

Data Submitted (UTC 11): 8/23/2021 11:00:00 AM

First name: Sara

Last name: Johnson

Organization: Native Ecosystem Council

Title: Director

Comments: 1. Statements Demonstrating Connection between the Objection and Prior Written Comments.

On April 7, 2021, the above objectors submitted comments on the draft Environmental Assessment for the Mud Creek Vegetation Project. Due to the length and scope of these comments, we wish to incorporate them by reference into this Objection, instead of repeating them. However we will summarize the basic concerns we raised. We covered a wide range of concerns, including grizzly bears (failure to acknowledge they are present in the project area); whitebark pine management (planned massive destruction of this proposed species in burning and logging units), migratory landbirds (failure to evaluate project impacts on these species as is required by the MOU between the Forest Service and FWS); failure of the 1987 Forest Plan to ensure viability of cavity-associated wildlife (failure of Forest Plan to have a valid conservation strategy for 25% of the forest bird populations, and a failure of the Bitterroot National Forest to amend the Forest Plan to correct this problem; failure to manage for Forest Plan levels of old growth, or levels of old growth required for wildlife viability; failure of the proposed Forest Plan amendments for old growth, thermal cover on big game winter range, and the Elk Habitat Effectiveness (EHE) standards to identify new standards or identify the significant adverse impacts these proposed amendments will have; failure of the agency to correctly define and map elk security, both what currently exists and how it will be changed by the project; failure of the agency to manage noxious weeds due to creating massive land disturbances that trigger noxious weeds, including due to burning, logging and building roads, without follow-up in eliminating these weeds due to a lack in funding priorities.

The vast network of roads in the Mud Creek Project Area, which most likely are bordered with noxious weeds throughout, will be increased with a huge addition of yet more roads. We identified the creation of openings over 40 acres as a concern, including a failure of the agency to provide a 60-day comment period by the public as per the Forest Service Manual direction for Region 1, at 2471.1 .

There was also no valid analysis of the impact of large openings on wildlife in the draft EA, or any rationale provided by the agency as to why large openings are more essential to forest management than providing wildlife habitat. The rationale for large openings to reduce insects and disease means that a key factor for wildlife, insects that provide food, is being selected against; controlling insects

while maintaining wildlife is a difficult task, one which was never addressed in the Mud Creek draft EA. We also challenged the agency claims that large clearcuts replicate natural openings created by bark beetles and/or other forest insect infestations. In our objection we have attached a research publication by Lowrey et al. (2020), work completed in Region 1, on the Helena National Forest, that demonstrated that even heavy infestations of bark beetles, infestations that cause up to 80% mortality of overstory trees, had only minor impacts on stand structures, and maintained elk cover as well; overall canopy reduction due to beetles was minor. We concluded in our concerns about large openings that the Bitterroot National Forest needs to complete a Forest Plan amendment to change the old growth MIS for the Forest, which are pileated woodpeckers and pine marten, because managing for these species is incompatible with creating large openings. We also noted that there was no analysis of how these proposed large openings will impact elk security. There was no valid analysis of large openings on elk security, because the agency falsely claimed that hiding cover is not required for elk security. Finally, we raised concerns about the programmatic planning nature of this project, for a 20 year period where treatment units are not mapped or the dates of planned treatments provided, where due to the massive scope of the project the public cannot be expected to understand all aspects of the project regarding both implementation and impacts on resources. No actual conclusions about environmental impacts are provided to the public, and on-the[shy] ground reviews by the public are impossible due to the massive scope of the project. Without valid

information on the project, its implementation and its impacts on resources, the public was denied the opportunity to both understand how project implementation over the next 20 years would happen, or what the impacts on resources would be, which means the public was not provided enough information to even identify their concerns. We also raised the issue about wildlife surveys, that none have been done, and therefore, the public does not know what wildlife species occur in the proposed treatment units, or how they may be impacted by the project. Also, the agency cannot assure the public that wildlife surveys will actually be done, since these will be done after the required public involvement process has ended, and there is no process whereby all the survey results will be provided prior to project decisions. It was also unclear that the agency has the needed wildlife personnel to complete these surveys.

