Data Submitted (UTC 11): 8/21/2021 11:00:00 AM
First name: Michael
Last name: Garrity
Organization: Alliance For The Wild Rockies
Title: Director
Comments: August 21, 2021, Via Email

Objection against the Draft Decision Notice (DDN), FON- SI, and Environmental Assessment for the Mud Creek Veg-etation Management Project, Forest Service, Bitterroot National Forest, West Fork Ranger District

Identification of Objectors:

Lead Objector: Michael Garrity, Director, Alliance for the Wild Rockies (AWR)

PO Box 505

Helena, MT 59624;

Phone 406-459-5936.

And for

Sara Johnson

Native Ecosystems Council PO Box125

Willow Creek, MT 59760. And for

Jason L. Christensen

Director Yellowstone to Uintas Connection

P.O. Box 363 Paris, Idaho 83261

jason@yellowstoneuintas.org

And for

Jim Miller, President

The Friends of the Bitterroot Hamilton, MT 59840 millerfobmt@gmail.com

And for Adam Rissien

WildEarth Guardians

PO Box 7516

Missoula, MT 59807

406-370-3147

And for Jeff Juel

Montana Policy Director Friends of the Clearwater 509-688-5956

jeffjuel@wildrockies.org

Signed for Objectors this 21st day of August 2021

/s/ Michael Garrity Michael Garrity

Name of the Responsible Official, Bitterroot National For- est, Ranger District where Project is Proposed: The Responsible Official for the project is the Bitterroot National Forest (BNF) Supervisor Matt Anderson. The Mud Creek Vegetation Management project area is in the Bitterroot Mountains southwest of Darby, Montana, on the West Fork Ranger District of the Bitterroot National Forest. The project area encompasses approximately 48,486 acres, and includes the entire West Fork Bitterroot River-Rombo Creek watershed and portions of the Nez Perce Fork-Nel- son Lake, Little West Fork, West Fork Bitterroot River- Lloyd Creek, Lower Blue Joint, and West Fork Bitterroot River-Painted Rocks Lake watersheds in the Bitterroot Mountain Range in Ravalli County, MT.

Description of those aspects of the proposed project ad- dressed by the objection, including specific issues related to the proposed project if applicable, how the objector be-lieves the environmental analysis, Finding of No Signifi- cant Impact, and Draft Decision Notice (DDN) specifically violates law, regulation, or policy: The EA and DND are contained in the USFS webpage at: https://www.fs.usda.- gov/project/?project=55744

Forest Supervisor Matt Anderson selected the proposed Al- ternative.

The selected alternative calls for clearcutting a maximum of (4800 acres), prescribed burning a maximum of

(45,160 acres), other commercial logging a maximum of (8900 acres), non-commercial logging a maximum of (26,282 acres), and an undetermined amount of new and temporary road building will be built. As a result of the Draft DN, in- dividuals and members of the above mentioned groups would be directly and significant-ly affected by the logging and associated activities. Appellants are conservation orga- nizations working to ensure protection of biological diver- sity and ecosystem integrity in the Wild Rockies bioregion (including the BNF). The individuals and members use the project area for recreation and other forest related activities. The selected alternative would also further degrade the wa- ter quality, wildlife and fish habitat. These activities, if im-plemented, would adversely impact and irreparably harm the natural qualities of the Project Area, the surrounding area, and would further degrade the watersheds and wildlife habitat.

1. Objectors names and addresses:

Lead Objector Mike Garrity, Executive Director, Al- liance for the Wild Rockies

P.O. Box 505; Helena, MT 59624 Phone 406 459-5936

And for

Sara Johnson

Native Ecosystems Council

P.O. Box 125

Willow Creek, MT 59760 And for

Jason L. Christensen

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And for

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406-370-3147

And for Jeff Juel

Montana Policy Director Friends of the Clearwater 509-688-5956

jeffjuel@wildrockies.org

2. Signature of Lead Objector:

Signed this 21st day of August 2021 by Lead Objector,

/s/ Michael Garrity

3. Lead Objector: Michael Garrity, Alliance for the Wild Rockies

4. Name of the Proposed Project, Responsible Official, Na- tional Forest and Ranger District where Project is: Mud Creek Vegetation Management Project; Bitterroot National Forest (BNF) Supervisor Matt Anderson is the Responsible Official; The Mud Creek Vegetation Management project area is in the Bitterroot Mountains southwest of Darby, Montana, on the West Fork Ranger District of the Bitterroot National Forest. The project area encompasses approxi- mately 48,486 acres, and includes the entire West Fork Bit- terroot River-Rombo Creek watershed and portions of the Nez Perce Fork-Nelson Lake, Little West Fork, West Fork Bitterroot River-Lloyd Creek, Lower Blue Joint, and West Fork Bitterroot River-Painted Rocks Lake watersheds in the Bitterroot Mountain Range in Ravalli County, MT. Supervisor Anderson chose the proposed or selected alter- native in the Draft Decision Notice and FONSI.

NOTICE IS HEREBY GIVEN that AWR objects pursuant to 36 CFR section 218 to the Responsible Official's adop- tion of the selected Alternative. As discussed below, the Mud Creek Project as proposed violates the Clean Water Act, the National Environmental Policy Act (NEPA), the National Forest Management Act (NFMA), the Endangered Species Act (ESA), the Bitterroot Forest Plan and the Ad- ministrative Procedure Act (APA).

Location

The Mud Creek Vegetation Management project area is in the Bitterroot Mountains southwest of Darby,

Montana, on the West Fork Ranger District of the Bitterroot National Forest. The project area encompasses approximately 48,486 acres, and includes the entire West Fork Bitterroot River- Rombo Creek watershed and portions of the Nez Perce Fork-Nelson Lake, Little West Fork, West Fork Bitterroot River-Lloyd Creek, Lower Blue Joint, and West Fork Bit- terroot River-Painted Rocks Lake watersheds in the Bitter- root Mountain Range in Ravalli County, MT.

5. Specific Issues Related to the Proposed Projects, includ- ing how Objectors believes the Environmental Analysis or Draft Record of Decision specifically violates Law, Regula- tion, or Policy: We included this under number 8 below. Thank you for the opportunity to object on the Mud Creek Project. Please accept this objection from me on behalf of the Alliance for the Wild Rockies, Native Ecosystems Council, Friends of the Bitterroot, Yellowstone to Uintas Connection and WildEarth Guardians..

6. Suggested Remedies that would Resolve the Objection:

We recommend that the "No Action Alternative" be select- ed. We have also made specific recommendations after each problem.

7. Supporting Reasons for the Reviewing Office to Consid- er:

This landscape has very high wildlife values, including for the threatened grizzly bear, lynx, bull trout, big game species, and wildlife dependent upon unlogged forests. The project area will be concentrated within some of the best wildlife habitat in this landscape which is an important travel corridor for wildlife such as lynx, grizzly bears, and wolverine. The agency will also be exacerbating an ongo- ing problem of displacing elk to adjacent private lands in

the hunting season due to a lack of security on public lands. The public interest is not being served by this project.

Suggested Remedies to Resolve the Objection:

We recommend that the "No Action Alternative" be select- ed. We have also made specific recommendations after each problem.

Supporting Reasons for the Reviewing Office to Consider

This landscape has very high wildlife values, including for the threatened grizzly bear, and lynx, big game species, and wildlife dependent upon mature forest habitat. The project area is concentrated within some of the best wildlife habitat in this landscape which is an important travel corridor for wildlife such as lynx, grizzly bears, and wolverine. The agency will also be exacerbating an ongoing problem of displacing elk to adjacent private lands in the hunting season due to a lack of security on public lands. The public in- terest is not being served by this project.

Thank you for the opportunity to object.

NOTICE IS HEREBY GIVEN that, pursuant to 36 CFR Part 218, AWR objects to the Draft Decision Notice (DDN) and Finding of No Significant Impact (FONSI) with the le- gal notice published on April 25, 2021, including the Re- sponsible Official's adoption of proposed or selected Alter- native.

AWR is objecting to this project on the grounds that im- plementation of the Selected Alternative is not in accor- dance with the laws governing management of the national forests such as the FLPMA, ESA, NEPA, NFMA, the Bit- terroot National Forest (BNF) Forest Plan and the APA, in- cluding the implementing regulations of these and other laws, and will result in additional degradation in already degraded watersheds and mountain slopes, further upsetting the wildlife habitat, ecosystem and human communities.

Our objections are detailed below.

If the project is approved as proposed, individuals and members of the above-mentioned groups would be directly and significantly affected by the logging and associated ac- tivities. Objectors are conservation organizations working to ensure protection of biological diversity and ecosystem integrity in the Wild Rockies bioregion (including the BNF). The individuals and members use the project area for recreation and other forest related activities. The select- ed alternative would also further degrade the water quality, wildlife and fish habitat. These activities, if implemented, would adversely impact and irreparably harm the natural qualities of the Project Area, the surrounding area, and would further degrade the watersheds and wildlife habitat.

Statements that Demonstrates Connection between Prior Specific Written Comments on the Particular Proposed Project and the Content of the Objection.
Roadless Rule

We wrote in our comments:

Disclose how Project complies with the Roadless Rule;

The Forest Service responded:

Please refer to roadless analysis (PF-REC-001; pp. 6-12) for an analysis of each area in the roadless expanse. The analysis used an assessment of roadless characteristics as units of measure (p. 5) for compliance with the Roadless Rule and 1964 Wilderness Act. The proposed action specifically states that there will be no road construction in wilderness study areas or inventoried roadless areas (draft EA, pp. 41, 42). The Forest Plan allows for vegeta- tion treatment in inventoried roadless areas "to meet the goals and recreation standards of this

management area." Vegetation treatment is not being proposed in wilderness study areas for this project. The effects of pre- scribed fire have been analyzed and can be found in the roadless report. Design features have been developed and will be implemented to ensure compliance with the forest plan and maintain wilderness and roadless characteris- tics.

It is well established that logging in an uninventoried and inventoried roadless areas is an irreversible and irretriev- able" commitment of resources that "could have serious environmental consequences" Smith v. U.S. Forest Service, 33 F.3d 1072, 1078 (9th Cir. 1994). Please address the ef- fects of logging and roading the uninventoried roadless ar- eas on their characteristics vis-[agrave]-vis potential for future wilderness or inventoried roadless area designation. The discussion of the impacts on unroaded areas was superficial. There was no analysis of the project's impact on the unique values of unroaded areas together with their adja- cent inventoried roadless areas. The EIS should satisfy the "hard look" requirement with respect to the environmental impact of logging and roading uninventoried roadless areas."

The Mud Creek Project is in violation NEPA, NFMA, the APA, and the Roadless Rule.

Remedy

Choose the No Action Alternative

Climate
We wrote in our comments:

Climate Issues

Please take a "hard look" at climate issues, including cumulative effects of the "treatments" in the proposed project when added to the heat, drought, wind and other impacts associated with increased climate risk. Regenera- tion/Restocking failure following wildfire, prescribed fire and/or mechanical tree-killing has not been analyzed or disclosed. There is a considerable body of science that suggests that regeneration following fire is increasingly problematic.

NEPA requires disclosure of impact on "the human envi- ronment." Climate risk presents important adverse im- pacts on cultural, economic, environmental, and social aspects of the human environment. [mdash] people, jobs, and the economy [mdash] adjacent to and near the project area.

Challenges in predicting responses of individual tree species to climate are a result of species competing under a never-before-seen climate regime [mdash] one forests may not have experienced before either.

In an uncertain future of rapid change and abrupt, un- foreseen transitions, adjustments in management approaches will be necessary and some actions will fail.

However, it is increasingly evident that the greatest risk is posed by continuing to implement strategies inconsistent with and not informed by current understanding of our novel future....

Achievable future conditions as a framework for guiding forest conservation and management, Forest Ecology and Management 360 (2016) 80-96, S.W. Golladay et al. (Please, find attached with our comments.)

Stands are at risk of going from forest to non-forest, even without the added risk of "management" as proposed in the project area.

The Bitterroot National Forest has not yet accepted that the effects of climate risk represent a significant issue, and eminent loss of forest resilience already, and a signif- icant and growing risk into the "foreseeable future?"

It is now time to speak honestly about unrealistic expecta- tions relating to desired future condition. Forest managers have failed to disclose that at least five common tree species, including aspens and four conifers, are at great risk unless atmospheric greenhouse gases and associated temperatures can be contained at today's levels of concen- tration in the atmosphere. (See attached map). This cu- mulative ("reasonably foreseeable") risk must not contin- ue to be ignored at the project-level, or at the program- matic (Forest Plan) level.

Global warming and its consequences may also be effec- tively irreversible which implicates certain legal consequences under NEPA and NFMA and ESA (e.g., 40 CFR

[sect] 1502.16; 16 USC [sect]1604(g); 36 CFR [sect]219.12; ESA Section 7; 50 CFR [sect][sect]402.9, 402.14). All net carbon emissions from logging represent "irretrievable and irreversible commitments of resources."

It is clear that the management of the planet's forests is a nexus for addressing this largest crisis ever facing humanity. Yet the EA fails to even provide a minimal quanti- tative analysis of project-or agency-caused CO2 emissions or consider the best available science on the topic. This is Immensely unethical and immoral. The lack of detailed scientific discussions in the EA concerning climate change is far more troubling than the document's failures on other topics, because the consequences of unchecked climate change will be disastrous for food production, sea level rise, and water supplies, resulting in complete tur- moil for all human societies. This is an issue as serious a nuclear annihilation (although at least with the latter we're not already pressing the button).

Page 73 of the EA states: "By reducing the risk of large wildfires, the largest source of carbon emissions, the Proposed Action will lower the potential for increased carbon emissions. Additionally, the establishment of new and vig- orously growing age-classes will improve carbon stores (Birdsey et al. 2019)." Birdsey et al. 2019 does not men- tion anything about logging reducing the threat of large wildfires.

Rhodes and Baker in a paper that looked at thinning and ponderosa pine forest find a very low probability of a thinned site encountering a fire during the narrow win- dow when tree density is lowest. Another review paper by fire specialists at the Missoula Fire Lab about fuel reduc- tions concluded: "The majority of acreage burned by wildfire in the US occurs in very few wildfires under ex- treme conditions. Under these extreme conditions, sup- pression efforts are largely ineffective."

Please see the column below by George Wuerthner, pub- lished in the October 11, 2019, Statesman Journal.

Fuels don't drive wildfires; climate and weather are the dominant factor | Opinion

George Wuerthner Guest opinion

The Wildfire Council set up by Oregon Gov. Kate Brown has many good recommendations including the need to reduce the flammability of communities, implementation of more effective evacuation routes, and other measures that will undoubtedly contribute to a safer and healthier environment for Oregon citizens. However, the council puts a lot of emphasis on ramping up the logging of our forests as a means of precluding large wildfires. The underlying assumption of the recom- mendations is that fuels drive wildfires. Yet according to the Oregon Department of Forestry in 2019 only 16,868 acres burned in the state, compared to 846,411 acres burned last year. Why the big difference? Is there that much less fuel? If fuel is the reason, we are seeing large acreages burn, then why so little this past year? Opinion:Logging our forests is a misguided solution

The obvious reason and what the research shows is that climate/weather is the dominant factor in all large wild- fires. If you have drought, low humidity, high tempera- tures, and high winds, you get large fires[mdash]regardless of the fuel load. That is why even though the Oregon Coast forests have some of the highest "fuel loadings" in the nation, they seldom burn. The Wildfire Council continues to "sell" the myth that fu- els are the problem and logging our forests is the solution.

The Council ignores the growing science that calls into question the efficiency and effectiveness of fuel reduc- tions.

For instance, Rhodes and Baker in a paper that looked at thinning and ponderosa pine forest find a very low proba- bility of a thinned site encountering a fire during the nar- row window when tree density is lowest.

Another review paper by fire specialists at the Missoula Fire Lab about fuel reductions concluded: "The majority of acreage burned by wildfire in the US occurs in very few wildfires under extreme conditions. Under these extreme conditions, suppression efforts are largely ineffective."

