USDA United States Department of Agriculture Forest Service Region One

Northern Region
26 Fort Missoula Road
Missoula, MT 59804

File Code: 1570 (218)
Date: September 3, 2019

Dear Objector:

This letter is in response to the objections filed to the Gold Butterfly Environmental Impact Statement (EIS) and draft Decision Notice released by Bitterroot National Forest Supervisor, Matt Anderson. I have read your objections and reviewed the project record and EIS, including environmental effects. My review of objections was conducted in accordance with the administrative review procedures found at 36 CFR 218, Subparts A and C.

ADMINISTRATIVE REVIEW PROCESS

The legal notice for the objection filing period was published on July 3, 2019. Your timely objections were received prior to the close of the objection filing period of August 8, 2019. The regulations at 36 CFR 218.8 provide for a pre-decisional administrative review process in which the objector provides sufficient narrative description of the project, specific issues related to the project, and suggested remedies that would resolve the objections. The regulations also allow for parties to meet in order to resolve issues. There was an objection resolution meeting held on August 28, 2019 at the Bitterroot National Forest Supervisor's Office in Hamilton, Montana. During this resolution meeting there were no issues that could be resolved that would also meet the purpose and need of the project.

RESPONSE TO OBJECTIONS

As specified at 36 CFR 218.11(b), I must provide a written response to your objection; however, this response need not be point-by-point. Based on my review, one issue required clarification; new science regarding Canada lynx, which the Responsible Official will incorporate into his analysis and record. The remaining issues raised did not warrant instruction. **The review of the objection issues is included as an attachment to this letter.**

CONCLUSION

My review finds that the project is in compliance with all applicable laws and the Bitterroot National Forest Plan (1987), as amended. Once the Responsible Official completes the instruction to review and incorporate new science regarding Canada lynx, he may sign the Record of Decision.

My review constitutes the final administrative determination of the Department of Agriculture; no further review from any other Forest Service or Department of Agriculture official of my written response to objections is available [36 CFR 218.11(b)(2)].

Sincerely,

KEITH LANNOM
Objection Review Officer

Enclosure

cc: Matt Anderson, Jeff Shearer, Amy Fox, Cody Hutchinson, Olga Troxel

Gold Butterfly Project – Bitterroot National Forest Objection Responses

Issue 1, Air Quality

Contention 1a: Prescribed Burning

Response:

Due to lung health, the objector disagrees with the proposed action's use of prescribed fire to address fuel conditions.

The responsible official disclosed air quality design features to abate the issue of planned fire caused airborne particulate matter (Final EIS, Chapter 2, page 34) [40 C.F.R. §93.154, 40 C.F.R. §1508.8]. The responsible official details fire and air quality organizations and agencies with whom the BNF works to manage and maintain compliance with national and state particulate matter creation, including Montana/Idaho Airshed Group (as stated in the Forest Plan, PR-AIR-010, Page 1) and complies with the Montana/Idaho Airshed Operating Guidelines, the USDA Smoke Management Permit Guidelines, the National Ambient Air Quality Standards (NAAQS) [42 U.S.C. §7403, 81 FR 58009], Air Quality Related Values (AQRV) [Montana Code 75, ARM Title 17, Chapter 8], and Montana Ambient Air Quality Standards (MAAQS) [CAAM, Title 75, Chapter 2, parts 1-4] (Final EIS, Chapter 2, page 34).

The responsible official details the levels of particulate matter created by planned fires, wild fires (PR-AIR010, page 5). The responsible official delineates in Table 2, specialist report (page 5) the amount of particulate matter produced by managed (planned) versus wildland fire. The table shows the marked decrease of particulate matter – below the level considered a danger to health – for planned fires.

Having reviewed the project record, I conclude that the objectors' concerns are fully addressed by the specialist report. The report details the differences between the levels of particulate matter created by planned fire activities and wildfire; showing that unlike wildfire, planned fire following guidelines required, create minimal particulate matter.

Contention 1b: Dust from Timber Haul

Response:

The objector contends that the FS did not disclose affects to air quality for those living along the haul route and did not do studies or cite literature concerning dust created by haul routes and the resultant health issues from same. The objector also provided a Draft EIS comment contending haul-route related impacts to air quality.

The Draft EIS comment was addressed by the responsible official in the EIS response to comments (Final EIS, Appendix C, page C-20, Comment 5f.02). "Potential impacts of log hauling on Willow Creek Road are disclosed in Chapter 3, Section 3.5 Public Health and Safety. See design features in Final EIS, Chapter 2, Table 2.2-8 developed to minimize risks related to log hauling." Final EIS, Chapter 2, Table 2.2-8 indicates the design features which state under "Public Health & Safety" that dust abatement through water or chemical application will occur when warranted.

The responsible official disclosed and discussed potential adverse effects to human health by dust created through haul-route activities in the Final EIS [*40 C.F.R. §1502.16, 40 C.F.R. §1508.8*]. The responsible official detailed the planned mitigation of these potential adverse effects to human health in the design criteria. (Final EIS, Chapter 3, page 108). This Final EIS discusses the types of concerns raised with dust creation along haul routes along gravel roads, including both respiratory impacts and decreased sight distance. Dust abatement is discussed for the graveled areas of the haul route utilizing high efficacy water and chemical (magnesium chloride) dust abatement, both on areas of the route under Forest Service maintenance oversight and under Ravalli County maintenance oversight through a Schedule A Road Maintenance Agreement (page 108).

The responsible official disclosed air quality issues created by haul activities in the Air Quality Specialist Report (PF-AIR-001, pages 2-5) [*40 C.F.R. §1502.16, 40 C.F.R. §1508.8*] and incorporated that into the EIS by reference. This specialist report defines within the project area the different topographic areas, the classes of airsheds for those topographic areas, and the differences in how particulate matter would respond to environmental factors based on those different topographic areas (Analysis Areas pages 1-2, Measurement Indicators page 2). The report explains in layman's terms the measurement indicators – quantity and quality – of particulate matter and the levels of concern for human health. Utilizing these data, the report clearly defines existing air quality conditions and analyzes the effects of the project to air quality under each alternative (Direct and Indirect Effects, pages 3-6).

Contention 1c, Dust from gravel portion of Willow Creek Road

Response:

The objector contends that the FEIS does not adequately address air quality issues, including dust abatement, related to log truck traffic on the gravel portion of Willow Creek Road. All issues concerning dust impacts raised by Goheen are addressed under Contention 1a, which also applies to dust generated from the gravel portion of Willow Creek road from log haul.

Contention 1d – Vermiculate mine impacts

Response

The objector contends that the project did not disclose the existence of the Vermiculite mine and health dangers of the dust created by the Vermiculite mine and distributed by planned activity on the haul route.

The responsible official disclosed and discussed the historic Vermiculite mine in the Final EIS (Final EIS, Chapter 3, page 113). Within the table of "Past Activities" – those activities whose effects are still present on the landscape or are still having an effect – the Vermiculite mine was addressed. The table defines the mine's location, that it is an existing mine, that an EIS was completed in 1993 for the mine but that no mining from that EIS has occurred, and that some erosion control on the existing disturbance of the mine was done in 1995 and from 2010-2013.

The issue of the potential dangers of asbestos at the vermiculite mine are addressed in: 11/8/1993, *Consolidated Appeals ROD – Proposed Mining Development Stansbury Holding Company's Western Vermiculite Project* (see project file)). This document details a nonasbestiform actinolite component of the vermiculite mineral at this mine and – utilizing the most restrictive definition of asbestos – defined a very low human health risk. The document referenced the (then) newly adopted June 1992 regulations

which removed nonasbestiform actinolite from the regulatory standard developed for asbestos (Federal Register Vol 57, No 110) that are still in place.

The responsible official determined that the analysis of effects of '...any health hazards due to vermiculite dust...' would not necessary: As per the Center for Disease Control "Based on available information, there is no clear evidence that dust from vermiculite itself causes any serious health effects. Nevertheless, as with any dust, workers should avoid prolonged, high-level exposures. The observed health effects associated with asbestos-contaminated vermiculite can be attributed to contaminant fibers, rather than to vermiculite itself." (CDC documentation, Project File: AIR-014)

Having reviewed the project record, I conclude that the Forest Service disclosed all pertinent information concerning potential health issues concerning dust air quality in accordance with 40 C.F.R. §1502.16, 40 C.F.R. §1508.8. The Air Quality Specialist Report and FEIS fully discusses the potential dust concerns and the actions that will be taken to abate issues of haul route dust creation. The FEIS discloses that the historic Vermiculite Mine is located within the project area. The responsible official determined that analysis of the Vermiculite mine was not deemed necessary based on 1993 studies' conclusion of no health concerns, validated by and in accordance with Federal Register Vol 57, No 110, that the nonasbestiform actinolite materials were not a health hazard and validated by the CDC that vermiculite is not of itself a health concern.

Issue 2 – Aquatics

Contention 2a – Forest Plan Goal II-5 and Road Impacts to Bull Trout

Response:

An objector contends FMP goal II-5 "maintain fish habitat by minimizing the miles of road needed for management and to require high standards for road maintenance" is not consistent with the scope of the project and that the project will have negative impacts on endangered bull trout.

The Bitterroot National Forest Plan, 1987 Forest-wide Management Objective E for Fish requires the Responsible Official to: "maintain or enhance fish habitat by....minimizing the miles of road needed for management. (Forest Plan pp. II-4 and II-5)

The Draft ROD, FEIS Appendix D, the fisheries report (FISH-002) and biological assessment (FISH-004) show that the project is in compliance with the Bitterroot Forest Plan (p. 47) and discusses the effects of the new road construction and road maintenance on bull trout. Design features are also included to reduce the increased rick of sediment delivery. It also discusses that post project, due to BMPs and road improvement work, sediment delivery would be lower than pre-project levels, and be beneficial to bull trout in the long term.

I conclude that for the reasons stated above, the project is consistent with the Forest Plan.

Contention 2b – Purpose and Need Consistency with Road Building

Response:

An objector contends project purpose and need to reduce chronic sediment source in Willow Creek and Burnt Fork watersheds to improve water quality and bull trout habitat in the long term is inconsistent with proposed road building.

As stated in the purpose and need section (1.3) of the FEIS, there are three main reasons for working in the Gold-Butterfly project area, one of them being the reduction of sediment to the two watershed listed above. The FEIS Chapter 2 describes the design features (pp. 23-26,) required for project implementation for water quality and fisheries while Chapter 3 (pp. 58-69, 76-92) discloses the direct, indirect and cumulative effects to the watersheds and native fisheries and aquatic habitat in the project area from all proposed projects in the planning area, including the no action alternative for comparison. Both action alternatives would in the long run, decrease sediment contributions to Willow Creek by 50%; lower than the existing condition.

I conclude that for the reasons stated above, the project record sufficiently demonstrates that project proposals are not inconsistent with the purpose and need.

Contention 2c – Clean Water Act

Response:

An objector contends the FEIS does not comply with the Clean Water Act by failing to demonstrate sediment levels do not exceed TMDLs and inappropriately relying on BMPs to mitigate sedimentation.

