May 20, 2024

Objection against the Southwest Idaho Resilient Landscape Project

To: Objection Reviewing Officer

USDA Forest Service

Intermountain Region

324 25th Street

Ogden, Utah 84401

1. Objector's Name and Address:

Lead Objector

Mike Garrity,

Director, Alliance for the Wild Rockies (Alliance),

PO Box 505,

Helena, MT 59624;

phone 406-459-5936

And for

Sara Johnson, Director, Native Ecosystems Council (NEC),

PO Box 125, Willow Creek, MT 59760;

Jason L. Christensen – Director Yellowstone to Uintas Connection (Y2U)

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435-881-6917

Katie Fite, Wildlands Defense, PO Box 125, Boise, ID 83701

208-871-5738

Kristine Akland

Center for Biological Diversity

P.O. Box 7274
Missoula, MT 59807

kakland@biologicaldiversity.org

Signed this 20th day of May, 2024 for Objectors

/s/

Michael Garrity

2. Name of the Proposed Project

Southwest Idaho Resilient Landscape Project

3. Location of Project, Name and Title of Responsible Official

The project uses the administrative boundary of the Boise National Forest as the project boundary. Within this boundary there are an estimated 2.5 million acres, including 2.1 million acres of National Forest System lands.

Name and Title of Responsible Official

Boise National Forest Supervisor Brant Peterson is the Responsible Official for this project.

Boise National Forest
1249 S. Vinnell Way, Suite 200
Boise, ID 83709

Supervisor Petersen chose the proposed Action as modified in the “Purpose and Need” and “Proposed Action” sections of the EA/FONSI.

NOTICE IS HEREBY GIVEN that AWR objects pursuant to 36 CFR section 219 to the Responsible Official's adoption of the selected Alternative. As discussed below, the Southwest Idaho Resilient Landscape (SWIRL) 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 Boise National Forest Forest Plan, the Migratory Bird Treaty Act and the Administrative Procedure Act (APA).

Location

The project uses the administrative boundary of the Boise National Forest as the project boundary. Within this boundary there are an estimated 2.5 million acres, including 2.1 million acres of National Forest System lands.

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5. Specific Issues Related to the Proposed Amendments, including how Objectors believes the Environmental Analysis or Draft Record of Decision specifically violates Law, Regulation, or Policy: We included this under number 8 below.

Thank you for the opportunity to object to the SWIRL Project.

Please accept this objection from me on behalf of the Alliance for the Wild Rockies, Native Ecosystems Council, and Wildlands Defense.

6. Suggested Remedies that would Resolve the Objection:

We recommend that the draft decision be withdrawn and an EIS be written for the proposed project or choose the No Action Alternative. We have also made specific recommendations after each problem.

7. Supporting Reasons for the Reviewing Office to Consider:

This Boise National Forest (BNF) has very high wildlife values, including for the threatened lynx, bull trout, northern goshawks, migratory birds, big game species, and wildlife dependent upon thick forests with lots of horizontal, ground level cover. The BNF have some of the best wildlife habitat in this landscape which is an important travel corridor for wildlife such as lynx, forests birds, 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 interest is not being served by the proposed amendment.

Suggested Remedies to Resolve the Objection:

We recommend that the “No Action Alternative” be selected. We have also made specific recommendations after each problem.

Thank you for the opportunity to object.

NOTICE IS HEREBY GIVEN that, pursuant to 36 CFR Part 219, Alliance objects to the Draft Decision Notice (DDN) and Finding of No Significant Impact (FONSI) with the legal notice published on April 3, 2024, including the Responsible Official’s adoption of modifications.

Alliance is objecting to these amendments on the grounds that implementation of the Selected Alternative is not in accordance with the laws governing management of the national forests such as the Clean Water Act, ESA, NEPA, the Migratory Bird Treaty Act, NFMA, and the APA, including 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 amendment is approved as proposed, individuals and members of the above-mentioned groups would be directly and significantly affected by the logging and associated activities. 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 BNF for recreation and other forest related activities. The selected 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 BNF, 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 Amendments and the Content of the Objection.

4. Connection between previous comments and those raised in the Objection:

We provided comments on September 27, 2023

We wrote in our comments:

The Alliance for the Wild Rockies, Yellowstone to Uintas Connection, Wildlands Defense, and Native Ecosystems Council (collectively "Alliance") submit the following comments to guide the development of the environmental analysis for the proposal. The Forest Service must complete a full environmental impact statement (EIS) for this Project because the scope of the Project will likely have a significant individual and cumulative impact on the environment. Alliance has reviewed the statutory and regulatory requirements 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 possible impacts of the Project, with accompanying citations to the relevant scientific literature. These references should be disclosed and discussed in the EIS or an EA if you refuse to not write an EIS for the Project.

I. NECESSARY ELEMENTS FOR PROJECT EIS: A. Disclose all Boise National Forest Plan requirements for logging/ burning projects and explain how the Project complies with them;

B. Disclose the acreages of past, current, and reasonably foreseeable logging, grazing, and road-building activities within the Project area;

C. Solicit and disclose comments from the Idaho Department of Fish, and Game regarding the impact of the Project on wildlife habitat;

D. Solicit and disclose comments from the Idaho Department of Environmental Quality regarding the impact of the Project on water quality;

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

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

G. Disclose the snag densities in the Project area, and the method used to determine those densities;

H. Disclose the current, during-project, and post-project road densities in the Project area;

I. Disclose the Boise National Forest's record of compliance with state best management practices regarding stream sedimentation from ground-disturbing management activities;

J. Disclose the Boise National Forest's record of compliance with its monitoring requirements as set forth in its Forest Plan;

K. Disclose the Boise National Forest's record of compliance with the additional monitoring requirements set forth in previous DN/FONSIs and RODs on the Boise National Forest;

L. Disclose the results of the field surveys for threatened, endangered, sensitive, and rare plants in each of the proposed units;

M. Disclose the level of current noxious weed infestations in the Project area and the cause of those infestations;

N. Disclose the impact of the Project on noxious weed infestations and native plant communities;

O. Disclose the amount of detrimental soil disturbance that currently exists in each project area from previous cutting, burning and grazing activities;

P. Disclose the expected amount of detrimental soil disturbance in each unit after ground disturbance and prior to any proposed mitigation/remediation;

Q. Disclose the expected amount of detrimental soil disturbance in each unit after proposed mitigation/ remediation;

R. Disclose the analytical data that supports proposed soil mitigation/remediation measures;

S. Disclose the timeline for implementation;

T. Disclose the funding source for non-commercial activities proposed;

U. Disclose the current level of old growth forest in each third order drainage in the Project area;

V. Disclose the method used to quantify old growth forest acreages and its rate of error based upon field review of its predictions;

W. Disclose the historic levels of mature and old growth juniper in the Project area;

X. Disclose the level of mature and old growth juniper necessary to sustain viable populations of dependent wildlife species in the area;

Y. Disclose the amount of mature and old growth juniper that will remain after implementation;

Z. Disclose the amount of current habitat for juniper- sagebrush dependent species in the Project area;

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

BB. Disclose the amount of big game (moose and elk) hiding cover, winter range, and

security after implementation;

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

DD. 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 juniper standard, and the failure to compile data to establish a reliable inventory of sensitive species on the Forest;

EE. 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 activities proposed for this Project;

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

GG. Disclose when and how the Boise National Forest made the decision to suppress natural wildfire in the Project area and replace natural fire with logging and prescribed burning;

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

II. Disclose how Project complies with the Roadless Rule;

JJ. Disclose the impact of climate change on the efficacy of the proposed treatments;

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

LL. Disclose the baseline condition, and expected sedimentation during and after activities,
for all streams in the area;

MM. Please disclose how this project will enhance wildlife habitat;

NN. Please disclose how this project will degrade wildlife habitat;

OO. Please explain the cumulative impacts of this proposed project;

PP. Please disclose Maps of the Wildland Urban Interface for the project area and an explanation of how the Wildland Urban Interface was defined and mapped;

QQ. Disclose maps of the area that show the following elements:

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

2. Past, current, and reasonably foreseeable grazing allotments in the Project area;

3. Density of human residences within 1.5 miles from the Project unit boundaries;

4. Hiding cover in the Project area according to the Forest Plan definition;

5. Old growth forest in the Project area;
6. Big game security areas;

7. Moose winter range;

Page one of the EA states that 77,000 acres will be burned. If the Forest Service know how many acres they will burn they should be able to tell the public where and when the burning will occur.