The authors go on to suggest: "Extreme environmental conditions .. .overwhelmed most fuel treatment effects. . . This included almost all treatment methods including pre- scribed burning and thinning. . .. Suppression efforts had little benefit from fuel modifications."

The Congressional Research Service (CRS) : "From a quantitative perspective, the CRS study indicates a very weak relationship between acres logged and the extent and severity of forest fires. [hellip] the data indicate that fewer acres burned in areas where logging activity was limited."

The Bitterroot National Forest has not yet accepted that the effects of climate risk represent a significant issue, and eminent loss of forest resilience already, and a signif- icant and growing risk into the "foreseeable future?"

It is now time to speak honestly about unrealistic expecta- tions relating to desired future condition. Forest managers have failed to disclose that at least five common tree species, including aspens and four conifers, are at great risk unless atmospheric greenhouse gases and associated temperatures can be contained at today's levels of concen- tration in the atmosphere. (See attached map.) This cu- mulative ("reasonably foreseeable") risk must not contin- ue to be ignored at the project-level, or at the program- matic (Forest Plan) level.

Global warming and its consequences may also be effec- tively irreversible which implicates certain legal consequences under NEPA and NFMA and ESA (e.g., 40 CFR

[sect]1502.16; 16 USC [sect]1604(g); 36 CFR [sect]219.12; ESA Sec-tion 7; 50 CFR [sect][sect]402.9, 402.14). All net carbon emissions from logging represent "irretrievable and irreversible commitments of resources."

It is clear that the management of the planet's forests is a nexus for addressing this largest crisis ever facing humanity. Yet the FSEIS fails to even provide a minimal quantitative analysis of project- or agency-caused CO2 emissions or consider the best available science on the topic. This is immensely unethical and immoral. The lack of detailed scientific discussions in the FSEIS concerning climate change is far more troubling than the document's failures on other topics, because the consequences of unchecked climate change will be disastrous for food pro- duction, sea level rise, and water supplies, resulting in complete turmoil for all human societies. This is an issue as serious a nuclear annihilation (although at least with the latter we're not already pressing the button).

The EA provided a pittance of information on climate change effects on project area vegetation. The FSEIS provides no analysis as to the veracity of the project's Purpose and Need, the project's objectives, goals, or desired conditions. The FS has the responsibility to inform the public that climate change is and will be bringing forest change. For the Mud Creek project, this did not hap- pen, in violation of NEPA.

The EA fails to consider that the effects of climate change on the project area, including that the "desired" vegeta- tion conditions will likely not be achievable or sustain- able. The EA fails to provide any credible analysis as to how realistic and achievable its desired conditions are in the context of a rapidly changing climate, along an un- predictable but changing trajectory.

The Forest Plan does not provide meaningful direction on climate change. Nor does the EA acknowledge pertinent and highly relevant best available science on climate change. This project is in violation of NEPA.

The EA does not analyze or disclose the body of science that implicates logging activities as a contributor to re- duced carbon stocks in forests and increases in green- house gas emissions. The EA fails to provide estimates of the total amount of carbon dioxide (CO2) or other greenhouse gas emissions caused by FS management actions and policies[mdash]forest-wide, regionally, or nationally. Agency policymakers seem comfortable maintaining a po- sition that they need not take any leadership on this issue, and obfuscate via this EA to justify their failures.

The best scientific information strongly suggests that management that involves removal of trees and other biomass increases atmospheric CO2. Unsurprisingly the FSEIS doesn't state that simple fact.

The EA fails to present any modeling of forest stands un- der different management scenarios. The FS should mod- el the carbon flux over time for its proposed stand man- agement scenarios and for the various types of vegetation cover found on the LNF.

The EA also ignores CO2 and other greenhouse gas emis- sions from other common human activities related to for- est management and recreational uses. These include emissions associated with machines used for logging and associated activities, vehicle use for administrative ac- tions, and recreational motor vehicles. The FS is simply ignoring the climate impacts of these management and other authorized activities.

The Committee of Scientists, 1999 recognize the impor- tance of forests for their contribution to global climate regulation. Also, the 2012 Planning Rule recognizes, in its definition of Ecosystem services, the "Benefits people ob- tain from ecosystems, including: (2) Regulating services, such as long term storage of carbon; climate regulation..."

We have no more time to prevaricate, and it's not a battle we can afford to lose. We each have a choice: submit to status quo for the profits of the greediest 1%, or empower ourselves to limit greenhouse gas emissions so not just a couple more generations might survive.

The District Court of Montana ruled in Case 4:17-

cv-00030-BMM that the Federal government did have to evaluate the climate change impacts of the federal gov- ernment coal program. Please find the order attached.

In March 2019, U.S. District Judge Rudolph Contreras in Washington, D.C., ruled that when the U.S. Bureau of Land Management (BLM) auctions public lands for oil and gas leasing, officials must consider emissions from past, present and foreseeable future oil and gas leases na- tionwide. The case was brought by WildEarth Guardians and Physicians for Social Responsibility.

In March of 2018 the Federal District Court of Montana found the Miles City (Montana) and Buffalo (Wyoming) Field Office's Resource Management Plans unlawfully overlooked climate impacts of coal mining and oil and gas drilling. The case was brought by Western Organization of Resource Councils, Montana Environmental Informa- tion Center, Powder River Basin Resource Council, Northern Plains Resource Council, the Sierra Club, and the

Natural Resources Defense Council.

The project is in violation of NEPA, NFMA, the APA, the ESA for not examining the impacts of the project on climate change. The project will eliminate the forest in the project area. Forests absorb carbon. The project will destroy soils in the project area. Soils are carbon sinks.

Please see the following article that ran in the Missoulian on March 11, 2019.

Fire study shows landscapes such as Bitterroot's Sapphire Range too hot, dry to restore trees

ROB CHANEY rchaney@missoulian.com Mar 11, 2019

Burned landscapes like this drainage in the Sapphire Mountains hasn't been able to grow new trees since the Valley Complex fire of 2000, due to lack of soil moisture, humidity and seed trees, as well as excess heat during the growing season. University of Montana students Erika Berglund and Lacey Hankin helped gather samples for a study showing tree stands are getting replaced by grass and shrubs after fire across the western United States due to climate change.

Fire-scarred forests like the Sapphire Range of the Bitter- root Valley may become grasslands because the growing seasons have become too hot and dry, according to new research from the University of Montana.

"The drier aspects aren't coming back, especially on north-facing slopes," said Kim Davis, a UM landscape ecologist and lead investigator on the study. "It's not soil sterilization. Other vegetation like grasses are re-sprouting. It's too warm. There's not enough moisture for the trees."

Davis worked with landscape ecologist Solomon Do- browski, fire paleoecologist Philip Higuera, biologist Anna Sala and geoscientist Marco Maneta at UM along with colleagues at the U.S. Forest Service and University of Colorado-Boulder to produce the study, which was re- leased Monday in the Proceedings of the National Academy of Sciences journal.

"What's striking is if you asked scientists two decades ago how climate warming would play out, this is what they expected we'd see," Higuera said. "And now we're start- ing to see those predictions on the impact to ecosystems play out." The study concentrated on regrowth of Ponderosa pine and Douglas fir seedlings in Montana, Idaho, Colorado, New Mexico,

Arizona and northern California. Field workers collected trees from 90 sites, including 40 in the northern Rocky Mountains, scattered within 33 wildfires that had oc- curred within the past 20 years. "We did over 4,000 miles of road-tripping across the West, as well as lots of miles hiking and backpacking," Davis said. The survey crews brought back everything from dead seedlings to 4-inch-diameter tree rings; nearly 3,000 samples in total. Then

they analyzed how long each tree had been growing and what conditions had been when it sprouted. Before the 1990s, the test sites had enough soil moisture, humidity and other factors to recruit new seedlings after forest fires, Dobrowski said."There used to be enough variability in seasonal condi- tions that seedlings could make it across these fixed thresholds," Dobrowski said. "After the mid-'90s, those windows have been closing more often. We're worried we'll lose these low-elevation forests to shrubs or grass- lands. That's what the evidence points to." After a fire, all kinds of grasses, shrubs and trees have a blank slate to recover. But trees, especially low-elevation species, need more soil moisture and humidity than their smaller plant cousins. Before the mid-90s, those good growing seasons rolled around every three to five years. The study shows such conditions have evaporated on vir- tually all sites since 2000. "The six sites we looked at in the Bitterroots haven't been above the summer humidity threshold since 1997," Higuera said. "Soil moisture hasn't crossed the threshold since 2009." The study overturns some common assumptions of post- fire recovery. Many historic analyses of mountain forests show the hillsides used to hold far fewer trees a century ago, and have become overstocked due to the efforts hu- mans put at controlling fire in the woods. Higuera ex- plained that some higher elevation forests are returning to their more sparse historical look due to increased fires. "But at the lower fringes, those burn areas may transition to non-forest types," Higuera said, "especially where climate conditions at the end of this century are different than what we had in the early 20th Century."

The study also found that soil sterilization wasn't a factor in tree regrowth, even in the most severely burned areas. For example, the 2000 Sula Complex of fires stripped for- est cover in the southern end of the Bitterroot Valley. While the lodgepole pine stands near Lost Trail Pass have recovered, the lower- elevation Ponderosa pine and Dou- glas firs haven't. Another factor driving regeneration is the availability of surviving seed trees that can repopulate a burn zone. If one remains within 100 meters of the burned landscape, the area can at least start the process of reseeding. Unfor- tunately, the trend toward high-severity fires has reduced the once-common mosaic patterns that left some undam- aged groves mixed into the burned areas. Higuera said he hoped land managers could use small or prescribed fires to make landscapes more resilient, as well as restructure tree-planting efforts to boost the chances of heavily burned places. Rob Chaney Natural Resources & Environment Reporter Natural Resources Reporter for The Missoulian.

Please write an EIS for this project if the FS still wants to pursue it, which includes an analysis that examines climate change in the context of project activities and De- sired Conditions. Better yet, it's time to prepare an EIS on the whole bag of U.S. Government climate policies.

The NFMA requires in the face of increasing climate risk, growing impacts of wildfire and insect activity, plus scien- tific research findings, the FS must disclose the signifi- cant trend in post-fire regeneration failure. The forest has already experienced considerable difficulty restocking on areas that have been subjected to prescribed fire, clear-cut logging, post-fire salvage logging and other even-aged management "systems." NFMA (1982) regulation 36CFR 219.27(C)(3) imple- ments the NFMA statute, which requires restocking in five years.

Forest managers must analyze and disclose the fact that the Bitterroot National Forest can no longer "insure that timber will be harvested from the National Forest system lands only where[hellip]there is assurance that such lands can be restocked within five years of harvest?" (NFMA[sect]6(g) (3)(E)(ii)). The project goals and expectations are not consistent with NFMA's "adequate restocking" requirement. Scientific research can no longer be ignored.

"At dry sites across our study region, seasonal to annual climate conditions over the past 20 years have crossed these thresholds, such that conditions have become in- creasingly unsuitable for regeneration. High fire severity and low seed availability further reduced the probability of post-fire regeneration. Together, our results demonstrate that climate change combined with high severity fire is leading to increasingly fewer opportunities for seedlings to establish after wildfires and may lead to ecosystem transitions in low-elevation ponderosa pine and Douglas-fir forests across the western United States." Wildfires and climate change push low-elevation forests across a critical climate threshold for tree regeneration, PNAS (2018), Kimberley T. Davis, et al. (Please, find attached)Forests are already experiencing emissions-driven defor- estation on both the post-fire and post-logging acreage. Areas where the cumulative effects of wildfire, followed by salvage logging on the same piece of ground are error upon error, with decades of a routine that can rightfully be described as willful ignorance and coverup. Where is the reference to restocking? Monitoring data and analysis? If monitoring has been done there is no disclosure documenting the scope and probability of post- fire regeneration failures in the project area. NFMA requires documentation and analysis that accurately esti- mates climate risks driving regeneration failure and deforestation - all characteristic of a less "resilient" forest. "In the US Rocky Mountains, we documented a significant trend of post-fire tree regeneration, even over the relatively short period of 23 years covered in this analysis. Our findings are consistent with the expectation of re- duced resilience of forest ecosystems to the combined impacts of climate warming and wildfire activity. Our results suggest that predicted shifts from forest to non-forested vegetation." Evidence for declining forest resilience to wildfires under climate change, Ecology Letters, (2018) 21: 243-252, Stevens-Rumens et al. (2018). (Please find attached)

The Forest Plan is based on assumptions largely drawn from our past that no longer hold true. These assumptions, made decades ago, must be challenged, and amend- ed, where overwhelming evidence demonstrates a change of course is critical. It is time to take a step back, assess the present and future and make the necessary adjust- ments, all in full public disclosure to the Congress and the American people. Many acres of (conifers) In many ar- eas, conifers haven't shown "resilience" enough to spring back from disturbance. Regeneration is already a big problem. (Emphasis added). Both RPA and NFMA mandate long-range planning which impose numerous limitations on commodity pro- duction, including grazing, timber harvesting practices and the amount of timber sold annually. These long- range plans are based on assumptions, which are based on data, expert opinion, public participation and other factors that all, well almost all, view from a historical per- spective. Assumptions that drove forest planning guidance decades ago, when climate risk was not known as it is to- day, are obsolete today.

Present and future climate risk realities demand new as- sumptions and new guidance.

A proper reexamination of the assumptions relating to re- silience and sustainability contained in the Forest Plan is necessary. Scientific research supporting our comments focus on important data and analysis. A full discussion and disclosure of the following is required: 1) trends in wildfires, insect activity and tree mortality, 2) past regen- eration success/failure in the project area, and 3) climate-risk sci- ence - some of which is cited below. Our comments, and supporting scientific research clearly "demonstrates connection between prior specific written comments on the particular proposed project or activity and the content of the objection[hellip]"

The project is in violation of NEPA, NFMA, the Forest Plan and the APA. Sec. 6. of the National Forest Management Act states:

(g) As soon as practicable, [hellip] the Secretary shall [hellip] pro- mulgate regulations, under the principles of the Multiple- Use, Sustained-Yield Act of 1960[hellip]

The regulations shall include, but not be limited to-

(3) specifying guidelines for land management plans de- veloped to achieve the goals of the Program which-

(E) insure that timber will be harvested from National Forest System lands only where-

(i) soil, slope, or other watershed conditions will not be ir- reversibly damaged;

NFMA regulations at 36 C.F.R. [sect] 219.27 (Management requirements) state:

(a) Resource protection. All management prescriptions shall[mdash]

(1) Conserve soil and water resources and not allow sig- nificant or permanent impairment of the productivity of the land;

(b) Vegetative manipulation. Management prescriptions that involve vegetative manipulation of tree cover for any purpose shall--

(5) Avoid permanent impairment of site productivity and ensure conservation of soil and water resources;

The project-level, and programmatic-level (Forest Plan) fail to publicly disclose the current and future impacts of climate risk to our national forests. NEPA requires cumu- lative effects analysis at the programmatic level, and at the project-level. The failure to assess and disclose all risks associated with vegetative-manipulation (slash and burn) units in the project area in the proper climate-risk context/scenario violates the NFMA, NEPA and the APA.

In the face of increasing climate risk, growing impacts of wildfire and insect activity, plus scientific research find- ings, NEPA analysis and disclosure must address the well- documented trend in post-fire regeneration failure. The project has already experienced difficulty restocking on areas that burned in the 1988 wildfire. NFMA (1982) regulation 36 CFR 219.27(c)(3) implements the NFMA statute, which requires adequate restocking in five years.

Given the forest's poor history of restocking success and its failure to employ the best available science, the ade- quacy of the site-specific and programmatic NEPA/ NFMA process begs for further analysis and disclosure of the reality of worsening climate conditions which threaten

- directly and cumulatively - to turn forest into non- forested vegetation, or worse. The desired future condi- tion described in the Purpose and Need, or in the Forest Plan is not deforestation.

The Forest Plan is based on assumptions largely drawn from our past. These assumptions must be challenged, and amended, where overwhelming evidence demon- strates a change of course is critically important. It is time to take a step back, assess the future and make the necessary adjustments, all in full public disclosure to the Congress and the American people.

