Redd Bull EA- Lolo National Forest

Objection Responses

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Issue 1 – NEPA

Contention 1.1 Complete an EIS

Objectors contend that the responsible official should prepare an environmental impact statement (EIS) due to significant impacts to the environment.

Objector(s): Adam Rissien (WEG), Michael Garrity (AWR)

Response:

The responsible official responded to comments on the need for an EIS, in Appendix C of the draft Decision Notice (DN) (p. E-27, comment #69). Anticipated direct, indirect, and cumulative effects that may occur to resources as a result of project activities, including effects to listed species, were considered and disclosed in the environmental assessment (EA) and in supporting project record documents. The responsible official determined that no significant impacts would occur as a result of proposed activities, as documented in the finding of no significant impact (Draft DN). Therefore, I conclude that preparation of an environmental impact statement is not required.

Please see responses to Contentions 2.3, 2.5, 2.6, 3.1, 7.2, 7.3, and 7.4.

Contention 1.2 Effects Analysis

The objector contends that the finding of no significant impact is arbitrary and capricious and in violation of NEPA because:

1) the hydrology effects analysis failed to use an appropriate baseline for its effects analysis in that non-system roads were included in the existing condition, along with system roads;

2) indirect and cumulative effects of adding non-system roads to the system were not considered because of the chosen baseline

Objector(s): Adam Rissien (WEG)

Response:

This concern was raised in comments, which the responsible official considered and responded to (Draft DN, Appendix E, p. E-20, comment 50). The EA and hydrology report document the rationale for the methodology/baseline and why the roads in question do not contribute additional effects by being added to the system (EA, p. 76; Redd Bull Hydrology Report, pp. 5-6, 30-33). In summary, the "non-system roads that would be adopted to the National Forest road system were considered in the sediment analysis of the existing condition because they already exist on the landscape…the adoption of these non-system roads would not result in additional effects beyond those already described for road management activities," (ibid). The hydrology effects analysis includes road use and maintenance (Hydrology Report, p. 74). Those roads to be designated as open do not cross streams.

Additionally, the EA discloses that "intensive field surveys were conducted to determine watershed conditions and identify management actions to address issues where they were found," (p. 68). This is consistent with NEPA implementing regulations to briefly provide sufficient evidence and analysis, including the environmental impacts of the proposed action and alternative(s), to determine whether to prepare either an EIS or FONSI (40 CFR 1508.9). Segments of NFSRs 282, 221, and 889 were found to be of particular concern, as a result of field surveys. As such, the hydrology report focused analysis on these roads.

In summary, I conclude that the responsible official adequately analyzed and disclosed effects in relation to the baseline used in the hydrology analysis, consistent with NEPA. Also see responses to contentions 3.1, 3.2, 5.3, 5.4, 5.5, and 5.6.

Contention 1.3 Project Implementation and Monitoring Timeline

The objector contends that the responsible official did not share a timeline for implementation of activities nor monitoring and asked to continue to be involved through the implementation of the project.

Objector(s): Erin Clark (Montana Wilderness Association)

Response:

Forest Service regulations implementing NEPA require consideration of public comments (36 CFR 220.4(c)(2)). The responsible official considered and responded to the objector's recommendation to share an implementation timeline consistent with NEPA (Draft DN, p. E-24, comment 60).

I conclude that the responsible official addressed this contention and responded to public comments in compliance with NEPA.

Contention 1.4 Purpose and Need

An objector contends an EIS should be prepared because there is flawed support for the claimed needs because the responsible official used historical conditions as a reference for a supposed need for treatments in violation of the National Forest Management Act (NFMA).

Objector(s): Adam Rissien (WEG)

Response:

This issue was raised in comment and responded to by the responsible official (Draft DN, Appendix E, comments 150 and 152). However, the objector is not satisfied with the response because it does not "address the uncertainties inherent in the agency's reliance on resistance strategies explained by Coop et al., 2020," (WildEarth Guardians Objection Letter, p. 6). A consideration of Coop et al. 2020 was provided in response to comment 154 (Draft DN, Appendix E), as well as in a review of literature provided by commenters (project record, document J1-009, pp. 7-8, 16). Appendix D of the EA provides details on how the proposed treatments would meet the purpose and need and documents the scientific rationale to support the use of these treatments. Appendix 7 of the Vegetation Report provided details on the use of historical vegetation conditions to inform the project, including scientific rationale; Appendix 4 of the Vegetation Report also provides additional information on the scientific rationale for the use of proposed treatments.

The responsible official reviewed this information to inform her determination in the Draft Decision Notice that the selected alterative meets the purpose and need of the project (pp. 13-14), is consistent with NFMA (pp. 23-26) and that significant scientific controversy does not exist (p. 21, FONSI intensity factor #4,). I find the responsible official has demonstrated scientific rationale for the use of historic conditions to inform the project, is consistent with NFMA in the use of proposed treatments to meet the purpose and need of the project, and that an EIS does not need to be prepared regarding this contention.

Issue 2 Terrestrial Wildlife

Contention 2.1 Fisher

An objector contends that responsible official failed to take a hard look at the impacts to fisher because fisher will be negatively impacted by logging and other forest management that remove canopy cover and fragment mature forests in violation of NEPA.

