Objection Reviewing Officer, Northern Region
Federal Building, 26 Fort Missoula Road
Missoula MT 59804
Cc: Matt Anderson, Forest Supervisor, Bitterroot National Forest

Subject: Gold Butterfly Project DROD

Date: January 11, 2022

Commentor: The Bitterroot Forest Collaborative
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The Bitterroot Forest Collaborative, or BFC, (formerly the Bitterroot Restoration Committee), thanks you for the opportunity to comment on the Draft Record of Decision (DROD) for the Gold Butterfly Project. BFC has submitted multiple comments on the project in the past, and we would appreciate the opportunity to continue to be involved as implementation occurs. Our collaborative is committed to science-based management of our National Forests and public lands. Maintaining or restoring properly functioning ecosystems is our primary objective; market factors, such as forest products and jobs, are beneficial secondary outcomes of science-based natural resource management.

BFC has been involved in the Gold Butterfly project proposal, in its various iterations, since its inception. In fact, our group initially recommended implementing a forest restoration project in the Butterfly Creek area years ago. While we supported aspects of the project, we were not in concurrence and filed an Objection on July 19th, 2019. Our Objection was based primarily on: (1) the potential adverse impacts of roads on streams and wildlife security, (2) the impacts of timber harvest in old-growth habitat, and (3) insufficient monitoring needed to adequately evaluate potential impacts from roads and timber harvest on wildlife habitat, especially on old-growth forests.

BFC also submitted comments on the draft Supplemental Environmental Impact Statement (DSEIS) on July 27, 2021. These comments focused on (1) ensuring that quality old growth and associated wildlife habitat be preserved and expanded, and (2) guaranteeing that monitoring will be funded and done to evaluate impacts on old growth.

According to p. 3 of the DROD, the following modifications were made to the original project:

1. **Convert 258 acres of old growth regeneration cuts to commercial intermediate treatments**. This is a positive change, but had already been made under modified Alternative 2 chosen in the original 2019 ROD because regeneration harvest of old growth is prohibited by HFRA, which authorizes this project. Following this change, BFC asked in their 2019 comments that BNF "reconsider the project's proposed actions/treatments and their possible impacts on OG, wildlife, and habitat". Although our committee conducted thoughtful discussions on whether

OG should be treated with noncommercial understory thinning or simply left alone, we did not consider any large-scale commercial thinning of OG as proposed under the DROD.

2. **Convert 154 acres of old growth regeneration cuts to non-commercial treatment.** This is also a positive change that BFC supports, but this change had also already been made in the modified Alternative 2 chosen in the original ROD.
3. **Convert 37 units of >40 acre regeneration harvest to 40 acres or less.** BFC supports this change.

One other significant modification in the DROD (Appendix B, p. 4) is the reduction of old growth to be maintained in MA 2 and MA3b third order drainages from 8% to 3%. BFC opposed any decreases in old growth percentages in the DSEIS comments submitted July 27, 2021 (see below).

BFC, as a science-based group, is also disappointed that our cited literature was dismissed, without explanation, as being less "accurate, relevant and reliable" than that provided in the FEIS (DROD, Appendix B, p. 5).

With the emphasis BNF has been placing on reducing stream sediments from roads, BFC thinks it is especially unwise to reopen the Butterfly Road (FR 13111) for a road excavator and full-sized vehicle traffic for administration and contractor use. It should be noted that, years ago, the BRC had strong reservations about opening this road during the original "Butterfly" project due to its proximity to the creek. We are concerned that the reopening of the Butterfly Road (FR 13111) will not comply with Montana's Streamside Management Zone (SMZ) Laws and Rules.

It appears that no other significant changes have been made to the project following either the original DROD objection period or the DSEIS comment period. Therefore, BFC also submits for reconsideration the two previous comment submissions. The 2021 DSEIS comments follow in this document, while the 2019 Objection is attached as a separate pdf. Please consider all of these comments.