The EA fails to acknowledge the likelihood that "[hellip]high seedling and sapling mortality rates due to water stress, competing vegetation, and repeat fires that burn young stands," which will likely lead to a dramatic increase in non-forest land acres. Many acres of (conifers) trees al- ready fail to regenerate. (Emphasis added). A map of these areas is required. In many areas, conifers haven't

shown "resilience" enough to spring back from distur- bance.

Looking to the Future and Learning from the Past in ourNational Forests: Posted by Randy Johnson, U.S. ForestService Research and Development Program, on No- vember 1, 2016 at 11:00 AM http://blogs.usda.gov/2016/11/01/looking-to-the-future-and-learning-from-the-past-in-our-national-forests/

Excerpt:

"Forests are changing in ways they've never ex-

perienced before because today's growing conditions are different from anything in the past. The climate is chang- ing at an unprecedented rate, exotic diseases and pests are present, and landscapes are fragmented by human activity often occurring at the same time and place.

When replanting a forest after disturbances, does it make sense to try to reestablish what was there before? Or, should we find re-plant material that might be more ap- propriate to current and future conditions of a changing environment?

Restoration efforts on U.S. Forest Service managed lands call for the use of locally adapted and appropriate native seed sources. The science-based process for selecting these seeds varies, but in the past, managers based deci- sions on the assumption that present site conditions are similar to those of the past." "This may no longer be the case."

REMEDY

Suggested remedies: Choose the No Action Alternative or Forest Plan Amendments are needed to establish stan- dards and guidelines which acknowledge the significance of climate risk to other multiple-uses. Amendments must not only analyze forest-wide impacts, but the regional, na- tional and global scope of expected environmental changes. Based on scientific research, the existing and projected irretrievable losses must be estimated. Impacts caused by gathering climate risk (heat, drought, wind) and its symptoms, including wildfire, insect activity, and regeneration failure and mature tree mortality must be analyzed cumulatively.

The selected scientific research presented above is only a sampling of the growing body of evidence that supports the need to disclose the consequences of the proposed ac- tion in a proper context - a hotter forest environment, with more frequent drought cycles. This evidence brings into question the Purpose and Need for the project. It also requires the FS to reconsider the assumptions, goals and expected desired future condition expressed in the ex- isting Forest Plan. Plan expectations must be amended at the programmatic level before proceeding with proposed project-level action(s). According to best available sci- ence, implementing the project will most likely accomplish the opposite of the desired future condition. We can ad- just as we monitor and find out more. However, to will- fully ignore what we do know and fail to disclose it to the

public is a serious breach of public trust and an uncon- scionable act. Climate risk is upon us. A viable alterna- tive to the proposal is not only reasonable and prudent, but it is the right thing to do.

The EA is in violation of NEPA, NFMA, the ESA and the APA because the project will adversely affect biological diversity, is not following the best available since and the purpose and need will not work. The Committee of Scien- tists, 1999 recognize the importance of forests for their contribution to global climate regulation. Also, the 2012 Planning Rule recognizes, in its definition of Ecosystem services, the "Benefits people obtain from ecosystems, in- cluding: (2) Regulating services, such as long term stor- age of carbon; climate regulation..."

We have no more time to prevaricate, and it's not a battle we can afford to lose. We each have a choice: submit to status quo for the profits of the greediest 1%, or empower ourselves to limit greenhouse gas emissions so not just a couple more generations might survive.

The Forest Service responded:

The Forest Service recognizes that the forest plays a role in carbon storage that affects global climate change. Carbon stewardship is one of many aspects of multiple-use management in the project area. The proposed action is in line with the multi-agency, Northern Rockies Adaptation Partnership's recommended strategies to manage for the unknowns as- sociated with the future climate through efforts to increase diversity and landscape resilience to future dis- turbances. The Forest Carbon Assessment for the Bitter- root National Forest (CLIMATE-003) was completed April, 2021 and added to the Mud Creek project file and analy- sis. The Forest Service has used several models to produce estimates of carbon stocks in vegetation and soil in the Bitterroot National Forest. These models are currently the best available scientific informa- tion regarding carbon dynamics on the forest.

The empirical data used to produce modeled estimates of carbon stocks and the effects of disturbances on carbon stocks are based on data from Forest Inventory and Analysis surveys. The analysis was completed at the Regional scale and narrowed down to the Bitterroot Na- tional Forest scale, the smallest scale to which carbon cycling, emis- sions, and storage can reasonably be analyzed based on model resolution and available data. Model re- sults are unavailable at the Mud Creek project scale. The Forest Carbon Assessment found that wildfire is the greatest source of carbon storage reduction on the Bitterroot National Forest, having affected approxi- mately 5% of the baseline inventory of forest-wide carbon stocks between 1990 and 2011, followed by root disease decay and mortality (<2% of baseline carbon stocks), insect-related mortality (<1%), and final- ly, timber harvest (<1%). In the near term, the

proposed action might contribute a small amount of change in the carbon balance however, carbon sequestration is cyclic in forests and carbon storage again increases as thinned stands increase in health and vigor, begin to grow, and new young stands establish. The Forest Service recognizes greenhouse gas (GHG) emissions tied to mechanical treatments and log haul however, carbon continues to be stored in wood products. Data is currently unavailable to analyze greenhouse gas emissions from harvest operations and other business operations at the project scale. Please see chapter 3 of the Final Environmental as- sessment and the Forest Vegetation/Silviculture Report (PF-SILV-001) for detailed information on the Existing Condition of the Climate and Carbon (page 19) and the Effects of Treatment Activities on Climate and Carbon (page 50). PF-CLIMAT E-001 and PF- CLIMATE-003 provide further detail about the informa- tion used to describe the existing condition of

carbon stocks.

The ability to regenerate a stand is a top consideration when choosing the location of regeneration harvests. The majority of the regeneration harvests will be Shelterwood Cuts or Seed Tree cuts. Clearcuts will only be used where current stand condi- tions are unable to return to a desired healthy state due to high levels of insects, disease, or a species composi- tion, such as lodgepole pine, that is highly susceptible to blow down if thinned. See the Forest Vege- tation/Silviculture Report (PF-SILV-001) Regeneration Treatments section starting on page 38. Dif- ferent forest types respond to disturbances, such as wild- fire, differently. Some species are more fire tolerant and fire dependent while others have little fire tolerance. Additionally, disturbances, such as wildfire, vary greatly depending on the season, tempera- tures, winds, fuel moistures, drought, etc. Many stands in the Mud Creek project area are generally even- aged stands that are the result of the last stand replacing fire well over 100 years ago. While the Forest Service recognizes that regeneration harvests are not an exact replica of standing replacing fire, the general removal of the overstory is similar. Many of the anticipated regeneration harvests are indeed not clearcuts but are two-aged seed tree and shelterwood cuts that retain overstory in order to naturally regenerate and provide shade for a new age-class of trees. (Arno and Fiedler 2005) "Mimicking Nature's Fire" is a great source for this information. The Forest Service measures regeneration success within 5 years following all regeneration harvests. Regeneration harvests are only established in locations where the certified silviculturist has confidence in regeneration success based on site conditions. The Refor- estation Timeframe Report for the West Fork Ranger District documents a 98.5% success with certified restocked stands within 5 years from 1977 to 2007, the most recent regeneration harvests on the Dis- trict. The data is tracked in the FACTS activity database. As with all databases database errors may be a factor in the remaining 1.5% of the acres. Planting success following natural events such as wildfire is not mandated by law. The Bitterroot is aware of the lands that have failed to regenerate follow- ing the high severity wildfires from 2000. The proposed action is designed to reduce likely hood of large- scale stand replacing fires to minimize the

likelihood of additional harsh sites converting non-forest- ed lands due to changes in climate and moisture availability (PF-SILV-010)

The project-level, and programmatic-level (Forest Plan) fail to publicly disclose the current and future impacts of cli- mate risk to our national forests. NEPA requires cumulative effects analysis at the programmatic level, and at the project-level. The failure to assess and disclose all risks as- sociated with vegetative-manipulation (slash and burn) units in the project area in the proper climate-risk context/ scenario violates the NFMA, NEPA and the APA.
Remedy

Choose the No Action Alternative or withdraw the DDN and write an EIS that has Forest Plan Amendments that

are needed to establish standards and guidelines which ac- knowledge the significance of climate risk to other multi- ple-uses.

Amendments must not only analyze forest-wide impacts, but the regional, national and global scope of expected en- vironmental changes. Based on scientific research, the ex- isting and projected irretrievable losses must be estimated. Impacts caused by gathering climate risk (heat, drought, wind) and its symptoms, including wildfire, insect activity, and regeneration failure and mature tree mortality must be analyzed cumulatively.

The selected scientific research presented above is only a sampling of the growing body of evidence that supports the need to disclose the consequences of the proposed action in a proper context - a hotter forest environment, with more frequent drought cycles. This evidence brings into question the Purpose and Need for the project. It also requires the FS to reconsider the assumptions, goals and expected de- sired future condition expressed in the existing Forest Plan. Plan expectations must be amended at the programmatic level before proceeding with proposed project-level action(s).

According to best available science, implementing the project will most likely accomplish the opposite of the de- sired future condition. However, to willfully ignore what we do know and fail to disclose it to the public is a serious breach of public trust and an unconscionable act. Climate risk is upon us. A viable alternative to the proposal is not only reasonable and prudent, but it is the right thing to do.

Whitebark Pine

We wrote in our comments:

Please disclose whether you have conducted surveys in the Project area for this Project for whitebark pine, wolverines, pine martins, northern goshawk and lynx, grizzly bears as required by the Forest Plan. Please disclose the last time the Project area was surveyed for whitebark pine, Monarch butterflies, wolverines, pine martins, northern goshawk, grizzly bears and lynx. Please disclose how often the Project area has been sur- veyed for whitebark pine, Monarch butterflies, wolverines, pine martins, northern goshawks, grizzly bears and lynx. Would the habitat be better for whitebark pine, Monarch butterflies, wolverines, pine martins, northern goshawks, grizzly bears and lynx if roads were removed in the Project area? What is the U.S. FWS position on the impacts of this Project on whitebark pine, Monarch butterflies, wolver- ines, pine martins, northern goshawks, grizzly bears and lynx? Have you conducted ESA consultation on wolver- ines? Please provide us with the full BA for the whitebark pine, monarch butterflies, wolverines, pine martins, northern goshawks, grizzly bears and lynx.

The Forest Service responded:

The rare plant specialist report speaks on whitebark pine and the proposed activities. Whitebark Pine was listed as a candidate species in 2012. As of December 2, 2020, the

U.S. Fish and Wildlife Service has proposed to list the whitebark pine as a threatened species under the Endangered Species Act. A biological assessment relative to im- pacts to whitebark pine from this project will be prepared and any

necessary concurrence from the USFWS will be obtained prior to a decision being signed for this project.

The biological assessment for whitebark pine will disclose in greater detail the effects on the species from the pro- posed treatments in the project. Cone bearing trees will be protected from any activities proposed.

The project area was partially surveyed for whitebark pine in 2019 and 2020. More encompassing surveys will be conducted once units are created within whitebark pine habitat.

Currently there are established roads near or within whitebark pine habitat. If roads were removed and de- commissioned, whitebark pine would slowly move into those areas that were roads if they are within whitebark pine habitat.

The Mud Creek DDN, FONSI and EA are in violation of NEPA, NFMA, the APA and the ESA. The project will harm habitat for fish and wildlife and is therefore not meet- ing the purpose and need of the Bitterroot National Forest- Forest Plan. Whitebark pine seedlings, saplings and mature trees, present in subalpine forests proposed for burning, would experience mortality from project activity. White-

bark pine is fire intolerant (thin bark). Fire favors whitebark pine regeneration (through canopy opening and reducing competing vegetation) only in the presence of ade- quate seed source and dispersal mechanisms (Clarks Nutcracker or humans planti- ng whitebark pine seedlings).

White pine blister rust, an introduced disease, has caused rapid mortality of white- bark pine over the last 30 to 60 years. Keane and Arno (1993) reported that 42 per- cent of whitebark pine in western Montana had died in the previ- ous 20 years with 89 percent of remaining trees being in- fected with blister rust. The ability of white- bark pine to reproduce naturally is strongly affected by blister rust in- fection; the rust kills branches in the upper cone bearing crown, effectively ending seed pro- duction.

Montana is currently experiencing a mountain pine beetle epidemic. Mountain pine beetle prefer large, older white- bark pine, which are the major cone producers. In some ar- eas the few remaining whitebark that show the

potential for blister rust re- sistance are being attacked and killed by mountain pine beetles, thus accelerating the loss of key ma- ture cone-bearing trees.

Are whitebark pine seedlings and saplings present in the subalpine forests pro- posed for burning and logging? In the absence of fire, this naturally occurring whitebark pine regeneration would continue to function as an important part of the subalpine ecosystem. Since 2005, rust resistant seed sources have been identified in the Northern Rockies (Mahalovich et al 2006). Due to the severity of blister rust infection within the region, natural whitebark pine regener- ation in the project area is prospective rust resistant stock.

Although prescribed burning can be useful to reduce areas of high-density sub- alpine fir and spruce and can create fa- vorable ecological conditions for whitebark pine regenera- tion and growth, in the absence of sufficient seed source for natural regeneration maintaining the viability and function of whitebark pine would not be achieved through burning. Planting of rust-resistant seedlings would likely not be suf- ficient to replace whitebark pine lost to fire activities.

Remedy:

Choose the No Action alternative or pull the draft decision and write an EIS that follow all laws and require- ments in the Forest Plan. Since Whitebark pine are now proposed to be listed under the ESA, you must formally re- consult with the FWS on the impact of the project on whitebark pine. To do this the Forest Service will need to have a complete and recent survey of the entire project area for whitebark pine and consider planting whitebark pine as the best available science by Keene et al. states is the only way to get new whitebark pine to grow. The Forest Service response is incorrect that the project area does not contain high elevation stands. Appendix A, Maps - Whitebark pine clearly show that there are whitebark pine stands in the project area.

On December 2, 2020, the U.S. Fish and Wildlife Service issued a rule proposing to list whitebark pine (Pinus albi- caulis) under the Endangered Species Act.

The Project area includes whitebark pine. The whitebark pine present in the Mud Creek Project area represents a major source within the larger geographic area. Hundreds of acres of clearcutting and burning around indi- vidual whitebark pine trees are proposed for the Project, in- cluding clearings around individual whitebark pines. The Forest Service fails to disclose the incredibly high fail- ure rate of these practices as a technique for natural regen- eration of whitebark pine under these conditions. The For- est Service states they are not protecting whitebark pine trees under 3" dbh.

The Forest Service fails to provide any discussion of the high failure rate of planting seedlings in clearcuts.

The Forest Service does not disclose or address the results of its only long- term study on the effects of tree cutting and burning on whitebark pine. This study, named "Restor- ing Whitebark Pine Ecosystems," included prescribed fire, "thinning", "selection cuttings," and "fuel enhancement cuttings" on multiple different sites. The results were that "[a]s with all the other study results, there was very little whitebark pine regeneration observed on these plots." See U.S. Forest Service, General Technical Report RMRS-GTR-232 (January 2010). These results directly undermine the representations the Forest Service makes in the Project EIS. More specifically, the Forest Service's own research at RMRS-GTR-232 finds: "the whitebark pine regeneration that was expected to result from this [seed] caching [in new openings] has not yet materialized. Nearly all sites contain very few or no whitebark pine seedlings." Thus, even ten years after cutting and burning, regeneration was "mar- ginal."

Moreover, as the Forest Service notes on its website: "All burn treatments resulted in high mortality in both whitebark pine and subalpine fir (over 40%)." Accordingly, the only proven method of restoration of whitebark pine is planting: "Manual planting of whitebark pine seedlings is required to adequately restore these sites."

We wrote in our comments submitted by Sara Johnson of Native Ecosystems Council:

The agency needs to identify all existing old growth stands in the Mud Creek Project Area, and define their individual patch size, and map their locations across the project area. The agency also needs to identify what the proposed logging and/or burning treatment is for each of these old growth stands, is required by the NEPA for project decisions (Page 8 of NEC's and AWR's comments).