Specific issues were:

1) "Asserting that fisher will remain viable across the rest of the Northern Region does not mean the Forest Service can continue to reduce fisher habitat in the project area."
2) "The agency analysis and response to our comments failed to address the body of scientific evidence we provided showing the importance of not only maintaining but also improving fisher habitat in order to ensure viability of the species within the project area."
3) Failure to respond to comments, to address contrary science and to use the best available science all violate NEPA

Objector(s): Adam Rissien (WEG)

Response:

Fisher is a Sensitive species for the Lolo National Forest (Regional Forester Sensitive Species List). Forest Plan Standard 27 on page II-14 of the Lolo National Forest Plan provides direction to "manage to maintain population viability" for sensitive species. The responsible official addressed two comments on fisher in the draft DN, Appendix E, response to comments 177 and 178. Comment 177 focused on project related effects to fisher while comment 178 refers to the forest plan standard. The response states that the analysis concluded the project would not result in a loss of species viability (p. E-71) and references the analysis documented in the Wildlife Report (project file, Document L-08-001, pp. 73-79) and the EA (pp. 103-107). These documents disclose the science applied, methodology, and assumptions used in the effects analysis. The EA discloses "Alternatives 2, 3, and 4 would not contribute to a trend toward federal listing or a loss of species viability" and provides rationale for that conclusion including that there's low potential to negatively impact "even one individual fisher" because fisher is inherently a "low-density" species; the majority (about 83 percent) of fisher habitat within the project area would be unaffected by harvest activity; and coarse woody debris, snags, and the largest trees appropriate for the forest type would be retained (p. 105).

Table 3.7-4 of the EA estimates the amount of fisher habitat potentially overlapping proposed acres of regeneration harvest by alternative. Intermediate harvest (thinning type treatments) is described in the EA as occurring on 4% of fisher habitat in Alternatives 2,3, and 4, but even habitat treated would be expected to retain some degree of suitability for fisher use (p. 106). Rationale is provided for the assumption. The analysis also concludes that low severity burning and pre-commercial thinning would not impact fisher because these treatments are not proposed in fisher habitat.

The responsible official determined that individual fisher may be impacted (MII) and that the proposed action is not likely to contribute to a loss of viability or a trend toward federal listing of the species (Wildlife Report, pp. 78-79). These findings are supported by the analysis.

I conclude the responsible official adequately analyzed and considered effects to fisher and their habitat, addressed viability of the species, and responded to public comments appropriately in compliance with NEPA and the Lolo National Forest Plan.

Contention 2.2 Forest Plan Elk Standards

The objector contends that the responsible official did not demonstrate compliance with forest plan standards for elk including habitat effectiveness, hiding and thermal cover, and security in violation of NFMA.

Objector(s): Michael Garrity (AWR)

Response:

The Forest Plan (1986) contains forest wide big game standards (pp. II-13 to II-14) as well as Management Area (MA)-specific big game standards (p. II-18). Winter Range MAs 18, 19, 22 and 23 have specific standards. Two key standards related to big game and timber management are:

- Standard 6 for MA 22 and 23, Standard 7 for MA 18. and Retain as a minimum a 50:50 cover: forage ratio. The majority of cover should be thermal cover, that is trees greater than or equal to 40 feet tall with a crown density greater than or equal to 50%.
- MA 18 also includes Standard 4 which states, "All logging and road building for normal management activities will generally be restricted to the summer and fall months. Mitigating measures will be included in work plans associated with road development for locatable minerals.

The responsible official responded to comments on elk and big game in the Draft DN (A-003, Appendix E, pp. 73-74, comments 181 –183). Issues raised are addressed/clarified in the responses and references to relevant documents are provided. A wildlife metadata document located in the project record provides additional relevant documentation.

The EA (p. 6) discusses big game habitat improvement and provides analysis information (pp. 116-120). Analysis criteria discussed include:

> Habitat effectiveness. Focus in is on summer range. MA 26 = 2027 acres in the Project Area. HE on this project is measured by open route density in summer and acres of treatment to improve summer forage. Why nothing on WR and cover/forage? Not sure HE is only a summer thing? Need to read spec report.
>
> Vulnerability is defined as likelihood of hunter mortality and can be related to cover and access management. Open road density during hunting season is the assessment index used. High vegetative cover and steep slopes mentioned here.
>
> Winter range quality is measured by cover:forage ratio (Forest Plan) and acres of forage availability. Current cover forage is 67:33.
>
> Note: There are no standards for big game habitat effectiveness or hiding cover in the Lolo Forest Plan.

Table 3.7-5 of the EA summarizes effects by alternative and shows that cover forage ratios will remain above 50:50 post project. Compliance with Forest Plan Standards is discussed on pages 120 – 121 of the EA. The Forest level standards are described and the MA specific cover forage standard is discussed. The Elk section in the Wildlife Report (pp. 25 – 31) provides additional relevant information.

There is supporting documentation in the project record specific to compliance with forest plan standards. Supplemental wildlife analysis methodology documents, also in the project record, provide additional relevant documentation. However, it is not clear from this review how the responsible

official is complying with Standard 4 for MA 18. The responsible official will clarify compliance with this forest plan standard in the final Decision Notice.

Contention 2.3 Forest Plan Standards Regarding TES Species

The objector contends that the responsible official does not comply with the forest plan's mandate to manage federally listed species recovery in violation of 16 USC 16.04(i) and Lolo Forest Plan standards 24 and 27.

Objector(s): Adam Rissien (WEG)

Response:

The objector contends that the agency failed to take a "hard look" at project impacts to grizzly bear, Canada lynx and fisher. Please see response to Contention 2.1 above for fisher.

The responsible official responded to similar comments from the objector in Appendix E *Response to Public Comments on the Redd Bull Environmental Assessment* of the draft DN (fisher - pp. 71-72, grizzly bear - p. 75, and lynx – p. 82). A specific comment from the objector on forest plan compliance with Threatened and Endangered species recovery is also addressed (p. 71). The response refers to the EA for discussion on compliance with Forest Plan standards 24 and 27 and also specifically addresses issues of habitat connectivity and linkage raised in the comment (pp. 94, 100-101, 101-111).