The Federal Clean Water Act (CWA) (33 U.S.C. § 1251 et seq.) is the foundation for surface water quality protection in the United States with the objective to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. Sections 303(d) and 305(b) direct states to list water quality impaired streams (WQLS) and develop total daily maximum loads (TMDLs) to control non-point source pollutants in stream segments not supporting beneficial uses.

The water resources report (WAT-001) discloses proposed activity compliance with federal and state regulations and laws on pages 10-12, including the Clean Water Act. Methodology, including limitations, used to analyze project-related impacts of sediment are disclosed in the water resources report (WAT-001, pg. 13) and in project record files: WAT-006, WAT-010, WAT-011, WAT-017, WAT-020, and WAT-022. The water resources report fully analyzes the effects to water quality, which are then summarized in the project FEIS. Additionally, the water resources report describes the MOU with the state of Montana to implement BMPs and lists as a reference the Final - Bitterroot Watershed Total Maximum Daily Loads and Water Quality Improvement Plan. It also states that, "...USFS often includes watershed improvement activities that go beyond BMP improvements on existing roads, such as road decommissioning or storage." This is the case in the Gold-Butterfly project. The water resources report (WAT-001, pp. 3-4) describes that the project proposes road decommissioning and storage activities in addition to BMPs to, "...move toward TMDL/Watershed Improvement Plan goals and fulfill USFS water quality obligations to the State of Montana." Contrary to what the objector suggests, there is no requirement in the Clean Water Act for all projects to meet TMDLs. Additionally, the water resources report also describes the MOU with the state of Montana to implement non-point source pollution controls (also known as Best Management Practices, or BMPs) and support water quality standards of the state.

I conclude that for the reasons stated above, the project is consistent with the Clean Water Act.

Contention 2d – Forest Plan Standard #7

Response:

An objector contends the FEIS is not consistent with Forest Plan Wildlife and Fish Standard #7. The Forest-wide Management Standard, e. Wildlife and Fish Standard, (7) does state, "Cutthroat trout populations will be used as an indicator of fisheries habitat changes."

The fisheries report affected environment (FISH-002, pgs. 16-17) describes the westslope cutthroat trout populations and trend. The fisheries report predicts that although both alternatives contribute sediment to Willow Creek, effects would be moderated by project design criteria, timing of delivery, portion of habitat affected, and inherent population resilience. Because of this, neither alternative is expected to contribute an amount that would result in measureable population level effects to cutthroat trout. The westslope cutthroat trout, sensitive species determination for Alternative 2 of this project is: "may impact individuals or habitat, but will not likely contribute to a trend towards federal listing or loss of viability to the population or species."(Fish-002, pgs. 47) Compliance with the Forest Plan can be found in the Fisheries Report (FISH-002, pg. 47). A summary of the effects of the project activities to westslope cutthroat trout can be found in the FEIS (pgs. 81-92) and the full effects analysis can be found in the fisheries report (FISH-002, pgs. 24-48).

I conclude that for the reasons stated above, the project is consistent with the Forest Plan Standard #7.

Contention 2e – Haul Sediment Estimates

Response:

The objector contend that in the FEIS there is an error in the comparison of sediment delivery impacts between Alternatives 2 and 3. This issue was addressed in response to comments (FEIS Appendix C, pg. C-9) and Table 2.4-1 in the Draft EIS was updated in the FEIS. The Water Resources Report (WAT-001) discloses the methodology used in sediment modeling calculations. Based on the information above, I conclude that the comparisons were updated to accurately reflect the sediment loading estimates.

Contention 2f – Timing of Water Flows

Response:

The objector contends that the Forest is in violation of Montana State Law for failing to expand the project's purpose and need to include a need to address timing and volume of water flows due to obligations under the Water Compact signed with the State of Montana in 2007.

40 CFR § 1502.13 states the purpose and need, "shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action." The Responsible Official determined the purpose and need for this project (FEIS, Chapter 1, pgs. 4-6). The objector's comment on stream flow during the draft EIS was addressed in the response to comments, see final EIS Appendix C, page C-16. I conclude that the Responsible Official did not violate 40 CFR § 1502.13, which is the proper regulation regarding purpose and need, not the specified Montana State Law described above.

Contention 2g – Impacts of Roads on Hydrology

Response:

The objector contends impacts of roads on groundwater and streamflow resources within the project area were not adequately analyzed. This is the exact same comment responded to during the DEIS comment period (Appendix C, pp. C-31, C-32). The stream flow methodology and analysis can be found in the FEIS (pgs. 58-59, 61-62) and in the water resources report (WAT-001 pgs. 12-14, 16, 18-20, 30). The conclusions based on data and research in the analysis showed that, "Roads occupy only a small percentage of watershed area, minimizing water yield effects from this source." I conclude that the effects to groundwater and streamflow were adequately analyzed.

Issue 3 – Climate Change

Contention 3a – HFRA Carbon Requirements and Climate Change Analysis

Response:

An objector contends that the Forest Service does not address how the project will enhance productivity and carbon sequestration, as per HFRA. The three additional objectors also raise issues of lack of analysis for climate change.

One of the purposes of HFRA, among five other purposes, is to enhance productivity and carbon sequestration. These are not requirements of HFRA, however HFRA was designed to achieve these purposes.

The responsible official addressed these climate change and carbon sequestration issues in several locations:

The responsible official addresses the requirement for analysis of climate change within the Climate Change, Forest Carbon Cycling and Storage Specialist Report (PF-CLIMATE-001, page 2). In determining the need and level of analysis of "climate change" in relation to this project, the responsible official describes following the Forest Service guidance documentation (Climate Change Consideration in Project Level NEPA Analysis) which focuses on incorporating climate change into project NEPA that is relevant for the project decision (PF-CLIMATE-001, page 2).

The responsible official also said that the project followed the 9th Circuit Court's ruling "...finding that a project of similar scope as that proposed here did not warrant detailed analysis of the projects potential impacts on climate change (Hapner v. Tidwell, No. 09-35896 (9th Cir. 2010))." (PF-CLIMATE-001, page 2).

Following these two pieces of direction (Forest Service Guidance and 9th Circuit Court ruling), the responsible official discusses the qualitative analysis of potential impacts to climate change. The responsible official discusses the direct and indirect effects of the project on the potential for climate change within the Climate Change, Forest Carbon Cycling and Storage Specialist Report (PF-CLIMATE-001, pages 3-5) [Public Law 108–148, SEC. 2. [16 U.S.C. 6501], 40 C.F.R. §1502.2].

The analysis of the potential for the project to substantively negatively impact climate change is defined by the responsible official as possible, but only minimally and only in the short term. The responsible official goes onto describe the potential for the project to positively impact climate change as much greater in the relatively near and long-term through better management of and resilience to multiple

stresses, including increasing probability of drought stress, high severity fires, and large scale insect outbreaks associated with projected climate change.

The responsible official discusses the analysis of stored carbon levels (carbon sequestration) in the Climate Change, Forest Carbon Cycling and Storage Specialist Report (PF-CLIMATE-001, pages 5-6). The responsible official concludes that of the qualitative analysis for potential harm to stored carbon levels the proposed action would have no discernable impact on atmospheric concentrations of greenhouse gases or global warming based on limited changes in both rate and timing of carbon flux predicted within these few affected forest acres, the global scale of the atmospheric greenhouse gas pool, the multitude of natural events, and human activities globally contributing to that pool.

Similar contentions were addressed during the Draft EIS comment period (Final EIS, Appendix C, pages C21-C22). The responsible official referenced the documentation and language of the Climate Change, Forest Carbon Cycling and Storage Specialist Report, stating that the concern for stored carbon levels on the Bitterroot National Forest would remain within the national norms and that the carbon release from proposed activities would be immeasurable in comparison to the continental and global scale.

Having reviewed the project record, I conclude that the Forest Service followed their climate change Forest Service guidance and the ruling on a similar issue by the 9th Circuit Court to analyze the issues of climate change (including carbon sequestration and greenhouse gasses) at the appropriate level [Public Law 108–148, SEC. 2. [16 U.S.C. 6501], 40 C.F.R. §1502.2]. Within their Climate Change, Forest Carbon Cycling and Storage Specialist Report, the Forest Service disclosed the regulatory and legal basis for the level of analysis, the basis of the analysis, and the outcomes of the analysis. The analysis concludes that the stored carbon levels would remain within the national norms and that the carbon release from proposed activities would be immeasurable in comparison to the continental and global scale.

Contention 3b – Impacts to Climate Change

Response

Multiple objectors allege the project does not properly analyze the impacts of the project activities on climate change. This includes analysis of the effects of climate change in regards to emissions from the proposed action and future forest resiliency to climate change and carbon storage

The responsible official addressed these climate change and carbon sequestration issues in several locations:

The responsible official addresses the requirement for analysis of climate change within the Climate Change, Forest Carbon Cycling and Storage Specialist Report (PF-CLIMATE-001, page 2). In determining the need and level of analysis of "climate change" in relation to this project, the responsible official describes following the Forest Service guidance documentation (Climate Change Consideration in Project Level NEPA Analysis) which focuses on incorporating climate change into project NEPA that is relevant for the project decision (PF-CLIMATE-001, page 2).

The responsible official also said that the project followed the 9th Circuit Court's ruling "...finding that a project of similar scope as that proposed here did not warrant detailed analysis of the projects potential impacts on climate change (Hapner v. Tidwell, No. 09-35896 (9th Cir. 2010))." (PF-CLIMATE-001, page 2).

Following these two pieces of direction (Forest Service Guidance and 9th Circuit Court ruling), the responsible official discusses the qualitative analysis of potential impacts to climate change. The responsible official discusses the direct and indirect effects of the project on the potential for climate change within the Climate Change, Forest Carbon Cycling and Storage Specialist Report (PF-CLIMATE-001, pages 3-5) [Public Law 108–148, SEC. 2. [16 U.S.C. 6501], 40 C.F.R. §1502.2].

The analysis of the potential for the project to substantively negatively impact climate change is defined by the responsible official as possible, but only minimally and only in the short term. The responsible official goes onto describe the potential for the project to positively impact climate change as much greater in the relatively near and long-term through better management of and resilience to multiple stresses, including increasing probability of drought stress, high severity fires, and large scale insect outbreaks associated with projected climate change.

The responsible official discusses the analysis of stored carbon levels (carbon sequestration) in the Climate Change, Forest Carbon Cycling and Storage Specialist Report (PF-CLIMATE-001, pages 5-6). The responsible official concludes that of the qualitative analysis for potential harm to stored carbon levels the proposed action would have no discernable impact on atmospheric concentrations of greenhouse gases or global warming based on limited changes in both rate and timing of carbon flux predicted within these few affected forest acres, the global scale of the atmospheric greenhouse gas pool, the multitude of natural events, and human activities globally contributing to that pool.

Similar contentions were addressed during the Draft EIS comment period (Final EIS, Appendix C, pages C21-C22). The responsible official referenced the documentation and language of the Climate Change, Forest Carbon Cycling and Storage Specialist Report, stating that the concern for stored carbon levels on the Bitterroot National Forest would remain within the national norms and that the carbon release from proposed activities would be immeasurable in comparison to the continental and global scale.