There is no map of the big game winter range in the Mud Creek Project area, or any information of where remaining thermal cover exists, or where it will be removed with this project. The current condition of thermal cover in this project area is important information to the public, as it demonstrates how the agency is implementing the forest plan. The draft EA states that in the hunting district, thermal cover on winter range is only 11%, but the level in the project area winter ranges is never provided. It seems likely that the agency has to date not implemented the existing Forest Plan direction for thermal cover. Since the agency is proposing to amend the Forest Plan, the public needs to be provided information as to how this standard has been implemented over the planning period, and if there are significant cumulative effects already from a failure to provide 25% thermal cover on elk and mule deer winter ranges. The EA at appendix D-6 notes that there have been 9 previous Forest Plan amendments for thermal cover. There is no actual information as to where these previous amendments were implemented, or how they affected big game quality of winter range. This type of information is needed for the agency to define the significance of the currently-proposed amendment. It is also key to the claim being made by the agency that for- age, not thermal cover, is lacking on big game winter range.

How were previous deletions of thermal cover evaluated in the Forest Plan monitoring program, and where is this information being provided in the Mud Creek EA? (pp.

10-11 of NEC's and AWR's comments).

We note there is no information ever addressed as per hid- ing cover that currently exists, or what will exist within each of the 4 sub-project areas in 20 years of logging and burning (Page 14 of NEC's and AWR's comments).

Violation of the NEPA

This proposal is a violation of the NEPA because there has been no "hard look" at how the proposed vegetation treatments and roads will impact other resources, includ- ing wildlife. Currently, there have been no inventories for key wildlife habitats, including snag forests, old growth forests, hiding cover, open road densities, elk and mule deer thermal cover on winter ranges, or elk security, for example. The status of Forest MIS and sensitive species in the project area appears unknown, as there have been no surveys at this time. Since the current conditions for wildlife and their habitat are unknown for the project area, the impacts of vegetation treatments and roads can- not be assessed. In addition, none of the proposed treat- ments have been defined as well, except for vague descrip- tions of the acres that may be treated by various mea- sures. So the manner in which wildlife habitat, currently undefined, will change with the proposed project cannot be measured as well.

Instead of evaluating how the overall Mud Creek Project will impact resources, the Forest Service instead will im- plement a complicated process whereby they will hold meetings to keep the public informed about how vegeta- tion treatments are proceeding. Although publics may identify concerns and issues at these meetings, there is no requirement for the Forest Service to address such, since the period for public participation ends when a decision for the project is signed. So the agency is proposing to implement a massive, 20-year vegetation treatment and road construction project without ever evaluating impacts to resources. This is a clear violation of the NEPA. The public is to be informed as to likely environmental im- pacts prior to the implementation of a decision, not after- wards.

This project is also a clear violation of the NEPA due to its massive size. Most of the entire project area of over 48,000 acres is planned for vegetation treatments. There is no way any public can possibly review even a minor portion of the estimated treatment areas prior to an agency decision. As just one example, the maps identify- ing existing and planned new road locations include 18 individual maps! Such a large project means there cannot be a reasonable level of public involvement, as is required by the NEPA.

The project is a violation of the NEPA due to a planned 20-year implementation period. NEPA decisions must be timely as per implementation, which is usually 5 years. In addition to limiting the timeline of projects to one that is reviewable by the public, and that changed conditions are not ignored due to long-term impacts of decisions that have already been implemented. One example is the use of the Mud Creek Project Area by grizzly bears. It is high- ly likely that if some bears are not already using this land- scape, they will be present within the next 5 years. Project planning and implementation must be limited to periods that can be responsible to changed conditions and changed science. Another example is the recent signifi- cant declines of western forest birds. Certainly a project that can proceed for 20 years without any additional analysis could not address issues such as this. Clearly, the future of most if not all resources is unknown, which means that project impacts cannot be reasonably mea- sured into the future as well.

The timeliness requirement of the NEPA also ensures that the current best science is applied to the project, and as well, that Forest Plan monitoring also addresses vegeta- tion management activities. Most monitoring periods are no longer than 5 years, and certainly none are 20 years in length. In fact, the estimated period for Forest Plan is 15 years. A 20-year project period for implementing a project decision cannot adhere to the Forest Plan monitoring re- quirements of the NFMA. In fact, a 20-year timeline makes any Forest Plan monitoring irrelevant. The Mud Creek NEPA analysis did not define how Forest Plan monitoring would be addressed over the 20-year project.

Instead of adhering to the NEPA, whereby public input based on high quality information is required prior to agency implementation of a decision, the Forest Service is switching to new process, where project impacts are po- tentially provided to the publics at various stages after various projects are implemented over the next 20 years. At various intervals, the public will be allowed to provide comments to the agency, based on information the agency provides to the public as to how vegetation treatments are being implemented. The actual framework of this new process is not identified in any Forest Service manual guidelines. This new process is apparently supposed to re- place the requirements of the NEPA for public involve- ment. The current law that allows this replacement of NEPA requirements for public involvement was never identified in the Mud Creek analysis.

Another significant violation of the NEPA for the Mud Creek project is the failure of the Forest Service to demonstrate that various proposed mitigation measures will actually be implemented and/or be effective. One ex- ample is the claim that wildlife surveys may be done in certain areas of the project sometime during the 20-year project period. It is questionable that high quality surveys, including for difficult species for nest location, such as the flammulated owl, will actually be done. Since the agency claims that MIS and sensitive species will be pro- tected from adverse impacts of the planned vegetation treatments, they need to demonstrate that this will actually occur, not just claim it will happen. There is no guaran- tee to the public that any surveys will be done, let alone high quality surveys, including for sensitive species and MIS. So the public has no idea that there will be any co- ordination between wildlife habitat needs and proposed vegetation treatments, because this coordination was not demonstrated in the NEPA process. The project area needs to be thoroughly surveyed for MIS and sensitive species PRIOR to a decision being implemented, so that the public can see how wildlife needs will be coordinated with vegetation treatments, as is required by the NEPA. The NEPA is not just a process whereby the agency says what they will do. The only way the agency can assure the pubic that vegetation treatments will be carefully coordi- nated with wildlife is to complete thorough surveys before a decision is implemented (pp. 21-23 of NEC's and AWR's comments).

The Forest Service did not respond to our comments or even acknowledge that they got comments from Sara John- son on behalf of NEC and AWR even though they were sent by certified mail # 7018 3090 0000 9066 3729 on

April 7, 2021.

This is a violation of NEPA to not identifying specific areas where logging would have occurred and where roads

and how many roads will be built.

Please see the article below about a similar timber sale in Alaska which a federal district court ruled was illegal.

Federal court blocks timber sale in Alaska's Tongass Na- tional Forest

https://www.adn.com/alaska-news/2020/06/25/federal- court-blocks-timber-sale-in- alaskas-tongass-national-forest/

JUNEAU [mdash] A federal judge has blocked what would have been the largest timber sale in Alaska's Tongass Na- tional Forest in decades. Wednesday's ruling ends the U.S. Forest Service's plan to open 37.5 square miles of old- growth forest on Prince of Wales Island to commercial logging, CoastAlaska report- ed. The ruling by Judge Sharon L. Gleason also stops road construction for the planned 15- year project. Conservationists had already successfully blocked the federal government's attempt to clear large amounts of timber for sale without identifying specific areas where logging would have occurred. Gleason allowed the forest service to argue in favor of correcting deficiencies in its re- view and moving forward without throwing out the entire project, but ultimately ruled against the agency. Gleason's ruling said the economic harm of invalidating the timber sales did not outweigh "the seriousness of the errors" in the agency's handling of the project. The method used in the Prince of Wales Landscape Level Analysis was the first time the agency used it for envi- ronmental review on an Alaska timber sale. The forest service, which can appeal the decision, did not return calls seeking comment. Gleason's decision affects the Prince of Wales Island project and the Central Tongass Project near Petersburg and Wrangell. The ruling triggers a new environmental review under the National Environmental Policy Act, said Meredith Train- or, executive director of the Southeast Alaska Conserva- tion Council. The ruling in the lawsuit brought by the council includes a requirement for public input on specific areas proposed for logging, Trainor said.Tessa Axelson, executive director of the Alaska Forest As- sociation, said in a statement that the ruling "threatens the viability of Southeast Alaska's timber industry."

The project is in violation of NEPA, NFMA, the Clean Water Act, the APA and the ESA.

Remedy
Withdraw the draft decision and FONSI un- til site specific prescriptions, new roads are mapped and unit boundaries are firmed up, then write an EIS and take public comments.

FOB wrote in their comments for FOB, AWR and others:

Conditions based analysis relies heavily on design fea- tures to minimize the detrimental effects of project actions on soils, streams, ecological resources, bull trout, lynx, white bark pine, elk, rare plants, and all other flora and fauna in the project area. Design features are mentioned 54 times in the DEA alone. How will BNF guarantee that these design features will be followed? Are any of these design features dependent on future funding? What will be the consequences for not fulfilling the necessary de- sign features to minimize effects to the forest? (p. 19, FOB's and AWR's comments).

The agency needs to identify all existing old growth stands in the Mud Creek Project Area, and define their individual patch size, and map their locations across the project area. The agency also needs to identify what the proposed logging and/or burning treatment is for each of these old growth stands, is required by the NEPA for project decisions (p. 8, FOB's and AWR's comments).

There is no map of the big game winter range in the Mud Creek Project area, or any information of where remaining thermal cover exists, or where it will be removed with this project. The current condition of thermal cover in this project area is important information to the public, as it demonstrates how the agency is implementing the forest plan. (p. 10, FOB's and AWR's comments).

There are no maps provided of where existing or planned security areas will be in the Mud Creek project area, in violation of the NEPA. There is also no analysis of how only 15% security (at best) is affecting elk displacement to private lands, given a minimum of 30% security is rec- ommended by the current best science. The agency claims there is no impact of this lack of security based on the current best science (draft EA 99-100). It is not clear how there can be a huge increase in the number of motorized routes in the Mud Creek Project Area, as well, and still maintain what is the current level of big game security (p. 14, FOB's and AWR's comments).

Forest Service Response

While a site-specific implementation schedule is not pro- posed, appendix B and the environmental assessment describe the use of implementation areas. The Forest Service will use implementation areas to phase use of the implementation process steps. While pub- lic and tribal workshops will occur annually, the interdisciplinary team will complete the field survey pack- et and checklists once per implementation area. The Forest Service will prioritize the Nez/Mud and Buck/ Ditch implementation areas, which contain the

bulk of locations preliminarily identified as warranting treatment in the analysis used to develop the proposed action. (p. B8, Appendix B - Response to Com- ments.)

The Forest Service will be able to provide additional detail about post-treatment vegetation conditions during the implementation process when treatments prescriptions are identified for specific locations. General descriptions of each treatment option and the expected post-treatment vegetation conditions, including green trees, snags, and coarse woody debris, are available in the activity cards in appendix A of the environmental assessment. The design features in appendix A also specify amounts of post-treatment coarse woody debris and snag retention per acre by fire group. Many activity cards include photos or diagrams to illustrate examples of potential post treatment conditions. (p. B-11 of Draft Decision Notice).

*No New Road Construction. The use of the existing road network alone would not provide enough access for

com- mercial harvest operations to be able to meet the purpose and need of this project. Some construction of specified and temporary roads would be needed to access stands that need treating. Since commercial treatments are a necessary tool to address forest health and fuels condi- tions within the project area, an alternative that precluded all road construction would not meet the purpose and need of this project. All new permanent roads constructed during the project will be stored after implementation. All temporary roads will be rehabilitated within 3 years of use. (P. 6 of the Draft Decision Notice).

In the paragraph above, the first 4 words state "No New Road Construction." The paragraph then continues on about the new roads that will be built but does not state how many miles of new roads will be built or where.

This is a violation of NEPA, the Bitterroot Forest Plan, NFMA, the Clearwater Act, the APA and the ESA based on the Federal Court ruling on a Forest Service logging project in the Tongass N.F. stated above. Supervisor Anderson is aware that is project is in violation of the law because be- fore he became Supervisor of the BNF on March 18, 2019,

he was the district ranger of the Craig and Thorne Bay Dis- tricts on Prince of Wales Island in Alaska.

https://ravallirepublic.com/news/local/ article_2788b2f0-7d0e-5206-861a-ae38edd79663.html

Remedy

Withdraw the draft decision and FONSI until site specific prescriptions, new roads are mapped and unit boundaries are firmed up, then write an EIS and take public comments.

We wrote in our comments:

Page 30 of the EA states: "Sixty-day public review is re- quired for creation of openings greater than 40 acres (FSM 2470, section 2471.1, Region 1 supplement 2400-2016-1). The project scoping letter (PF-SCOPE-002) initially notified the public of the proposed creation of openings greater than 40 acres as part of the Mud Creek project." But the legal notice for scoping peri- od states it is a 30 day comment period. Please initiate a 60 day public review if openings greater than 40 acres as required by FSM 2470, section 2471.1, Region 1 supple-

ment 2400-2016-1.

The Forest Service responded:

Forest Service Manual 2471.1 (R1 Supplement 2400-2016-1) requires a 60-day public notice and Regional Forester approval for even-aged regeneration harvest openings exceeding 40 acres. In accordance with 36 CFR 219.27 (d) (2) (ii), public notice of the proposed activities in focal areas was provided in the draft envi- ronmental assessment on March 21, 2021. The 60-day public notice does not need to run concurrently with Na- tional Environmental Policy Act comment periods. The Bitterroot National Forest will request Regional Forester approval for even-aged and two-aged regeneration har- vests greater than 40 acres, and approval is mandatory be- fore the decision can be signed. All openings will be scheduled for reforestation through natural regeneration or tree planting. Adequate stocking, meeting prescription objectives, is expected within five years following harvest, as required by NFMA Section 6 (g) (3) (E) (ii) and Forest Service Handbook 2409.17, Supplement No. : R1

2409.17-2002-1, Sections 2.3

and 2.7. (pp. B-19 - B-20 of the DDN).

The Forest Service acknowledges that they are required to have a 60 day comment period but they call it a 60 day no- tice. But these are two different things. The Mud Creek DDN and FONSI are in violation of Forest Service Manual 2471.1 (R1 Supplement 2400-2016-1) requires a 60-day public notice and Regional Forester approval for even-aged regeneration harvest openings exceeding 40 acres. A 60 day comment period was never set. The project is therefore in violation of NEPA, NFMA, and the APA.

Please see the attached report by Friends of the Clearwater, titled, "The Clearcut Kings."
Remedy
Withdraw the DDN and write an EIS and open a 60 day comment period for the openings greater than 40 acres with maps showing there these clearcuts will be and how big they will be. Or choose the No Action Alternative.

We wrote in our comments:

Appendix A of the Wildlife report states grizzlies are not present in the project area. It also states: "Not designated as 'may be present' in the project area for grizzly bears." Please see the following Montana Fish Wildlife and Parks map of occupied grizzly habitat.

As of 2018, an article in the July/August 2020 issue of Montana Outdoors, the Montana Fish Wildlife and Parks magazine included a map showing the distribution of ver- ified and possible grizzly bear locations. This map in- cludes 5 verified grizzly bear sightings only about 10 miles east of the Mud Creek Project (verified since 2005) and 2 possible sightings since 2011.

https://issuu.com/montanaoutdoors/docs/outlierbears

It is clearly possible that grizzly bears are also present in the Mud Creek landscape in the last 3 years.

Please incorporate this into your analysis.

Please formally consult with the U.S. Fish and Wildlife Service on the impact of the Mud Creek project on grizzly bears.

Please see the attached paper by Dr. David Mattson, "Grizzly Bears for the Selway-Bitterroot." It recommends:) "Permanent and meaningful protection of Inventoried Roadless Areas; (ii) Road closures and permanent road retirement; (iii) Retirement of grazing allotments; (iv) Improved husbandry on allotments; (v) Increased law en- forcement[hellip]"

The Interagency Grizzly Bear Guidelines (IGBC 1986) document directs the FS to manage for "multiple land use benefits" to the extent that these uses are compatible with grizzly recovery.