In compliance with requirements in the Endangered Species Act, the responsible official is consulting with the US Fish and Wildlife Service on the proposed action and federally listed species that may occur in the project area. The responsible official will wait for letters of concurrence on lynx and grizzly bear, and a Biological Opinion for bull trout before signing the decision. I conclude the responsible official complied with NEPA, NFMA, and the ESA.

Contention 2.4 Grizzly Bear Habitat in Roadless Areas

The objector states concern with activities in the Marble Creek [Point] Inventoried Roadless Area (IRA) in areas identified as potential linkage zones for grizzly bears and believes the proposed action should not include the creation of motorized trail #203.

Objector(s): Erin Clark (MWA)

Response:

The responsible official addressed this issue in response to the objector's comment 188 (and also a related comment #178) in appendix E of the draft DN (pp.71, 74). The linkage zones are clarified with reference to the relevant science (Servheen, Waller and Sandstrom, 2003). Regarding modification of the IRA with a motorized trail, the responsible official considered converting Trail 203 to motorized use but decided against it because it had potential to compromise roadless values (Draft DN, p. 16). Connectivity is specifically addressed in the Wildlife Report (Analysis methods, pp. 5, 7; Birds, pp. 12-13; Pileated woodpecker, p. 24Big game, p. 29 last paragraph; Lynx – pp. 34 – 35, 37, 42).

Survey and Observation information in the Wildlife Report provides evidence that connectivity does exist in the project area vicinity. Existing secure habitat and proximity to the putative linkage zones is discussed in the Wildlife Report (p. 49). This section of the report also provides rationale as to why conditions outside of recovery areas may be having greater effects and even adverse effects on grizzly bears – standards and objectives do not apply the same way everywhere grizzlies may occur.

The Wildlife Report (p. 50) states that existing motorized route density is 1.8 mi/mi^2 across the project area and open motorized road density is 1.6 mi/mi^2. The Report discloses that research on grizzly bears and open motorized access, none of which has been conducted in the vicinity of the project area, is inconsistent on a recommendation for road densities that facilitate grizzly survival or reproduction. Nevertheless, the open route densities in the project area fall within the upper range of levels identified as needed to maintain low mortality on the population.

Table 11 in the Wildlife Report (p. 51) provides a comparison of post project metrics for grizzlies across alternatives. See also BA Tables 8 and 9 on page 37**.** The BA also discusses connectivity and linkage zones for lynx (pp. 19, 26) and grizzly bears (pp. 32, 39-40).

Based on information in the draft DN, EA, Wildlife Report and BA, I conclude the responsible official adequately considered and addressed the effects of the proposed action on grizzly bears and lynx.

Contention 2.5 Impacts to Canada Lynx

The objector contends that the responsible official failed to take a hard look at impacts to Canada lynx and did not show the results of analysis in the Wildlife Report. The objector is also concerned that the public did not have access to all relevant documents.

Objector(s): Adam Rissien (WEG)

Response:

The responsible official responded to several comments on lynx in the draft DN (Appendix E, pp. 82-83). She acknowledged she is in consultation with the US Fish and Wildlife Service and addressed the issues of linkage, connectivity, and compliance with the NRLMD. The Wildlife Report and EA both disclosed the preliminary Not Likely to Adversely Affect (NLAA) determination for lynx and provide supporting analysis and rationale for the determination. The BA, which has been added to the project website, discusses connectivity, linkage, and lynx movement (p. 19). The fact that the project area overlaps a linkage area identified in the Northern Rockies Lynx Management Direction (NRMLD) is disclosed and important definitions are also included. The BA also discloses the amount of lynx habitat modified by prescription (p. 21) and the amount of habitat remaining after regeneration harvest by structural stage (Table 7, p. 25). Compliance with standards applicable to the proposed action is demonstrated on pages 26 to 29 of the BA. The wildlife report and BA disclose the results of the analysis and explains how it's consistent with the NRLMD.

Please see response to Contention 2.3. The responsible official will wait for letters of concurrence for lynx and grizzly bear before signing a decision.

I find the responsible official complied NEPA, NFMA, and the ESA.

Contention 2.6 Impacts to Grizzly Bears

The objector asserts that the responsible official fails to comply with the Endangered Species Act and NEPA by failing to take a hard look at effects to grizzly bears and failed to consult with the US Fish and Wildlife Service.

Objector(s): Adam Rissien (WEG)

Response:

The responsible official responded to similar comments raised by the objector in the draft DN (Appendix E, p. 75). The response clarifies the issue of recovery and gives context to the project not being located

within a recovery area. In addition, the point about roads having effects is addressed with reference to the Wildlife Report and the EA. The responsible official further disclosed that consultation with the US Fish and Wildlife Service on potential project effects to grizzly bears is underway. Other similar comments were also responded to in the Draft DN (pp. 75 – 82).

I find the responsible official considered and disclosed impacts to grizzly bears and their habitat. The responsible official is in consultation with U.S. Fish and Wildlife Service and is awaiting a concurrence letter for the grizzly bear NLAA determination. The Biological Assessment for this project is available on the Lolo National Forest website.

Issue 3 Watershed and Fisheries

Contention 3.1 Bull Trout and its Habitat

Objectors assert that project activities will degrade bull trout habitat in Little Joe Creek and that the responsible official must complete consultation with the US Fish and Wildlife Service.

Objector(s): Adam Rissien (WEG), Michael Garrity (AWR), and Erin Clark

Response:

There will be short term increases in sediment delivery over the course of project implementation in some places due to restoration action disturbances (many culvert removals and replacements), road decommissioning, application of road BMPs and physical storage and decommissioning, and increased road use and haul tied to vegetation management actions (Fisheries Specialist Report, pp. 12-22, 24). Both Fisheries and Hydrology specialist reports indicate effects will be spread out over time and space such that no long-term negative outcomes will result for habitat or fish (Fisheries BA, p. 25). Extensive Best Management Practices (BMPs) will in part, help mitigate project level effect intensity and duration (EA, Section 3.5, pp. 68-79) to keep biological outcomes sublethal during project implementation (Fisheries Specialist Report, p. 26).