Having reviewed the project record, I conclude that the Forest Service followed their climate change Forest Service guidance and the ruling on a similar issue by the 9th Circuit Court to analyze the issues of climate change (including carbon sequestration and greenhouse gasses) at the appropriate level [Public Law 108–148, SEC. 2. [16 U.S.C. 6501], 40 C.F.R. §1502.2]. Within their Climate Change, Forest Carbon Cycling and Storage Specialist Report, the Forest Service disclosed the regulatory and legal basis for the level of analysis, the basis of the analysis, and the outcomes of the analysis. The analysis concludes that the stored carbon levels would remain within the national norms and that the carbon release from proposed activities would be immeasurable in comparison to the continental and global scale.

Contention 3c – Climate Change Impacts on Vegetation

Response

An objector alleges the FEIS does not adequately address potential climate change impacts that may affect forest vegetation.

Final EIS, Appendix C, Page C-20, Comment 5g.02, addresses a similarly worded contention by the same objector during the Draft EIS comment period. During the Draft EIS comment period the objector contends: "The DEIS discusses carbon cycling and storage, but it does not appear to address how the portion of forest included in the Gold Butterfly Project may change due to an increasingly warming climate."

The responsible official states: "The Environmental Consequences section in the Climate Change, Forest Carbon Cycling and Storage Specialist Report (PF-CLIMATE-001) discloses potential changes to forest conditions under the no action alternative and both action alternatives."

Having reviewed the project file, I conclude that the objector's contention was fully addressed during the Draft EIS comment period. The contention that the FEIS does not adequately address potential climate change impacts on forest vegetation is addressed within the Climate Change, Forest Carbon Cycling and Storage Specialist Report in all three alternatives as defined in Public Law 108–148, SEC. 2. [16 U.S.C. 6501], 40 C.F.R. §1502.2. The analysis concludes that in the short term, carbon stocks would remain higher in the no action alternative, but forgoes those adaptive actions that protect the forest from climate change issues in the long term. The analysis further concludes that in the short term, the action alternatives would remove and release some carbon currently stored within treatment area biomass, but in the long-term they maintain the overall capacity of these stands to sequester carbon.

Issue 4 – Collaboration

Contention 4a – Collaboration Process

Response:

Objectors state that the Forest Service did not adequately collaborate as required by the National Environmental Policy Act (NEPA) and the Healthy Forest Restoration Act (HFRA). They also raise issues with identification of issues to be analyzed and development of alternatives. NEPA regulations require the Forest Service to inform the public of our actions, they do not require public collaboration. The HRFA, Section 603 authorizes hazardous fuel reduction projects with special collaboration (see 16 U.S.C. §6514 (e),(f),(g). As indicated in the FEIS, Chapter 1, pg. 7-8, the Forest Service satisfied the requirements of the NEPA and the HFRA. Public involvement and collaboration were facilitated in the form of public meetings, workshops, and field trips. Information was distributed using multiple forms of electronic and hard-copy mail media and over social media platforms. Relevant issues raised through public comments were addressed and effected changes in design features and action alternatives. The Forest Service conducted an Alternative Development Workshop where the public's concerns and issues were heard and considered, and alternatives were explored and developed.

I conclude that the Forest Service adequately informed and integrated the public into the collaboration process. The Forest Service remained engaged with the public, facilitated collaboration, and analyzed the public's concerns while remaining transparent and non-exclusive throughout the development of this project.

Issue 5 – Economics

Contention 5a – Economic Analysis

Response:

An Objector contends the statement "there are no unavoidable adverse effects to the economic area" has not been properly explained.

The discrepancy of language between the Economic Analysis Specialist Report and the Final EIS is noted. The Responsible Official will be adding clarifying language to the Economics Specialist Report prior to the finalization of the ROD.

Contention 5b – Economic Feasibility of No New Roads

Response:

An objector contends that the project does not analyze for the economic feasibility of a 'no roads construction' scenario. The objector also presented this contention during the Draft EIS comment period (PF-Comment-060).

The responsible official completed an economic feasibility study that includes a 'no roads construction' component in the Economic Analysis Specialist Report (ECON-001) [40 C.F.R. §1502.2]. The responsible official responded to the objector's Draft EIS comment (Final EIS, Appendix C, page C-24, Comment 5h.14.). The response states "Alternative 3 as presented in the FEIS (Chapter 1, Section 1.8.2 Issues Used to Formulate an Alternative) does not propose new road construction." (Final EIS, Appendix C, page C-4, comment 2c)

Within the specialist report, the responsible official details sales feasibility, financial efficiency, and economic impacts of both alternatives 2 (utilizing road construction) and alternative 3 (no road planned construction) individually and by comparison between the two alternatives. Within this report, the standard data of economic feasibility are provided: Tables 4 (page 8), Table 7 (page 10), and Table 8 (pages 10-11) which then detail and compare by alternative the costs, values, and jobs/labor income.

The information provided within the specialist report is incorporated into the Final EIS by reference at Chapter 1, page 5, under "Timber Products and Jobs".

Having reviewed the project file, I conclude that the objector's contention was fully addressed during the Draft EIS comment period. The information requested by the objector has been provided within the specialist report and incorporated into the FEIS by reference. This information shows the analysis of the economic feasibility at the appropriate level [40 C.F.R. §1502.2] through both the both financial cost and the cost of the impacts to the project of both the new roads scenario and no new roads scenario.

Issue 6 – Fire and Fuels

Contention 6a – Forest Resilience

Response:

An objector contends that the issue of logging, thinning, and prescribed burns will reduce, rather than increase, fire resiliency. The objector raised the issue during the Draft EIS comment period and asserts that the contention was not addressed during the comment period. The objector first raised this issue during the comment period on the Draft EIS.

The responsible official said "Timber harvest and other thinning reduce the ladder fuels that surface fire can travel through and get into the tree canopies and under the right conditions initiate a crown fire. Thinning increases the distance between live crowns, if a fire were to occur the fire could drop out of the crowns back to a surface fire. Subsequent treatments using prescribed would keep fuels from accumulating beyond the fire regime condition class one."(Final EIS, Appendix C – Opportunity to Comment, comment 5i-21, page C-28).

Having reviewed the project file, I conclude that the objector's contention was fully addressed during the Draft EIS comment period. The responsible official details the planned introduction of fire and how those actions will aid in forest resiliency. The review of the objector's cited article by the responsible official states that the article provides information that does not rule out planned fire treatment as effective in forest resiliency.

Contention 6b – Forest Plan Standard K(1) – Fires Management

Response:

The objector alleges that the EIS does not disclose that the Bitterroot National Forest is not being managed consistent with Forest Plan Forestwide K(1) protection standards in regards to Forest Plan Appendix M.

The objector raised the issue of consistency with the Forest Plan during the Draft EIS comment period. The responsible official responded to the objectors' contention that the project is outside of the scope of Forest Plan forest-wide standard K-1 (Final EIS, Appendix D – Plan Amendment and Consistency Discussion, Protection #1, page D-16).

Having reviewed the project file, I conclude that the objector's contention was fully addressed during the Draft EIS comment period. The information provided by the responsible official says that the project will be following the Forest Plan guidance [36 CFR §219.15 (d)] and the fire management standards. The responsible official also concluded that revisions to the Fire Management Plan were outside the purpose of the project.

Issue 7 – NEPA, NFMA/Forest Plan, Objections

Contention 7a – Best Available Science

Response:

An objector states that the commercial thinning goes against the best available science and that current scientific studies refute the idea that thinning will reduce the chance and spread of wildfires and requests the Responsible Official to review the papers to support this claim.

40 CFR § 1502.24 states that *Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements.* As seen in the response to the draft EIS comments, individual specialist reports, upon which FEIS Chapter 3, (Environmental Effects) are based, disclose methodology, assumptions, and literature used in analysis and conclusions. The Forest Service adheres to CEQ requirements for scientific integrity in environmental analyses.

In response to the first paper (Bradley et al., 2016) "This paper assesses whether active management of forests results in lower fire severity. It concludes that areas that are protected from logging burn the least severe. The authors maintain allowing more wildfires to burn under safe conditions can be an effective restoration tool. The researchers also acknowledge they could not rule out that low-intensity management could decrease the occurrence of high-severity fires." (FEIS, Appendix C, page C-75) The second paper (Morrison 2007) could not be accessed due to a broken web link.

I conclude that the Forest Service conducted a review of the accessible literature provided by the objector to incorporate additional sources into the analysis in compliance with 40 CFR § 1502.24. The

selected treatment may differ from the findings of the paper provided, however, the Responsible Official's response highlights reasoning for the identified difference.

Contention 7b –Disagreement in FEIS

Response:

An objector states that there is a conflict between the Forest Plan and the DEIS to "provide sawtimber and wood products to sustain a viable local economy" and the DEIS states that "due to the size of the product and lack of local mills, this will not increase local timber jobs." This statement could not be found in the DEIS or the FEIS. The objector also claimed that the Forest Service identified Ravalli County as a timber-dependent community. As noted in the Responsible Official's response to the comment, Section 1.3 of FEIS Chapter 1, references the National Forest Management Act's requirement to give consideration to the economic stability of communities whose economies are dependent on National Forest materials. This statement does not imply Ravalli County is a timber-dependent community.

I conclude that there is no conflict between the Forest Plan and the DEIS in reference to sustaining the local economy or increasing timber jobs.

Contention 7c – Project Size

Response:

Two objectors state that the project is too large to be analyzed as a single project. As stated in the Responsible Official's response, there are no laws, regulations, or policy which limit the scope and scale of a vegetation treatment project which are analyzed through an EIS. Selecting Alternative 3 over all other alternatives would have greatly reduced amount of harvest, thinning, and prescribed fire. The Draft ROD (pages 5-6) states the reasoning for selecting modified Alternative 2 over Alternative 3.

I conclude that, by law, regulation, and policy, there are no restrictions on scope and scale of EIS projects. Therefore, the Forest Service is not limited on analyzing the Gold Butterfly project area through the use of a single EIS.

Contention 7d – Use of Best Available Science

Response:

An objector states that best available science is not included to support the project purpose and need in the FEIS. Objector requests "recent references justifying your need to improve landscape resilience to disturbances such as disease, insects, and fire, and supporting your treatment methods to do so." The FEIS, Chapter 1, (page 4) includes justification for improving landscape resilience to disturbance. The Silviculture Report, (SILV-001, pages 11-15) also includes background, forest history, and reference to recent studies and articles which aid in justification of the project's silvicultural treatments.

I conclude that the project purpose and need is supported by best available science for improving landscape resilience to disturbance such as disease, insects, and fire. The Silviculture Report (SILV-001), prepared by certified silviculturist contains adequate references to support the analysis.

Contention 7e – Scientific Integrity

Response

Objectors allege that the Forest Service violated NEPA within the DEIS and draft ROD by not demonstrating scientific integrity. 40 CFR § 1502.24 states that *Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements*. As seen in the response to the draft EIS comments, individual specialist reports, upon which FEIS Chapter 3, (Environmental Effects) are based, disclose methodology, assumptions, and literature used in analysis and conclusions. The Forest Service adheres to CEQ requirements for scientific integrity in environmental analyses. Objectors provided literature for consideration during draft EIS comments which was responded to in FEIS Appendix C (pgs. C-75 thru C-81).