The Bitterroot National Forest has occupied grizzly bear habitat though out. Management must focus on grizzly bear habitat maintenance, improvement and minimization of grizzly-human- conflict. Since grizzly are listed as threatened under the Endangered Species Act, manage- ment decisions shall favor the needs of the grizzly bear when grizzly habitat and other land use values compete.

The Draft EA and the Forest Plan do not disclose if ad- verse project or cumulative impacts are consistent with the requirement to prioritize the needs of the grizzly bear for the applicable Management Situations.

Additional direction in the Interagency Grizzly Bear Guidelines (IGBG) (1986) for MS1 habitat included the following for timber management:

Logging and/or fire management activities which will ad- versely affect grizzly bear populations and/or their habitat will not be permitted; adverse population effects are popu- lation reductions and/or grizzly positive conditions; ad- verse habitat effects are reduction in habitat quantity and/ or quality.

Schwartz et al. (2010) noted that management for grizzly bears re-quires not only the provision of security area, but control of open road densities between security areas.

Otherwise, grizzly bear mortality risks will be high as bears attempt to move across highly roaded landscapes to another security area. There needs to be direction regard- ing existing road densities located outside of and between security areas.

Grizzly bears are winter-sleepers rather than true hiber- nators. If high density motorized routes are known to disturb, displace, habituate, and raise mortalities among grizzlies in spring, summer, and fall, there's no logical, or scientific reason to believe they don't do the same to sleeping bears in winter.

The Forest Plan's desired condition for patches which in- cludes a range of larger opening sizes may result in adverse effects if lack of cover leads to under use of foraging habitat or increased risk of human-grizzly bear conflicts causing mortality of a grizzly bear. The EA fails to show that the openings to be newly created by the project don't exceed levels of current incidental take.

The current management strategy allows "temporary" re- ductions in Core and "temporary" increases in road den- sity as if the habitat would then get reprieve from such "temporary" adverse effects. However, the FS recognizes no genuine limitations on how much, how often and for how long these "temporary" current protections by al- lowing such harmful activities in Security Core as the opening of roads to public motorized uses like firewood gathering, unlimited amounts of non-motorized trails and human activity, and logging projects that reduce Security Core for half a decade.

Moreover, excusing logging roads from limits on Total Motorized Route Density even though they have not been decommissioned, have not been removed from the road system, and are instead being "stored" for future logging[mdash]which also makes them more vulnerable to contin- ued use as trails. (Hammer, 2016.)

The EA fails to consider loss of vegetative cover from the massive clearcutting proposed, which will affect security for grizzly bears and other wildlife depending upon seclu- sion from humans. By law, the logging roads and illegal user-created roads on National Forests are supposed to be securely and effectively closed. Unfortunately, the Forest Service has in- terpreted this requirement to allow it to put a pile of dirt in front of the road and call it good. Road use on closed roads and illegal user-created roads is a pervasive and chronic problem and it is keeping these endangered griz- zly bears on the brink of extinction. This represents a major departure from prior manage- ment requirements and threatens to significantly degrade grizzly.

The Forest Service is violating the ESA by arbitrarily dismissing the threat to grizzly bears and bull trout posed by roadbuilding. Page 45 of the EA states: "Where roads were not needed in the near-term but may be needed for long-term re- source management, the team proposed road storage (which included blocking public access and making the road prism hydrologically stable). A total of 16.25 miles of existing road was proposed for storage (this includes 0.76 miles of undetermined road that would be added to the NFS road system and then stored)." How many road closure violations have occurred in the last 5 years in the West Fork Ranger District?

The Forest Service must reconsult with the USFWS on the impact of the Bitterroot Forest Plan on grizzly bears singer there are now grizzly bears where they were not when the Forest Plan was written. The Forest Service must also give the public a chance to comment on this consultation. It is a violation of NEPA, NFMA, the APA,

and the ESA to not do so.

This is strong reason that the Forest Service should write an EIS for this project.

The Forest Service must complete a full environmental impact statement (EIS) for this Project because the scope of the Middleman Project will likely have a significant in- dividual and cumulative impact on the environment. Al- liance has reviewed the statutory and regulatory require- ments governing National Forest Management projects, as well as the relevant case law, and compiled a check-list of issues that must be included in the EIS for the Project in order for the Forest Service's analysis to comply with the law. Following the list of necessary elements, Alliance has also included a general narrative discussion on possi- ble impacts of the Project, with accompanying citations to the relevant scientific literature. These references should be disclosed and discussed in the EIS for the Project.

I. NECESSARY ELEMENTS FOR PROJECT EIS:

[bull] Disclose all Bitterroot National Forest (BNF) Plan requirements for logging/ burning projects and ex- plain how the Project complies with them;

[bull] Disclose the acreages of past, current, and reason- ably foreseeable logging, grazing, and road- building activities within the Project area;

[bull] Solicit and disclose comments from the Montana Department of Fish, Wildlife, and Parks regarding the impact of the Project on wildlife habitat;

[bull] Solicit and disclose comments from the Montana Department of Environmental Quality regarding the impact of the Project on water quality;

[bull] Disclose the biological assessment for the candidate, threatened, or endangered species with potential and/ or actual habitat in the Project area;

[bull] Disclose the biological evaluation for the sensitive and management indicator species with potential and/or actual habitat in the Project area;

[bull] Disclose the snag densities in the Project area, and the method used to determine those densities;

[bull] Disclose the current, during-project, and post-project road densities in the Project area;

[bull] Disclose the Bitterroot National Forest's record of compliance with state best management practices re- garding stream sedimentation from ground-disturbing management activities;

[bull] Disclose the BNF's record of compliance with its monitoring requirements as set forth in its Forest Plan;

[bull] Disclose the Bitterroot National Forest's record of compliance with the additional monitoring require- ments set forth in previous DN/FONSIs and RODs on the Bitterroot National Forest;

[bull] Disclose the results of the field surveys for threat- ened, endangered, sensitive, and rare plants in each of the proposed units;

[bull] Disclose the level of current noxious weed infesta- tions in the Project area and the cause of those infes- tations;

[bull] Disclose the impact of the Project on noxious weed infestations and native plant communities;

[bull] Disclose the amount of detrimental soil disturbance that currently exists in each proposed unit from pre- vious logging and grazing activities;

[bull] Disclose the expected amount of detrimental soil dis- turbance in each unit after ground disturbance and prior to any proposed mitigation/remediation;

[bull] Disclose the expected amount of detrimental soil dis- turbance in each unit after proposed mitigation/re- mediation;

[bull] Disclose the analytical data that supports proposed soil mitigation/remediation measures;

[bull] Disclose the timeline for implementation;

[bull] Disclose the funding source for non-commercial ac- tivities proposed;

[bull] Disclose the current level of old growth forest in each third order drainage in the Project

area;

[bull] Disclose the method used to quantify old growth for- est acreages and its rate of error

based upon field review of its predictions;

[bull] Disclose the historic levels of mature and old growth forest in the Project area;

[bull] Disclose the level of mature and old growth forest necessary to sustain viable populations

of dependent wildlife species in the area;

[bull] Disclose the amount of mature and old growth forest that will remain after

implementation;

[bull] Disclose the amount of current habitat for old growth and mature forest dependent

species in the Project area;

[bull] How many acres of old growth will be logged or burned under the action alternative. What science are you using to justify this?

[bull] Using Green et. al. will this still be clarified as old growth?

AA. Disclose the amount of habitat for old growth and mature forest dependent species that will remain after Project implementation;

BB. Disclose the method used to model old growth and mature forest dependent wildlife habitat acreages and its rate of error based upon field review of its predictions;

CC. Disclose the amount of big game (moose and elk) hiding cover, winter range, and security currently available in the area;

DD. Disclose the amount of big game (moose and elk) hiding cover, winter range, and security during Project implementation;

EE. Disclose the amount of big game (moose and elk) hiding cover, winter range, and security after implementa-

tion;

FF. Disclose the method used to determine big game hid- ing cover, winter range, and security, and its rate of error as determined by field review;

GG. Disclose and address the concerns expressed by the ID Team in the draft Five-Year Review of the Forest Plan regarding the failure to monitor population trends of MIS, the inadequacy of the Forest Plan old growth standard, and the failure to compile data to establish a reli- able inventory of sensitive species on the Forest;

HH. Disclose the actions being taken to reduce fuels on private lands adjacent to the Project area and how those activities/or lack thereof will impact the efficacy of the ac- tivities proposed for this Project;

II. Disclose the efficacy of the proposed activities at re- ducing wildfire risk and severity in the Project area in the future, including a two-year, five-year, ten-year, and 20- year projection;

JJ. Disclose when and how the BNF made the decision to suppress natural wildfire in the Project area and replace natural fire with logging and prescribed burning;

KK. Disclose the cumulative impacts on the Forest-wide level of the BNF's policy decision to replace natural fire with logging and prescribed burning;

LL. Disclose how Project complies with the Roadless Rule;

MM. Disclose the impact of climate change on the effica- cy of the proposed treatments;

NN. Disclose the impact of the proposed project on the carbon storage potential of the area;

OO. Disclose the baseline condition, and expected sedi- mentation during and after activities, for all streams in the area;

Disclose maps of the area that show the following ele- ments:

Past, current, and reasonably foreseeable logging units in the Project area;

Past, current, and reasonably foreseeable grazing allot- ments in the Project area; Density of human residences within 1.5 miles from the Project unit boundaries; Hiding cover in the Project area according to the Forest Plan def- inition;

Old growth forest in the Project area;

The Forest Service responded:

Grizzly bears are currently not classified as "may be present" in project area, and no grizzly bear occurrences or sightings have been recorded in the project area. (p. B- 37 of DDN).

Grizzly Bears clearly are present. The Mud Creek DDN and FONSA are in violation of NEPA, NFMA, the ESA and the APA.

Remedy

Withdraw the Draft Decision Notice and write an EIS that deals with the other issues we raised in our comments, ac-

knowledge grizzlies are in the project area and formally consult with the FWS on the impact of the project on grizzly bears or choose the No Action Alternative.

The agencies must reinitiate and complete reconsultation on the Bitterroot Forest Plan to address current grizzly bear distribution and suitable habitat; this has not yet been done.

ESA regulations mandate that "[r]einitiation of formal con- sultation is required .. . (b) If new information reveals ef- fects of the action that may affect listed species .

. . in a manner or to an extent not previously considered . . .

." 50 C.F.R.[sect]402.16(b); see Alliance for the Wild Rockies v. USDA,772 F.3d 592,601 (9th Cir.2014).

We wrote in our comments:

An article in the Bitterroot Star reports the following:

[Stevensville District Ranger Steve Brown] also said that in the Forest's 1994 monitoring report, it states that the Forest Plan standards adopted in 1987 are not the best available science, making it difficult if not impossible to measure and that the Forest should be using 'Green. et al'. "I believe the language used actually said that we should amend our Forest Plan to include Green. et al.." said Brown. He said the Forest went on to use 'Green. et al' for the next 26 years but did not bother to amend the Forest Plan to say that Green. et al. would be used to define old growth.

"Then these groups sued us, complaining that we were not following the Forest Plan," said Brown. "We took a look at it and said, hey, they are right..... " The article continues: "The solution, according to Brown, will be to adopt a project specific amendment to the Forest Plan for the Gold Butterfly Similarly, an article in the Ravalli Republic quotes the District Ranger as stating: "When it came out in the com- plaint that we were not using the standards found the Forest Plan, we took a look and saw that was right." In the interview, the District Ranger again concedes that the violation has been occurring for the past 26 years. The ar- ticle further quotes the Bitterroot Forest Supervisor as stating: "Upon further review of the project analysis, we recognized some deficiencies regarding Forest Plan com- pliance." This same statement was made in an agency press release.

C. Other Ongoing Projects

Although the Forest Service has now withdrawn the Gold Butterfly Project decision, there are a number of other ongoing projects on the Bitterroot National Forest that have not been withdrawn. There is no publicly available list that indicates which projects are currently being im- plemented on the Bitterroot National Forest. Thus, the projects discussed below are not intended to be a complete list, but rather a representative sample.

In May 2020, the Forest Service signed a decision autho- rizing the Piquet Creek Project. Ex.10 at pdf-30. The project allows approximately 3,000 acres of commercial logging. Ex.10 at pdf-21. The agency's response to scop- ing comments states: There is no proposal to remove any old growth stand from old growth status, as defined by Green et al. 1992 (amended 2005). Treatments may be proposed to reduce competition and ingrowth to create a more re- silient and resistant stand to insects, disease and wildfire that would protect and aid in managing these stands for old growth into the future. Old growth data will be col- lected where appropriate to determine if stands qualify based on the Green et al. definition and ensure we're meeting the Forest Plan. Thus, the agency did not use the Forest Plan old growth definition to calculate existing old growth in the project area, and the project permits logging in old growth to a level that would not comply with the Forest Plan old growth definition. Id. Nonetheless, the Forest Service ex- empted this project from NEPA analysis and the adminis- trative objection process purportedly because it was com- plying with the Healthy Forest Restoration Act categorical exclusion mandate "to maximize retention of old-growth and large trees as appropriate." However, logging down to 8 large trees per acre and 33% canopy closure under Green et al. - instead of retaining at least 15 large trees per acre and 75% canopy closure as required by the For- est Plan - does not maximize old-growth and large trees but rather minimizes them.

Similarly, in April 2020, the Forest Service signed a deci- sion authorizing the Buckhorn Project. Ex.12 at pdf-24. The project allows approximately 1,165 acres of commer- cial logging. Ex.12 at pdf-1. The Forest Service states: "Most treatment units do not contain old growth stands as defined by Green et al. 1992 (amended 2005)." Ex.12 at pdf-2 (emphasis added). For example, in Unit 14, "trees >20" DBH in one stand did not meet age requirements based on Green et al. 1992 (amended 2005) for the habitat type. Age requirements are 170 years or older . . . ." In contrast to Green et al., however, the Forest Plan old growth definition does not have an age minimum; thus, this stand would likely have been protected as old growth under the Forest Plan.

Moreover, the Forest Service states: "Treatments within all units would retain large, old ponderosa pine and thus would not reduce the old growth percentage for this third order drainage." Ex.12 at pdf-2. This statement is premised upon retention in accordance with the Green et al definition, which only requires retention of 8 large trees per acre, whereas the Forest Plan definition requires 15 large trees per acre and 75% canopy closure. Thus, existing Forest Plan old growth may be logged by this Project down to conditions that no longer constitute For- est Plan old growth.

Since the Bitterroot National Forest has not been follow- ing the old growth requirements of the Forest Plan, the Bitterroot N.F. must amend the Forest Plan not do a site specific amendment since the Bitterroot N.F. has not been compelling with the Forest Plan and clearly does not in- tend to in the future. The other option is to follow the Forest Plan direction for old growth.

The Forest Service responded:

A project-specific amendment to support using the old growth definitions in Green et al. for the Mud Creek Project rather than the 1987 Forest Plan old growth crite- ria would not result in any negative cumulative effects when considering the foreseeable Gold Butterfly and Bit- terroot Front projects. Since old growth stands have been identified in all three project areas using the definitions in Green et al., a project-specific amendment to support using the Green et al. definitions for the Mud Creek Project would not result in changes to the amount of old growth identified or managed in any of these projects.

Likewise, a project-specific amendment to support using the old growth definitions in Green et al. for the Mud Creek Project would not affect the amount of habitat available for species such as pileated woodpeckers or marten that are associated with habitat components that are most common in mature or over-mature forests, but also occur in stands that do not meet old growth defini- tions. (P. 30 of DDN).

According to the 2012 Planning Rule, "Plan amendments may be broad or narrow, depending on the need for change, and should be used to keep plans current and help units adapt to new information or changing condi- tions. The responsible official has the discretion to deter- mine whether and how to amend the plan and to deter- mine the scope and scale of any amendment" (36 CFR 219.13(a)). The responsible official has determined that

the conditions in the project area warrant project-specific forest plan amendments. (P. B-16 of the DDN).