Indicators in the analysis were selected to predict and evaluate short and long-term changes to habitat (Fisheries Specialist Report, p. 3, Table 1). These indicators were partially used to inform compliance with forest plan standards, including the INFISH (1995) Forest Plan Amendment, its associated standards and guidelines, and Riparian Management Objectives (RMOs). Other forest plan standards evaluated for compliance include Forest Wide (FW) Standard 24 that requires contributions to Endangered Species recovery (bull trout in this case); FW Standard 27 requiring maintenance of habitat needed to support or contribute to Sensitive Species (including westslope cutthroat trout) viability across the planning unit; and FW Standard 28 requiring design of aquatic and other multiple use management actions for aquatic outcomes that are free from permanent or long-term unnatural imposed stress. This includes outcomes related to aquatic insect density or diversity, fish populations, intra-gravel sediment accumulations, or channel structure changes (Fisheries Specialist Report, p. 5).

Evaluation of indicators discloses long term benefits to fish connectivity and reduction in stream crossing disturbances (especially in bull trout systems), improvements to the road density indicator, and long term reductions in sediment delivery in the most important bull trout habitat in the project area (Fisheries Specialist Report, pp. 12-22). It is also important to note that systematic project area monitoring of bull trout habitat indicates project areas are in comparatively good condition relative to other streams monitored on the Forest (Fisheries Specialist Report, Figure 2). This is in spite of the observed high road densities (Hydrology Specialist Report, Table 6) and their potential affects. Also the habitat conditions in watersheds across the middle Clark Fork Core Area are generally trending positively (Fisheries BA, Figure 2, Figure 19).

The Fisheries Specialist Report discloses that there will be some adverse outcomes from implementing the project (p. 26). The proposed action would affect bull trout in Dry Creek and both bull trout and bull trout critical habitat in Ward/Little Joe Creeks and St. Regis/Clark Fork Rivers. Design criteria and mitigation measures are expected to keep the level of effect to non-lethal levels for fish. Nonetheless, short term sediment production and delivery are in amounts that warrant a "May Affect, Likely to Adversely Affect determination". As such a BA disclosing these potential effects was prepared for the formal Section 7 consultation process. The BA also discloses positive long-term habitat outcomes to habitat in bull trout watersheds (BA, Figures 12 and 16). The degree to which these indicators are expected to improve is not trivial and includes 8 habitat indicators improved for the Little Joe watershed, 4 improved for Ward Creek, and 3 for Dry Creek (BA, Appendix E). The responsible official awaits a Biological Opinion from the US Fish and Wildlife Service.

The EA and specialist reports for water and fish disclose status and outcomes by indicator and alternatives and indicate consistency with Forest Plan standards noted above. Indicators include Roads (BA, Figure 10) and sediment (Fisheries Specialist Report, pp. 12-22, and Fisheries BA). Other habitat indicators linked to INFISH Riparian Management Objective such as wood, pools, etc. and evaluated against existing robust PIBO data incorporated into a Condition Index, are expected to continue on positive trajectories. This will be validated by required post project monitoring (Draft DN, Aquatics Monitoring C-9). There would be periods of short-term degradation (especially with the fine sediment indicator) with expected strategic long-term improvement to habitat over time (Fisheries Specialist Report, pp. 25-26 along with regulatory compliance determination). Improvement includes decreased hydrologic risks via road decommissioning or storage, numerous culverts removed or replaced restoring aquatic organism movement, and decreased watershed vulnerability and risk (Fisheries Specialist Report, Appendix A, Table 5). Strategic BMPs would be applied to known sediment delivery points (these include engineered BMPs such as drivable dips and cross drains, slash-filter windrows, dust abatement, and road narrowing, etc., as well as administrative BMPs such as season road closures).

The Fisheries Specialist Report discloses the comparative short-term adverse outcomes and long-term benefits demonstrating Alternative 3 as the optimal for bull trout. Although decommissioning of a 2.5-mile portion of the South Fork Little Joe road tied to Alternative 3 was not selected, the responsible official demonstrated substantive benefits to bull trout and critical habitat from considerable road relocation (nearly 3 miles in key bull trout critical habitat), partial hardening of the road, and closure during winter and breakup. Anticipated improved conditions for bull trout build from the measured bull trout habitat currently in relatively good condition compared to other aquatic systems across much of the rest of the Forest (Fisheries Specialist Report, p. 8). On the North Fork of the Little Joe road there will be large scale reconstruction via narrowing, surfacing and dust abatement, and two aquatic organism passage projects that will all combine for effect reductions and some longer lasting benefits.

I find the responsible official considered and disclosed impacts to bull trout and their critical habitat. The decision will not be signed until a biological opinion is received from the US Fish and Wildlife Service.

Contention 3.2 Adverse Watershed Impacts

An objector asserts that the responsible official failed to disclose hydrological impacts and harmful effects to fisheries and requests that the responsible official complete WEPP modeling for all roads in project watersheds. The objector further contends that the existing analysis is insufficient for demonstrating how targets outlined in the sediment TMDL would be met, thereby violating antidegradation rules and the Clean Water Act, and includes an overreliance on the use of Best Management Practices (BMPs).