2. Remedy

Due to the countless violations that the proposed Mud Creek Vegetation Project will trigger in regards to various laws, such as the NEPA, the NFMA, the APA and the ESA, as well as Forest Service manual direction regarding providing a public comment period on large openings, Objectors request that this project be withdrawn. It is clearly a violation of the NEPA in that programmatic plans are not allowed in Environmental Assessments. This project is a programmatic proposal that is consistent with Forest Planning, not site-specific project NEPA evaluations.

1. Description of Project Aspects that Violates Law, Regulation and Policy.

A. The Mud Creek Vegetation Project will violate the National Environmental Policy Act (NEPA)}, the National Forest Management Act (NFMA)}, the Administrative Procedures Act (APA)} and the Endangered Species Act (ESA). Forest Plan Violations:

The Mud Creek Vegetation Project (here after "project") will violate the Forest Plan direction to implement the 1985 Coordinating Elk and Timber Management by Lyon and others. The Forest Plan Record of Decision (ROD) at 8 and 31 states that these recommendations have been incorporated into the Forest Plan as standards. One of the recommendations is to have small clearcuts, under 100 acres in size. The Project plans clearcuts up to 200 acres in size.

The Lyon et al. (1985) recommendations include one that thinning next to clearcuts is not recommended, due to the loss of hiding cover. There are no restrictions against forest thinning adjacent to clearcuts in the Project. Although the agency states in the initial Wildlife Report at 34 that forest stands with a minimum canopy cover of at least 40% provide hiding cover for elk, there was no actual documentation of this claim provided. It is highly unlikely that most forest stands in the project that will be logged and then have the understory also removed, including with prescribed burning, that hiding cover as defined by the Forest Plan glossary, or hides 90% of an elk within 200 feet, would be retained.

This is the standard definition of hiding cover for elk (Black et al. 1976). A standard definition of hiding cover for elk as per the 40% canopy cover standard was not cited in the initial Wildlife Report.

A Forest Plan standard (d-3 at 11-19) that the size, shape and location of the area between openings will be consistent with wildlife, water and visual resource considerations was not implemented for the Project; documentation of the rationale and tradeoffs are required if the proposed openings are larger than the intervening leave areas. Thus the Lyon et al. (1985) recommendation that openings should be developed without reducing elk security needed to be addressed for opening sizes. Why are large openings avoiding significant impacts on elk security?

The Forest Plan definition of security was not used for the Project. This definition includes areas from 5,000-8,000 acres below 7000 feet in elevation that provide high-use fall habitat that is secure for elk (Forest Plan at VII-11, Forest Plan FEIS at 111-21). The Project documents only state that the Hillis Paradigm was used as a measure of elk security, along with EHE. There were no security areas as defined by the Forest Plan and associated FEIS for the Project Area.

The Forest Plan direction to consider the 1978 Guides for Elk Habitat Objectives (e-12) was clearly not met with the Mud Creek Project. These guidelines recommend 20% thermal cover on big game winter ranges.

There was no documentation provided for the Project as per the Forest Plan standard for MA 3b for 25-50% old growth; there is no documentation that this level is being met in the project area.

The Forest Plan has a standard that sanitation and salvage logging may occur in old growth stands if old growth characteristics are maintained. The proposed logging in old growth will not maintain old growth characteristics for wildlife (see Declaration in Appendix C of this Objection).

The Forest Plan has a standard that long rotations will be prescribed in old growth on suitable timberlands in Management Areas 1, 2, 3a and 3c; the rotation ages planned for the old growth stands in the Project Area were never identified, including for regeneration harvest units.

NFMA, NEPA and APA violations:

The agency claims there will be no significant adverse impacts to wildlife even though surveys are planned only for management indicator (MIS) and sensitive wildlife species (Response to Comments B-37); given the treatment of almost the entire project area, this means that low density forest raptors, as the goshawk, great gray owl, boreal owl, northern pygmy owl, and saw-whet owl, will likely be extensively eliminated from the Project Area. This would be a significant impact. The Targhee Revised Forest Plan (USDA 1997) has required careful habitat management for the goshawk and great gray owl (both Montana Species of Concern}}, management that requires location of nesting areas and retention of large blocks of old growth in nesting areas. Failure to require similar management strategies for these low-density forest raptors in the Mud Creek Project will have unmeasured adverse impacts on these species. The agency has provided no information as to why surveys for these low-density forest raptors could not be done, including if much smaller projects were planned. Implementing huge vegetation treatment projects does not eliminate the requirements of the agency

to adhere to the NEPA and the NFMA, to maintain a diversity of wildlife and to define impacts on wildlife in projects that impact their habitat.