I find that the Responsible Official demonstrated its use of best available science and scientific integrity as indicated throughout the specialist reports contained in the FEIS, Chapter 3. These requirements were further examined as to the validity and application of literature in response to the objectors' recommended sources in the FEIS, Appendix C, (pp. C-75 thru C-81).

Contention 7f – Incorporation by Reference

Response

Some objectors attempted to incorporate by reference both comments from the DEIS from past public participation opportunities and objections sent by other parties. Federal Regulations at 36 CFR 218.8(b) state that incorporation by reference is not allowed, except for specific items which reference date, page, section of cited document, and a description of cited document, along with a description of its content and applicability to the objection. The exceptions include (1) federal laws and regulations, (2) Forest Service directives and land management plans, (3) documents referenced by the Forest Service in (this case) the proposed EIS that is subject to the objection, and (4) previously submitted written comments regarding the project. Further 36 CFR 218.8(c) states that issues raised in objection must be based on previously submitted specific written comments regarding the proposed project or activity and attributed to the objector unless the issue is based on new information that arose after the opportunities for comment. The burden is on the objector to demonstrate compliance with this requirement for objection issues. This burden is described in 36 CFR 218.8(d)(6) and states that the objector must demonstrate the connection between specific written comments on the proposed action or activity and the content of the objection, unless new information arises.

Multiple objectors referenced their previous comments but gave no connection to those comments besides stating they incorporate these comments by reference. 36 CFR 218.8(b-d) allows objectors to incorporate their previously submitted comments by reference, however they must demonstrate how those comments are connected to their objections. Additionally, the Responsible Official completed a response to comments as required for EIS documents. Rather than including their previously submitted comments by reference, objectors should incorporate the Responsible Official's response into their objection, especially when there is disagreement, and explain why they are still incorporating the comment that has already received a response.

Multiple objectors referenced other parties' objections as their own but presented no connection to those objections besides stating they incorporate those objections by reference. Pursuant to 36 CFR 218.8, incorporation of other parties' objections by reference is not allowed, without

exceptions. Objectors wishing to represent each other may either jointly submit objections (e.g. in the same objection letter) and then must identify a lead objector to represent them (see definition for lead objector at 36 CFR 218.2) or they may submit the same objection as another person or party in a separate letter. In the latter case, the objection must be based on an issue the objector raised previously during an official opportunity to comment (36 CFR 218.8 (c)).

Other objectors properly identified themselves as lead objectors on this project and represented multiple objectors in their submission, their issues were eligible for objection review pursuant to 36 CFR 218.8.

I conclude that multiple parties did not adhere to objection regulations at 36 CFR 218.8 by attempting to incorporate their comments by reference and incorporating other parties' objections by reference. If objectors need assistance with this on future projects, I encourage them to contact my Administrative Review Staff here in the Northern Regional Office.

Issue 8 – Old Growth

Contention 8a – Consistency with Green et al 1992

Response:

An objector contends that the old growth standards and prescriptions are not ecologically supported nor are they supported by best available science. Objector states that old growth is being taken down to the minimum criteria established by Green et al. 1992.

The FEIS, Chapter 3, (pgs. 95-104) demonstrates that the project analysis and prescription development were conducted using the standards established in Green et al. 1992. Definitions and standards for old growth in Western Montana per Green et al. 1992, were used to analyze the impacts to old growth and to ensure compliance with these established standards. Additionally, the Wildlife Report (WILD-001, pgs. 5-18) recognizes and integrates the old growth habitat standards established in Green et al. 1992, into the project plan as related to wildlife.

I find that the Forest Service project plans are supported by the best available science as established and acknowledged in Green et al. 1992. The old growth definitions and standards are incorporated into the project actions and are demonstrated in the FEIS and Wildlife Report.

Contention 8b – Forest Plan Compliance

Response:

Objector contends that the project is not in compliance with standards set forth in the Forest Plan. The standards of the Forest Plan were used to analyze the project's impacts to old growth and to ensure compliance, as demonstrated in the FEIS, Chapter 3, pgs. 95-104 (specifically, see Table 3.4-2 on pgs. 98-100 in Chapter 3).

An objector states that the DEIS admits that it is deficient in Old Growth in the project area but does not cite reference to this claim. However, both the DEIS and FEIS, Chapter 3, pg. 93, describe the old growth distribution in the project area in relation to the Forest Plan standards. "Currently, old growth distribution within the project area meets the applicable Forest Plan Standards for old growth habitat in eleven of the twelve 3rd order drainages where MA 1 occurs, four of the eight drainages where MA 2 occurs, and nine of the nine drainages where MA 3a occurs." Further detailed information is found in

the Silviculture Report (SILV-006) which discusses and provides tables on the stand exam plots used to delineate old growth in the project area.

I conclude that the Forest Service utilized and acknowledged the old growth standards established in the Forest Plan. Old growth distribution and delineation are detailed in the FEIS and the Silviculture Report, respectively. The Forest Plan standards and compliance are demonstrated in the Draft and Final EIS and are shown to be incorporated into the planning for the project's old growth areas.

Contention 8c – Changes in draft ROD

Response:

Multiple objectors contend that proposed old growth treatments in the draft ROD were not properly analyzed.

The analysis for changes to the old growth treatments were conducted for each individual unit. The draft ROD (Section 4.2, page 11) states that "Silvicultural prescriptions were developed for each treatment unit individually based on the stand conditions and the best method for moving conditions from existing to desired future conditions". The Responsible Official outlines the reasoning for modifications to Alternative 2 in the draft ROD, and did not consider non-commercial treatment of old growth stands as an exclusive option as such a project-wide prescription of this scale, which would not adequately address the specific needs of individual stands. In other words, a one size fits all approach could not be effectively applied to all treatment units given the variability of old growth stand composition and conditions in the project area.

The FEIS analyzed the impacts of not treating old growth (No Action Alternative and Alternative 3) and treating old growth through regeneration harvest (Alternative 2). Proposed impacts from the modification described in the draft ROD of changing regeneration harvest in old growth to an intermediate treatment are 'bracketed' by the analysis of no treatment and a regeneration treatment. FEIS Chapter 3, table 3.4-2 (pgs. 98-100) list the acres and percentage of old growth remaining by management area following treatments proposed under each alternative analyzed. Percent old growth remaining for each 3rd order drainage under Alternative 2 meets the Forest Plan standard. Modified treatments to Alternative 2 described in the draft ROD (pg. 3-4) would remove less old growth than treatments proposed under the original Alternative 2. The modified Alternative 2 meets Forest Plan standards for old growth. Response to comments found in the FEIS, Appendix C, page C-4 states that "non-commercial thinning in old growth stands was considered but not carried forward as an alternative to analyze as non-commercial thinning would not treat the size class of trees with identified insect and disease concerns in many units. Also see FEIS Chapter 2, Section 2.3 (Alternatives Considered but Eliminated from Detailed Study).

I conclude that the Responsible Official appropriately analyzed the changes to old growth treatments within the FEIS in compliance with NEPA. Each alternative was analyzed in comparison and individual units were analyzed to ensure the appropriate treatment was selected.

Contention 8d – Old Growth Treatments

Response:

An objector contends that changes to old growth treatments in the draft ROD are counter to management needs of the project area and the project purpose and need to increase forest resilience.

In response to comments, the Responsible Official outlined the reasoning for modifying Alternative 2 as related to old growth treatments in the draft ROD, page 6. "The regeneration harvest silvicultural prescriptions have been changed to commercial intermediate treatments or non-commercial treatments. Though not as effective, commercial intermediate treatments with an improvement harvest will reduce tree density, open the canopy, and favor early seral species with retention of existing ponderosa pine and whitebark pine trees and the opportunity to development new regeneration of those species. Reducing the basal area and retaining the healthiest and largest trees will increase forest resilience to fire, insects, and diseases. Large diameter trees and old growth characteristics sufficient to keep old growth status will be retained through implementation activities, and monitoring of the old growth stands will occur after treatments are completed. Non-commercial treatments with a diameter limit will also reduce basal area and improve forest resilience to disturbances, although to a lesser extent, while retaining large diameter trees and old growth characteristics; existing old growth in these units will also be retained."

The modifications to Alternative 2 are in keeping with the design features of the Proposed Action (FEIS Chapter 2, pgs. 11-22) and are a result of comments submitted to the DEIS (Appendix C, pg. C-4). All treatment units containing old growth would retain their old growth status under the selected alternative. Increasing resiliency was identified as a key factor during the treatment selection for the individual old growth units. A description of the treatment and treatment objectives can be found in the Silviculture Report (SILV-001, pgs. 29-36).

The Responsible Official further describes the treatment analysis and selection in the draft ROD, Section 4.2, pg. 11 (Alternatives Not Analyzed in Detail) "Issues disclosed during public scoping used to refine the Proposed Action (Alternative 2) or develop Alternative 3 are discussed in the FEIS (Chapter 1, pages 9-10). During the DEIS comment period, several other requests were received for alternative consideration. Some of the public requested an alternative that only conducted vegetation treatments in old growth stands through non-commercial methods. Silvicultural prescriptions were developed for each treatment unit individually based on the stand conditions and the best method for moving conditions from existing to desired future conditions. We did not consider non-commercial treatment of old growth stands as an exclusive option as such a project-wide prescription of this scale would not adequately address the specific needs of individual stands. In other words, a one size fits all approach could not be effectively applied to all treatment units given the variability of old growth stand composition and conditions in the project area. Other alternative requests received during the DEIS comment period were either beyond the scope of the project or already accounted for in Alternative 2 and/or Alternative 3 (see FEIS Appendix C, Opportunity to Comment for Agency response to alternative development requests)."

I find that the Forest Service made changes to the project alternative in keeping with the purpose and need of the project. A blanket-treatment approach was not used for the old growth units due to variance in stand composition and conditions and increasing forest resiliency was considered during old growth treatment selection.

Contention 8e – HFRA

Response:

Objectors contend that the proposed actions in the draft ROD are in violation of the Healthy Forest Restoration Act in that the plan does not maintain larger diameter trees while focusing on reducing smaller diameter trees.

Healthy Forest Restoration Act (HFRA), Section 102 (Authorized Hazardous Fuels Reduction Projects) states: (f) LARGE TREE RETENTION (1) IN GENERAL.—Except in old growth stands where the management direction is consistent with subsection (e)(2), the Secretary shall carry out a covered project in a manner that (A) focuses largely on small diameter trees, thinning, strategic fuel breaks, and prescribed fire to modify fire behavior, as measured by the projected reduction of uncharacteristically severe wildfire effects for the forest type (such as adverse soil impacts, tree mortality or other impacts); and (B) maximizes the retention of large trees, as appropriate for the forest type, to the extent that the trees promote fire-resilient stands.

The Silviculture Report (SILV-001, pgs. 29-36) describes the treatment methods and objectives which take into account thinning of smaller diameter trees and the retention of larger diameter trees. Additionally, the Responsible Official discusses the objectives of the treatment of old growth in the draft ROD, page 6. "Reducing the basal area and retaining the healthiest and largest trees will increase forest resilience to fire, insects, and diseases. Large diameter trees and old growth characteristics sufficient to keep old growth status will be retained through implementation activities, and monitoring of the old growth stands will occur after treatments are completed. Non-commercial treatments with a diameter limit will also reduce basal area and improve forest resilience to disturbances, although to a lesser extent, while retaining large diameter trees and old growth characteristics; existing old growth in these units will also be retained."