The EA provides little additional information on where burnings will be or how the specifics on how the burning will occur. The EA is programmatic in that they want to log whenever and wherever for the next 20 years with no public over site of their activities. This is a violation of NEPA, NFMA, the APA, and the ESA.

Please see the article below for a ruling on a similar error by the Forest Service.

Federal court blocks timber sale in Alaska's Tongass National Forest

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

JUNEAU — A federal judge has blocked what would have been the largest timber sale in Alaska's Tongass National 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 reported.

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 review 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 environmental 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 Trainor, executive director of the Southeast Alaska Conservation 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 Association, said in a statement that the ruling "threatens the viability of Southeast Alaska's timber industry."

Please see the following article by the American bar Association about the use of Condition-Based Management.

May 10, 2021

The U.S. Forest Service's Expanding Use of Condition-Based Management: Functional and Legal Problems from Short-Circuiting the Project-Planning and Environmental Impact Statement Process

Andrew Cliburn, Paul Quackenbush, Madison Prokott, Jim Murphy, and Mason Overstreet

https://www.americanbar.org/groups/environment_energy_resources/publications/fr/20210510-the-us-forest-services-expanding-use-of-condition-based-management/

Condition-based management (CBM) is a management approach that the U.S. Forest Service has increasingly used to authorize timber harvests purportedly to increase flexibility, discretion, and efficiency in project planning, analysis, and implementation. The agency believes it needs this flexible approach because sometimes conditions on the ground can change more quickly than decisions can be implemented. In practice, however, CBM operates to circumvent the National Environmental Policy Act (NEPA) review framework by postponing site-specific analysis until the Forest Service implements the project, which effectively excludes the public from site-specific decisions, reduces transparency, and removes incentives for the agency to avoid harming localized resources. The practice should be curtailed by the Biden administration

NEPA requires federal agencies including the Forest Service to provide the public with "notice and an opportunity to be heard" in the analysis of "specific area[s] in which logging will take place and the harvesting methods to be used." Ohio Forestry Ass'n v. Sierra Club, 523 U.S. 726, 729–30 (1998). Site-specific public involvement can significantly improve projects because the agency may be unaware of harmful impacts or resource concerns until the public flags them during

the environmental analysis process. Nationally, the Forest Service drops about one out of every five acres it proposes for timber harvest based on information or concerns presented during the NEPA process, often due to public comments regarding site-specific information. Public Lands Advocacy Coalition, Comments on Proposed Rule, National Environmental Policy Act (NEPA) Compliance (June 13, 2019) (analyzing 68 projects that relied on environmental assessments).

The Forest Service appears to be abandoning the site-specific analysis model in favor of CBM. CBM projects use an overarching set of "goal variables"—predetermined management criteria that guide implementation—that Forest Service staff apply to on-the-ground natural resource "conditions" encountered during the course of project implementation, a period that can span years or even decades: essentially, when the Forest Service finds X resource condition on the ground, it applies Y timber harvest prescription. However, basic information regarding the project's details—such as unit location, timing, roadbuilding, harvesting methods, and site-specific environmental effects—is not provided at the time the Forest Service conducts its NEPA environmental review (when the public can weigh in), nor when it gives its final approval to a project (when the public can seek administrative review). Instead, site-level disclosures are made after NEPA environmental and administrative review is complete, depriving the public of opportunities to comment and influence the decision based on localized conditions.

While CBM is not a new management tool, the Forest Service has employed it for over a decade and it was used sparingly

during the Obama administration. However, its use accelerated during the Trump administration and shows no sign of slowing. To date, dozens of Forest Service projects across the country have used CBM. See, e.g., Red Pine Thinning Project, Ottawa National Forest; Medicine Bow Landscape Vegetation Analysis, Medicine Bow-Routt National Forest; Sage Hen Integrated Restoration Project, Boise National Forest.

As the Forest Service's use of CBM continues, questions remain about its legality. Public-lands advocates argue that CBM violates NEPA's mandate that agencies take a hard look at the consequences of their actions before a project commences. This "look before you leap" approach was the primary purpose of NEPA and remains the statute's greatest strength. NEPA works by requiring an agency to consider alternatives and publicly vet its analysis whenever its proposal may have "significant" environmental consequences, 42 U.S.C. § 4332(2)(C), or implicates "unresolved conflicts" about how the agency should best accomplish its objective. Id. at § 4332(2)(E). However, CBM allows the Forest Service to circumvent the effects analysis process when exercising discretion about where and how to log decisions that often may have "significant" environmental consequences.

Only two federal cases have addressed CBM's legality. In WildEarth Guardians v. Connor, 920 F.3d 1245 (10th Cir. 2019), the Tenth Circuit approved a CBM approach for a logging project in southern Colorado in Canada lynx habitat. The environmental assessment utilized CBM and analyzed three different alternatives, one of which was a worst-case scenario. For the worst-case scenario, the Forest Service assumed that

the entire lynx habitat in the project area would be clear-cut. The Forest Service "took the conservative approach" because it "did not know precisely" where it would log in the lynx habitat areas. WildEarth Guardians, 920 F.3d at 1255. Based on this conservative approach, coupled with a comprehensive, region-wide lynx management agreement and its associated environmental impact statement, the court agreed with the Forest Service that its future site-specific choices were "not material" to the effects on lynx—i.e., that no matter where logging occurred, "there would not be a negative effect on the lynx." Id. at 1258–59.

However, a second case addressing CBM found that site-specific analysis was needed to satisfy NEPA's "hard-look" standard. In Southeast Alaska Conservation Council v. U.S. Forest Service, 443 F. Supp. 3d 995 (D. Ak. 2020), the court held that the Forest Service's Prince of Wales Landscape Level Analysis Project—a 15-year logging project on Prince of Wales Island in the Tongass National Forest—violated NEPA. The project would have authorized the logging of more than 40,000 acres, including nearly 24,000 acres of old growth, along with 643 miles of new and temporary road construction, but it "d[id] not include a determination—or even an estimate—of when and where the harvest activities or road construction . . . w[ould] actually occur." Id. at 1009. The court found that this analysis was not "specific enough" without information about harvest locations, methods, and localized impacts. Id. at 1009–10. The court further held that a worst-case analysis could not save the project, because site-specific differences were consequential. Id. at 1013.