The agency states that prior to implementation, surveys for MIS and sensitive species will be done. The public was unable to provide any input on the current density and distribution of MIS and sensitive species in the project area, or to know how past as well as proposed vegetation treatments and prescribed burning may have impacted their current densities in the Project Area, or how the proposed project will overlap with nesting areas for these MIS and sensitive species. Without this information, the public was unable to provide any meaningful input regarding management of these nesting areas, or to have some level of information as to how the project will impact these wildlife species.

The agency is not providing the public with any information as to how the proposed project will be implemented on the ground. This information will be provided to the public piecemeal, over the next 20 or so years, in annual implementation workshops (Response to Comments B-22). This information will include design and location of treatment units and roads. Without this information being provided during the public comment period, the public lacks the basic information of the proposed project to provide comments or to review these proposed treatments on the ground prior to providing comments, as well as to object to specific actions they believe violate existing laws or policy. Thus the condition-based management proposal by the Forest Service excludes any actual public involvement for influencing proposed actions, as is required by the NEPA.

The scale of the proposed Project is so large that it is impossible for the public to gather any meaningful understanding or assessment of how resources will be impacted. The public will also be unable to do any meaningful level of review of the project on the ground, due to the vast size of treatments and proposed new roads. This large project effectively prevents any meaningful public comments and on-the-ground review of the proposal, in violation of the NEPA.

There was no actual analysis of project impacts of the large openings that will be created, including up to 200 acres, including for Forest MIS the pileated woodpecker and pine marten. Research has shown that clearcutting is not recommended in pileated woodpecker territories, and that extensive clearcutting can severely reduce pileated woodpecker breeding pairs (Bull et al. 2007)}. The impact of the proposed large openings on this MIS was never evaluated for the Project, however. The agency is required to define how clearcuts in general will impact individual home ranges of pileated woodpeckers, as per the current best science. Extensive areas of clearcutting will also reduce the landscape carrying capacity for the MIS pine marten (Fager 1993)}. Also, there was no analysis of the impact of large openings on elk, which is noted to be an indicator or management impacts on elk hunting and vulnerability. A 200-acre opening is almost the minimum size of an elk security area of 250 acres (Hillis et al. 1991)}. Thus the location of these large openings means that the ability to provide elk security has been eliminated for that area. Also, openings over 4 acres are not considered goshawk habitat (Reynolds et al. 1992)}. The goshawk is a Montana Species of Concern (Montana Natural Heritage Program, available on their web page)}. Also, openings in the forested landscape eliminate goshawk habitat and create habitat for the common red-tailed hawk (La Sorte et al. 2004). The red-tailed hawk is not a Montana Species of Concern.

The Project includes a site-specific Forest Plan amendment for EHE, or elk habitat effectiveness. For Management Areas 1, 2, 3a and 3c, this includes a 50% EHE for generally roaded areas, and 60% EHE for generally unroaded areas; a 50% EHE is roughly 2 miles per section of active motorized routes, and a 60% EHE is roughly a mile of active motorized routes (initial Wildlife Report at 33)}. The EA Appendix D- 6 notes there have been 12 site specific amendments for EHE, plus additional site[shy] specific amendments will be implemented for the Gold Butterfly and Bitterroot Front Projects. As a result, the Forest Service is completing serial Forest Plan amendments for EHE in order to avoid completing a programmatic Forest Plan amendment, one that would require an analysis of cumulative impacts of amending this EHE across the Forest . Currently, no such cumulative analysis as been made for the existing 12, and proposed 3 additional site-specific amendments to the EHE standard. For the Mud Creek Project Area, 14 of 28 3rd

order drainages do not meet the required Forest Plan standard for EHE {{initial Wildlife Report at 33}. Table 13 in the Revised Wildlife Effects Analysis Report shows that the 14 unroaded watersheds in the project area average about 1 mile per section of open road, while the 14 roaded watersheds average 2.85 miles of open road per watershed. Thus if the proposed 10 miles of new permanent roads and 34 miles of new temporary roads {{Initial Wildlife Report at 37} were kept out of the unroaded 3rd order watersheds, the Forest Plan standard of 60% EHE would overall be met for the Project Area. However, since the roaded watersheds average 2.85 miles per section, or are well above the 50% EHE standard, any new roads in these watersheds will exacerbate current effects of roads on elk and other wildlife. The actual on-the-ground impact of these roads is unknown for either current or planned conditions, as this information was never provided in the Mud Creek NEPA documents. The proposed open road densities during and after project implementation was never identified to the public. Yet the agency claims there will be no significant impacts from this project or from the EHE amendment.