The objectors also suggest remedies which include "Drop all project activities as proposed in old growth. Disclose the historic range of variability of old growth on the BNF. Update the forestwide inventory to accurately reflect the amount and distribution of 40+ acre patches of old growth." The Silviculture Report (SILV-001, pages 7-20), discloses the historic range of variability of vegetative conditions in the project area. However, updating the forest-wide inventory of old growth is outside of the purpose and need of this project.

I conclude that the Forest Service does not violate the tenets of the HFRA but does incorporate them into the project plan, specifically for the treatment of old growth within the treatment area.

Issue 9 – Roads

Contention 9a – Forest Service Road 1311 and Montana SMZ Law

Response:

An objector contends a number of issues related to roads, old growth, wildlife, and wildlife habitat. Objector disagrees with a number of conclusions made in the final EIS and draft ROD. The only violation

of law, regulation and policy is in relation to the objector's contention that administrative use of Forest System Road 13111 is in violation of the Montana Streamside Management Zone law.

In reference to the roads, old growth, wildlife and wildlife habitat comments, 40 CFR § 1503.3 (a) reads, "Comments on an environmental impact statement or on a proposed action shall be as specific as possible and may address either the adequacy of the statement or the merits of the alternatives discussed or both." Additionally, 36 CFR 218.10 (a)(4) states, "Except for issues that arose after the opportunities for comment, none of the issues included in the objection are based on previously submitted specific written comments and the objector has not provided a statement demonstrating a connection between the comments and objection issues (see §§ 218.8(c) and 218.8(d)(6))." Comments submitted by the Bitterroot Restoration Committee on the draft EIS were of a general nature and provided no specific connection to the draft EIS' merits or inadequacy in analysis, methodology, or conclusions.

The objector fails to provide a link between previously submitted comments during designated opportunities to provide comment, including for the DEIS, and specific objections raised during the objection period. At no point during the public scoping period or draft EIS comment period were specific issues or contentions such as a concern with compliance of Montana's Streamside Management Zone Laws and Rules (SMZ1) the raised by the objector or submitted in writing to the U.S. Forest Service for consideration in the final EIS. Pursuant to 36 CFR 218.10 (a)(4) no further response is warranted.

Contention 9b – Road Maintenance

Response:

An objector contends that the economic analysis for the Gold Butterfly Project did not fully disclose the cost of road maintenance nor address the coordination of road maintenance across the project area. In compliance with forest-wide standards specific to timber outlined in the 1987 Bitterroot Forest Plan (p. II-23 (g)(11)), an economic analysis was completed for the project (PF-ECON-001). A primary component to the economic analysis for Forest Service timber-related projects is the determination of sale feasibility. Sale feasibility is a residual value ("stumpage") appraisal that determines whether a timber sale is likely to attract bids, given current market conditions. In determining residual value, logging costs are broken into two primary categories, "stump-to-mill costs" and "other logging costs". Project-related road maintenance is a component included in the "other logging costs" category. Table 4 of the economic analysis for the project identifies the estimated dollar costs (total and unit cost) by alternative for all "other logging costs", to include the estimated cost for project-related road maintenance. Both "stump-to-mill costs" and "other logging costs" are then reflected in the present net value (PNV) for the project, accounted for as a reduction in revenue, presented in Table 5 of the economic analysis.

The economic analysis addresses the estimated cost of work items associated with the project, not ground-level implementation factors such as coordination of road maintenance across the project area. A successful bidder (contractor) will be contractually responsible for the completion of all necessary road maintenance specific to the sale they were awarded. Coordination of such activities during project implementation involves ongoing communication between the contractor, assigned Forest Service Project personnel (e.g., Sale Administrator), and other cooperating entities where applicable such as County resources (e.g., Ravalli County Roads Department).

Having reviewed the project record, I conclude that the economic analysis completed for the Gold Butterfly Project adequately discloses the estimated cost of road maintenance for each alternative. The total and unit cost values for project-related road maintenance are presented in table 4 of the Economic Analysis and further reflected in Table 5 as a reduction in revenue along with stump-to-mill costs. Cost estimation worksheets utilized to support the economic analysis are available for review in the project file (PF-ECON). The coordination of road maintenance activities will occur during the implementation phase through contractor compliance with sale contract performance elements and through communication between the contractor(s), Forest Service personnel and cooperators.

Contention 9c – Forest Plan Road Stands J1 and J2

Response:

An objector alleges that the Gold Butterfly Project would not be consistent with two of the forest-wide management standards provided in the 1987 Bitterroot Forest Plan regarding road systems. J-1 provides, "roads will be maintained to design standards"; and J-2 provides, "roads will be closed to public use if adequate road maintenance funds are not available" (Forest Plan, p. II-27). Forest plan consistency tables are provided in Appendix D of the project FEIS (p. D-15). The concern regarding J1 and J2 pertained specifically to the maintenance of new roads and/or undetermined roads identified for re-opening that would be added to the Forest road system. In addition to the Forest-wide standards provided by the Bitterroot Forest Plan, further policy regarding the operation and maintenance of road systems is provided by Forest Service Manual 7700 (Travel Management). Regulations governing the management of roads on Forest Service lands are contained in 36 CFR Chapter II Part 212 (PF-ROAD-001). Annual maintenance of U.S. Forest Service jurisdiction roads is contingent upon appropriations from U.S. Congress.

Project implementation would result in approximately 16.5 miles of undetermined roads and approximately 6.4 miles of newly constructed roads being added to the Forest road system (FEIS Ch. 1, p. S-6). Chapter 2 of the FEIS provides discussion of National Forest System roads, road maintenance and road system management within the project area (p. 19-22); as presented in Table 2.2-6 (p. 22), the entire 16.5 miles of undetermined roads to be re-opened and an added 5.0 miles of existing roads will be placed in storage and assigned an operations maintenance level of M1. Consistent with the regulations and policies noted above and in alignment with the 2016 Forest Travel Management Plan, stored/M1 status roads receive basic custodial care and are intended for intermittent management use only. M1 roads are closed to the general public for motorized travel yearlong.

Maintenance of existing project area roads occurs currently as recorded in Forest road maintenance reports, which can be found in the project file (PF-ROAD-012 and PF-ROAD-013). Subject roads are maintained in accordance with their road management objectives (PF-ROAD-010). New roads necessary for project support will be constructed and maintained to standards appropriate for the intended uses, and sufficient BMP improvements will be implemented to bring all project-required roads up to standard prior to haul activity. Specific to road uses and road management of routes within the project area, I conclude that the Gold Butterfly Project activities will be in compliance with Bitterroot Forest Plan forest-wide management standards J1 and J2.

Contention 9d – Forest Plan Desired Conditions

Response:

An objector contends that the extent of road construction necessary to support implementation of the Gold Butterfly Project under the proposed action would not be in alignment with the desired conditions outlined in the 1987 Bitterroot Forest Plan (see p. II-12). The 1987 Forest Plan was completed in compliance with the National Forest Management Act of 1976 (NFMA) and the National Environmental Policy Act of 1969 (NEPA).

A primary forest-wide objective of the Bitterroot Forest Plan specific to roads, is to "minimize the extent of the road system needed for resource management" (Forest Plan, p. II-7). Gold Butterfly Project Alternative 2 proposes the construction of 6.4 miles of new permanent road and 17.3 miles of temporary road in order to implement silvicultural prescriptions and to provide for product removal (see FEIS Ch. 2, p. 6; and Appendix A for unit by unit road construction lengths). Table II-1 in the Bitterroot Forest Plan (p. II-8) presents average annual projected outputs and activities by 10-year increments (5), spanning from 1986-2035. For the time period of 2016-2035, the projected annual output specific to local road construction is 21 miles (i.e., 210 miles projected in total over the 10-year period). That projection was contingent upon conditions and infrastructure needs being met in the preceding decades.

In review of the values presented in Table II-1 of the Forest Plan, reflecting a unit of measure applied to each year of the 2016-2035 time period, and having considered the miles of road construction (new and temporary) proposed to support implementation of the Gold Butterfly Project, I conclude that the proposed road construction activities would not conflict with the desired future conditions outlined in the 1987 Bitterroot Forest Plan (pgs. II-12 to II-17).

Contention 9e – Impacts of Road Construction

Response:

An objector contends that the potential impacts of project-related road construction were not adequately analyzed. The objector further states, "I find the statement, "Road construction was not determined to present a significant direct or indirect effect to any resource area" to be a bit ridiculous, even a little offensive, in part because I don't see sufficient evidence or reasoning supporting it. It defies logic that all the roadwork planned for the project will not spread weeds, fragment habitat, disturb wildlife, and increase sediment into streams."

Section 1.8 of the FEIS provides an overview of how public comments and issues regarding the proposed project were addressed (see Ch. 1, p. 8). As noted in Section 1.8, issues raised during scoping (public and/or internal) were assessed for potential significance per Council on Environmental Quality (CEQ) regulations pertaining to the National Environmental Policy Act (40 CFR 1508.27). Issues utilized to refine the proposed action and those utilized to develop alternatives are discussed in Sections 1.8.1 and 1.8.2 respectively. Issues carried forward for further analysis based on their potential for significance, including road construction, are discussed in resource specialist reports contained in the project file.

The FEIS discloses the environmental effects (impacts) of the three alternatives for the Gold Butterfly project (FEIS, Ch. 3). Resource-specific analysis and conclusions regarding project-related impacts of road construction are presented throughout various specialist reports, which are available for review in the project file. Having reviewed this project information, I conclude that impacts from road

construction associated with the Gold Butterfly Project were adequately addressed throughout the project analysis and the FEIS.

Contention 9f – Health and Safety

Response:

An objector contends that both the FEIS and draft ROD do not take a hard look at the public health and safety issues related to the project activities of the Gold Butterfly.

The National Environmental Policy Act (NEPA) implementing regulations require that an environmental impact statement include a section covering environmental consequences of the alternatives, including the proposed action (40 CFR 1502.16). As noted in section 1.10 of the FEIS (Ch. 1, p. 11), to address issues related to public health and safety highlighted by the public during scoping and the DEIS comment period, a discussion of the affected environment and environmental consequences related to log hauling was added to Chapter 3 of the FEIS. The added discussion section (Section 3.5) focused primarily on those sections of haul routes outside of U.S. Forest Service ownership or maintenance jurisdiction (i.e., Ravalli County and State of Montana maintained roads). As completed for other relevant project-related issues, the issue of public health and safety was assessed for potential significance per Council on Environmental Quality (CEQ) regulations pertaining to the National Environmental Policy Act (40 CFR 1508.27), and as a result, the issue was identified for further analysis and inclusion in the FEIS.

Project-related impacts regarding public health and safety are presented for review in Chapter 3 of the FEIS (pgs. 104-110). Specific impacts related to roads maintained under Forest Service jurisdiction are presented in the Transportation Specialists Report (PF-ROAD-001). Design features developed by the interdisciplinary team of resources specialists to address public health and safety concerns for both action alternatives are provided in Chapter 2 of the FEIS (p. 33).