A Site-Specific Amendment of Old Growth Standards is not appropriate for this project given that the BNF for the past 26 years have violated, and are continuing to violate, the Bitterroot Forest Plan old growth requirements. Please see the following article from the September 1, 2020

Bitterroot Star.

https://bitterrootstar.com/2020/09/forest-withdraws-ap- proval-of-massive-gold-butterfly-project/

Forest withdraws approval of massive Gold Butterfly project

Bitterroot National Forest Supervisor Matthew Anderson, on Friday, August 28, withdrew his Record of Decision approving the Gold Butterfly Project. The project area stretches over 10 miles in the Sapphire Mountains from Stevensville to Corvallis covering an area of 55,147 acres.

The vegetative management component of the project in- cluded commercial logging on 5,461 acres, prescribed burning activities on 4,854 acres and non-commercial logging of smaller trees on 5,040 acres. It was approved on November 19, 2019, but on July 10, 2020, two conser- vation organizations, Friends of the Bitterroot and Al- liance for the Wild Rockies, filed suit to stop the project, alleging several violations of the law, including that the project did not follow the Forest Plan.

"I have decided it is in the best interest of the public to withdraw the decision and direct my staff to conduct addi- tional review and analysis," wrote Anderson. "Upon fur- ther review of the project analysis, we recognized some

deficiencies regarding Forest Plan compliance." He said any new decision will proceed through the required NEPA and public involvement procedures. Anderson said that the objectives of the project included improving forest resilience to natural disturbances, such as fire, insects, and diseases, reducing chronic sediment sources in Willow Creek watershed to improve water qual- ity and bull trout habitat, restoring or improving key habi- tats including meadows, aspen, and whitebark pine, and managing timber to provide forest products, jobs, and income to local communities. The decision also included

vegetation management activities, including commercial timber harvests, non-commercial thinning, and prescribed burning on approximately 7,376 acres to improve forest health. The selected alternative was modified to retain old growth status in all treatment units.

Anderson emphasized, "The Forest staff on the Bitterroot will be reviewing the procedural steps and analysis to date, and we will determine the best path to move the project forward. The Bitterroot National Forest is still committed to completing the important work in this project area."

Stevensville District Ranger Steve Brown said that the current Forest Plan was adopted in 1987 and defines old growth by certain measurements such as a certain num- ber per acre that are 20" dbh or more. He said the Plan

talks about a canopy closure of 75% of site potential. He called that "a very undefined measure" and "not a set standard." He also noted that the Forest Plan doesn't even consider the age of a tree in determining its status as old growth.

According to Brown, a more "reasonable, repeatable way of measuring old growth" was developed in a document commonly referred to as "Green, et al..." after the lead author of the work, which "lays out very consistent re- peatable measures of what constitutes old growth across the region by using habitat type. It's exhaustive, compre- hensive, and tied closely to data that we can check. So it's simple to determine if it's old growth or not."

He also said that in the Forest's 1994 monitoring report, it states that the Forest Plan standards adopted in 1987 are not the best available science, making it difficult if not impossible to measure and that the Forest should be using 'Green, et al'.

"I believe the language used actually said that we should amend our Forest Plan to include Green, et al.," said Brown. He said the Forest went on to use 'Green, et al' for the next 26 years but did not bother to amend the Forest Plan to say that Green, et al, would be used to define old growth.

"Then these groups sued us, complaining that we were not following the Forest Plan," said Brown. "We took a look at it and said, hey, they are right and I guess this is the long way of saying that we were doing our best, we were using the best available science, but our Forest Plan is not based on the best available science, so it's really a technicality." The solution, according to Brown, will be to adopt a project specific amendment to the Forest Plan for the Gold Butterfly Project. That means doing a supplemental Environmental Impact Statement (EIS). He said it could take up to nine months to a year to go through that process.

"We recognize that this is important work that needs to be done and we are going to do our best to get it turned around so that we can continue the good work," he said.

Jim Miller, President of Friends of the Bitterroot, said, "Gold Butterfly would have been the largest, most de- structive timber sale in decades on the Bitterroot National Forest. We are very glad they withdrew the decision be- cause it was an illegal project." He said the project in- cluded old-growth logging, clearcutting, road building, destruction of wildlife habitat, and threatened spawning streams for endangered bull trout. "Although it was

broadly opposed by the public, the For- est Service ignored citizen input and a viable alternative that would have achieved the purpose of the project with- out seriously disrupting the ecological integrity of the area," said Miller. Miller said that in the past Friends of the Bitterroot has been criticized by the timber industry and the U.S. Forest Service for stepping in at the last hour on their projects and making a legal issue of things.

"We have been expressing our concerns about these is- sues in public comment and at public meetings for two years now," said Miller. "In our comments at the meeting that the Forest Service held with objectors, we all but pleaded with them to change the project and protect these resources, but they refused to do so. So now here we are, two years into this project, and the Forest Service is final- ly admitting that they are violating their own Forest Plan and our environmental laws. They could have recognized this a long time ago and prevented a lawsuit and poten- tially had this project underway." "We believe and I think most of the country believes that our environmental laws are here for a reason, to protect the national forests, the public's forests," said Miller. "When they do that, we expect the Forest Service to re- spect the laws and their own regulations, but when they don't, our only recourse is to go to court."

Miller said that there isn't much old growth left on the national forests or in the country due to massive cutting at the turn of the century. "So it's really important to protect those big old trees be- cause they are critical to the forest ecosystem, to the wildlife and are such a rare part of our forest. I think everybody loves those big old trees and the Forest Service has plans to overcut the old growth as per its own forest plans and to even clear-cut some areas. I don't think most people want that," said Miller.

He said there was an alternative in the EIS which was broadly supported by about 75% of the public comment and it included commercial logging. "They had an opportunity to choose an alternative that had community support, and to build bridges with the conservation community," said Miller. "When they decid- ed not to do that, it was a great lost opportunity."

Mike Garrity, Executive Director of the Alliance for the Wild Rockies, stated in a press release that it made abso- lutely no sense to go forward with this "enormously ex- pensive and environmentally destructive project given the nation's current economic condition." "We are thrilled that the Forest Service came to its senses," said Garrity. "As the Forest Service's own data indicates [mdash] federal taxpayers would have lost a stunning $4.2 million on the project. Significantly, this information was buried in internal agency documents, and the agency did not honestly disclose this number to the public in the Environmental Impact Statement."

Garrity noted that 750 acres, more than one square mile of old-growth forest, has been saved by withdrawing this decision.

"The Forest Service claimed it was going to conduct this logging under the provisions of the Healthy Forest Restoration Act, but there's a real legal problem with that since that law actually prohibits logging old-growth forests [mdash] and this project was going to chop down 750 acres of increasingly rare old growth forests," he said. Regarding their claims about the elk habitat violation, he said the Forest Service admitted that the project did not comply with the standard for elk habitat and it proposed a new standard for the project. But that new standard, he said, requires at least 30% of the project area be main- tained in "elk security blocks." He said this project area is already woefully inadequate, with only 8.0% in elk securi- ty blocks and the extensive logging and

roading from the project will further reduce that security. However, he said, the Forest Service chose not to disclose its non-compli- ance with the new standard to the public in the Environ- mental Impact Statement. "It's no wonder the vast majority of the thousands of peo- ple who commented opposed the Gold Butterfly project, since it's estimated to run 6,000 to 7,000 loaded logging trucks down Willow Creek Road," Garrity concluded. "That's a dirt road with people's homes right next to it, which would significantly impact and endanger their lives and families. The Alliance for the Wild Rockies and Friends of the Bitterroot were honored to stand with the thousands of citizens opposing this project and will continue to exercise our first amendment rights to challenge illegal Forest Service decisions in court in the future."

Stevensville District Ranger Steve Brown admitted in the article that the BNF was not following the Forest Plan. The solution is not to do repeated site specific amendments.

The solution is to go through NEPA to amend the Forest Plan if the Forest Service no longer wants to follow the Forest Plan standard for old growth since all projects, mon- itoring reports, and other planning and analysis documents on the Bitterroot National Forest for the past 26 years have violated, and are continuing to violate, the Bitterroot Forest Plan old growth requirements.

The agency is not following the Forest Plan on other log- ging projects such as Mud Creek and in May 2020, the For- est Service signed a decision authorizing the Piquet Creek Project which allows approximately 3,000 acres of com- mercial logging. The agency's response to scoping com- ments states: "There is no proposal to remove any old growth stand from old growth status, as defined by Green et al. 1992 (amended 2005). Treatments may be proposed to reduce competition and ingrowth to create a more re- silient and resistant stand to insects, disease and wildfire that would protect and aid in managing these stands for old growth into the future. Old growth data will be collected where appropriate to determine if stands qualify based on the Green et al. definition and ensure we're meeting the Forest Plan."

Similarly, in April 2020, the Forest Service signed a deci- sion authorizing the Buckhorn Project. The project allows approximately 1,165 acres of commercial logging. The For- est Service states: "Most treatment units do not contain old growth stands as defined by Green et al. 1992 (amended 2005)." For example, in Unit 14, "trees >20" DBH in one stand did not meet age requirements based on Green et al. 1992 (amended 2005) for the habitat type. Age require- ments are 170 years or older . . . ." In contrast to Green et al., however, the Forest Plan old growth definition does not have an age minimum; thus, this stand would likely have been protected as old growth under the Forest Plan.

Moreover, the Forest Service states: "Treatments within all units would retain large, old ponderosa pine and thus would not reduce the old growth percentage for this third order drainage.". This statement is premised upon retention in ac- cordance with the Green et al definition, which only re- quires retention of 8 large trees per acre, whereas the Forest Plan definition requires 15 large trees per acre and 75% canopy closure. Thus, existing Forest Plan old growth may be logged by this Project down to conditions that no longer constitute Forest Plan old growth.

Thus, the old growth analyses across the entire Forest - for every ongoing project, monitoring effort, and planning and analysis process - are fundamentally flawed because the Forest Service is using the wrong definition. The Forest Service's failure to use the Forest Plan definition of old growth, and consequent failures to demonstrate compliance with Forest Plan old growth standards for retention and via- bility, violate NFMA and the APA. if the Forest Service no longer wants to use the Forest Plan old growth standards and definition, then it must implement a formal Forest-wide Forest Plan amendment in a process that complies with NFMA and NEPA. See Native Ecosystems Council, 418 F. 3d at 961.

In Wildwest Inst. v. Seesholtz, the Forest Service did not just withdraw a timber sale; instead, it agreed to produce an EIS for a forest-wide forest plan amendment on old growth. The Forest Service's proposed solution to adopt a project specific amendment to the Forest Plan for the Gold Butter- fly Project does not address the Forest-wide status of this legal violation, but rather continues to kick the can down the road, as the agency has been doing for the past 27 years. To the Forest Service, "retain old growth status" means cut many large old trees from old growth, leaving some to meet the stale, technical definition their amendment would adopt. The spirit and intent of the original Forest Plan, on the other hand, was to maintain old growth by letting it be, recognizing nature can manage these ancient groves quite nicely without chainsaws.

The site-specific Forest Plan amendment issued for this Project and the Forest Service's practice of issuing succes- sive site-specific Forest Plan amendments to evade analysis of a "significant" Forest Plan amendment violate NFMA, NEPA, and the APA.

NFMA allows the Forest Service to amend Forest Plans. 16 U.S.C.[sect]1604(f)(4). The Ninth Circuit holds:

If the Forest Service thinks any provision of the 1986 [Helena National Forest] Plan is no longer relevant, the agency should propose amendments to the [Helena Na- tional Forest] Plan altering its standards, in a process complying with NEPA and NFMA, rather than discount its importance in environmental compliance documents. Native Ecosystems Council, 418 F.3d at 961.

Thus, any Forest Plan amendment must comply with both NEPA and NFMA. The Ninth Circuit's ruling on the Helena National Forest violating the Forest Plan equally applies to the BNF.

If a Forest Plan amendment constitutes a "significant change" in the Forest Plan, the Forest Service must prepare an EIS and analyze the amendment in the same procedure as it analyzed the Forest Plan. See id.; 36 C.F.R. [sect]219.10(f) (1982). The required procedure for analysis of a significant Forest Plan amendment is set forth in the NFMA regula- tions. 36 C.F.R. [sect]219.12 (1982). If the amendment does not constitute a significant change, it must still comply with NEPA procedures. 36 C.F.R. [sect]219.10(f) (1982).

The Forest Service's refusal to disclose reasonably foresee- able Forest Plan amendments violates NEPA. Finally, the Forest Service's practice of issuing successive site-specific Forest Plan amendments amounts to a de facto significant Forest Plan amendment that must be analyzed in a full stand lone EIS.

The 1982 NFMA regulations require: habitat must be pro- vided to support, at least, a minimum number of reproduc- tive individuals and that habitat must be well distributed so that those individuals can interact with others in the plan- ning area. 36 C.F.R. [sect]219.19 (1982).

The regulations further require that "management planning for the fish and wildlife resource shall meet the require- ments set forth in paragraphs (a)(1) through (a)(7) of this section." 36 C.F.R. [sect]219.19(a)(1982).

Section (a)(1) requires: "On the basis of available scientific information, the interdisciplinary team shall estimate the effects of changes in vegetation type, timber age classes, community composition, rotation age, and year- long suit- ability of habitat related to mobility of management indica- tor species. 36 C.F.R. [sect]219.19(a)(1)(1982).

Section (a)(2) requires: Planning alternatives shall be stated and evaluated in terms of both amount and quality of habi- tat and of animal population trends of the management in- dicator species." 36 C.F.R. [sect]219.19(a)(2)(1982). Section (a) (3) requires: "Biologists from State fish and wildlife agen- cies and other Federal agencies shall be consulted in order to coordinate planning for fish and wildlife . . . .36 C.F.R. [sect]219.19(a)(3)(1982).

Section (a)(4) requires: "Access and dispersal problems of hunting, fishing, and other visitor uses shall be considered." 36 C.F.R. [sect]219.19(a)(4)(1982). Thus, any Forest Plan amendment under the 1982 regula- tions must ensure that habitat for a management indicator species is "well-distributed" as established by "available scientific information," "amount and quality of habitat," consultation with "State fish and wildlife agencies," and "[a]ccess and dispersal problems of hunting . . . ." 36 C.F.R. [sect]219.19. In other words, changing the old growth standard to come into compliance with past illegal practices is not sufficient in and of itself; the standard must adequate- ly conserve secure habitat across the entire BNF. A site specific amendment for old growth violates the NFMA planning regulations because it does not ensure well-distributed adequate habitat for old growth dependent species in the planning area.

The Forest Service cannot simply exempt each successive logging project from critical Forest Plan old growth standards. To do so would subvert one of NFMA's most funda- mental mandates - the requirement that each project "shall be consistent with the land management plans." 16 U.S.C. [sect]1604(i). If the Forest Service wants to amend a Forest Plan, it must do so in a way that complies with NFMA. Na- tive Ecosystems Council, 418 F.3d at 961.

In order to comply with NFMA, a Forest Plan amendment must ensure that habitat for old growth management

indica- tor species will be "well-distributed." 36 C.F.R. [sect]219.19.

The Forest Service's failure to do so in this case violates NFMA and renders proposed site specific amendment un- lawful. The Forest Service's failure to analyze any alternatives to the site specific amendment to the Forest Plan old growth standard violates NEPA.

The same applies to the site specific Forest Plan amend- ments to elk thermal over and habitat effectiveness. The Forest Service's failure to analyze any alternatives to the site specific amendment to the Forest Plan for elk thermal over and habitat effectiveness violates NEPA.

A Forest Plan amendment must comply with NEPA proce- dures. 36 C.F.R. [sect]219.10(f) (1982). A Record of Decision is issued after an EIS is completed. 40 C.F.R. [sect]1505.2 (2019). In the Record of Decision, an agency must "[i]dentify all alternatives considered by the agency in reaching its deci- sion . . . ." 40 C.F.R. [sect]1505.2(a)(2)(2019). In an EIS, agencies shall . . . [r]igorously explore and objectively evaluate all reasonable alternatives. . . ." 40 C.F.R. [sect]1502.14(a)(2019); see also 40 C.F.R. [sect]1502.1 (2019) (an EIS "shall inform decision makers and the public of rea- sonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the human environ- ment.)