The lack of any information on the impacts of the project and the amendment for EHE is exacerbated by the agency's analysis of decommissioned roads and motorized trails. The Compliance report for travel minimization criteria notes that motorized trails do not affect EHE. So it seems that motorized trails are not considered a disturbance impact to elk, or impact EHE. In addition, the claimed benefits of decommissioning of roads and trails, which could reduce motorized route densities, may not actually reduce motorized route densities. It is noted in the Compliance report that the planned conversion of trails is to "non-system status" (15.8 and 9.7 miles of trails). What does this mean as per future motorized use? This lack of information/clarity on motorized use of decommissioned roads/trails is occurs with the report's notation that ATV users felt decommissioning of roads/trails was okay as long as the routes were not recontoured. Thus these routes will likely remain available for motorized use.

Given the lack of any clear information on current or planned motorized route densities, or such during project implementation in the Mud Creek Project NEPA documents, there is no basis for the agency's claim that the proposed action and

proposed amendment for EHE will not have significant impacts. These impacts already exist in 10 of the 14 roaded drainages that exceed 2 miles per section of open motorized routes, and in 3 of the unroaded drainages that exceed two miles per section of open motorized routes (Christensen et al. 1993)}. The assumption in the draft DN for the Mud Creek Project is that the increase in planned open road densities will not have additional

adverse impacts to elk because the Forest Plan standard has already been exceeded is implausible. The displacement impacts of roads increases as the density of open roads increases (Christensen et al. 1993; Lyon et al. 1985}}.

Across the entire Bitterroot National Forest, there are 385 3rd order drainages, which 110 do not meet the EHE standards (EA Appendix D-5}}. This noncompliance thus includes almost 29% of the fo rest.

The agency claim that the serial site-specific Forest Plan amendments for Elk Habitat Effectiveness (EHE}} have not significantly impacted elk populations or elk hunting on the Forest are clearly invalid. There is no information provided on bull/cow or cow/calf ratios in the Project Area, even though these are indicators of habitat quality and security. The only place this information is available is the 2010-2013 Forest Plan monitoring report, where the bull/cow and cow/calf ratios, as well as total estimated elk populations, are provided. It was noted that there are continued concerns with low cow/calf and bull/cow ratios in certain hunting districted that are lower than the listed FWP and Forest Plan population objectives. The bull/cow ratios for Hunting District 250, that includes the Mud Creek Project Area, was below the objective of 15 bulls/100 cows during all reported years, 2010 to 2013. Only in 2013 did the cow/calf ration of 25 calves per 100 cows exceed this level estimated to provide population recruitment (Table 1}}. The population objective for HD 250 is 2000, with a range of 1600-2400 (Table 2}}. The total elk counted in HD 250 during 2010-2013 were 764, 785, 812 and 985, all below the minimum objective of 1600 elk. And the Mud Creek Project

EA Appendix D-6 states that the most recent elk population estimate for HD 250 is

only 900 elk. So this population continues to remain well below the minimum population objective set by MFWP of 1,400 elk.

One rationale for the agency's claim that the serial site-specific amendments to EHE have not affected the elk hunting opportunities on the forest is that the hunting season remains at 5 weeks (EA Appendix D-6). However, this claim is misleading. The initial Wildlife Report at 35 notes that the hunting season is severely restricted, with a total draw only of 55 licenses, including 45 bull and 10 cow permits; the units has been limited to antlerless hunts since 2002. The Response to Comments at B-36 notes that hunting season for moose in Hunting District 250, that includes the project area, has been closed.

