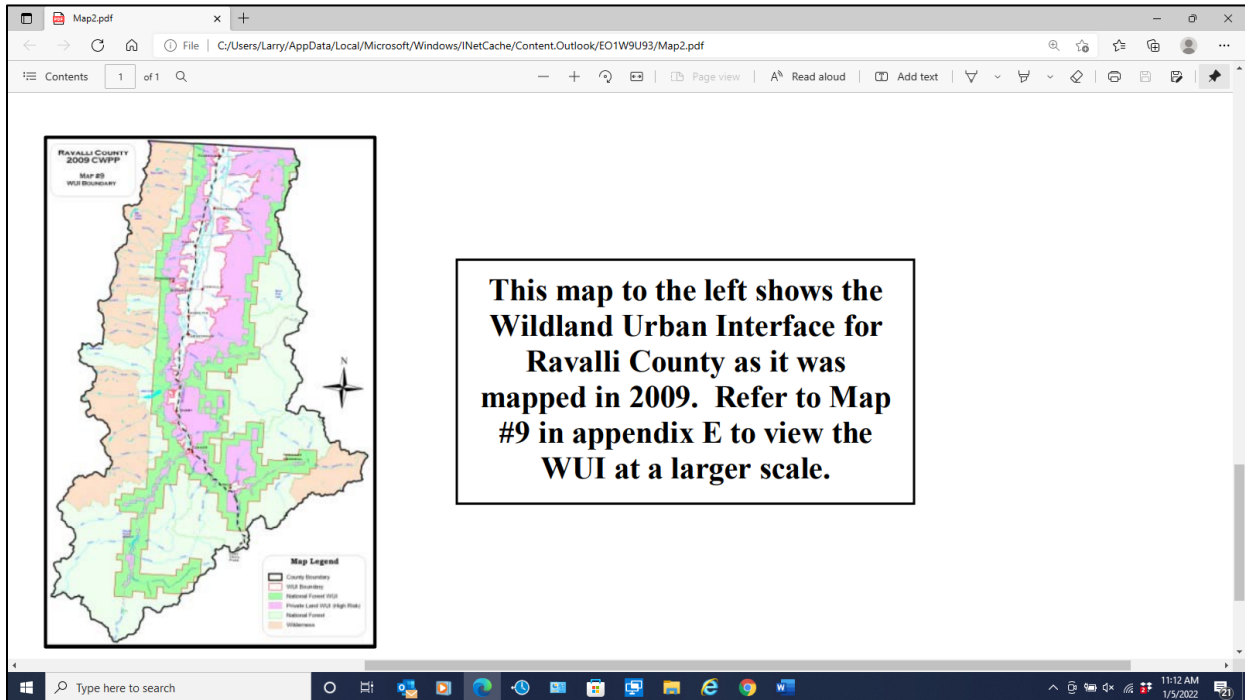


Figure 5 – Screen shot of WUI map

Simply adopting the CWPP definition and map of the WUI is not sufficient for NEPA purposes. Simply saying that the Project is within the wildland-urban interface, without more, does not make it so. The CWPP and WUI map should be subject to a normal USFS NEPA process, including analysis and public review. The EIS does not rationalize the blanket inclusion of an area 1 to 1½ mile wide along the Forest boundary independent of consideration of the existence of human structures or site-specific characteristics. Nearby private land is sparsely inhabited and generally upwind of the project area. Most of the project area boundary is miles from any homes.

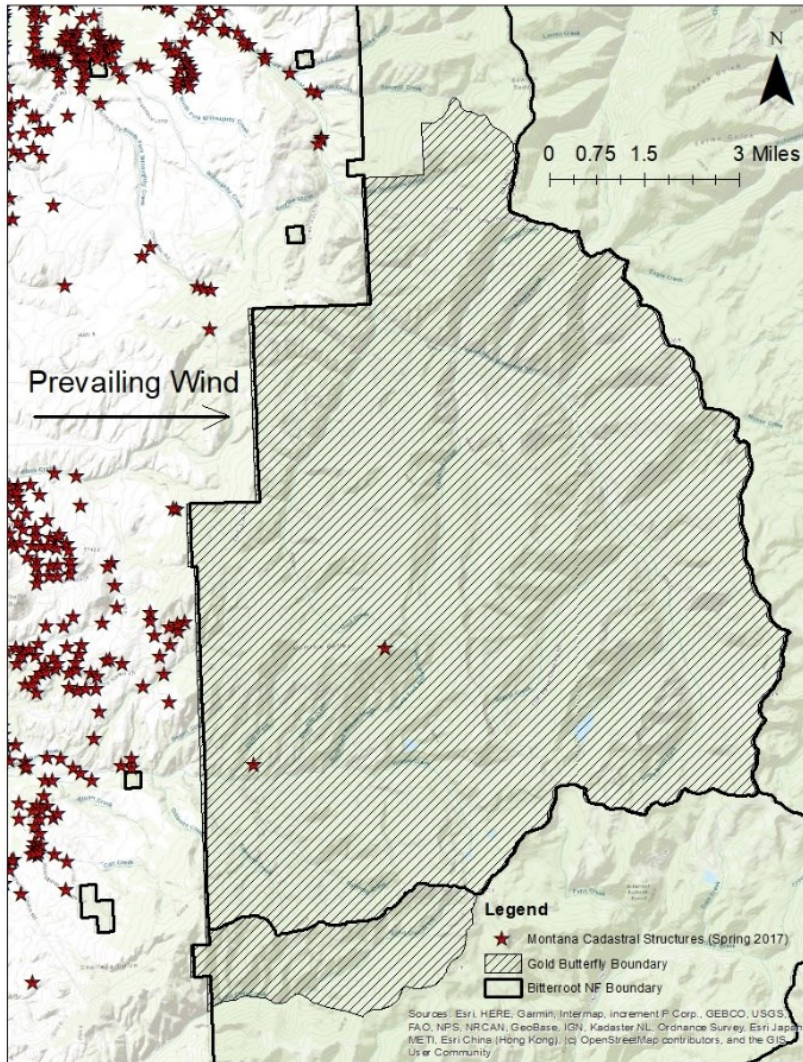


Figure 6 - A map displaying Gold Butterfly Project Area

The 2009/2010 Bitterroot Community Wildfire Protection Plan wildland urban interface dramatically expands the wildland urban interface and includes a one-mile buffer zone along the entire National Forest boundary, regardless of housing density. (Figure 6)