I conclude that the responsible official and the interdisciplinary team did take a hard look at potential health and safety issues related to the project activities, as evidenced by incorporation of the issue into the project analysis, the development of relevant design features to minimize impacts, and the disclosure of the subject in project file documentation (e.g., FEIS and draft ROD).

Contention 9g – Project Design for Health and Safety

Response

An objector contends that the design features developed for the Gold Butterfly Project do not adequately address concerns over public health and safety related to activities along the project haul route. The objector's concern is focused on the segment of Willow Creek Road extending from the town of Corvallis to mile post 8.29 (Forest Service administrative boundary), a portion of the primary haul route for transport of logs to receiving mills.

As noted in section 1.10 of the FEIS (Ch. 1, p. 11), to address issues related to public health and safety highlighted during public scoping and the DEIS comment period, a discussion of the affected environment and environmental consequences related to log hauling was added to Chapter 3 of the FEIS. As completed for other relevant project-related issues, the issue of public health and safety was assessed for potential significance per Council on Environmental Quality (CEQ) regulations pertaining to the National Environmental Policy Act (40 CFR 1508.27); as a result, the issue was identified for further analysis and inclusion in the FEIS.

Estimated costs associated with project-related road maintenance on routes under Forest Service ownership and/or maintenance jurisdiction are accounted for in the Economic Analysis as an "other logging costs". "Other logging costs" are a contributing factor in determining sale feasibility (see PF-ECON-001, Table 4, p. 8). Project-related direct, indirect and cumulative impacts regarding public health and safety with regards to log hauling activities along route segments outside of Forest Service ownership and/or maintenance jurisdiction are available for review in Chapter 3 of the FEIS (pgs. 104-110). Design features developed by an interdisciplinary team of resources specialists to address identified public health and safety concerns for both action alternatives are provided in Chapter 2 of the FEIS (p. 33).

Maintenance jurisdiction for the subject section of Willow Creek Road is primarily under Ravalli County. An existing "Schedule A" agreement between Ravalli County and the Forest Service addresses road maintenance along the eastern-most 1.2 miles of Willow Creek Road (FEIS, Ch. 3, p. 105). As a result of project analysis and to ensure responsiveness to pertinent issues, a design feature was developed that would increase the reach of the current maintenance agreement such that it would pertain to eastern-most 2.46 miles of Willow Creek Road (graveled section) during the life of the Gold Butterfly Project (see FEIS - Ch. 2, p. 33; and Ch. 3, p. 108).

The FEIS and project file information noted above provide evidence of how the project analysis directly addressed concerns regarding project-related traffic and maintenance management along Willow Creek Road. Additional design features regarding public health and safety related to log haul on roads outside of Forest Service jurisdiction are provided in Chapter 2 of the FEIS (p. 33). I conclude that the design features developed during the project analysis adequately address concerns over public health and safety related to activities along project haul routes.

Contention 9h – Impacts to the Paved Portion of Willow Creek Road

Response:

An objector contends that the FEIS for the Gold Butterfly Project does not adequately address project-related impacts to the paved portion of Willow Creek Road.

As noted in section 1.10 of the FEIS (Ch. 1, p. 11), to address issues related to public health and safety highlighted during scoping and the DEIS comment period, a discussion of the affected environment and environmental consequences related to log hauling was added to Chapter 3 of the FEIS. The added discussion section (Section 3.5) focused primarily on those sections of haul routes outside of U.S. Forest Service ownership or maintenance jurisdiction (i.e., Ravalli County and State of

Montana maintained roads). As was completed for other relevant project-related issues, the issue of public health and safety was assessed for potential significance per Council on Environmental Quality (CEQ) regulations pertaining to the National Environmental Policy Act (40 CFR 1508.27).

The subject road segment extends from the town of Corvallis to approximately mile post 5.83, and exists as a public road under Ravalli County maintenance jurisdiction. As noted in the paragraph above, the direct, indirect and cumulative effects of project haul activities on roads outside of Forest Service ownership and/or maintenance jurisdiction were considered in the project analysis (see FEIS, Ch.3, Sec. 3.5, pgs. 104-110). Chapter 3 of the FEIS discloses the project-related impacts to the Willow Creek Road infrastructure, including the paved segment of concern (p. 109). Chapter 2 of the FEIS presents a list of

design features developed by the project interdisciplinary team to address public health and safety concerns analyzed in association with project alternatives (p. 33).

Having reviewed the FEIS and supporting project file information, I conclude that project-related impacts to the paved portion of Willow Creek Road were adequately addressed in the analysis.

Contention 9i – Impacts to Willow Creek Road Bridge

Response

An objector contends that the FEIS does not adequately address project-related impacts to the Willow Creek Road Bridge across the Bitterroot River Irrigation Ditch (BRID).

As noted in section 1.10 of the FEIS (Ch. 1, p. 11), to address issues related to public health and safety identified during scoping and/or the DEIS comment period, a discussion of the affected environment and environmental consequences related to log hauling was added to Chapter 3 of the FEIS. As completed for other relevant project-related issues, the issue of public health and safety was assessed for potential significance per Council on Environmental Quality (CEQ) regulations pertaining to the National Environmental Policy Act (40 CFR 1508.27), and as a result, the subject was identified for further analysis and inclusion in the FEIS. The direct, indirect and cumulative effects of project haul activities pertaining to roads outside of Forest Service ownership and/or maintenance jurisdiction identified during project analysis are listed in Section 3.5 of the FEIS (see pgs. 104-110). Project-related impacts specific to relevant road infrastructure are presented in the same chapter (see p. 109). The bridge feature of concern was not specifically identified in the FEIS discussion of impacts to road infrastructure (Ch. 3, p. 109).

Willow Creek Road exists as a public road under Ravalli County maintenance jurisdiction; the State of Montana has jurisdiction over bridge safety on such public roads. The successful bidder for a Forest Service timber sale is contractually responsible for obtaining all necessary permits applicable to the contract-specified activities. Regarding the Willow Creek Road Bridge across the BRID, this contractual obligation may include obtaining an overload permit from the Montana Department of Transportation (Motor Carrier Services Division) (see PF-ROAD-015). Any bridge-specific improvements and/or maintenance requirements required would be identified by the Montana Department of Transportation and based on proposed use (i.e., axle configuration, weight, et al.). Identified improvements or maintenance requirements would be incorporated into the overload permit and require permit holder acceptance prior to permit approval.

The project file includes documentation of communications between Forest Service and Montana Department of Transportation representatives which occurred during project analysis (PF-ROAD-015 and PF-ROAD-016). The documented correspondence directly pertain to proposed project-related bridge use, the existing condition of the bridge (e.g., dimensions, construction type, load rating, inspection report, etc.), and overload permitting requirements.

Having reviewed available project file information and in consideration of the jurisdictional element(s) specific to the subject bridge, I conclude that project-related impacts to the Willow Creek Road bridge across the BRID were adequately addressed during the project analysis, which supports the FEIS.

Contention 9j – Public Safety

Response:

An objector contends that the FEIS does not adequately address project-related impacts to public safety on Willow Creek Road. The objector's concern pertains specifically to potential impacts associated with project-related log truck haul traffic.

As completed for other relevant project-related issues, the issue of public safety was assessed for potential significance per Council on Environmental Quality (CEQ) regulations pertaining to the National Environmental Policy Act (40 CFR 1508.27), and as a result, the issue was identified for further analysis and inclusion in the FEIS. Section 1.10 of the FEIS notes, that in order to address issues related to public safety identified during scoping and/or the DEIS comment period, a discussion of the affected environment and environmental consequences related to log hauling was added to Chapter 3 (Ch. 1, p.11).

Section 3.5 of the FEIS discloses the impacts to public safety from increased traffic volume on those sections of haul routes outside of Forest Service ownership and/or maintenance jurisdiction. The noted section of the FEIS discloses, "Risk to public safety for motorized, non-motorized, and pedestrian traffic along Willow Creek Road will be elevated over background conditions due to the volume of log trucks estimated under Alternative 2 and Alternative 3" (FEIS, Ch.3, p. 109). Project design features developed to minimize impacts to public safety relating to increased traffic volume are listed in Chapter 2 of the FEIS (p. 33). Primary objectives of the design features are to: "reduce the risk of traffic-related conflicts between project and public traffic", and to "reduce the risk of traffic-related conflict in areas outside of FS jurisdiction" (see Table 2.2-8). The design features specific to Willow Creek Road outline management elements such as haul timing restrictions and maintaining ongoing communication and coordination with both Ravalli County and Corvallis School District representatives. Willow Creek Road is a public road primarily under Ravalli County jurisdiction, thus as stated in Section 3.5 of the FEIS, "Log truck operators are still subject to the same traffic safety laws and posted speed limits on Willow Creek Road as all other road users" (Ch. 3, p. 109).

Having reviewed the available project file documentation, I conclude that the FEIS adequately addressed project-related impacts to public safety on Willow Creek Road. Design features listed in the FEIS for incorporation into the project were developed to specifically minimize impacts to public safety. However, as the FEIS openly discloses, "no design features or safety precautions can eliminate risk altogether" (Ch. 3, p. 109).

Contention 9k – Travel Management Rule

Response:

An objector contends that the FEIS does not comply with the Travel Management Rule under Subpart A (36 CFR 212.5(b)).

36 CFR 212.5(b) states:

> ***"(1) Identification of road system. For each national forest, national grassland, experimental forest, and any other units of the National Forest System (§ 212.1), the responsible official must identify the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of National Forest System lands. In determining the***

minimum road system, the responsible official must incorporate a science-based roads analysis at the appropriate scale and, to the degree practicable, involve a broad spectrum of interested and affected citizens, other state and federal agencies, and tribal governments. The minimum system is the road system determined to be needed to meet resource and other management objectives adopted in the relevant land and resource management plan (36 CFR part 219), to meet applicable statutory and regulatory requirements, to reflect long-term funding expectations, to ensure that the identified system minimizes adverse environmental impacts associated with road construction, reconstruction, decommissioning, and maintenance."; and

"(2) Identification of unneeded roads. Responsible officials must review the road system on each National Forest and Grassland and identify the roads on lands under Forest Service jurisdiction that are no longer needed to meet forest resource management objectives and that, therefore, should be decommissioned or considered for other uses, such as for trails. Decommissioning roads involves restoring roads to a more natural state. Activities used to decommission a road include, but are not limited to, the following: reestablishing former drainage patterns, stabilizing slopes, restoring vegetation, blocking the entrance to the road, installing water bars, removing culverts, reestablishing drainage-ways, removing unstable fills, pulling back road shoulders, scattering slash on the roadbed, completely eliminating the roadbed by restoring natural contours and slopes, or other methods designed to meet the specific conditions associated with the unneeded road. Forest officials should give priority to decommissioning those unneeded roads that pose the greatest risk to public safety or to environmental degradation."

No restrictions are provided in 36 CFR 212.5(b) prohibiting the construction of new roads. The modified Alternative 2 described in the draft ROD (Alternative 2, modified) would construct 6.4 miles of permanent road and decommission 22.3 miles of permanent road, resulting in a net reduction of 15.9 miles of permanent road within the project area (FEIS, Ch. 2, pgs. 21-22). The Roads Analysis Report (PF-ROAD-009) provides an assessment of each road segment within the project area based on the minimum road system needs for the project, in accordance with 36 CFR 212.5(b). Appendix F of the FEIS provides a table of specific treatment needs for each road segment to be decommissioned (see Table F-1, pgs. F2-3).