The Forest Service's widespread use of CBM also creates compliance challenges under the Endangered Species Act (ESA). Section 7(a)(2) of the ESA requires federal agencies to consult with the Fish and Wildlife Service and/or National Marine Fisheries Service whenever a proposed action "may affect" listed species or destroy or adversely modify its critical habitat to ensure that the action is "not likely to jeopardize" these species. 16 U.S.C. § 1536. CBM conflicts with that statutory requirement because it does not allow agencies to properly determine whether an action "may affect" or is "likely to jeopardize" a listed species when the consulting agencies do not know the specifics of when or where the action will be implemented, or what the site-specific impacts of the action may be.

For some projects, the Forest Service has tried to avoid this tension by conducting section 7 consultation prior to each phase of a CBM project, but this approach has run headlong into the general rule against segmenting project consultation duties under the ESA. See, e.g., Conner v. Burford, 848 F.2d 1441, 1457 (9th Cir. 1988). With few exceptions, section 7 consultation must cover the overall effects of the entire project at the initial stage before the project can commence. Thus, regardless of whether agencies choose to consult up front or to consult in stages, the Forest Service is likely to face significant legal hurdles when its CBM project "may affect" listed species.

CBM is not only legally dubious, but also unnecessary. The Forest Service already has NEPA-compliant methods to deal with situations that require a nimble response to the needs of a dynamic landscape. In these cases, the Forest Service can complete a single "programmatic" analysis to which future

site-specific decisions will be tiered. This programmatic approach allows the Forest Service to speed the consideration and implementation of site-specific, step-down proposals. Unlike CBM, this approach allows for public review of site-specific decision-making and administrative review of those decisions.

Surveying the regulatory horizon, the future of CBM in the Forest Service system is uncertain. The national forests face a host of complex challenges including climate-related crises, insect and forest pestilence, protecting and restoring biodiversity, and wildfire management. These challenges are made worse by budget and staff restrictions. Without adequate funding, the Forest Service must rely on imperfect tools like commercial logging, which can cause more harm than good in the wrong places.

But this is not the time to shortchange the most consequential decisions that the agency must make: determining where and how to act. During the final two years of the Trump administration, the Forest Service attempted to explicitly codify CBM provisions in revisions to its NEPA regulations, although those provisions were dropped from the final rule. Simultaneously, other federal land-management agencies like the Bureau of Land Management have started to use CBM analogues in their NEPA-related planning documents. Although it is still early, the Biden administration's newly appointed Council on Environmental Quality team has yet to weigh in on CBM. If use of CBM continues in a manner that undermines public participation and NEPA's "hard look" standard, some of our riskiest

land management projects may not receive proper environmental oversight.

The project is not taking a hard look as required by NEPA. Please withdraw the EA until site specific prescriptions and unit boundaries are firmed up, then issue and take comments on an EIS with appropriate prescriptions.

Please find attached the Federal District Court of Alaska's ruling on condition-based management.

What scientific proof to you have that show the project will increase resilience of existing vegetation, restore or maintain proper ecological function to native vegetation communities and wildlife habitats, and improve firefighter and public safety?

How long will this increased resilience last? Please find attached, Scott L. Stephens et al. "Fire Treatment Effects on Vegetation Structure, Fuels, and Potential Fire Severity in Western U.S. Forests ," Ecological Applications 19 (2009): p. 305-320, "found that forests are capable of returning in a wind driven wildfire just a year or two after a prescribed fire." Hanson, "Smokescreen, Debunking Myths to Save our Forests and our Climate."
This happens because the material that drives fires, needles, leaves and twigs, returns very quickly. (Knapp et al. 2007). Please find Knapp et al. 2007 attached.

According to Philip Higuera, professor of fire ecology at the University of Montana: "It's true that if cut, there is less fuel

in the forests. But in a lot of cases, there is what's called slash — woody debris — left on the ground that will carry fire across the forest floor, which is what you need for it to spread. The simple answer — if you want to eliminate fire, then pave it and there will be no fire." But one reason President Teddy Roosevelt created national forests was to protect watersheds and wildlife habitat — and neither clearcuts nor pavement makes for great watersheds or wildlife habitat.

How will the enormously high level of fire conducted across the forest affect the ecosystem, wildlife and forest carbon storage levels?

How effective will the project be at stopping wind driven, crown wildfires?

What time of year will the prescribed fires be lit? How will the prescribed fires effect nesting birds and cavity nesting species?

Is the project in compliance with the Migratory Bird Treaty Act?

Which species and processes the prescribed fires harm?

Which species and processes the prescribed fires help?

What evidence do you have that this prescribed burning will make the forest healthier for fish and wildlife?

What about the role of mixed severity and high severity fire – what are the benefits of those natural processes?

How have those processes (mixed and high severity fire) created the ecosystems we have today?

Over how many millennia have mixed and high severity fire have been occurring without human intervention?

What beneficial ecological roles do beetles play? If the project does make the forest more resilient to crown fires how can the forest survive without beetles? How will this affect woodpeckers?

How will the project improve watershed health?

How will the project affect blackjack woodpeckers who depend on blacken trees from crown fires to hide from raptor predators?

Page 1 of the EA states: In a natural fire regime, wildfire and historical burning of varying intensities thinned vegetation and limited fuel loading. However, throughout the 20th century, human activities, such as fire suppression and livestock grazing, altered this natural fire regime. Without regular wildfire, vegetation composition and structure has been altered and fuel loading has increased. This, in turn, has caused an increase in the magnitude in size and intensity of wildfire during hot, dry years.

What evidence to you have that the natural fire regime has been altered? What is the regular fire cycle?

Is the project area outside the normal range of variability?

The agency is violating the NEPA by claiming that conifer encroachment needs to be removed to promote aspen, when live-

stock grazing is almost always the problem with aspen failure to regenerate.

The agency is violating the NEPA by promoting fuel reduction projects as protection of the public from fire, when this is actually a very unlikely event; the probability of a given fuel break to actually have a fire in it before the fuels reduction benefits are lost with conifer regeneration are extremely remote; forest drying and increased wind

speeds in thinned forests may increase, not reduce, the risk of fire.

The agency is violating the NEPA by providing false reasons for Prescribed burning to the public by claiming that insects and disease in forest stands are detrimental to the forest by reducing stand vigor (health) and increasing fire risk. There is no current science that demonstrates that insects and disease are bad for wildlife, including dwarf mistletoe, or that these increase the risk of fire once red needles have fallen.

The agency is violating the NEPA by claiming that prescribed burning is needed to create a diversity of stand structures and age classes; this is just agency rhetoric to conceal the

The agency is violating the NEPA by using vague, unmeasureable terms to rationalize the proposed burning to the public. How can the public measure "resiliency?" What are the specific criteria used to define resiliency, and what are the ratings for each proposed burning unit before and after treatment? How is the risk of fire as affected by the project being measured so that the public can understand whether or not this will be effective? How is forest health to be measured so that

the public can see that this is a valid management strategy? What specifically constitutes a diversity of age classes, how is this to be measured, and how are proposed changes measured as per diversity? How are diversity measures related to wildlife (why is diversity

needed for what speciese)? If the reasons for burning cannot be clearly identified and measured for the public, the agency is not meeting the NEPA requirements for transparency.

The agency is violating the NEPA by claiming that prescribed burning will benefit wildlife; the EA does not identify what habitat objectives will be addressed with burning, so the public is unable to understand how to comment on this claim.

The agency is violating the Roadless Area Rule by burning in inventoried roadless lands; specific measurable criteria were not provided as to why these treatments will promote natural processes and wildlife.

The agency is violating the Roadless Area Rule by proposing prescribed burning to control fire in adjacent landscapes; this rationale would allow the treatment of all IRAs and make the purpose of the Roadless Area Conservation Rule meaningless, since the main function of IRAs would be fire management of adjacent landscapes.