The agency at EA Appendix D-3 correctly defines the Hillis et al. (1991) definition of elk security, and at D-6, states that this Hillis method has been added to their analysis process. This is not actually true, as their measure of elk security by the Hillis method does not include hiding cover. The agency notes in the EA Appendix D-3 that there are 7,202 acres of elk security at present, which is 15%; after project completion, there will be 7,423 acres of security, which remains at 15%.

As a result, the agency claims that the project will result in increased security for elk (D-6), which is clearly impossible. Clearly, the massive loss of elk hiding cover via clearcutting and forest thinning, and understory burning within the WSA and IRAs, is not counted in the measures of security. The agency also changed the

measure of security as per the Hillis Paradigm by measuring open roads for the entire year, instead of the hunting season.

The agency falsely claims in the EA Appendix D-3 that new roads will not reduce elk security because these roads will be closed to the public. The initial Wildlife Report at 37 also states that temporary roads are not counted in EHE because there is no public use. The Eastside Assessment (2013), which was cited in this agency analysis in the initial Wildlife Report at 34, notes that vehicle trips of only several per 12 hours displaces elk.

The initial Wildlife Report at 37 claims that the proposed exemption for EHE will have minimal effects on elk because the vegetation treatments will compensate

for the increase in roads by increasing elk forage, making the overall impact of the project beneficial. This claim is not supported by the Lyon et al. (1985) standards for the Forest Plan; this report specifically notes that clearcuts had no measurable forage benefits to elk. And as was also noted in the Eastside Assessment (2013), opening forests means that elk forage in late summer will be dried out, while this does not happen within forested cover. Page 19 of this report notes that late summer forage quality in the Blue Mountains was highest where it was within a forest cover type, and that the function of cover during spring, summer and fall may include lengthening the season of succulence and palatability where adequate understory forage exists and overstory shade is provided. Page 22 of this report notes that forage within forested areas can have a longer green and succulent season, when more open areas cure out in the late summer sun. Page

The impact of roads on elk is not eliminated when motorized use is restricted. The Eastside Assessment (2013) at page 15 notes that closed roads within elk security areas may increase elk vulnerability by providing walking and shooting lanes.

Participants in the report agreed that closed roads should be minimized within security areas.

The agency falsely claims that the site-specific amendment for elk thermal cover is based on new science that demonstrates thermal cover is not needed by elk in the winter. The single sited study by Cook et al. (1998) was done on penned, tame elk, and is not applicable to wild elk on natural winter ranges. This was noted in the Eastside Assessment (2013). The importance of elk thermal cover was also identified in a response to the Cook et al. (1998)} study by Thompson et al. 2005.

Conclusions of slide presentation include elk shifted to forest habitats under extreme winter conditions, where they consume conifer trees as forage; forage in open areas is unavailable to elk if they can't paw through hard, deep snow; the highest use of forested winter range occurred in February, when conditions were usually at their worst; they noted that the results of the Cook et al (1998) study were being extended beyond the limitation of this study; this report does not provide research done under natural conditions; tame elk were used in the study,

and it was limited to calf and yearling elk; study animals were confined to small holding pens, and were not free-roaming; elk were also artificially fed.

The Eastside Assessment (2013) addressed this Cook et al. 1998 study at page 11: the agency participants had an opportunity to discuss this research with the staff from the Starkey Research Station; we concluded that the condition under which the study was conducted, including the climate of the study area and the use of penned and fed elk, may not be applicable to winter conditions for free ranging wild elk on the four forests addressed in this document.

In the Eastside Assessment (2013) ta page 11 noted that agency participants ultimately agreed that elk may use cover in the winter for a variety of reasons that may include thermoregulation, but that forested cover may also be important in keeping forage available to elk in some situations (crusty, icy conditions, or deep snow for example), or to buffer elk from potential disturbances on winter ranges; MDFWP representatives pointed out that from an energy expenditure reduction standpoint, big trees and multi-layered canopies may provide benefits not provided by small trees or single-layered forests canopies; the participants concluded that coniferous cover should generally be maintained on elk winter range within the capability of the landscape; they also noted that it takes up to 60 years or more for logged conifer forests to develop the thermal cover qualities of being dense-canopied or multistoried, the kind of conditions that provide snow interception. Page 11 of this report notes that in conclusion, forested cover is an important consideration on elk winter range. This report clearly contradicts the agency claims in the Mud Creek NEPA reports, including the rationale for amending the thermal cover standard, that the current best science demonstrates thermal cover is not needed on elk winter ranges.