**Below are BFC DSEIS comments, submitted July 27, 2021. New comments based on the DROD are added in blue italics:**

As the DSEIS deals largely with adaptive management, particularly of old-growth habitat on the Bitterroot National Forest, we are focusing our current comments on relevant issues of old-growth habitat features and monitoring and on larger-scale (both spatial and temporal) views. Our comments are based primarily on our earlier 2019 Objection to the Gold Butterfly project and on our collaborative's recently approved Position Statement on Special Habitats, Habitat Features, and Habitat Conditions Position Statement, hereafter referred to as our Special Habitats Position Statement (see attached). We hope that you will give our comments strong consideration when finalizing the SEIS and during all phases of project implementation.

**OLD-GROWTH HABITAT**

Throughout our Special Habitats Position Statement, we devote considerable attention to old growth. The following excerpt from the Background section discusses the importance of old-growth forests:

> Because special habitats support disproportionately greater species richness or provide the only habitat suitable for obligate species, special habitats need special consideration in managed landscapes. Depending on the specific circumstances, different types of management may be necessary. Maintaining appropriate representation of old-growth forests, for example, may need complete protection in some cases, recruitment of replacement habitat in other cases, silvicultural treatment to maintain old-growth conditions (tree diameter, stand density, composition, and structure in ponderosa pine habitat, for example) in other situations and actions such as treating adjacent timber stands in a manner that helps reduce the risk of losing existing old-growth to wildfire in yet others. Similarly, snag retention in timber sale areas or the actual creation of snags may be necessary to meet Forest Plan standards and provide sufficient snags to meet the needs of cavity nesters.
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> Providing sufficient and quality old growth habitat remains a contentious issue on the Bitterroot National Forest and therefore merits disproportionately greater discussion and consideration from other special habitats. Old growth forests are ecosystems distinguished by old trees and related structural attributes such as snags, down woody material, and multiple canopy layers. According to Principle 6 in Hessburg et. al. (2015): "Widely distributed large, old trees provide a critical backbone to dry pine and dry to mesic mixed-conifer forest landscapes."
> *FS response to the above two paragraphs was simply: **"This project-specific amendment is proposed to improve old growth management"** (DROD Appendix C, p. 47) without explaining how cutting OG trees and building roads through OG will accomplish this goal.*
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> Large, old trees store disproportionate 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.
*FS response (DROD, Appendix C, p. 18, 47) was:* ***"Fire and disease account for the highest losses of non-soil carbon stocks, and these together are multiple times higher than the non-soil carbon stock removed by timber harvest. Therefore, the net effect of harvest that leads to stands that are more resilient to fire and disease would result in more carbon stored. See Bitterroot Carbon Assessment paper (CLIMATE-004) page 14 for a discussion regarding that removing carbon from forests for human use can result in lower net contributions of greenhouse gases to the atmosphere than if the forest was not managed."*** *However, no data are given in support of these statements in either Appendix C or PF-CLIMATE-004.*

Certain species on the Bitterroot Forest are associated with mature forest habitats or old growth. These animals require habitat with structural components such as snags, down logs, and large, old trees for cover, denning, food, or nesting. Examples include fisher, flammulated owls, pileated woodpeckers, and pine marten, the latter two being old growth management indicator species.

Reflecting the importance discussed above, many of our Position Statement's Recommendations focus on old-growth habitat, in Gold Butterfly and other BNF projects:

- To the extent possible, retain all or nearly all old/large trees. Retain and expand on existing relict trees, old forests, and post-disturbance large snags and down logs in these types.
- Forest managers should protect existing old-growth habitat and manage vegetation to accelerate the replacement of ecologically functioning old growth where there is a deficit of existing old growth or where old -growth habitat is at high risk of being lost to normal forest succession and/or wildfire.
- Management actions in old growth should strive towards preserving secondary old growth structural components such as snags and down logs, characteristics that crucially add to the complexity and functionality of old growth and for which many old growth-associated animals rely on for denning, nesting, or cover.
- Any prescriptive vegetation management in old growth should not decrease old growth percentages in any 3rd order drainages.