Objector(s): Adam Rissien (WEG)

Response:

Nonpoint source pollution is regulated under a variety of federal and state Clean Water Act (CWA) authorities, including but not limited to Sections 208 and 319 of the CWA, the State of Montana Water Quality Act (MCA 75-5-101 through -327). Where impairment is a concern, Section 303 of the CWA requires designation of the impaired waterbody and sets in motion a set of actions whereby state regulatory agencies evaluate the scope of an impairment, develop Total Maximum Daily Loads (TMDL), and create plans to meet pollutant goals as outlined in a TMDL. The Red Bull project contains watersheds that fall within two TMDL analysis areas: Central Clark Fork Basin Tributaries (2014; mainly Dry Creek and Clark Fork mainstem), and the St. Regis Planning Area (2008; including the main Little Joe along with the North Fork and mainstem St. Regis) TMDL analysis areas. Most appropriate here are the main Little Joe and its North Fork, where The Montana Department of Environmental Quality identifies that chronic sedimentation from existing roads in close proximity to streams and undersized road-stream crossings as the main causes of beneficial use impairment (EA, p. 63; Hydrology Specialist Report, Table 5 and pp. 8-10). Water Quality Restoration Plans allow for sediment load reduction to be accomplished both via Best Management Practices and active restoration, both of which are included in the proposed action.

The EA contains an abbreviated portion of the analysis documented in the Hydrology and Fisheries Resource Reports. The Hydrology analysis assessed potential water quality effects through a multi-indicator approach. This includes road density analysis, road sediment delivery using models, and stream crossing indicator changes to help assess pre, during, and post project and regulatory compliance (EA, p. 72).

The Fisheries Report and BA similarly used a series of diagnostic pathways and indicators to make determinations of project effects to federally listed species and US Forest Service Region 1 Sensitive Species. The analyses, especially in the Fisheries BA, integrate project outcomes to demonstrate that key indicators such as fine sediment will be beneficial once benefits accrue during and after implementation (see response to Contention 3.1 above) and in support of the aquatic life beneficial uses consistent with TMDL plan requirements (Fisheries Specialist Report, pp. 23-25).

Objectors also claim that BMP use and assumed effectiveness was overly relied on as an act of compliance with the Clean Water Act (see EA, p. 8). Both Hydrology and Fisheries reports demonstrate that BMPs (improved drainage, surfacing, road narrowing, no haul the South Fork Little Joe Road, slash filter windrows, and vegetation management restrictions) are but one modality that contributes to aquatic resource protection and benefit of this project. The Redd Bull project has strategic aquatic elements that are based on five years of data collection (Hydrology Specialist Report, p. 5), which is foundational to establishing a spatially explicit aquatic strategic improvement. The strategy includes road relocation, hardening, decommissioning and storage, and stream crossing remedies for hydrologic integrity and/or fish passage such that water quality and aquatic habitat conditions will accrue and persist for some time post project implementation (Hydrology and Fisheries Specialist Reports, EA Draft DN). The responsible official acknowledges there are uncertainties with BMP effectiveness and longevity (EA, p. 76; Hydrology Report, p. 26 and Appendix G) which is why BMP application is not overly relied upon to predict sediment reductions (EA, p. 70; Hydrology Report, p. 26; Fisheries Report, p. 6).

The St. Regis and Central Clark Fork Tributaries sediment TMDLs do not forbid elevated pollutant loading while project activities are being undertaken, nor is there a timeline for meeting pollutant targets outlined in the water quality plan. Sediment conveyance is necessary to implement part of the proposed action, that will ultimately contribute to a net reduction in risk of sediment conveyance or direct

sediment delivery to tributaries within the project area (Fisheries BA, p. 13). The St. Regis (including the North Fork Little Joe) and the Central Clark Fork Tributaries TMDLs and Water Quality Improvement Plans recommend use of BMPs for maintaining unpaved roads as a tool for addressing sediment concerns within the project area. Also, the Fisheries BA (p. 5) provides time frames required for watershed improvements; these are the highest priority and most consequential to water and fish benefits, at more than $2.7 million dollars of investment.

The proposed action would be subject to all necessary permits (including, but not limited to Montana SPA 124, ACOE Section 404, and Montana Short-Term WQ Standard for Turbidity (318) permits and a Biological Opinion from the US FWS to allow for incidental take and a no jeopardy opinion.

I find the responsible official demonstrated compliance with the Clean Water Act.

Issue 4 Vegetation

Contention 4.1 NFMA Restocking

Objectors contend that the responsible official is in violation of NFMA regulations at 36CFR 219.27(C)(3) and NFMA 6(g)(3)(E)(ii) by not ensuring stands will be restocked in five years.

Objector(s): Michael Garrity (AWR), Center for Biological Diversity, and Wildearth Guardians

Response:

The objector contends that the proposed action will not comply with NFMA requirement to ensure stands will be adequately restocked within five years. The responsible official addressed the restocking requirement in stands that would be regeneration harvested stating, "Natural regeneration is expected at various densities and species, and most of these units will be planted to ensure regeneration of larch, ponderosa pine, and blister rust-resistant white pine." (Draft DN, p. 2) The vegetation report demonstrates the responsible official's ability to meet the restocking deadline (Draft DN, p. 24; Vegetation Report, p.25; Vegetation Report Appendix 1, p. 6).

The objector commented regarding recent science about post-fire conversion and lack of reforestation success. This comment was addressed in Appendix E of the Draft Decision Notice in response to comment 154. The proposed treatments within the Redd Bull project incorporate relevant science to modify stand- and landscape-level susceptibility to climate change and to increase resilience to disturbance. Adaptation strategies for conserving native forest vegetation focus on increasing resilience to chronic low soil moisture and increasing environmental disturbances such as wildfire, insects, and non-native species are discussed in the EA Appendix D.

In addition, the response to comment 155 addresses the contention that the agency will not be able to regenerate cut areas resulting in conversion to a different vegetative group. The response thoroughly discusses the focus of retaining disease tolerant species as seed for regeneration, as well as planting to achieve timeframes required by law. Experience based evidence is discussed regarding regeneration success within the project area as well as elsewhere on the District.