The agency is violating the NEPA by using vague, un- measureable terms to rationalize the proposed burning to the public. How can the public measure "resiliency?" What are the specific criteria used to define resiliency, and what are the rat-

ings for each proposed burning unit before and after treatment? How is the risk of fire as affected by the project being measured so that the public can understand whether or not this will be effective? How is forest health to be measured so that the public can see that this is a valid management strategy? What specifically constitutes a diversity of age classes, how is this to be measured, and how are proposed changes measured as per diversity? How are diversity measures related to wildlife (why is diversity need-ed for what species)? If the reasons for burning cannot be clearly identified and measured for the public, the agency is not meeting the NEPA requirements for transparency.

Please find attached the paper by Faison et al. 2023 titled, "The importance of natural forest stewardship in adaptation planning in the United States." They "argue that expensive management interventions are often unnecessary, have uncertain benefits, or are detrimental to many forest attri- butes such as resilience, carbon accumulation, structural complexity, and genetic and biological diversity. Natural forests (i.e., those protected and largely free from human management) tend to develop greater complexity, car- bon storage, and tree diversity over time than forests that are actively man- aged; and natural forests often become less susceptible to future insect attacks and fire following these disturbances. Natural forest stewardship is therefore a critical and cost effective strategy in forest climate adaptation."

Faison et al. 2023 shows that the project is not meeting the purpose and need of the project. Please find Faison et al. 2023 attached.

The agency will violate the NFMA by failing to ensure that old growth forests are well-distributed across the landscape with a Forest Plan amendment; although not provided in the EA for public comment, the agency is amending the Forest Plan to allow burning of old growth rather than preserving it.

Page 6 of the EA states:

The Need for Condition-based Management

Condition-based management is a management approach that allows for responding to conditions that may have changed between the decision and implementation. The Forest Service has frequently been in a position of spending two to three years preparing for and conducting National Environmental Policy Act- related analysis for a site-specific prescribed burning project only to have a wildland fire come through and burn part or all of the project area prior to analysis completion. Condition-based management allows for proposed treatments to be aligned, after the decision has been made, with the conditions on the ground at the time of implementation. For prescribed burning, this is particularly necessary since site specific conditions that allow for safe burning can be quite dynamic.

Conditions based itions based analysis relies heavily on design features 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 design features to minimize effects to the forest?

The agency needs to identify all existing old growth stands in the 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 burning is for each of these old growth stands, is required by the NEPA for project decisions.

There is no map of the big game winter range in the 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.

There are no maps provided of where existing or planned security areas will be in the 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 recommended by the current best science. The agency claims there is no impact of this lack of security based on the current best science. It is not clear how there can be a huge increase in the number of motorized routes in the Project Area, as well, and still maintain what is the current level of big game security.

The project's use of conditions based management is a violation of NEPA, 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.

The Forest Service did not respond to our comments in violation of NEPA.

Because the project did not tell the public where, when and how the project will be implemented the project is in violation of the Forest Plan, NEPA, NFMA, the CleanWater Act and the ESA.

The Forest Service is unable to demonstrate compliance with the Boise National Forest Plan, violating NFMA and NEPA.

It is well settled that the Forest Service "must *demonstrate* that the [site-specific] project would be consistent with the land resource management plan of the entire forest" in order to comply with the NFMA and NEPA. *Neighbors of Cuddy Mountain v. USFS*, 137 F.3d 1372, 1377 (9th Cir. 1998); 36 C.F.R. § 219.10(e); 16 U.S.C. § 1604(a); *Native Ecosystems*, 418 F.3d at 963. Further, "[t]he duty to demonstrate Forest Plan consistency applies at the time of the decision, not at a speculative future date." *Ohio Forestry Ass'n v. Sierra Club*, 523 U.S. 726, 729-30 (1998). "NFMA requires sufficient disclosure for a court to be able to 'ascertain from the record that the Forest Service is in compliance' with the statute and regulations." *Sierra Forest Legacy v. Sherman*, 646 F.3d 1161, 1200 (9th Cir. 2011) *citing Native Ecosystems,* 418 F.3d at

963. The federal district court of Montana has found that "[t]he Court cannot simply take Defendants' word" that a project complies with a standard. *Alliance*, 2021 WL 4551496 *4.

The purpose of Forest Plan standards is to provide objective and clear benchmarks for Forest protection so that the public need not blindly trust the Agencies and may hold the Agencies accountable for legal compliance. Id.; Native Ecosystems, 418 F.3d at 963. Here, not only do the Agencies ask the public to trust mere promises to comply with vital wildlife standards as the Agencies make up the Project as it goes along, the Agencies also failed to disclose highly relevant information, rendering it impossible for the public to engage in informed decision making. Native Ecosystems, 418 F.3d at 964-65; WildEarth Guardians v. Mont. Snowmobile Ass'n, 790 F.3d 920, 925 (9th Cir. 2015).

According to decades of caselaw, the SWIRL Project draft decision notice and FONSI do not satisfy the Agencies' legal obligations. *Id.; Neighbors*, 137 F.3d 1378; *Alliance*, 2021 WL 4551496 *4; *Ohio Forestry*, 523 U.S. at 729-30.

For example, the demonstration of compliance with the Forest Plan' lynx habitat standard important to ensure the SWIRL Project's compliance with NFMA and NEPA, but it is also vital to understanding the environmental baseline that can be used to assess future impacts to lynx habitat within this LAU. Without disclosing how many acres of lynx habitat the

SWIRL Project will remove, not only are the public and decision makers inhibited from assessing *this* Project's compliance, they also will be unable to adequately assess any future project compliance with VEG S2. FS567 (limiting regeneration harvest to 15% of lynx habitat in a ten-year period). Neither the Forest Service, nor the public, can understand if and how this Project or any future projects will comply with the Forest Plan. As in *Alliance*, "[t] record simply [does] not reveal how these [] measures would ensure the Project complied with the Forest Plan's [lynx habitat] standard." 2021 WL 4551496 *4. Once again, the agency "needs to show [its] work," *id*., but has failed to do so.

Understanding the precise location, timing, and extent of timber units and roads authorized by the SWIRL Project at the time of the decision is fundamental to the Agency's NFMA duties. *Ohio Forestry*, 523 U.S. at 729-30.

Allowing the Forest Service to authorize a Project without disclosing information required to understand compliance with the Forest Plan inhibits public participation and review of the Project, which are vital in analyzing impacts of a project and ensuring compliance with the Forest Plan. Withholding this important information obscures both the public's and agency decision-makers' understanding of on-the-ground conditions, thereby stymieing both the public's ability to submit informed comments as to the Project's actual effects and the Court's ability to assess the Project's consistency with the Forest Plan, in violation of both NFMA and NEPA. *Kettle*

Range Conservation Group v. USFS, 2023 WL 4112930 *9 (E.D. Wash 2023) ("If the Agency does not know where or when an activity will occur or if it will occur at all, then the effects of that action cannot be meaningfully evaluated.")

Remedy: The Forest Service needs to demonstrate that they are complying with the definition of the Wildland Urban Interface in the Healthy Forest Restoration Act (HFRA).