*DROD, Appendix B, p. 4, states that old growth to be maintained in MA 2 and MA3b third order drainages is reduced from 8% to 3%.*

**OLD GROWTH CRITERIA**

In both the Background and Recommendation sections of our Special Habitat Position Statement, we address Green et al., the standard the DSEIS proposes to use in place of the Forest Plan standard for old growth.

From the Background section:

> For our region Green et. al. (1992) has helped define minimum screening criteria of different tree species for old growth. The principal criteria are age, size (dbh), and # qualifying trees/acre. As an example, for our western Montana region, ponderosa pine, Douglas-fir, and western larch have a 170 year minimum and 8 or more trees per acre of 21" dbh or greater. Green et al (1992) examined 4847 old growth plots of these species, on warm to warm, dry environments and found an average of 17 trees per acre that met the old growth criteria, more than double the minimum criteria. Fiedler et al (2007b) state that "old-growth functions increase as numbers of large trees, snags, and downed logs increase," again suggesting more is better.

We also address the use of Green et al. in our Recommendations:

- The Forest should justify the rationale for entering any old-growth habitat and avoid designated "old growth" except where absolutely necessary.
- Definitions for old growth in Green et al. should only be used when recruiting stands to meet minimum old-growth acreage requirements.

It follows that Green et al. should not be used to bring existing old-growth stands down to eight old-growth trees per acre, Green's minimum.

*FS responded (DROD, Appendix C, p. 47) 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."*** *However, this does not ensure that old growth stands will not be cut down to the 8 old-growth trees per acre minimum. In fact, DROD, Appendix C, p. 7 , confirms that large/old trees will be cut in old growth units. The prescription states:* ***"retain all older ponderosa pine in form classes 3A-3B and 4A-4C regardless of basal area or spiked dead top and retain older ponderosa pine in class 3C-3D and 4D only if they exhibit signs of decay, woodpecker activity, or dead tops that are needed as live snag replacements. Favor the largest Douglas-fir for retention without spruce budworm damage, or mistletoe and have 40% or better crown ratio."*** *Class 3 is mature and Class 4 is over-mature (likely old growth) timber. A-D refer to vigor, with A being the most vigorous and D being least. Therefore, older PP with poorer crowns will be cut unless they are needed as live snag replacements. Old DF with spruce budworm damage or mistletoe are also likely to be cut. From the BFC 2019 objection: "Some BFC members are concerned that, even if resulting stand conditions meet definitions of Green et. al., whether they will continue to function as OG habitat."*

**MONITORING**

We are pleased that the DSEIS frequently mentions monitoring, often in the context of arguing that the old-growth standards in Green et al. are superior to those in the 1987 Forest Plan. The document repeatedly says that standards in Green et al. are based on actual data taken from field plots and are much easier to monitor than those in the Forest Plan.

Monitoring has always been recommended in our comments on BNF projects. For example, in our Objection Comment on the Gold Butterfly FEIS in July of 2019, one of our recommendations focused on monitoring:

> We would like the Forest to elaborate on how it plans to monitor activities associated with the implementation of the GB project. Based on past experience, some members of the Committee are not convinced that stand treatments will be implemented exactly as prescribed, that assumptions related to maintaining OG characteristics are completely valid and, even if resulting stand conditions meet definitions of Green et al., they will continue to function as OG habitat.

In addition, BFC's Position Statement on Special Habitats includes the following recommendation on monitoring:

> The Forest should provide a greater emphasis and follow-up on monitoring. Effective monitoring is essential for tracking trends in the amount and quality or rare and declining habitats, especially old-growth forests. The Bitterroot Forest should initiate an aggressive "rare habitat monitoring program" that tracks the abundance and distribution of rare habitats through time and supplements such monitoring with statistically valid field verification.

In the draft SEIS, the BNF says:

> Attributes that need to be tracked over time to meet monitoring objectives are:
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> - Does the stand still meet Northern Region old growth definitions as defined in Green et al. after treatment?
>  a. Does it continue to maintain these characteristics?
>  b. How does the vigor of the old growth stand trees change over time?
> - Did the activity reduce potential for stand replacing fire? How long was it reduced?
> - Did the activity reduce the susceptibility to bark beetles? How long was it reduced?
> - Did vegetation respond as desired?
> - How do the treatment areas compare to unmanaged areas over time (i.e. controls)?