I conclude that the responsible official adequately addressed restocking following regeneration harvest in compliance with NFMA.

Contention 4.2 Old Growth Forest Plan Compliance

An objector contends it is not clear how the responsible official will meet forest plan old growth standards because maps of old growth were not included for review by the public. Further the objector states that the responsible official is in violation of the forest plan by not identifying old growth compliant with the plan (Forest Plan p. IV-23) - Stands should be provided which are at least 30-40 acres in size and are decadent, multistoried, fully stocked, contain snags with dead and down material greater than 15 tons per acre, and contain 15 trees per acre greater than 20 inches dbh.

Objector(s): Michael Garrity (AWR)

Response:

The Lolo Forest Plan does not contain standards for retaining a specific level of old growth. The Forest Plan old growth strategy can be found in the Redd Bull EA (Document A-002, pp. 39-44), in the Vegetation Report, Appendix 1 as well as in the Old Growth Summary document (L01-005).

The Lolo Forest Plan does not contain forest-wide standards for old growth. The Forest Plan FEIS (p. II-61) states, "As a strategy for meeting old growth needs, the Forest was segregated into 71 drainages. A minimum of eight percent old growth was allocated to most of these drainages where wilderness was not available." The eight percent was based on an interpretation of literature available at the time which considered the minimum habitat needed for various old growth associated species. This was a strategy, not a forest plan standard. The Forest Service Northern Region has since defined old growth in Green et al. (1992, errata corrected 2011). The 2016 Forest Plan Monitoring Program Transition modified how the Forest is to measure the quantity of old growth across the Forest. The indicator used is acres of old growth that meet Region 1 old growth definitions (Green et al.). The data source is Forest Inventory and Analysis (FIA) National Program Database. The Redd Bull EA discloses that following project completion, the Lolo National Forest would continue to meet the Forest Plan strategy for old growth (Document A-002, p. 44).

Responses to comments 167 and 168 in the Draft Decision Notice (p. E-67-68) also respond to the objector's concern regarding meeting old growth forest plan standards.

I conclude that the responsible official is consistent with Forest Plan direction for old growth.

Issue 5 Roads and Travel

Contention 5.1 Adding Roads to the System

Objectors contend the environmental assessment fails to demonstrate the need to add roads to the transportation system, fails to consider long-term funding for the new roads, fails to address adverse resource effects of the new roads, and fails to prioritize establishing a right-sized, affordable road network.

Objector(s): Adam Rissien (WEG), Center for Biological Diversity, and Alliance for the Wild Rockies

Response:

As required by the Forest Service transportation system management policy, the decision to add undetermined roads and construct new roads was informed by travel analysis (2015 Lolo Travel Analysis Report (forestwide) and Redd Bull Travel Analysis Report). The regulations do not prohibit new road

construction, nor do they require the responsible official to "prioritize establishing a right-sized, affordable road network". Rather they indicate road construction "shall be directed to what is necessary and economically justified for protection, administration, development, and multiple-use management of the federally owned lands and resources served" (36 CFR 212.4(a)) and also "Forest officials should give priority to decommissioning those unneeded roads that pose the greatest risk to public safety or to environmental degradation" (36 CFR 212.5(b)(2)).

The project-specific travel analysis, EA, and transportation specialist report for the Redd Bull project considered social and environmental risks and benefits of the road system, a financial review, and contribution of the road system to land management objectives and desired conditions. This analysis documented the need for new road construction, identified some roads to be stored, some roads to be decommissioned, and found that some existing non-system (undetermined) roads need to be added to the National Forest road system (draft DN, p. E-25). The EA discloses potential effects and resource measures designed to minimize effects related to invasives species, watershed, fish, and wildlife in sections 3.2.3, 3.5, 3.6, 3.7, and 3.11. Additional effects are addressed in the fisheries, wildlife, and recreation specialist reports and biological assessments. See also the draft Decision Notice pages 31 to 32 and Appendix E Response to Comments on page E-49 to 50. The transportation specialist report details the maintenance costs associated with each operational maintenance level, as well as the costs associated with construction, reconstruction, storage, and decommissioning.

I find the responsible official supported the travel management decisions with travel analysis, demonstrating a need for additional roads, while also decommissioning unneeded roads. The project record demonstrates a consideration of environmental, social, and economic impacts. However, the responsible official will clarify how the maintenance costs disclosed in the project documentation reflect a consideration of the long-term funding obligation for the routes added to national forest transportation system.

Contention 5.2 Detail of Project TAR

Objectors contend the findings from the Redd Bull Travel Analysis Report must be disclosed and discussed in the environmental assessment. They also contend that the Redd Bull Transportation Analysis Report (TAR) lacks detail regarding how the resource risks were evaluated and informed the recommendations.

Objector(s): Adam Rissien (WEG)

Response:

Although the objector would prefer additional travel analysis report information was included in the EA, the responsible official has the discretion to incorporate that information by reference. As indicated on page E-28 of the draft DN, NEPA regulations at 40 CFR 1508.9 describe an environmental assessment as a concise public document that serves to briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact. The travel analysis report, the environmental assessment, and transportation specialist report together describe how risks and benefits were considered. Also see response to Contention 5.1 regarding the sufficiency of the information provided to support the project travel management decisions.

Contention 5.3 Minimum Road System

Objectors contend the responsible official has a regulatory obligation to include the identification of the minimum road system in the Redd Bull project's purpose and need.

Objector(s): Adam Rissien (WEG), Center for Biological Diversity, and Alliance for Wild Rockies

Response:
The travel management regulations at 36 CFR 212.5(b) require the following of the Forest Service (1) to "identify the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of NFS lands" and "use of a science-based roads analysis at the appropriate scale" and (2) identify unneeded roads. Travel management decisions such as the identification of the minimum road system, road construction, reconstruction, decommissioning, acquiring NFS roads through a land purchase or exchange, or changing motor vehicle use designations must be informed by travel analysis.