The HFRA defines wildland urban interface as follows: "The term 'wildland-urban interface' means– (A) an area within or adjacent to an at-risk community that is identified in recommendations to the Secretary in a community wildfire protection plan . . . ." 16 U.S.C. § 6511 (16)(emphasis added). The HFRA defines "at-risk community" as follows:

The term "at-risk community" means an area-- (A) that is comprised of--

(i) an interface community as defined in the notice. . . (66 Fed. Reg. 753, January 4, 2001); or

(ii) a group of homes and other structures with basic infrastructure and services (such as utilities and collectively maintained transportation routes) within or adjacent to Federal land;

(B) in which conditions are conducive to a large-scale wildland fire disturbance event; and

(C) for which a significant threat to human life or property exists as a result of a wildland fire disturbance event.

16 U.S.C. § 6511 (1) (emphases added). In turn, the cited Federal Register notice mandates: "The development density for an interface community is usually 3 or more structures per acre, with shared municipal services. . . . An alternative definition of the interface community emphasizes a population density of 250 or more people per square mile." 66 Fed. Reg at 753, 2001 WL 7426.

Please explain how the Madison County community wildfire protection plan (CWPP) defines the Wildland Urban Interface and if it complies with the Healthy Forest Restoration Act.

NEPA "requires a federal agency such as the Forest Service to prepare a detailed EIS for all 'major Federal actions significantly affecting the quality of the human environment.'" Blue Mountains Biodiversity Project v. Blackwood, 161 F.3d 1208, 1211–12 (9th Cir. 1998) (citing 42 U.S.C. § 4332(2)(C)). "Major reinforces but does not have a meaning independent of significantly []." 40 C.F.R. § 1508.18. "As a preliminary step, an agency may prepare an EA to decide whether the environmental impact of a proposed action is significant enough to warrant preparation of an EIS." Id.; 40 C.F.R. § 1501.2. Before reaching the question of significance, however, there must be an analysis of whether there is "federal action." See Envtl. Prot. Info. Ctr. v. USFS, 2003 WL 22283969 *9, n.10 (N.D. Cal. 2003).

The CEQ regulations state:

(b) Federal actions tend to fall within one of the following categories: .. .

(2) Adoption of formal plans, such as official documents prepared or approved by federal agencies which guide or prescribe alternative uses of Federal resources, upon which future agency actions will be based.

.. . 40 C.F.R. § 1508.18.

Furthermore, in general, CEQ regulations allow agencies to "tier" from a site-specific NEPA analysis to a programmatic analysis "to eliminate repetitive discussions of the same issues" by "incorporat[ing] discussions from the broader statement by reference. . . . ." 40 C.F.R. § 1502.20. "However, tiering to a document that has not itself been subject to NEPA review is not permitted, for it circumvents the purpose of NEPA." Kern v. BLM, 284 F.3d 1062, 1073 (9th Cir. 2002)). The CEQ regulations are binding on the Forest Service. See Trustees for Alaska v. Hodel, 806 F.2d 1378, 1382 (9th Cir. 1986). The Forest Service does not receive deference when implementing the CEQ regulations because those regulations were not issued by the Forest Service. See U.S. Dep't of Treasury, I.R.S. v. Fed. Labor Relations Auth., 996 F.2d 1246, 1250 (D.C. Cir. 1993)("We generally do not grant any deference to the [an agency's] interpretation of regulations promulgated by other agencies.")

In violation of NEPA, the Forest Service has not yet conducted a NEPA analysis for the Wildfire Plan. Other courts have found that other types of fire management plans adopted and implemented by the Forest Service are major federal actions under NEPA. For example, in People of Cal. ex rel. Lockyer v. USFS, the district court found "that the Fire Plan is a major federal action, and so defendant's decision not to conduct any environmental review was unreasonable." 2005 WL 1630020 *11 (N.D.

Cal. 2005). Likewise, in Environmental Protection Information Center (EPIC) v. USFS, the district court held: "Defendant violated NEPA by failing to prepare an Environmental Assessment or an Environmental Impact Statement in connection with the issuance of the

Six Rivers National Forest Fire Management Plan." 2003 WL 22283969, at *13 (N.D. Cal. 2003). In EPIC, the district court addressed a relevant Ninth Circuit case, Port of Astoria v. Hodel, in which the Ninth Circuit addressed whether a "regional proposal for development and distribution of power" was a federal action under NEPA. 595 F.2d 467, 477–78 (9th Cir. 1979). The proposal was called "Phase 2" and resulted "from an agreement between [the agency], its direct-service industrial customers, and the public, cooperative, and investor-owned utilities in [the] region." Id. The agency argued that Phase 2 was not a federal program, but the Ninth Circuit rejected that argument: "although Phase 2 is a cooperative enterprise involving [the agency] and nonfederal participants, it is [the agency's] participation that integrates the entire program. . . . Without [the agency] it is doubtful that Phase 2 would ever have been developed or, if developed, would have become feasible." Id.

In this case, there is no mention of developing a Wildfire Plan with public participation.

Alternatively or additionally, even if the Wildfire Plan did not require NEPA analysis at the time it was created, once the wildland urban interface designation from the Plan was used to justify and authorize this site-specific project, NEPA analysis was required under the doctrine of "tiering." The seminal Ninth Circuit case on this issue is Kern v. BLM, 284 F.3d 1062 (9th Cir.

2002). In Kern, the Ninth Circuit addressed the BLM's adoption of guidelines for management of a fungus affecting Port Orford cedar trees. In an earlier case, the Ninth Circuit had denied a claim that the guidelines themselves were a major federal action that required NEPA analysis.

The FS must have a detailed long-term program for maintaining the allegedly safer conditions, including how areas will be treated in the future following proposed treatments, or how areas not needing treatment now will be treated as the need arises. The public at large and private landowners must know what the scale of the long-term efforts must be, including the amount of funding necessary, and the likelihood based on realistic funding scenarios for such a program to be adequately and timely funded.

The FS must assess the fuel and fire risk situation across land ownership boundaries to understand, and disclose to the public, the likely fire scenarios across the area's landscape. Only then can the context of your proposal be adequately weighed on its merits and evaluated on its merits.

The FS (Cohen, 1999) reviewed current scientific evidence and policy directives on the issue of fire in the wildland/urban interface and recommended an alternative focus on structure ignitability rather than extensive wildland fuel management:

> The congruence of research findings from different analytical methods suggests that home ignitability is the prin-

cipal cause of home losses during wildland fires… Home ignitability also dictates that effective mitigating actions focus on the home and its immediate surroundings rather than on extensive wildland fuel management.

[Research shows] that effective fuel modification for reducing potential WUI fire losses need only occur within a few tens of meters from a home, not hundreds of meters or more from a home. This research indicates that home losses can be effectively reduced by focusing mitigation efforts on the structure and its immediate surroundings. Those characteristics of a structure's materials and design and the surrounding flammables that determine the potential for a home to ignite during wildland fires (or any fires outside the home) will, hereafter, be referred to as home ignitability.

> The evidence suggests that wildland fuel reduction for reducing home losses may be inefficient and ineffective. Inefficient because wildland fuel reduction for several hundred meters or more around homes is greater than necessary for reducing ignitions from flames. Ineffective because it does not sufficiently reduce firebrand ignitions (Cohen, 1999)

That research also recognizes "the imperative to separate the problem of the wildland fire threat to homes from the problem of ecosystem sustainability due to changes in wildland fuels" (Ibid).

Please see the following article titled:

Montana researchers urge towns to focus on wildfire preparation

February 7, 2024

https://missoulacurrent.com/research-wildfire-preparation/

Laura Lundquist

(Missoula Current) For more than a decade, a small group of scientists have been trying to convince people that fireproofing their homes is far more effective than logging the forest when it comes to surviving wildfire. But few people are listening.