I conclude that the FEIS complies with the Travel Management Rule under Subpart A (36 CFR 212.5(b)). A minimum roads analysis, including a risks and benefits matrix, was conducted during project analysis in accordance with 36 CFR Part 212 and Forest Service Manual 7703 (see PF-ROAD-009). The roads analysis (PF-ROAD-009) was used to inform project development regarding which roads are needed for current and future management needs. Maintenance level one (M1) roads needed for future management activities are proposed for storage; identified roads not needed for future management activities are proposed for decommissioning. Implementation of the preferred alternative (Alternative 2, modified) would result in a net reduction in the total miles of permanent road remaining within the project area at the close of the project.

Contention 9l – Impact Analysis of Roads

Response:

The objector contends that the FEIS does not fully analyze direct, indirect and cumulative impacts associated with system and non-system roads.

The National Environmental Policy Act (NEPA) implementing regulations require that an environmental impact statement include a section covering environmental consequences of the alternatives, including

the proposed action (40 CFR 1502.16). A minimum roads analysis, including a risks and benefits matrix, was conducted during project analysis in accordance with 36 CFR Part 212 and Forest Service Manual 7703 (see PF-ROAD-009). The roads analysis (PF-ROAD-009) was used to inform project development regarding which roads are needed for current and future management needs. Existing roads (system and non-system) and new proposed roads (temporary and permanent) were considered cumulatively in resource analyses where roads pose potential effect(s) to a resource (e.g., see - sediment assessment in Water Resources Report (PF-WAT-001, pgs. 21-23).

Direct, indirect, and cumulative effects of existing and proposed roads are disclosed in resource specialist reports where the presence of roads impacts a resource (e.g., sediment erosion into streams (see Water Resources Report, PF-WAT-001)). Project-related impacts of road maintenance, construction, and decommissioning are disclosed in Chapter 3 of the FEIS (see pgs. 63-67 and 77-85). Existing roads in the project area not associated with project activities are accounted for in the Cumulative Effects section of the FEIS (Ch. 3, Section 3.6).

Having reviewed the FEIS, the individual resource reports, and the supporting project information contained in the project file, I conclude that the FEIS adequately analyzed the direct, indirect and cumulative effects associated with system and non-system roads within the project area.

Contention 9m – Forest Plan Standard 3b

Response

The objector contends that the FEIS for the Gold Butterfly Project is not consistent with Management Area (MA) direction provided in the 1987 Bitterroot Forest Plan specific to MA 3b. The objector specifies, "The Gold Butterfly FEIS fails to demonstrate consistency with Forest Plan MA Standard 3b (12): "Manage roads so open road mileage adjacent to fisheries streams is limited to the current level."". This specific standard is listed on page III-23 of the 1987 Forest Plan under c. - Wildlife and Fish (see 3.c.-12, p. III-23).

The Forest Plan describes MA 3b as containing "50,431 acres of riparian habitat" and it "includes 100 feet on either side of smaller streams or the area defined by water-influenced vegetation, whichever is greater." (p. III-22). The goals for management areas occurring within the project area are listed in Chapter 1 of the FEIS, goals specific to MA 3b include: "Manage riparian areas to maintain flora, fauna, water quality, and water-related recreation activities. Emphasize water and soil protection, dispersed recreation use, visual quality, and old growth. Provide low levels of timber harvest, livestock forage, and big-game forage on fisheries riparian areas, and moderate levels of timber harvest and forage on non-fisheries riparian areas. Road construction in the riparian areas will be restricted to meet water quality and fish objectives." (Ch. 1, p. 7).

Appendix B of the FEIS provides map books for each of the action alternatives; the maps display both the existing road system within the project area as well as any roads proposed (Specified or Temporary). Both Alternative 2 and 3 describe the decommissioning of 22.3 miles of road and the placement of 21.3 miles of road into storage (PF-FISH-002, p. 26). Section 2.2.4.1 of the FEIS notes that 6.4 miles of new road construction and 17.3 miles of temporary road construction would be necessary to support the project under Alternative 2 (Ch. 2, pgs. 34-35).

The Fisheries Report completed for the project highlights, "The new roads proposed under Alternative 2 are located on the mid- to upper slopes and were designed to have limited contact with water." (PF-

FISH-002, p. 26). The report further notes that three new permanent crossings of headwaters streams would occur under Alternative 2, one at the extreme upper end of a tributary to Eastman Creek and two on headwater tributaries in the Birch Creek drainage (PF-FISH-002, p. 27). The report describes these headwaters areas as non-fish bearing, and states that these project elements (i.e., new or temporary road construction) are not expected to contribute measurable quantities of sediment into fish bearing waters (PF-FISH-002, p. 30). Design features developed to minimize adverse impacts resulting from project-related road construction activities, including those specific to riparian areas, are provided in Table 2.2-8 of the FEIS (see Ch. 2, p. 24-26). Appendix D of the FEIS discloses project consistency with all applicable Forest Plan standards. Specific sections regarding "roads in riparian areas", "road density standards" and "INFISH roads management" are outlined on pages D21-23, D23, and D24-26 respectively (FEIS, Appendix D).

New road construction was designed such that placement would minimize proximity to, and the crossing of, streams (see FEIS, Appendix B – map books). Project activities would include the decommissioning of 22.3 miles of road and the placement of 21.3 miles of road into storage, and require the construction of 6.4 miles of new permanent road. Thus, implementation of the project would result in a net reduction of 15.9 miles of permanent road within the project area (FEIS, Ch. 2, pgs. 21-22). In consideration of these project factors and having reviewed the available project file information, I conclude that the FEIS is consistent with the Management Area (MA) direction provided in the 1987 Bitterroot Forest Plan specific to MA 3b.

Issue 10 – Roadless

Contention 10a – Dropped Treatments in Roadless Area

Response:

An objector states that they encourage science based vegetation management in the Inventoried Roadless Area (IRA) of the project, specifically units 87 and 88, as proposed in the scoping process. The objectors allege that the Forest Service did not use best available science in dropping these units from the project. By law, 36 C.F.R. §294.12 prohibits road construction and road reconstruction in inventoried roadless areas and 36 C.F.R. §294.13 prohibits timber cutting, sale, or removal in inventoried roadless areas. After the issue of roads and treatment within IRA was raised through public comment, the line officer made the decision to drop the treatment units within IRAs from the project.

I conclude that the Forest Service is in compliance with 36 C.F.R §294.12 and §294.13 by dropping proposed treatments within IRAs from the project without the use of best available science. Line officer discretion is used when dropping units that may not be in compliance with law or regulation.

Issue 11 – Visuals

Contention 11a – Forest Plan Compliance

Response:

An objector contends the project is not consistent with Forest Plan goal to "maintain a high level of visual quality on landscapes seen from population centers and major travel routes." The Bitterroot National Forest Plan Forest-wide Goal 4 requires the Responsible Official to *maintain a high level of visual quality on landscapes seen from population centers and major travel routes, and adjacent to fishing streams* (1987 Forest Plan, p. II-2). Compliance with Forest Plan standards is the measure used to

ensure Forest Plan goals are met. Table 3 in the Scenery Report (SCENERY-001) lists a summary of travel corridors and observation points and justification for use of these locations for the viewshed analysis (Scenery Report, Figure 2). A location in Corvallis, Montana, the closest population center to the project area, is included as an observation point. Scenery Report Tables 7 and 8 (for regeneration harvest and intermediate harvest units, respectively) list unit-specific design criteria needed to meet both modification and partial retention visual quality objectives. The viewshed analysis was used to determine which treatment units would meet modification and/or partial retention visual quality objectives. Additionally, the FEIS Chapter 2 (page 32) includes a design feature that is applicable to all roads and units to retain scenic integrity in high sensitivity viewsheds.

I conclude that the scenery analysis demonstrates compliance with the 1987 Bitterroot National Forest Plan Goal 4 by finding compliance with VQOs. Further, I find that the Responsible Official addressed this issue adequately in the Response to Comments on page C-60 and C-61.

Issue 12 – Weeds

Contention 12a – Weeds Analysis, part one

Response:

The objector contends that project related impacts to invasive species were not properly analyzed [40 C.F.R. §1502.2]. The objector provided the same contentions during the Draft EIS comments period, stating "Weeds should be analyzed as a significant issue for the project. The nature of cheat grass has made introducing fire to the landscape ineffective in regenerating native species. A timber sale disturbs the soil which gives weeds, especially cheatgrass, a chance to take over." The Draft EIS comment was addressed by the responsible official in the EIS response to comments (Final EIS, Appendix C, page C-42-43, Comment 5o.07) "Potential project impacts on invasive plants, including cheatgrass, is included in the Invasive Plants Specialist Report (PF-INVASIVES-001, pg. 1-8."

The objector also contends that several other invasive species are located within the project area and questions the limited mitigation measures for the invasive species [EO 13112]. The objector provided the same contentions during the Draft EIS comments period, stating "Meadow hawkweed is present near treatment unit 80. St. John's wort, knapweed, and cheatgrass seeds are easily transported to the area and soil disturbance has the potential to spread weeds through a number of avenues. The project should address more than just spraying along roads and washing equipment as mitigation measures." The Draft EIS comment was addressed by the responsible official in the EIS response to comments (Final EIS, Appendix C, page C-43, Comment 5o.08) "FEIS Chapter 2, Table 2.2-8 lists mitigation measures and best management practices which not only includes roadside treatment and washing equipment but biocontrol and revegetation."

Having reviewed the project file, I conclude that the Forest Service addressed each of the objector's issues concerning the analysis of noxious weeds [40 C.F.R. §1502.2, EO 13112]. The specialist report details the analysis methodology, methods, and results of the analysis. The specialist report also details 25 invasive species being monitored and addressed during the project, as well as a number of mitigation measures and best management practices for invasive species management. The report discloses both the efficacy of the treatments utilized stating that some noxious weed populations will take many treatment applications over a span of years to eradicate.

Contention 12b – Weeds Analysis, part two

Response:

Another Objector contends project related impacts to weeds were not properly analyzed, specifically: failure to disclose the amount/extent of noxious weed infestation in the project area, cost of noxious weed treatment, impact to productivity of forest lands, and efficacy of treatment.