While we agree that it is important to monitor all the listed attributes, we particularly support the last item that says monitoring will compare treated to untreated areas. Again, from our Objection Comment Recommendations:

> With the objective of learning from this project, we would have liked to have seen more of Alternative 3 (no harvest in OG and no new roads) incorporated into the selected alternative. This would have provided the opportunity to compare habitat conditions between treated and untreated stands, which could go a long way in substantiating or refuting the Agency's ability to create OG habitat through timber harvest.

Clearly, adaptive management cannot occur unless the success or shortcomings of treatment can be assessed. Control stands will make assessment far easier and more accurate.

The Forest Service has not always been successful in completing planned monitoring activities. Although we understand this is often due to a lack of funds, we would like to see a detailed plan for monitoring that includes treated and untreated old-growth stands in the Gold Butterfly Project area. As any project should not be considered complete until planned monitoring has been accomplished, we recommend that the Forest prioritize funding for monitoring the impacts on old growth from implementation of the Gold Butterfly project.

*FS responds (DROD, Appendix C, p. 48):* ***"This comment is outside the scope of this DSEIS which is focused to updating the Forest Plan definition of old growth and removing the 40 acre minimum stand size requirement. Also, Forest Plan monitoring reports are available on the Bitterroot National Forest website at Bitterroot National Forest - Planning (usda.gov)."*** *However, this provided link shows no monitoring reports available after 2015 (reports from 2009-2015 only).*

**Cumulative Effects**

The section in the DSEIS on cumulative effects is unclear. For example, you focus on impacts from the distant Mud Creek and Bitterroot Front Projects while you omit discussion of current and future projects that are geographically closer to Gold Butterfly, such as the recently proposed Eastside Project. The Eastside Projects proposes nearly 97,000 acres of prescribed burning, which has a tremendous potential to locally impact wildlife habitat for species such as deer, elk, and Black-backed Woodpeckers, but the project is not mentioned.

We recommend that you conduct a comprehensive cumulative effects analysis on impacts to wildlife and old-growth habitat for this and any other large-scale projects you propose in the future. These analyses should address impacts at local and broader spatial scale through time.

*FS response (DROD, Appendix C, p. 48):* ***"This DSEIS is focused on updating the Forest Plan definition for old growth to Green et al. and therefore it considers the cumulative effects of other projects that will also site specifically need to update their definitions of old growth. Since old growth stands have been identified in all three project areas using the definitions in Green et al., a project specific amendment to support using the Green et al. definitions for the Gold Butterfly project would not result in changes to the amount of old growth identified or managed in any of these projects."***

**Summary and Conclusion**

BFC appreciates the opportunity to comment on the Gold Butterfly DSEIS. We are especially pleased that you have helped clarify the definition of old-growth habitat referenced in Green et al. The clarification will improve future discussions related to old-growth habitat. While Green et al. may be the best available science for identifying old growth, whether it is beneficial or detrimental to this special habitat depends on ensuing management activities, as our comments above, under Old Growth Criteria, suggest. We are also pleased that you have acknowledged the need for monitoring and that you have identified a number of specific questions that can be addressed through monitoring.

We recognize that funding for monitoring continues to be a problem; however, feedback is an essential function in any adaptive management protocol. In particular, adequate monitoring is absolutely necessary to verify many of the assumptions regarding the Forest's ability to manage vegetation to provide favorable special habitat conditions, especially old growth. From our perspective, monitoring the impacts of projects of this temporal and spatial scale is critical and should be a very high priority for the Forest. Projects of this magnitude should not be initiated unless adequate monitoring funds are available.

We hope you take our comments as constructive and will give them strong consideration as you move forward with the Gold Butterfly project. We intend to remain involved and look forward to working with you on this and future projects on the Bitterroot Forest and make more specific site-specific recommendations during implementation.

Thank you again for the opportunity to comment.