In mid-December, six researchers published a paper in the Proceedings of the National Academy of Sciences journal

warning that communities across the nation, but particularly those in the West, aren't prepared to survive an urban conflagration such as the one that devastated Lahaina, Hawaii, in August.

The paper, titled "Wildland-urban fire disasters aren't actually a wildfire problem," points out that, since 2016, communities from Lahaina to Gatlinburg, Tenn., that have lost hundred of homes to fires have certain things in common: the fires occurred under extreme weather conditions - high winds and persistent drought - and most of the structures weren't fire-resistant.

"These problem fires were defined as an issue of wildfires that involved houses. In reality, they are urban fires initiated by wildfires. That's an important distinction - and one that has big repercussions for how we prepare ourselves for future fires," the authors wrote.

The authors included three researchers from the Forest Science and Fire Sciences laboratories of the U.S. Forest Service Rocky Mountain Research Station in Missoula and one from Headwaters Economics in Bozeman.

In a 2014 paper in the Proceedings of the National Academy of Science, some of the same authors developed a community risk assessment that put the focus on improving the security of individual homes in a community, not the forest around them.

The emphasis is placed on modifying the house and the home ignition zone, a region within 100 feet of a house where debris

and vegetation should be eliminated or minimized to reduce the chance of fire getting close to the house.

The reason that urban conflagrations begin and spread is because wind pushes embers and heat from one unprotected building to another, overwhelming fire departments that normally train to fight fire in just one building. Conditions are made worse when buildings are close together, because radiant heat becomes a bigger factor, spreading fire quicker.

"Reducing the likelihood that a home will ignite interrupts the disaster sequence by enabling effective structure protection. New construction siting, design, construction materials, and landscaping requirements should take wildfire potential into account," the authors wrote in the December paper.

One of the paper's authors, Jack Cohen, is a fire-behavior analyst and heat transfer engineer who has spent 40 years investigating wildfires, particularly those that are linked to incidents where hundreds of homes burned. He has spent at least the past decade writing papers and giving talks about the need to focus on making homes less susceptible to wildfires, which are a natural process, especially in the arid West.

When asked why the researchers decided to submit the recent article that seeks to drum home points they already promoted a decade ago, Cohen said cities and agencies have done very little during that time period to put their recommendations into place.

"What prompted us this time was the Lahaina urban conflagration that was associated with a grassfire. It may be a repeated message on our part, but it's not being received very well. Not much has changed," Cohen said. "The federal and state agencies still don't get it - they're still defining the problem as a wildfire control problem."

Since the 2014 paper, Cohen and other researchers have had to just watch as town after town has burned terribly but predictably, as if no one has read their research. In Gatlinburg and Pigeon Forge, Tenn., 2,460 buildings burned in a 2016 fire; in 2018, the Camp Fire led to the loss of almost 19,000 buildings in Paradise, Calif.; in December 2021, 1,084 buildings burned in Superior and Louisville, Colo. from a grass fire; and in November 2021, a grassfire sparked fires in 23 homes in Denton, Mont.

Each wildfire had very little connection to most of the burning buildings, Cohen said. A wildfire is the source of initial ignition, but from that point on, it's a series of structure fires that lead to more structure fires. For example, with the Four Mile Canyon Fire in Boulder, Colo., the state of Colorado and the Forest Service had completed a number of fuel treatments nearby that they touted as protective. But high winds carried fire brands to ignite the houses far from the fire. Cohen found that while 168 houses burned, a lot of vegetation around the houses didn't, "so the wildfire didn't sweep through town."

"In the past five years, a number of incidents with more than 100 houses burning have been initiated by grass fires, which burn quickly. The grass fires pass through and are gone while

the community continued to burn," Cohen said. "What I've found, particularly over the past five or six years, is that extreme wildfire is not dependent on closed-canopy conifers that produce big flames. The only time these urban disasters occur is under extreme conditions. That typically means it's very windy."

Nothing about the Lahaina Fire surprised Cohen. Not even the overblown claims that a wildfire "roared through and destroyed the town." Again, the wildfire was over before the town really started to burn. The fire started as a grassfire fanned by high winds, and had Lahaina not been there, the fire would have burned through the buffel grass and guinea grass within a matter of minutes before it died out on the beach.

But Lahaina was there, a high-density community with several blocks of multi-story, largely-connected wooden structures. That configuration caused buildings to catch fire either due to burning embers flying from other buildings or from catching fire due to the overwhelming heat from nearby buildings.

"The ignition initiated where the grassfire came down, and that was it - it was a conflagration," Cohen said. "You don't want to be in a high-density community when you can't control the fire. Thirteen of the 26 fatalities in the 1991 Oakland Hills Fire occurred in the street when two-story buildings were burning on both sides of the street and the road became blocked. The heat was untenable."

One house in Lahaina stood untouched and was dubbed "the miracle house." But Cohen said it was just a good example of

the points he and his fellow authors have been trying to communicate about defensible space and being fire-adapted. The owners had recently renovated the house with a nonflammable roof. It had wood walls, but the nearest building was about 30 feet away - far enough to prevent radiant heat from starting a fire - and there was little debris on the grounds or the house to actively spread the fire.

"The home ignition zone works," Cohen said. "The home ignition zone came out of the modeling I did and then the crown fire experiments I did with wood walls to show the distance, the proximity required to produce an ignition was realistic. At the same time, California was cutting 300-foot clearances around communities, which means nothing to (airborne) burning embers, but it's way over (what's required) for radiant heat exposure."

Cohen and his colleagues hope their latest paper prompts more action from local governments. Cohen is hoping Missoula County can do a better job when it updates its Wildfire Protection Plan in the near future.

But more than likely, Cohen said, they'll be writing a similar paper in another few years, trying to make politicians and the public understand. It doesn't help that they're fighting some in their own agency, the Forest Service, who insist that logging, not home modification, will save communities.

"Fire is inevitable. But nobody's figuring it out," Cohen said. "We're starting from the presumption that it's wildfire that spreads through a community that lays it to waste. We even

have the agencies responding in that fashion by being obsessed with this notion of wildfire control. So they do fuel treatments to have safe firefighting. That's not only counter ecologically, it doesn't work."

Contact reporter Laura Lundquist at lundquist@missoulacurrent.com.

Please find the paper, ***Wildland-urban fire disasters aren't actually a wildfire problem***, by Calkin et al. 2023 attached.

Calkin et al. 2023 is the best available since and shows the project is not meeting the purpose and need of the project and is in violation of the Healthy Forest Act, NEPA, NFMA, and the APA.

Please consider that thinning can result in faster fire spread than in the unthinned stand. Graham, et al., 1999a point out that fire modeling indicates:

> For example, the 20-foot wind speed must exceed 50 miles per hour for midflame wind speeds to reach 5 miles per hour within a dense Stand (0.1 adjustment factor). In contrast, in an open stand (0.3 adjustment factor), the same midflame wind speeds would occur at only a 16-mile-per-hour wind at 20 feet.

Graham, et al., 1999a also state:

> Depending on the type, intensity, and extent of thinning, or other treatment applied, fire behavior can be improved (less severe and intense) or exacerbated." … Fire intensity in thinned stands is greatly reduced if thinning is accompanied by reducing the surface fuels created by the cuttings. Fire has been successfully used to treat fuels and decrease the effects of wildfires especially in climax ponderosa pine forests (Deeming 1990; Wagel and Eakle 1979; Weaver 1955, 1957). In contrast, extensive amounts of untreated logging slash contributed to the devastating fires during the late 1800s and early 1900s in the inland and Pacific Northwest forests.