Under the NEPA, the responsible official has broad discretion to determine the purpose and need of a proposed action. Neither the NEPA nor the regulations at 36 CFR 212 require the identification of the minimum road system as part of a project purpose and need or the proposed action.

As required the Redd Bull road management actions were informed by travel analysis. This included a consideration of the forestwide travel analysis and the refined, project-specific travel analysis (EA, Section 3.8, pp. 121-122; draft DN, p. 18 and appendix E, pp. E-25-26). Although the response to comments includes an inaccurate statement that the forestwide travel analysis report identified the minimum road system (Draft DN, p. E-25), the description of the travel analysis process in section 3.8, the Draft DN on page 18, and the travel analysis report itself accurately describe how the travel analysis report provided recommendations for road management actions in the project. The responsible official will correct the statement in the response to comments.

I find the responsible official complied with travel management regulations regarding identification of the minimum road system.

Contention 5.4 Temporary Roads

Objectors assert the environmental assessment does not include sufficient analysis regarding wildlife and temporary roads, increases in road densities and habitat fragmentation, or measures to ensure temporary roads do not become unauthorized roads.

Objector(s): Adam Rissien (WEG)

Response:
Sections 3.6 and 3.7 of the EA and the wildlife and fisheries specialist reports disclose the effects of roads, whether permanent or temporary, on bull trout, westslope cutthroat, grizzly bears, lynx, wolverine, elk, and migratory birds. Road density effects are modeled to estimate effects to grizzly bears and fish habitat. Page 52 of the wildlife specialist report discusses the effects of the standard operating procedures related to treatment of temporary roads after timber harvest activities have been completed. This indicates temporary roads would be in place for 3 to 6 years at most and would be ripped and seeded by the end of the timber sale contract. The EA (pp. 24, 73) and the response to comments (Draft DN, p. E-71) indicate temporary roads would be decommissioned by recontouring the hillslope back to its original shape as much as possible, rendering them impassable by motorized vehicles.

I find the analysis in the project record provides sufficient information for the responsible official to make a finding of no significant effects.

Contention 5.5 Travel Management Rule Compliance

Objectors assert the responsible official fails to demonstrate how the current motorized trail designations comply with the criteria at 36 CFR 212.55(b). In addition, objectors contend the analysis in the environmental assessment does not support the decision notice determination that designation of motor vehicle use on Trail #203 was made in consideration of the criteria at 36 CFR 212.55(b).

Objector(s): Adam Rissien (WEG)

Response:
As indicated in the response to comments on page E-47 (Draft DN), the travel management designation regulations at 36 CFR 212.50(b) give the responsible official discretion to incorporate previous travel management decisions made under other authorities to comply with the motor vehicle use designation requirements at 36 CFR 219.51. The regulations do not require reconsideration of the effects of those designations when additional travel management designations or prohibitions are proposed.

The regulations do require the responsible official to make any *new* motor vehicle trail use designations, such as the one made for Trail #203, with the objective of minimizing effects to the list of criteria described at 36 CFR 212.55(b). While the analyses in the environmental assessment and specialist reports do not use the term "minimization criteria", effects of the designation on the affected resources is disclosed and is sufficient to inform the responsible official's determination the designation of Trail #203 for motor vehicle use has been made with the objective of minimizing adverse effects in compliance with the regulations.

Contention 5.6 Post-Fire Roads

Objectors contend that the responsible official failed to disclose post-fire effects of the untreated or partially treated closed, stored, and decommissioned roads.

Objector(s): Adam Rissien (WEG)

Response:
The EA discloses the effects of the road management actions on invasive species, watersheds, and wildlife in sections 3.2.3, 3.5, 3.6, and 3.7. It acknowledges adverse effects could occur after high intensity wildfire on roads stored or decommissioned via natural regeneration (pages 75 to 76). However, it would be highly speculative to describe potential post-wildfire effects in additional detail given those effects would vary depending on if and when wildfire occurred, the duration, location, and intensity of any wildfire, and the post-fire weather conditions.

Issue 6 Climate and Carbon

Contention 6.1 Proposed Action Impacts on Climate Change

Two objectors contend that the responsible official failed disclose the project impacts on climate change and that the responsible official failed to quantify the project's impact on carbon storage in violation of NEPA.

Objector(s): Adam Rissien (WEG) and Michael Garrity (AWR)

Response:
The CEQ regulations for implementing NEPA provide direction and guidance for assessing direct, indirect, and cumulative effects caused by the proposed action and alternatives. Tiering to this direction, Forest Service guidance on addressing climate change is found in Climate Change Considerations in Project level NEPA Analysis, 2009 (https://www.fs.fed.us/emc/nepa/climate_change/includes/cc_nepa_guidance.pdf). The guidance states, "As with any environmental impact, GHG emissions and carbon cycling should be considered in proportion to the nature and scope of the Federal action in question and its potential to either affect emissions or be affected by climate change impacts" and "As GHG emissions are integrated across the global atmosphere, it is not possible to determine the cumulative impact on global climate from emissions associated with any number of particular projects. Nor is it expected that such disclosure would provide a practical or meaningful effects analysis for project decisions."

A qualitative cumulative effects discussion could incorporate a summary of local, regional, or national climate change scientific assessments to recognize overall climate change effects expected because of all contributions to climate change. However, it would not be possible, and it is not expected that the effects of a particular project or multiple projects can be specifically attributed to those effects.