The analysis of alternatives "is the heart of the environmen- tal impact statement."40 C.F.R. [sect]1502.14(a)(2019). "The existence of a viable but unexamined alternative renders an environmental impact statement inadequate." Alaska Wilderness Recreation & Tourism Ass'n v. Morrison, 67 F.

3d 723, 729 (9th Cir.1995).

The Mud Creek DDN, FONSI and EA are in violation of NEPA regulations, and fails to evaluate any reasonable al- ternatives to proposed site specific amendments to the old growth standard, elk habitat effectiveness and security cover. 40 C.F.R. [sect]1502.14(a)(2019). "[t]he existence of a viable but unexamined alternative ren- ders an environmental impact statement inadequate." Alas- ka Wilderness, 67 F.3d at 729.

A viable alternative for Forest Plan Amendment to the old growth standard, big game habitat effectiveness and secu- rity cover does exist. Changing the big game security stan- dard and habitat effectiveness to come into compliance is not sufficient in and of itself; the standard must adequately conserve secure habitat.

Viable and reasonable alternative to site specific amend- ments to the Forest Plan standards for old growth and big game security cover and habitat effectiveness would be an amendment that adequately conserves secure habitat, habitat effectiveness for big game and old growth dependent species in the planning area.

Such an amendment would comply with the 1982 NFMA regulations by using available science and consultation with State biologists to (a) ensure well-distributed habitat for elk throughout the planning area, and (b) address access and dispersal problems during the hunting season and (c) adequate habitat for old growth dependent species. See 36 C.F.R. [sect]219.19 (1982).

The Forest Service's failure to disclose and analyze the cumulative effects of reasonably foreseeable site-specific Forest Plan amendments to exempt other projects from the old growth, big game security and habitat effectiveness vi- olates NEPA.

"NEPA always requires that an environmental analysis for a single project consider the cumulative impacts of that project together with 'past, present and reasonably foresee- able future actions.'" Native Ecosystems Council v. Dombeck, 304 F.3d 886, 895 (9th Cir. 2002)(citing 40

C.F.R. [sect]1508.7 (2019)). "Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." 40 C.F.R. [sect]1508.7 (2019).

In Dombeck, the Ninth Circuit held that the Forest Service must analyze the cumulative effects of reasonably foresee- able Forest Plan amendments:

The Ninth Circuit held that the reasonably foreseeable For- est Plan amendments "are proposed for the same national forest and will effect separate but additive changes to the density of roads within that geographic area." Id. Thus, "[b]ecause the amendments are reasonably foreseeable and may have cumulative impacts within the Gallatin National Forest, the Forest Service has a duty to consider them in its analysis of impacts within the Darroch-Eagle EA."

Furthermore, the Ninth Circuit expressly rejected the Forest Service's argument that the agency need not disclose all reasonably foreseeable Forest Plan amendments across the same National Forest:

The national forest was the geographic unit within which the Forest Service chose to set forth binding road density standards in the Forest Plan. All of these sales are pro- posed within the Gallatin National Forest and will neces- sarily have additive effects within that management unit.

Unless the cumulative impacts of these amendments are subject to analysis even though distantly spaced through- out the Forest, the Forest Service will be free to amend road density standards throughout the forest piecemeal, without ever having to evaluate the amendments' cumula- tive environmental impacts. NEPA does

not permit this, but rather requires the assessment of the cumulative im- pact of "individually minor but collectively significant actions taking place over a period of time."3 40 C.F.R.

[sect]1508.7 (2001). Dombeck, 304 F.3d at 896-97

The same concern is present in the Mud Creek EA, DDN and FONSI.

The Forest Service's practice of issuing successive site- specific Forest Plan amendments amounts to a de facto sig- nificant Forest Plan amendment that must be fully analyzed as such in an EIS.

The agencies must reinitiate and complete reconsultation on the Bitterroot Forest Plan to address current grizzly bear distribution and suitable habitat; this has not yet been done.

ESA regulations mandate that "[r]einitiation of formal con- sultation is required .

. . (b) If new information reveals effects of the action that may affect listed species .

. . in a manner or to an extent not previously considered . . .

." 50 C.F.R.

[sect]402.16(b); see Alliance for the Wild Rockies v. USDA, 772 F.3d 592,601 (9th

Cir.2014).

Remedy

Choose the No Action Alternative or withdraw the draft de- cision notice and write an EIS that fully complies with the law.

Bull Trout and Bull Trout Critical habitat We wrote in our comments:

The Forest Service is violating the ESA by arbitrarily dismissing the threat to grizzly bears and bull trout posed by roadbuilding.

Conditions based analysis relies heavily on design fea- tures to minimize the detrimental effects of project actions on soils, streams, ecological resources, bull trout, lynx, white bark pine, elk, rare plants, and all other flora and fauna in the project area. Design features are mentioned 54 times in the DEA alone. How will BNF guarantee that these design features will be followed? Are any of these design features dependent on future funding? What will

be the consequences for not fulfilling the necessary de- sign features to minimize effects to the forest? (p. 19, FOB's and AWR's comments).

The Forest Service responded:
The aquatics specialist report (AQUATICS-007) discusses the existing condition of streams in the Analysis Area un- der the Affected Environment Section and Water Quality and Aquatic Habitat subsections (pp. 5-6). The report identifies four streams listed by the State Department of Environment Quality as impaired: West Fork Bitterroot River, Nez Perce Fork, Buck Creek, and Ditch Creek. The Specialist report describes the impacts predicted from project activities to water quality and in the Environmen- tal Consequences Section describes how a combination of Design Elements and standard best management prac- tices (BMPs) are required to limit project impacts to water quality (pp. 17-26).

Regarding effects to bull trout specifically, no bull trout populations are likely to be extirpated because of the Mud Creek project (draft EA, pp. 51-54; AQUATICS- 001, pp. 63-64, 71; AQUATICS-007, pp. 26-27, 31-32). For the bull trout population in Rombo Creek, the main area of concern for cumulative sediment effects is the first 1000 feet or so of stream that is located immediately downstream of the FR 13462 crossing (draft EA, p. 53; AQUATICS-001, p. 71; AQUATICS-007, p. 31). The main reason why this section of stream is expected to suffer a cumulative effect is because removing the FR 13462 culvert barrier is going to deliver sediment directly into bull trout spawning and rearing habitat. Removing the culvert would be beneficial to bull trout in the long-term (same citations as above), but the short-term sediment effects are unavoidable. The amount of sediment that log hauling is likely to add to this section of Rombo Creek would be small relative to the amount that the culvert removal would contribute. There are not many bull trout in the first 1000 feet of Rombo Creek below the FR 13462 culvert - less than 20 individuals - and the bull trout (and westslope cutthroat trout) that reside in the affected zone are likely to

move downstream out of the affected area to escape the brunt of the sediment (draft EA, p. 51). Fish that vacate the affected area typically return within a couple of weeks to months as sediment is routed out of the affected area and conditions improve. Usually, by the first high flow event following the culvert removal, substrate conditions near the road crossing have reverted back to near pre-removal condition. While some mortality cannot be completely ruled out, the most likely scenario is that most of the bull trout and westslope cutthroat trout that vacate the affected area will return and not perish. (P. B-54 of DDN).

4.2 Bull Trout Populations

Bull trout numbers continue to decline in much of their range in the western United States, including many core area populations in western Montana. The two greatest threats to their continued existence are curtailment and degradation of their habitat, and compe- tition with introduced species (USFWS, 2008). Bull trout core area populations in western Montana con- tinue to decline. The most recent bull trout five year status review (USFWS, 2008) supported maintaining the bull trout listing as threatened throughout its

range noting that with few exceptions, core area popula- tions are not increasing and threats have not been removed. Recent re-surveys of mid 1990's bull trout sites in the neighboring East Fork Bitterroot River drainage indicate that over the past 20 years, site extirpa- tions exceeded site colonization's and were more frequent at warm, low elevation sites (Eby et al. 2014). This pattern is also likely occurring at the lower elevations in the West Fork Bitterroot River drainage.

The action area overlaps portions of both the Bitterroot River and West Fork Bitterroot River core areas.

In the Bitterroot River core area, migratory forms of bull trout have declined to very low numbers. Monitoring indices for this core area are inadequate to discern trends due to the sparse fluvial and fragmented resident popula- tions. Fewer fish are captured with similar effort than in previous decades. Nearly all of the bull trout that remain in the Bitterroot River core area consist of isolated resi- dent populations. The Bitterroot River core area is dis- cussed on pages 222-297 of the Bull Trout Conservation Strategy (USDA Forest Service, 2013). (P. 13 of the FISHERIES BIOLOGICAL ASSESSMENT AND EVALUATION).

There are eight streams in the action area that contain bull trout. Table 3 lists those streams and the local population they belong to.

Table 3. Streams Containing Bull Trout in the Action Area Stream Local Population

West Fork Bitterroot River Lower West Fork Bit ter- root River

Nez Perce Fork Nez Perce Fork

Little West Fork Nez Perce Fork

Soda Springs Creek Nez Perce Fork Sentimental Creek
Nez Perce Fork Nelson Creek Nez Perce Fork Blue Joint Creek
Blue Joint Creek

Rombo Creek None, small isolated res ident population

(P. 14 of the FISHERIES BIOLOGICAL ASSESSMENT AND EVALUATION).

Page 27 of the FISHERIES BIOLOGICAL ASSESSMENT

AND EVALUATION report states that all of the bull trout streams are Functioning at Unacceptable Risk. Or Functioning at Risk but they do not plan on improving them to Functioning Appropriately. The project as described in the DDN is a violation of NFMA, the Clean Water Act, the ESA, the APA, the Forest Plan and the ESA.

Has the money already been appropriated to do restoration work called for in the EA?

Do the action alternatives comply with PACFISH-INFISH? Are you meeting the INFISH Riparian Management Objec- tives for temperature, pool frequency, and sediment?

Remedy
Choose the No Action Alternative or write an EIS that fully complies with the law.

With all of the bull trout spawning streams and designated as critical habitat in the project area we would expect ro- bust road decommissioning and culvert removals, and no

logging in riparian areas of streams. Instead Redd Bull project is a robust logging and roading project that will de- grade, not improve aquatic ecosystems.

One of the Endangered Species Act's strongest provisions, designation of "critical habitat" is required for all domestic species listed under the Act. Critical habitat includes specif- ic areas within a species' current range that have "physical or biological features essential to the conservation of the species," as well as areas outside the species' current range upon a determination "that such areas are essential for the conservation of the species." In other words, the original definition of critical habitat said it must include all areas deemed important to a species' survival or recovery, whether the species currently resides in those areas, histori- cally resided in those areas, uses those areas for movement, or needs them for any other reason.

Critical habitat provides key protections for listed species by prohibiting federal agencies from permitting, funding, or carrying out actions that "adversely modify" designated ar- eas. Designating critical habitat also provides vital informa- tion to local governments and citizens about where impor- tant habitat for endangered species is located [mdash] and why they should help conserve it.

The best available science shows that roads are detrimental to aquatic habitat and logging in riparian areas is not restoration. Fish evolved with fire, they did not evolve with roads and logging.

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

Intensive land management could make that a difficult job. (Rieman and Clayton 1997)

If the restoration work does not get done. How much sedi- ment will go into the streams in the project area post-project?

It is not clear to us how this project where all of the action alternatives call for over 45,000 acres of burning, over 35,000 acres of logging with 4800 of acres of clearcuts will accomplish this. How does clearcutting and building more roads and adding non-system roads to the National Forest Service system helps bull trout and bull trout critical habitat recover?

What are the redd counts in bull trout critical habitat in the project area? Please also provide the all the historical bull counts that you have in the project area?

If you write an EIS instead of choosing the No Action Al- ternative, the EIS must fully and completely analyze the impacts to bull trout critical habitat and westslope cutthroat trout habitat. What is the standard for sediment in the For- est Plan? Sediment is one of the key factors impacting wa- ter quality and fish habitat. [See USFWS 2010]

The introduction of sediment in excess of natural amounts can have multiple adverse effects on bull trout and their habitat (Rhodes et al. 1994, pp. 16-21; Berry, Rubinstein, Melzian, and Hill 2003, p. 7). The effect of sediment be- yond natural background conditions can be fatal at high levels. Embryo survival and subsequent fry emergence success have been highly correlated to percentage of fine material within the stream-bed (Shepard et al. 1984, pp.

146, 152). Low levels of sediment may result in sublethal and behavioral effects such as increased activity, stress, and emigration rates; loss or reduction of foraging capability; reduced growth and resistance to disease; physical abrasion; clogging of gills; and interference with orientation in homing and migration (McLeay et al. 1987a, p. 671; New- combe and MacDonald 1991, pp. 72, 76, 77; Barrett, Grossman, and Rosenfeld 1992, p. 437; Lake and Hinch 1999, p. 865; Bash et al. 2001n, p. 9; Watts et al. 2003, p. 551; Vondracek et al. 2003, p. 1005; Berry, Rubinstein, Melzian, and Hill 2003, p. 33). The effects of increased suspended sediments can cause changes in the abundance and/or type of food organisms, alterations in fish habitat, and long-term impacts to fish populations (Anderson et al. 1996, pp. 1, 9, 12, 14, 15; Reid and Anderson 1999, pp. 1, 7-15). No threshold has been determined in which fine sed- iment addition to a stream is harmless (Suttle et al. 2004, p. 973). Even at low concentrations, fine-sediment deposition can decrease growth and survival of juvenile salmonids.

Aquatic systems are complex interactive systems, and iso- lating the effects of sediment to fish is difficult (Castro and Reckendorf 1995d, pp. 2-3). The effects of sediment on re- ceiving water ecosystems are complex and multi-dimen- sional, and further compounded

by the fact that sediment flux is a natural and vital process for aquatic systems (Berry, Rubinstein, Melzian, and Hill 2003, p. 4). Environmental factors that affect the magnitude of sediment impacts on salmonids include duration of ex- posure, frequency of exposure, toxicity, temperature, life stage of fish, angularity and size of particle, severity/mag- nitude of pulse, time of occurrence, general condition of biota, and availability of and

access to refugia (Bash et al. 2001m, p. 11). Potential impacts caused by excessive sus- pended sediments are varied and complex and are often masked by other concurrent activities (Newcombe 2003, p. 530). The difficulty in determining which environmental variables act as limiting factors has made it difficult to es- tablish the specific effects of sediment impacts on fish (Chapman 1988, p. 2). For example, excess fines in spawn- ing gravels may not lead to smaller populations of adults if the amount of juvenile winter habitat limits the number of juveniles that reach adulthood. Often there are multiple in- dependent variables with complex inter-relationships that can influence population size.

The ecological dominance of a given species is often de- termined by environmental variables. A chronic input of sediment could tip the ecological balance in favor of one species in mixed salmonid populations or in species com- munities composed of salmonids and nonsalmonids (Ever- est et al. 1987, p. 120). Bull trout have more spatially re- strictive biological requirements at the individual and popu- lation levels than other salmonids (USFWS (U.S. Fish and Wildlife Service) 1998, p. 5). Therefore, they are especially vulnerable to environmental changes such as sediment de- position.

Aquatic Impacts

* Classify and analyze the level of impacts to bull trout and westslope cutthroat trout in streams, rivers and lakes from sediment and other habitat alterations:

Lethal: Direct mortality to any life stage, reduction in egg- to-fry survival, and loss of spawning or rearing habitat.

These effects damage the capacity of the bull trout to pro- duce fish and sustain populations.

Sublethal: Reduction in feeding and growth rates, decrease in habitat quality, reduced tolerance to disease and toxi- cants, respiratory impairment, and physiological stress.

While not leading to immediate death, may produce mortal- ities and population decline over time.