In their conclusion, Graham, et al., 1999a state:

> Depending on intensity, thinning from below and possibly free thinning can most effectively alter fire behavior by reducing crown bulk density, increasing crown base height, and changing species composition to lighter crowned and fire-adapted species. Such intermediate treatments can reduce the severity and intensity of wildfires for a given set of physical and weather variables. But crown and selection thinning would not reduce crown fire potential.

Since the scientific literature suggests that your thinning activities will actually increase the rate of fire spread, you need to reconcile such findings with the contradictory assumptions expressed in your scoping letter.

Please see the column below by Dr. Chad Hanson.

https://thehill.com/blogs/congress-blog/energy-environment/590415-logging-makes-forests-and-homes-more-vulnerable-to

Logging makes forests and homes more vulnerable to wildfires

The West has seen some really big forest fires recently, particularly in California's Sierra Nevada and the Cascade Mountains of Oregon. Naturally, everyone is concerned and elected officials are eager to be seen as advancing solutions. The U.S. Senate is negotiating over the Build Back Better bill, which currently contains nearly $20 billion in logging subsidies for "hazardous fuel reduction" in forests. This term contains no clear definition but is typically employed as a euphemism for "thinning", which usually includes commercial logging of mature and old-growth trees on public lands. It often includes clearcut logging that harms forests and streams and intensifies wildfires.

Logging interests stand poised to profit, as they tell the public and Congress that our forests are overgrown from years of neglect. Chainsaws and bulldozers are their remedy. Among these interests are agencies like the U.S. Forest Service that financially benefits from selling public timber to private logging companies.

In this fraught context, filled with a swirling admixture of panic, confusion, and opportunism, the truth and scientific

evidence are all too often casualties. This, unfortunately, can lead to regressive policies that will only exacerbate the climate crisis and increase threats to communities from wildfire. We can no longer afford either outcome.

Many of the nation's top climate scientists and ecologists recently urged Congress to remove the logging subsidies from the Build Back Better bill. Scientists noted that logging now emits about as much carbon dioxide each year as does burning coal. They also noted that logging conducted under the guise of "forest thinning" does not stop large wildfires that are driven mainly by extreme fire-weather caused primarily by climate change. In fact, it can often make fires burn faster and more intensely toward vulnerable homes. Unprepared towns like Paradise and Grizzly Flats, Calif., unfortunately burned to the ground as fires raced through heavily logged surroundings.

Nature prepares older forests and large trees for wildfires. As trees age, they develop thick impenetrable bark and drop their lower limbs, making it difficult for fire to climb into the tree crowns. Older, dense forests used by the imperiled spotted owl burn in mixed intensities that is good for the owl and hundreds of species that depend on these forests for survival. Our national parks and wilderness areas also burn in lower fire intensities compared to heavily logged areas.

Occasionally even some of the largest trees will succumb to a severe fire but their progeny are born again to rapidly colonize the largest and most severe burn patches. Dozens of cavity-nesting birds and small mammals make their homes

in the fire-killed trees. Soon after fire in these forests, nature regenerates, reminiscent of the mythical phoenix, aided by scores of pollinating insects and seed carrying birds and mammals.

Wildfires are highly variable, often depending on what a gust of wind does at a given moment, and even the biggest fires are primarily comprised of lightly and moderately-burned areas where most mature trees survive. By chance, in any large fire there will always be some areas that were thinned by loggers that burned less intense compared to un-thinned areas. Before the smoke fully clears, logging interests find those locations and take journalists and politicians to promote their agenda. What they fail to disclose are the many examples where managed forests burned hotter while older, unmanaged forests did the opposite.

This sort of self-serving show boating occurred after the 2020 Creek Fire in the Sierra National Forest in California, as news stories echoed the logging industry's "overgrown forests" narrative based on a single low-intensity burn area. When all of the data across the entire fire were analyzed, it turned out that logged forests, including commercial "thinning" areas, actually burned the most intensely.

In Oregon, The Nature Conservancy has been conducting intensive commercial thinning on its Sycan Marsh Preserve. Based on satellite imagery, the northern portion of the 414,000-acre Bootleg Fire of 2021 swept through these lands. Within days, TNC began promoting its logging program, focusing on a single location around Coyote Creek, where a

“thinned” unit burned lightly. They failed to mention that nearly all of the dense, unmanaged forests burned lightly too in that area. Well-intentioned environmental reporters were misled by a carefully picked example.

Billions of dollars are being wasted to further this false logging industry narrative—funds that instead should be used to prepare communities for more climate-driven wildfires. Congress can instead redirect much needed support to damaged communities so they can build back better and adopt proven fire safety measures that harden homes and clear flammable vegetation nearest structures.

The path forward is simple, with two proven remedies that work. Protect forests from logging so they can absorb more carbon dioxide from the atmosphere and moderate fire behavior, and adapt communities to the new climate-driven wildfire era.

Chad Hanson, Ph.D., is a research ecologist with the John Muir Project and is the author of the 2021 book, “Smokescreen: Debunking Wildfire Myths to Save Our Forests and Our Climate.” Dominick DellaSala, Ph.D., is chief scientist with Wild Heritage and the author of Conservation Science and Advocacy for a Planet in Peril: Speaking Truth to Power.

Please see the column below by Chad Hanson and myself.

Opinion by **Chad Hanson** and
Mike Garrity

https://www.washingtonpost.com/opinions/no-we-cant--and-shouldnt--stop-forest-fires/2017/09/26/64ff718c-9fbf-11e7-9c8d-cf053ff30921_story.html
September 26, 2017

Chad Hanson is a research ecologist with the John Muir Project and is co-editor and co-author of "The Ecological Importance of Mixed-Severity Fires: Nature's Phoenix." Mike Garrity is executive director of the Alliance for the Wild Rockies.

The American West is burning, Sen. Steve Daines (R-Mont.) tells us in his recent Post op-ed. He and officials in the Trump administration have described Western forest fires as catastrophes, promoting congressional action ostensibly to save our National Forests from fire by allowing widespread commercial logging on public lands. This, they claim, will reduce forest density and the fuel for wildfires.

But this position is out of step with current science and is based on several myths promoted by commercial interests.

The first myth is the notion that fire destroys our forests and that we currently have an unnatural excess of fire. Nothing could be further from the truth. There is a broad consensus among scientists that we have considerably less fire of all intensities in our Western U.S. forests compared with natural, historical levels, when lightning-

caused fires burned without humans trying to put them out.

There is an equally strong consensus among scientists that fire is essential to maintain ecologically healthy forests and native biodiversity. This includes large fires and patches of intense fire, which create an abundance of biologically essential standing dead trees (known as snags) and naturally stimulate regeneration of vigorous new stands of forest. These areas of “snag forest habitat” are ecological treasures, not catastrophes, and many native wildlife species, such as the rare black-backed woodpecker, depend on this habitat to survive.

Fire or drought kills trees, which attracts native beetle species that depend on dead or dying trees. Woodpeckers eat the larvae of the beetles and then create nest cavities in the dead trees, because snags are softer than live trees. The male woodpecker creates two or three nest cavities each year, and the female picks the one she likes the best, which creates homes for dozens of other forest wildlife species that need cavities to survive but cannot create their own, such as bluebirds, chickadees, chipmunks, flying squirrels and many others.

More than 260 scientists wrote to Congress in 2015 opposing legislative proposals that would weaken environmental laws and increase logging on National Forests under the guise of curbing wildfires, noting that snag forests are "quite simply some of the best wildlife habitat in forests.”