Logging thermal cover on elk winter ranges without any specific habitat objectives, such as retaining 25% thermal cover, as per the Bitterroot Forest Plan standard for winter range, also violates the Forest Plan standard to incorporate the 1985 Coordinating Elk and Timber Management Report by Lyon et al. This

report notes that timbered areas adjacent to primary winter foraging areas should be managed to maintain the integrity of cover for elk; elk on winter ranges in western Montana preferred dense timber stands and larger trees for bedding cover; timbered areas that received moderate to heavy elk bedding use prior to logging were not used during winters following heavy selection logging; elimination of preferred bedding sites subjected elk to decrease energy intake and increased energy output because of increased travel between suitable bedding and feeding sites; when snow depths get deep, elk will seek cover; logging adjacent to grassland winter ranges will normally be detrimental to elk; west of the divide, where winter ranges are heavily forested and forage conditions are poor, the timber overstory can be removed in small patches to enhance forage production on south- to west-facing slopes; the design and layout of these openings should be planned so that adjacent forest cover on benches and finger ridges will provide thermal cover and bedding sites; because of the relative importance of productive elk winter range and the narrow margin for error, any contemplated modification of timber stands should be planned on a site-by-site basis, with the primary emphasis on maintaining adequate cover adjacent to productive forage areas.

Failure to Complete Valid Forest Plan Amendments

There were no alternatives proposed for the EHE and thermal cover amendments in violation of the NEPA and NFMA. The agency cannot just exempt themselves from Forest Planning simply by suspending standards, as is being proposed for EHE and thermal cover for the Mud Creek Project as per the draft ON at 4. The new proposed standard for these 2 amendments was not provided.

As previously noted, the draft ON for the project at 4 states that the proposed action will require site-specific amendments to suspend certain Forest Plan standards relating to elk habitat effectiveness and elk habitat, and old growth. Appendix D of the project EA at 2 states that the amendments for EHE are to "set aside" this standard for the project. The proposed amendment for EHE is invalid because it does not actually define what the EHE standard and the thermal cover standards are being changed to. The level of EHE during project implementation is not provided. Even the current level of EHE in the 3rd order drainages is unknown, because the mileage of roads not open to the public, and illegal ATV use that is occurring, is not provided. The table on road densities in the updated wildlife report for the 28 3rd order drainages in the Mud Creek Project Area do not necessarily include all active motorized routes, such as administrative routes, and possibly, motorized trails. It is also unclear if this includes a large mileage of supposedly closed roads that will be decommissioned at some future date, but are likely currently receiving motorized use. The report on compliance with travel minimization criteria notes that adding or removing motorized trails does not change the EHE attainment. And will roads slated for decommissioning be converted to motorized trails? Overall, it is impossible to determine either the current or proposed level of EHE for the Mud Creek Project Area, even though the agency claims the proposed action will have no significant impacts. It is well established by Region 1 of the Forest Service that habitat effectiveness levels of below 50%, or 2 miles of motorized routes per section, means elk management is not being done (Christensen et al. 1993). This report also notes that any road that receives motorized use displaces elk. It appears that even the existing situation for elk is a significant adverse effect, one that will be even more significant with the Forest Plan amendment. The agency's claim that the EHE amendment will not have direct or cumulative significant impacts is clearly false.

The agency also claims that the amendment for thermal cover in the Bitterroot Forest Plan will have no significant impacts, either direct, indirect or cumulative. As per information before provided on elk and moose populations, there is no evidence that the 9 past amendments for thermal cover have not impacted winter range quality for these big game species. Additional losses, including what may also occur in the Bitterroot Front and Gold Butterfly projects, will likely have additional cumulative effects. The proposed amendment for the Mud Creek Project will also violate the Forest Plan recommendations for elk habitat as per the 1978 Guides for Elk Habitat, for which no amendment was proposed; the Forest Plan at F-e-12 notes that these guidelines will be considered in planning timber management. A summary of these guidelines is provided in Table 14 of the Revised Wildlife Effects Analysis Report. This table shows that optimum habitat proportions for hiding cover and thermal cover on winter ranges are both 20%. The current level of these habitats in the Mud Creek Project Area is only 12% for each. The larger analysis area for the project contains 20% hiding cover and 12% thermal cover on the winter range. There was no amendment to change the requirement to consider these guidelines for managing winter range for the Mud Creek Project. The agency will also violate the incorporation requirement of the Lyon et al. (1985) as per the Forest Plan ROD. These recommendations call for no disturbances on elk winter range, which means no road use or vegetation treatments in the winter period.