The Redd Bull Forest Carbon Cycling and Storage Report provided context for a baseline conditions at the regional and national level for U.S. Forests (p. 2), stating "U.S. forests are a strong net carbon sink, absorbing more carbon than they emit (Houghton 2003, Heath et al. 2011, EPA 2015)." and "The total carbon stored on the Lolo National Forest is approximately 135 Tg, or about thirty one hundredths of one percent (0.0030) of approximately 44,931 Tg of carbon stored in forests of the coterminous U.S. (Heath, et al. 2011). The Redd Bull Project would affect only a tiny percentage of the forest carbon stock of the Lolo National Forest, and an infinitesimal amount of the total forest carbon stock of the United States." (p. 5). The report further states "Neither the No Action alternative or the Proposed Action would have a discernable impact on atmospheric concentrations of greenhouse gases or global warming, considering the limited changes in both rate and timing of carbon flux predicted within these few affected forest acres and the global scale of the atmospheric greenhouse gas pool and the multitude of natural events and human activities globally contributing to that pool" (ibid.). This statement is consistent with Forest Service guidance provided above.

I conclude the responsible official adequately disclosed the effects of the proposed action on carbon storage.

Contention 6.2 Impacts of Climate Change

Objectors contend that BMPs designed to limit erosion and stream sediment for current weather conditions may not be effective in the future and that the responsible official failed to disclose how realistic and achievable its desired vegetation conditions are in the context of climate change.

Objector(s): Adam Rissien (WEG) and Michael Garrity (AWR)

Response:
The objector contends that BMPs will not be effective in the future due to changes in climate. The responsible official responded to comment on the effectiveness of BMPs under a future climate scenario (Draft Decision Notice, Appendix E, p. E-20, comment 51).

Building resiliency to natural disturbances and responding to fundamental environmental shifts is described in the purpose and need of the project (EA, pp. 3, 4-5). The effects of climate change on forest resources such as forested vegetation, old growth, sensitive plant species, fisher, wolverine, hydrology

and fisheries, are addressed throughout the EA (pp. 33-39, 46-50, 101-103, 103-107) or the respective specialist reports (project record). The EA and/or the respective specialist reports disclose methodologies used in analyses as well as assumptions made. A discussion of climate change and how the treatments in the proposed action would modify susceptibility to climate change is included in Appendix D of the EA. The discussion presents the science behind methodology and assumptions used, and rationale for conclusions (pp. D-3 to D-4).

I conclude the responsible official considered the effects of climate change when developing the proposed action and applicated of Best Management Practices.

Issue 7 Roadless Areas

Contention 7.1 Roadless Forest Plan Compliance

An objector asserts that the responsible official is in violation of her forest plan which states approximately 25 percent of the forest will remain in a roadless condition and managed as wilderness for its roadless values.

Objector(s): Michael Garrity (AWR)

Response:
The proposed action does not include road construction nor reconstruction within any IRA. None of the alternatives would have long-term adverse effects to roadless characteristics or wilderness attributes (EA, p. 137). The majority of the timber harvest within the IRA would occur where roadless characteristics meet the 'substantially altered' exception in the Roadless Rule (36 CFR 294.13 (b)(4)) from previous timber harvest and road construction that occurred in the late 1980s to early 1990s (EA, p. 14). The EA also states that the majority of the Marble Point IRA where timber harvest would occur is allocated to management areas (MA) in the forest plan that allow timber harvest and other development. However, the majority of the Ward Eagle and Sheep Mountain-Stateline IRAs within the project area are allocated to MA 11 where timber harvest and other development are prohibited (p. 129). There would be no change to the percentage of the Lolo National Forest managed for its roadless and wilderness values as a result of the proposed action. on the Forest plan requirement of managing approximately 25 percent of the Forest for its roadless and wilderness values.

Contention 7.2 Roadless Rule Exceptions

An objector contends that the responsible official is in violation of NEPA and the Roadless Area Conservation rule by: Relying on the Roadless Rule's narrow exemption for timber harvest (36 CFR 291.13(b)(4) and road maintenance. Further the boundary of substantially altered within the roadless area is not identified.

Objector(s): Adam Rissien (WEG)

Response:
The EA adequately describes where and how past development of roads and timber harvest in the Marble Point IRA have led to the substantially altered roadless characteristic determination (EA, pp. 133-135). Also, Figure 3 in the Roadless Specialist Report displays how proposed activities will be conducted in the substantially altered potion of the Marble Point IRA (Roadless Report pp. 51). The EA makes it clear that no new roads or road reconstruction, in an IRA, is part of any alternative. The EA describes

what road maintenance will be conducted consistent with the definition in the Roadless Rule (EA pp. 140).

Contention 7.3 Roads in Roadless

An objector contends that the responsible official fails to demonstrate that she may undertake road reconstruction under the guise of "road maintenance" in violation of the Roadless Rule.

Objector(s): Adam Rissien (WEG)

Response:

Both the EA and Draft Decision Notice address the difference between road maintenance and reconstruction and explain no new roads or road reconstruction will be conducted in an IRA (EA, pp. 140-141; Draft DN, pp. 29-30). The Draft Decision Notice demonstrates compliance with the Roadless Rule regarding road maintenance (Draft DN, p. 29).

Contention 7.4 Timber Harvest in Roadless Areas

An objector contends that the responsible official has violated the roadless rule at 36 CFR 294.13(b)(1)(ii) because she has not demonstrated that the proposed logging will be limited to generally small diameter timber.

Objector(s): Adam Rissien (WEG)

Response:

When not utilizing timber exception 36 CFR 294.13(b)(4) the EA and Draft Decision Notice adequately discusses and explains how the proposed timber harvest complies with the Roadless Rule utilizing timber harvest exception 36 CFR 294.13(b)(1)(ii) (EA, p. 156; Draft DN, p. 30). Also, a more in-depth discussion on the use and compliance of the Roadless Rule utilizing timber exception 36 CFR 294.13(b)(1)(ii) can be found in the Roadless Specialist Report (pp. 43-44).