An alternative HFRA definition of the interface community emphasizes a population density of 250 or more people per square mile.

Category 2. Intermix Community

The Intermix Community exists where structures are scattered throughout a wildland area. There is no clear line of demarcation; wildland fuels are continuous outside of and within the developed area. The development density in the intermix ranges from structures very close together to one structure per 40 acres. Fire protection districts funded by various taxing authorities normally provide life and property fire protection and may also have wildland fire protection responsibilities.

An alternative definition of intermix community emphasizes a population density of between 28-250 people per square mile.

Category 3. Occluded Community

The Occluded Community generally exists in a situation, often within a city, where structures abut an island of wildland fuels (e.g., park or open space). There is a clear line of demarcation between structures and wildland fuels. The development density for an occluded community is usually similar to those found in the interface community, but the occluded area is usually less than 1,000 acres in size. Fire protection is normally provided by local government fire departments.

A very small portion, if any, of the project Gold butterfly area would meet these definitions of communities at risk.

Remedy: Withdraw the Draft SEIS ROD. Design a proposed action that fully complies with the law. Subject the Ravalli County Community Wildfire Protection Plan and WUI to a full NEPA analysis and complies with NFA. (See AWR v. Higgs USFS (Idaho) Hanna Flats MSJ (decision) - 27apr21)

The analysis should include a publicly available cadastral map, disclose the distances to existing structures from the project boundary, reveal intervening vegetation types, and the status of fire-hazard work performed on adjacent and/or intervening private lands.

Submitted respectfully,

/S/

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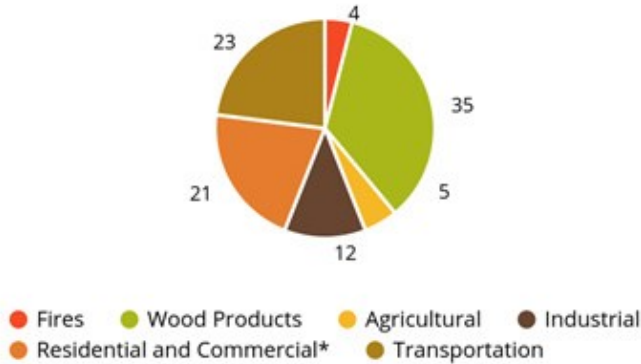
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Appendix A

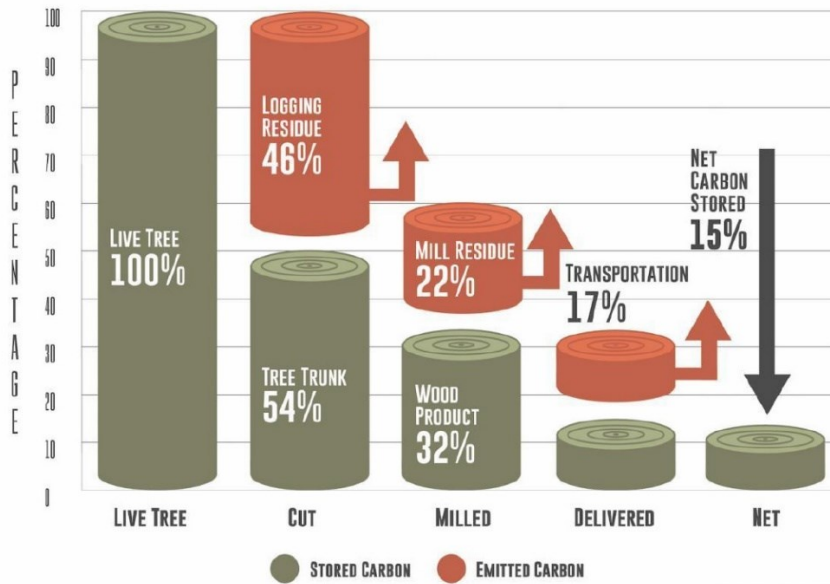
Percent carbon dioxide emissions by sector in Oregon 2011-2015



Sources: Oregon Global Warming Commission and Oregon State/University of Idaho Study
 Note: Utility fuel use is subtracted from residential and commercial data reported by the Oregon Global Warming Commission

BEAM venngage.com/beam

FATE OF CARBON FROM HARVESTED WOOD



DATA FROM SMITH ET AL. 2006 AND GOMER ET AL. 2006

Appendix B

References cited in the Objection and Incorporated documents

2020 Biological Assessment (BA) - Bitterroot National Forest Grizzly Re-consultation

2021 BiOp Appendix A – Maps

2021 BiOp Appendix B - Forest Plan Direction

2021 BiOp Appendix C - Elk Plan Amendment

2021 BiOp Appendix D - Food Storage Order

2021 BiOp Appendix E - Travel Plan Selected Alternative

2021 BiOp Appendix F - Secure Habitat Analysis

2021 BiOp Appendix G - Secure Habitat Table

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