The agency claims that exempting the Mud Creek Project from the thermal cover Forest Plan standard will actually improve elk habitat by increasing forage (EA Appendix D-2, D-6). However, there are a number of

research reports and recommendations, such as Thompson et al. (2005), Lyon et al. (1985) and the Eastside Assessment (2013) that stress that retention of thermal cover on elk winter ranges is critical for this big game species. The actual level of thermal cover the agency intends to implement as per the proposed amendment was never identified. Nor was the science identified that recommends this level of thermal cover for elk winter range.

The agency also claims that the amendment for old growth will have no significant impacts, even though this amendment, by implementing only a portion of the Region 1 old growth definitions as per Green et al. (1992 as revised in 2011) opens the door for unlimited logging on old growth. By defining old growth by just the minimal criteria in this white paper, the agency can justify logging existing old growth stands down to just a dozen or so trees (see Declaration provided with this objection in Appendix C). Logging an undisclosed acreage of old growth in the Mud Creek Project Area will remove habitat for a host of wildlife associated with old growth, including the two MIS on the Bitterroot National Forest for old growth, the pileated woodpecker and pine marten. There was no analysis of how logging old growth down to minimum criteria would impact wildlife, and the measures of impact on the 2 old growth MIS was invalid. There was also no

analysis of how the current and proposed direction in the Forest Plan would impact wildlife, since the agency falsely claimed that there would be no impact to wildlife from logging old growth.

Roadless Area and Migratory Bird Treaty Act Violations

The Mud Creek Project proposes to burn 8,326 acres in the Blue Joint and Allan Mountain Inventoried Roadless lands, and burn 6,575 acres in a Wilderness Study Area. There was no analysis as per the impacts of these burning programs on wildlife, either big game species, or migratory songbirds. The MOU with the Fish and Wildlife Service requires that project impacts on migratory birds be evaluated in projects that alter vegetation. The Roadless Area Conservation Rule does not prioritize fuels management that removes wildlife habitat. The amount of habitat to be removed for wildlife is never identified in the Mud Creek NEPA documents. The wildlife species that will have habitat restored are not identified. The specific changes for their habitat that are being proposed are unknown. What vegetation is being targeted for removal to restore natural conditions in these roadless areas? This information is never provided in order to demonstrate compliance with management of IRAs and WSAs.

The Bitterroot National Forest has to date not completed any monitoring on the impacts on prescribed burning on wildlife, from big game to nongame species, including 67 species of western forest birds. None of the Forest Plan monitoring reports available on the agency's web page include any monitoring of prescribed burning impacts on wildlife. These burning programs are identified as "habitat improvements" for big game, but the reason these improve habitats is never identified. The impact of these burning programs on nongame wildlife is not included in any monitoring reports. Thus claims that these massive prescribed burning projects will have no significant adverse impacts on wildlife are baseless, due to the lack of any analysis.

Violation of the ESA

The agency is planning to both burn and log forests that contain whitebark pine. The agency claims that because whitebark pine trees over 3 inches in diameter will not be removed, that there will be no adverse impacts on whitebark pine, including "plus" trees. It is not clear why removal of whitebark pine regeneration is not an impact, especially as the current science indicates that such regeneration is hard to come by in these stands (Keane

and Parsons 2010). This report is cited in the Biological Assessment for whitebark pine as a claim that the proposed vegetation treatments, such as daylighting mature whitebark pine trees, will promote this species by increasing regeneration. Actually, this report notes that these treatments in whitebark pine have failed to create any significant production of young trees. The proposed burning and logging of whitebark pine trees in the Mud Creek Project is clearly a violation of the ESA, as there will be a huge destruction of not only young whitebark pine trees, but also many older cone-producing whitebark pine trees will be killed in the massive prescribed burning programs.