Behavioral: Avoidance and distribution, homing and migra- tion, and foraging and predation. Behavioral effects change the activity patterns or alter the kinds of activity usually as- sociated with an unperturbed environment. Behavior effects may lead to immediate death or population decline or mor- tality over time.

Direct effects:

Gill Trauma - High levels of suspended sediment and tur- bidity can result in direct mortality of fish by damaging and clogging gills (Curry and MacNeill 2004, p. 140).

Spawning, redds, eggs - The effects of suspended sediment, deposited in a redd and potentially reducing water

flow and smothering eggs or alevins or impeding fry emergence, are related to sediment particle sizes of the spawning habitat (Bjornn and Reiser 1991, p. 98).

Indirect effects:

Macroinvertebrates - Sedimentation can have an effect on bull trout and fish populations through impacts or alterations to the macroinvertebrate communities or populations (Anderson, Taylor, and Balch 1996, pp. 14-15).

Feeding behavior - Increased turbidity and suspended sed- iment can affect a number of factors related to feeding for salmonids, including feeding rates, reaction distance, prey selection, and prey abundance (Barrett, Grossman, and Rosenfeld 1992, pp. 437, 440; Henley, Patterson, Neves, and Lemly 2000, p. 133; Bash et al. 2001d, p. 21).

Habitat effects - All life history stages are associated with complex forms of cover including large woody debris, un- dercut banks, boulders, and pools. Other habitat character- istic important to bull trout include channel and hydrologic stability, substrate composition,

temperature, and the presence of migration corridors (Rie- man and McIntyre 1993, p. 5).

Physiological effects - Sublethal levels of suspended sedi- ment may cause undue physiological stress on fish, which may reduce the ability of the fish to perform vital functions (Cederholm and Reid 1987, p. 388, 390).

Behavioral effects - These behavioral changes include avoidance of habitat, reduction in feeding, increased activi- ty, redistribution and migration to other habitats and locations, disruption of territoriality, and altered homing (An- derson, Taylor, and Balch 1996, p. 6; Bash et

al. 2001t, pp. 19-25; Suttle, Power, Levine, and McNeely 2004, p. 971).

* How will this project affect native fish? What is the cur- rent condition in the riparian areas?

How will this project protect rather than adversely impact fish habitat and water quality? No logging or road building should be done in riparian areas. There should not be any stream crossings. Roads should be decommissioned and removed, not upgraded and rebuilt.

* Hauer, et al. (1999) found that bull trout streams in wilderness habitats had consistent ratios of large to small and attached to unattached large woody debris. However, bull trout streams in

watersheds with logging activity had substantial variation in these ratios. They identified logging as creating the most substantive change in stream habitats.

"The implications of this study for forest managers are twofold: (i) with riparian logging comes increased unpre- dictability in the frequency of size, attachment, and stability of the LWD and (ii) maintaining the appropriate ratios of size frequency, orientation, and bank attachment, as well as rate of delivery, storage, and transport of LWD to streams, is essential to maintaining historic LWD characteristics and dynamics. Our data suggest that exclusion of logging from riparian zones may be necessary to maintain natural stream morphology and habitat features. Likewise, careful upland management is also necessary to prevent cumulative effects that result in altered water flow regimes and sediment de- livery regimes. While not specifically evaluated in this study, in general, it appears that

patterns of upland logging space and time may have cumu- lative effects that could additionally alter the balance of LWD delivery, storage, and transport in fluvial systems.

These issues will be critical for forest managers attempting to prevent future detrimental environmental change or set- ting restoration goals for degraded bull trout spawning streams."

Muhlfeld, et al. (2009) evaluated the association of local habitat features (width, gradient, and elevation), watershed characteristics (mean and maximum summer water temper- atures, the number of road crossings, and road density), and biotic factors (the distance to the source of hybridization and trout density) with the spread of hybridization between native westslope cutthroat trout Oncorhynchus clarkii lewisi and introduced rainbow trout O. mykiss in the upper Flathead River system in Montana and British Columbia.

They found that hybridization was positively associated with mean summer water temperature and the number of upstream road crossings and negatively associated with the distance to the main source of hybridization. Their results suggest that hybridization is more likely to occur and spread in streams with warm water temperatures, increased land use disturbance, and proximity to the main source of hybridization.

How many years it will take post-project to make up for all of the increase in sediment during the project? Will there be any bull trout left in the streams by then? How many bull trout will be killed during the implementation of the project?

Will this project adversely modify bull trout critical habitat in the short run?

Roads

We wrote in our comments:

How will the Forest Service that closures are effective when they haven't been in the past?

How often will the closures be monitored to be sure they are effective?

How many road closure violations has the Forest Service discovered in the project area in the last 5 years?

How will the Forest Service ensure that illegal roads or trails are not being built?

How effective are road closures in the BNF?

How often to you monitor the road closures to make sure they are working?

The Forest Service responded:

Recreation and engineering staff annually monitor road closures on the Bitterroot National Forest. In the event gates are damaged or cut, if the recreation staff cannot replace or fix the damaged component, the forest road crew may be mobilized to repair or replace the damaged gate. On user created trails or two tracks from motorcycles and ATV's, the force account crews may de-compact, scatter brush, and sign the route as closed to motorized traffic. The Bitterroot's OHV ranger will often sign illegal routes. Some locations are more respected by the public than others, but over time the signing and rehabilitation has been an effective way to reduce illegal user created trails. The Bitterroot National Forest will continue to monitor, sign, and maintain road closures, realizing that violations may continue to occur, in some locations more than others. Road closures are monitored on an annual basis at the minimum, as well as when Forest Service per- sonnel visit the woods. When damage to gates or viola- tions occur Forest Service field going personnel will noti- fy the recreation staff on the ranger districts. Popularity of location often leads to more infractions, and not all road closures receive illegal use. The physical condition of a road can prohibit use, and overgrown road prisms and those that have been recontoured or de-compacted will often discourage riders from violating the travel pro- hibition. Existing trailheads and developed recreation sites are posted with necessary signs on the information boards. Signs will be posted on any new information boards, such as at dispersed campsites and trailheads and staging areas. The Bitterroot National Forest adheres to the National Signing Guidelines for motorized and non- motorized travel. Trail signs are maintained on a regular basis, and the proposed new trails will be signed to meet trail signing standards. Motor Vehicle Use Maps are available for free to the public.

Page 34 of the EA states: "Elk Habitat EffectivenessCur- rently the Forest Plan standard for elk habitat effectiveness is: "Manage roads through the Travel Plan process to attain or maintain 50 percent or higher elk habitat effectiveness (Lyon 1983) in currently roaded third order drainages. Drainages where more than 25 percent of roads are in place are considered roaded. Maintain 60 percent or higher elk habitat effectiveness in drainages where less than 25 percent of the roads have been built" (USDA Forest Service 1987, p. II-21.

The proposed project-specific variance from this standard is intended to allow six third order drainages in the project area to not meet elk habitat effectiveness stan- dards. The small size of the 3rd order drainages in the project area limits the amount of roads that can be present on the ground. In order to meet the standards, the mileage of roads needed to be closed would limit forest management access and conflict with other forest plan

management objectives to provide roaded, dispersed recreation."

The Forest Service did not answer our question of "How many road closure violations has the Forest Service discov- ered in the project area in the last 5 years?"

It is a violation of NEPA to not answer the public's ques- tions.

It is fair to assume that there are many more violations that regularly occur and are not witnessed and reported. It is also fair to assume that you have made no effort to request this available information from your own law enforcement officers, much less incorporate it into your analysis. Con- sidering your own admissions that road density is the pri- mary factor that degrades elk bull trout, and grizzly habitat, this is a material and significant omission from your analy- sis- all of your ORD and HE calculations are wrong with- out this information.

Moreover, in light of the fact that you are exempting this project from Forest Plan hiding cover standards designed to protect and conserve elk habitat, the only protection left for elk habitat would be the Forest Plan open road density limits and mandates to maintain existing HE. This makes your failure to analyze road closure violations even more egregious - both in the Project analysis and your analysis of the Forest Plan amendment. Chronic, illegal road use is reason- ably foreseeable and must be addressed in the cumulative effects analysis for both the Project and the Forest Plan amendment.

Additionally, your emphasis on elk populations across en- tire hunting districts is disingenuous and has little relevance to whether you are meeting your Forest Plan obligations to maintain sufficient elk habitat on National Forest lands. As you note, the Forest Plan estimated that 70% ofelk were taken on National Forest lands in 1986. What percentage of elk are currently taken on National Forest lands? You refuse to disclose this information. Have you asked Montana FWP for this information? Any honest biologist would admit that high elk population numbers do not indicate that you are appropriately managing National Forest elk habitat; to the contrary, high elk numbers indicate that you are so poorly managing elk habitat on National Forest lands that elk are being displaced to private lands where hunting is limited or prohibited. Your own Forest Service guidance document, Christensen et al 1993 states: "Reducing habitat effective- ness should never be considered as a means of controlling elk populations."

Have you closed or obliterated all roads that were promised to be closed or obliterated in the BitterrootTravel Plan?

Since you are not telling the public how many miles of roads will be built or where they will be built it is not clear that the Mud Creek project complies with the Bitterroot Travel Plan.

Or, are you still waiting for funds to close or obliterate those roads? This distinction matters because you cannot honestly claim that you are meeting road density standards promised by the Travel Plan if you have not yet

completed the road closures/obliterations promised by the Travel Plan. Furthermore, as noted above, you have a major problem with recurring, chronic violations of the road closures cre- ated by the Travel Plan, which means that your assumptions in the Travel Plan that all closures would be effective has proven false. For this reason, you cannottier to the analysis in the Travel Plan because it is invalid. You must either complete new NEPA analysis for the Travel Plan on this is- sue or provide that new analysis in the NEPA analysis for this Project. Either way, you must update your open road density calculations to include all roads receiving illegal use.

In your analysis you set forth a habitat effectiveness esti- mate, it is unclear whether the numbers were based on ac- tual conditions or a promised goal for a future condition. Certainly, you are not taking a hard look at habitat effec- tiveness in this Project area if you are relying on the habitat effectiveness estimates that do not take into account illegal road use.

Christensen et al (1993) states: "Any motorized vehicle use on roads will reduce habitat effectiveness. Recognize and deal with all forms of motorized vehicles and all uses, in- cluding administrative use." Please disclose this to the pub- lic and stop representing that roads closed to the public should not be included in habitat effectiveness calculations. The facts that (a) you are constructing a large but undeter- mined miles of road for this project, (b) you have problems with recurring illegal use, and (c) you already admit that you illegal roads in the project area that you have not committed to obliterating, means that your conclusion that this Project will have no effect on open road density or habitat effectiveness is implausible to the point of being disingenuous. You cannot exclude these roads simply be- cause you say they are closed to the public. Every road re- ceiving motorized use must be included in the HE calcula- tion. You must consider all of this road use in order to take a hard look that is fully and fairly informed regarding habi- tat effectiveness. In thevery least you must add in all "non- system" roads, i.e. illegal roads, as well as recurring illegal road use (violations) in your ORD calculations.

Christensen et al 1993 finds: "Areas where habitat effec- tiveness is retained at lower than 50 percent must be recog- nized as making only minor contributions to elk manage- ment goals. If habitat effectiveness is notimportant, don't fake it. Just admit up front that elk are not a consideration."

You fail to make this admission and instead represent that you are meeting all relevant objectives.

You are also violating your Forest Plan requirements. The Standard is not being met and therefore this is a NEPA, NFMA and APA violation. The Mud Creek project is in violation of NEPA for not re- sponding to our comments. The standard is not being met at the project level and their is no evidence provided that it is being met at the Forest Plan level.

The project is in violation of NEPA, NFMA, the Forest Plan, The Travel Plan, Clean Water Act, the APA and the ESA because of the re-occuring road closure violations. your assumptions in the Travel Plan that all closures would be effective has proven false. For this reason, you cannot tier to the analysis in the Travel Plan because it is invalid.

Remedy: Choose the No Action Alternative or you must either complete new NEPA analysis for the Travel Plan on this issue or provide that new analysis in the NEPA analysis for this Project. Either way, you must update your open road density calculations to include all roads receiving ille- gal use.

Wildland Urban Interface We wrote in out comments:

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1. If the Forest Service did not conduct NEPA for the Fire local Community Wildfire protection plan and or the Wildland Urban Interface, please immediately start that NEPA process.
2. DidtheForestServiceconduct NEPA analysis (i.e. an EA or EIS) for the local Wildfire protection plan or the WUI which the Forest is using for this project?
3. Please provide a map showing the WUI and the loca- tions of all homes in comparison to the project area.
4. If the Forest Service did not conduct NEPA for the the local Community Wildfire protection plan, please disclose the cumulative effect of the Mud Creek project to avoid illegally tiering to a non-NEPA document.

Specifically analyze the decision to prioritize mechani- cal, human-designed, somewhat arbitrary treatments as a replacement for naturally occurring fire.

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1. Did the Forest Service conduct ESA consultation for the local Community Wildfire protection plan?

The Forest Service Responded

The fuels prioritization and process document (PF FIRE- 002) describes the data and models used to develop the fuel treatment component of the proposed action. The Community Protection Zone developed during the Wild- fire Risk Assessment conducted by the Bitterroot National Forest in 2016 is scientifically derived and incorporates variables regarding values at risk (see page 14 of PF- FIRE-001). To identify priority areas for fuels treatments, the fuels prioritization process incorporated potential fire behavior, burn probability, distance from structures, and the potential for a fire to impact the community. Treating these priority areas will reduce potential fire behavior and provide control opportunities. Incorporating the burn probability data allowed for prioritization of areas within the project that are the most likely to burn based on their current vegetation and fuel conditions, topography and historical weather and ignition patterns.

The WUI boundary isn't derived from scientific factors and was determined by the criteria specified in the Healthy Forest Restoration Act of 2003. The 2006 Bitter- root Community Wildfire Protection Plan did not desig- nate an official WUI boundary in Ravalli County, there- fore the delineation and designation of the WUI defaults to the definition and criteria for WUI specified in the Healthy Forest Restoration Act.

The WUI boundary utilized for this project was delineated utilizing the criteria identified in Section 101 (16) (B) of the Healthy Forest Restoration Act. The WUI consists of 20,841 acres or 43% of the assessment area, of which 1,824 acres is private property and 70 acres is state land.

Within the project boundary there are 236 individual private property listings on the 2017 Ravalli County tax records with homes or other improvements. It is estimated there are at least 175 homes or structures on these properties. Multiple maps displaying the WUI boundary and structures are located within the Fire/Fuels Report (PF-FIRE-001), and one of these maps has been added to appendix C of the final environmental assessment.

The Bitterroot National Forest did not conduct a National Environmental Policy Act analysis or Endangered Species Act consultation for the Bitterroot Community Wildfire Protection Plan. The Healthy Forests Restoration Act states that Federal agency involvement in development of community wildfire protection plans is not considered a Federal agency action under the National Environmental Policy Act (16 USC 6513(c)(1)). The Mud Creek project also does not tier to the Bitterroot Community Wildfire Protection Plan. The Community Wildfire Protection Plan prioritizes hazardous fuels treatment locations on the Bit- terroot National Forest as directed in the National Fire Plan but does not specify or authorize activities. The Mud Creek project environmental assessment is an analysis pursuant to the National Environmental Policy Act for hazardous fuel reduction treatments that implement the goals and objectives of the Bitterroot Community Wildfire Protection Plan. Chapter 3 of the environmental assess- ment contains the effects analysis including the effects of the project as designed, which incorporated the WUI for prioritization of treatments. The Forest Service is also engaging in project-level consultation with the U.S. Fish and Wildlife Service regarding threatened and endan- gered species in the Mud Creek project area. Activities proposed within the WUI and Community Protection Zone comply with the Forest Plan management areas in which they occur.

The Mud Creek DDN, FONSI and EA did not clearly demonstrate that the project complies with the Healthy For- est Act definition of the Wildland Urban Interface (WUI) in violation of NEPA, NFMA, the Healthy Forest Act and the APA.

Remedy

Choose the No Action Alternative or withdraw the draft de- cision and write an EIS that fully complies with the law.