Four separate contentions concerning noxious plants are brought forward by the objector. Although worded differently, all four of these issues were presented by the objector during the Draft EIS comment period [40 C.F.R. §1502.2, 40 C.F.R. §1508.8, EO 13112]:

- **An objector contends that the project fails to disclose the amount or extent of noxious weed infestation within the project area. This contention was addressed in the Final EIS, Appendix C, Comment 3i-02, page C-13: "Field surveys in the project area were conducted during the summer of 2017 and 2018 by botany field crews for sensitive plants and noxious weeds. Invasive crews also survey known infestations of hawkweed and the eradicated dalmatian toadflax site annually."**
- **An objector contends that the project fails to disclose the cost of noxious weed treatment. This contention was addressed in the Final EIS, Appendix C, Comment 5o.04, page C-42: "The cost of herbicide treatments in a meadow can vary depending on how accessible the area is and thus the equipment being used to treat it. Backpack and handline spraying can start at $65/ac and run up to three times that amount. Biocontrol typically cost about $.50 / cyphocleonus acates insect with a release being at least 50 weevils or more. One release is generally put out for every 5 acres."**
- **An objector contends that the project fails to disclose the efficacy of noxious weed treatment. This contention was addressed in the Final EIS, Appendix C, Comment 5o.05, page C-42: "Current treatments are maintaining or reducing the number of invasive plants along roadsides and trails. Due to the lifespan of most invasive plant seed it will take many years before that seedbed is exhausted and treatments are no longer needed therefore the existing population cannot be eliminated from the inventory database. Continued inventory and more accurate mapping of invasive species are being added to the database so the overall acreage of infested species increases even though the number of plants has declined."**
- **An objector contends that the project fails to disclose the effects of noxious weeds and noxious weed treatment to land productivity. This contention was addressed in the Final EIS, Appendix C, Comment 5o.06, page C-42: "See Forest Plan Monitoring and Evaluation reports (https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd544563.pdf)"; and Final EIS, Appendix C, Comment 5w.23, page C-58: "See PF-SOILS-001 pages 16-17" which states: "The Forest monitored, gridded and treated with herbicides approximately 11,250 acres of invasive plants in 2014 and 5,173 acres in 2015" and lists the treatments of 25 noxious weed species in 2014-2015 and the efficacy of each.**

Having reviewed the project file, I conclude that the Forest Service addressed each of the objector's issues concerning the analysis of noxious weeds, including distribution, treatment, efficacy, and costs during the comment period [40 C.F.R. §1502.2, 40 C.F.R. §1508.8, EO 13112]. The specialist report details the analysis methodology, methods, and results of the analysis. The specialist report details 25 invasive species being monitored and addressed during the project, as well as a number of mitigation

measures and best management practices for invasive species management. The report discloses the efficacy of the treatments utilized stating that some noxious weed populations will take many treatment applications to eradicate. The report discusses the costs of treatment: the actual cost of materials, the cost of differing logistics to the overall cost, and then provides an example in the form of a two year accounting of treatment costs.

Issue 13 – Wildlife

Contention 13a – Project Specific Amendment for Elk

Response

Multiple objectors contend the project-specific amendment to the Forest Plan elk habitat objectives violates NFMA and the 2012 Planning Rule.

Regulations for the 2012 planning rule at 36 CFR 219.13 address Forest Plan Amendments. Regulations pertinent to this objection state:

a. Plans may be amended at any time and be broad or narrow, depending on the need for change. Responsible officials have the discretion to determine whether and how to amend the plan and determine the scope and scale of the amendment. Further, plan amendments are required to add, modify, or remove one or more plan components, or change how or where one or more plan components apply to all or part of the plan area.

1. *Amendments must be based on a need to change the plan*
2. *Amendments must be subject to public notification as required in §219.4.*
3. *Amendments must be consistent with NEPA procedures*
4. *Amendments must apply to existing plan components*
5. *Amendments must determine which specific substantive requirements (§§219.8 through 219.11 – Sustainability, diversity of plant and animal communities, multiple use, timber requirements) are directly related to the plan direction being added, modified, or removed by the amendment and apply such requirement(s) within the scope and scale of the amendment.*

The Forest Plan amendments included in the project are site-specific plan amendments to address elk habitat effectiveness, thermal cover, and hiding cover. The amendments are needed because the proposed action does not meet elk related Forest Plan Standards (See FEIS Appendix D). The FEIS (Appendix D) describes the use of more current research to analyze elk habitat than what was utilized in the Forest Plan. The project addressed the above criteria of 36 CFR 219.13(a) by the following:

1. The Forest Service identified a need to change the plan by describing the purpose of changing objectives and standards (Appendix D).
2. The public was notified about the Forest Plan amendment during the comment period on the Draft EIS.
3. The Forest Service followed NEPA procedures for amendments as the same procedures were followed for this project.
4. The amendment applied to existing plan components as described in EIS Appendix D.
5. The Forest Service determined the substantive requirement the amendments applied is 219.10(a)(5) – 10: Multiple Use – a- Integrated resource management for multiple use – 5 - Habitat conditions, subject to the requirements of § 219.9, for wildlife, fish, and plants

> commonly enjoyed and used by the public; for hunting, fishing, trapping, gathering, observing, subsistence, and other activities (in collaboration with federally recognized Tribes, Alaska Native Corporations, other Federal agencies, and State and local governments). FEIS Appendix D discusses how the plan amendment meets the planning rule requirement.

I conclude that in reference to the project-specific amendment to the Forest Plan, for the reasons stated above, Forest Service properly completed the Forest Plan amendments compliant with the 2012 Planning rule at 36 CFR 219.13 by following its requirements as shown above.

Contention 13b – Impacts to Wildlife Species

Response:

The objector contends the FEIS did not properly analyze project impacts to wildlife species. 40 CFR §1508.7 and §1508.8 are specific to effects. These regulations requires analysis of direct, indirect, and cumulative effects, which include ecological, aesthetic, historic, cultural, economic, social, or health impacts. These effects may also include those resulting from actions having both detrimental and beneficial effects. Wildlife species are part of the ecology of project area, requiring an analysis per 40 CFR §1508.7 and §1508.8. Further, for endangered species, requires analysis under the Endangered Species Act (ESA). The FEIS discusses the issues brought up during the public comment process and how they were addressed (FEIS Section 3.1). The Responsible Official completed wildlife analysis for threatened, endangered, proposed, sensitive and Forest Plan management indicator species can be found both in the wildlife specialist report (WILD-001) and the Biological Assessment for grizzly bears and Canada lynx (WILD-004) and disclosed the effects in compliance with 40 CFR §1508.7 and §1508.8 and ESA in both the specialist report and the FEISI conclude that wildlife analysis for the Gold-Butterfly project is sufficient.

Contention 13c – Forest Plan Consultation on Canada Lynx

Response:

Numerous Objectors contend the project violates NEPA, NFMA, ESA and APA by not taking a hard look at lynx presence and the Forest Plan's potential impacts on lynx, using the best available science and not completing USFWS consultation for Canada lynx at the Forest-plan level in violation of a 10/15/2018 Montana District Court Order.

The courts have consistently found that NEPA mandates a "hard look" at what and action may do to the environment and what may be done about it. NEPA requires projects must analyze direct, indirect, and cumulative effects and that the Forest Service to look at consequences to the human environment and they be analyzed and disclosed, based on issues. ESA requires that, "Each Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out . . . is not likely to jeopardize the continued existence of any endangered species or threatened species..." Additionally, the Montana District Court found that the Beaverhead-Deerlodge National Forest was required to complete USFWS consultation for Canada Lynx at the Forest Plan Level.

The affected environment and expected direct, indirect and cumulative effects of proposed project activities on unoccupied, secondary Canada lynx habitat are disclosed and discussed within the Wildlife Report (WILD-001) and Biological Assessment (WILD-004), including references and science-based rationale to support the analysis areas, methodologies and findings. The Wildlife Report further

discusses Canada lynx use of the analysis area and Bitterroot National Forest lynx survey information. All activities are in compliance with the Northern Rockies Lynx Management Direction. The project does not violate the Forest Plan.

Consultation at the forest plan level occurred through the Northern Rockies Lynx Management Plan Direction (NRLMD) which amended the 1987 Bitterroot Forest Plan. The biological assessment discloses how the Gold Butterfly project is consistent with the NRLMD (WILD-004). Project specific consultation with the USFWS for Canada lynx was completed (see WILD-004 for biological assessment, and WILD-108 for USFWS concurrence). The consultation found that the Gold-Butterfly project "may affect – is not likely to adversely affect" the Canada lynx. The 10/15/2018 Court Order applied specifically to the Beaverhead-Deerlodge National Forest, not the Bitterroot National Forest.

I conclude, for the reasons stated above, the Responsible Official took a hard look at impacts to Canada Lynx and did not violate ESA, NEPA, NFMA or the APA. However, I am instructing the responsible official to consider research from Kosterman prior to making his final decision.

Contention 13d – Project Consultation on Grizzly Bear

Response

The objector contends that the Responsible Official must complete formal consultation for project activities on for grizzly bears and that the FEIS does not demonstrate that project implementation is consistent with the best available science (road densities, secure area), and therefore violates NEPA, NFMA, and ESA.

For NEPA, CEQ Regulation 40 C.F.R. §1502.24 establishes a scientific integrity requirement for Environmental Impact Statements: "Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements. They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement. . ."

The affected environment and expected direct, indirect and cumulative effects of proposed project activities on grizzly bears and grizzly bear habitat, including road densities and secure area, are disclosed and discussed in the Wildlife Report, including references and science-based rationale to support the analysis areas, methodologies and findings. The wildlife report analyzes road densities as recommended not only by Mace et al. (1996), as suggested by the objectors, but also by more current research; Boulanger and Stenhouse (2014). The road densities in this project area are lower than those recommended by the above literature.

ESA requires that, *Each Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out . . . is not likely to jeopardize the continued existence of any endangered species or threatened species...* The Bitterroot National Forest consulted both on the Forest Plan and on this project for grizzly bears. A biological opinion for the Forest Plan consultation was received July 1, 2019 and on August 6, 2019 the USFWS concurred that the Gold Butterfly project "may affect, but is not likely to adversely affect" the grizzly bear. I conclude that in reference to grizzly bears, for the reasons stated above, the Responsible Official does not violate ESA, NEPA or NFMA.

Contention 13e – Project Consultation on Wolverine

Response

Objector contends the project violates ESA by not completing USFWS consultation for wolverine. Additionally the contend that the "FEIS fails to take a hard look at cumulative impacts to wolverines and properly incorporate best available science in violation of NEPA and fails to insure viable populations are being maintained on the BNF, in violation of NFMA."

ESA requires that, "Each Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out . . . is not likely to jeopardize the continued existence of any endangered species or threatened species..." There are no consultation requirements for proposed species. However in 2014, the Northern Region of the Forest Service completed a programmatic biological assessment for the wolverine as a proposed species. It covered the National Forests known to have wolverine, including the Bitterroot National Forest. This biological assessment covered all types of Forest Service activities, including those proposed in the Gold-Butterfly project. The U.S. Fish and Wildlife Service concurred with the "no jeopardy" determination. Additionally, the consultation letter sent to the USFWS (November 14, 2018) for the Gold-Butterfly project, stated, "Consultation for proposed wolverine was completed using the Programmatic Biological Assessment for North American wolverine. The Responsible Official determined that the proposal was not likely to jeopardize the wolverine."

The Forest Service for Cumulative Effects analysis is 40 C.F.R. §1508.7 and defines them as ". . . the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." For its cumulative effects analysis regarding wolverine, the wildlife report (WILD-001 pp. 47-49) described the analysis boundary, the habitat within it, the activities considered in the cumulative effects analysis and the final determination that this project is "not likely to jeopardize wolverines across their range."

I conclude that in reference to wolverines, for the reasons stated above, the Gold-Butterfly Project does not violate ESA, NEPA or NFMA.