The Forest Service also needs to answer the public's question. It is is a violation of NEPA to not do so,

The Forest Service should withdraw the EA, Draft Decision Notice and FONSI and write an EIS for this project that fully complies with the law or choose the No Action Alternative.

The FS must disclose its transparent, well thought-out long-term strategy for old-growth associated wildlife species viability in a properly-defined cumulative effects analysis area.

"The purpose of the Project is to promote resiliency and ecological function by helping to restore and maintain the structure, function, composition and connectivity of Forest terrestrial systems.

Since Ecological restoration is the project's priority, the NEPA document must at least identify all the existing ecological liabilities caused by past management actions. This includes poorly located or poorly maintained roads, high-risk fuel situations caused by earlier vegetation manipulation projects, wildlife security problems by open motorized roads and trails plus those that are closed but violated—and include all those impacts in the analyses.

Any desire to keep a road in the project area WUI must be in harmony with the alleged priority goals (again, to reduce the chances that fire will destroy private structures and harm

people), not driven by timber production goals. The analysis must show how all roads will in fact be in harmony with the priority goals.

Proposed activities could artificialize the forest ecosystem. Lodgepole pine is particularly subject to blowdown, once thinned. And any forest condition that is maintained through mechanical manipulation is not maintaining ecosystem function. The proposed management activities would not be integrated well with the processes that naturally shaped the ecosystem and resulted in a range of natural structural conditions. Thus, the need for standards guiding both the delineation of zones where artificializing fuel reduction actions may take place, and that also set snag and down woody debris retention amounts.

That brings us to myth No. 2: that eliminating or weakening environmental laws — and increasing logging — will somehow curb or halt forest fires. In 2016, in the largest analysis ever on this question, scientists found that forests with the fewest environmental protections and the most logging had the highest — not the lowest — levels of fire intensity. Logging removes relatively non-combustible tree trunks and leaves behind flammable "slash debris," consisting of kindling-like branches and treetops.

This is closely related to myth No. 3: that dead trees, usually removed during logging projects, increase fire intensity in our forests. A comprehensive study published in the Proceedings of the National Academy of Sciences thoroughly debunked this notion by showing that out-

breaks of pine beetles, which can create patches of snag forest habitat, didn't lead to more intense fires in the area. A more recent study found that forests with high levels of snags actually burn less intensely. This is because flames spread primarily through pine needles and small twigs, which fall to the ground and soon decay into soil shortly after trees die.

Finally, myth No. 4: that we can stop weather-driven forest fires. We can no more suppress forest fires during extreme fire weather than we can stand on a ridgetop and fight the wind. It is hubris and folly to even try. Fires slow and stop when the weather changes. It makes far more sense to focus our resources on protecting rural homes and other structures from fire by creating “defensible space” of about 100 feet between houses and forests. This allows fire to serve its essential ecological role while keeping it away from our communities.

Lawmakers in Congress are promoting legislation based on the mythology of catastrophic wildfires that would largely eliminate environmental analysis and public participation for logging projects in our National Forests. This would include removing all or most trees in both mature forests and in ecologically vital post-wildfire habitats — all of which is cynically packaged as "fuel reduction" measures.

The logging industry’s political allies have fully embraced the deceptive “catastrophic wildfire” narrative to promote this giveaway of our National Forests to timber

corporations. But this narrative is a scientifically bankrupt smoke screen for rampant commercial logging on our public lands. The American people should not fall for it.

Please see the letter from the 260 scientist to Congress which is mentioned in the column above, below.

Open Letter to U.S. Senators and President Obama from Scientists Concerned about Post-fire Logging and Clearcutting on National Forests

As professional scientists with backgrounds in ecological sciences and natural resources management, we are greatly concerned that legislation which passed the House in July 2015, H.R. 2647, would suspend federal environmental protections to expedite logging of both post- fire wildlife habitat and unburned old forests on national forest lands. This legislation would also effectively eliminate most analysis of adverse environmental impacts, and prevent enforcement of environmental laws by the courts.

A similar measure, S. 1691, currently proposed in the U.S. Senate, would override federal environmental laws to dramatically increase post-fire logging, increase logging and clearcutting of mature forests, eliminate analysis of environmental impacts for most logging projects, and effectively preclude enforcement of environmental laws. The bills propose these measures under the guise of

“ecosystem restoration,” ostensibly to protect national forests from fire.

Not only do these legislative proposals misrepresent scientific evidence on the importance of post-fire wildlife habitat and mature forests to the nation, they also ignore the current state of scientific knowledge about how such practices would degrade the ecological integrity of forest ecosystems on federal lands. We urge you to vote against this legislation, and urge President Obama to veto these bills if they are passed in some form by Congress.

National Forests were established for the public good and include most of the nation’s remaining examples of intact forests. Our national forests are a wellspring of clean water for millions of Americans, a legacy for wildlife, sequester vast quantities of carbon important in climate change mitigation, and provide recreation and economic opportunities to rural communities if responsibly managed. Though it may seem at first glance that a post-fire landscape is a catastrophe, numerous scientific studies tell us that even in the patches where forest fires burn most intensely, the resulting wildlife habitats are among the most ecologically diverse on western forestlands and are essential to support the full richness of forest biodiversity.1

Post-fire conditions also serve as a refuge for rare and imperiled wildlife species that depend upon the unique habitat features created by intense fire. These include an abundance of standing dead trees, or “snags,” which pro-

vide nesting and foraging habitat for woodpeckers and many other plant and wildlife species responsible for the rejuvenation of a forest after fire.

The post-fire environment is rich in patches of native flowering shrubs that replenish soil nitrogen and attract a diverse bounty of beneficial insects that aid in pollination after fire. Small mammals find excellent habitat in the shrubs and downed logs, providing food for foraging spotted owls. Deer and elk browse on post-fire shrubs and natural conifer regeneration. Bears eat and disperse berries and conifer seeds often found in substantial quantities after intense fire, and morel mushrooms, prized by many Americans, spring from ashes in the most severely burned forest patches.

1 See http://store.elsevier.com/The-Ecological-Importance-of-Mixed-Severity-Fires/Dominick-DellaSala/isbn- 9780128027493/.

This post-fire renewal, known as “complex early seral forest,” or “snag forest,” is quite simply some of the best wildlife habitat in forests, and is an essential stage of natural processes that eventually become old-growth forests over time. This unique habitat is not mimicked by clearcutting, as the legislation incorrectly suggests. Moreover, it is the least protected of all forest habitat types, and is often as rare, or rarer, than old-growth forest, due to extensive fire suppression and damaging for-

est management practices such as those encouraged by this legislation. Much of the current scientific information on the ecological importance of post-fire habitat can be found in several excellent videos, including ways for the public to co-exist with fires burning safely in the backcountry.1,2

After a fire, the new forest is particularly vulnerable to logging disturbances that can set back the forest renewal process for decades. Post-fire logging has been shown to eliminate habitat for many bird species that depend on snags, compact soils, remove biological legacies (snags and downed logs) that are essential in supporting new forest growth, and spread invasive species that outcompete native vegetation and, in some cases, increase the flammability of the new forest.

While it is often claimed that such logging is needed to restore conifer growth and lower fuel hazards after a fire, many studies have shown that logging tractors often kill most conifer seedlings and other important re-establishing vegetation and actually increases flammable logging slash left on site. Increased chronic sedimentation to streams due to the extensive road network and runoff from logging on steep slopes degrades aquatic organisms and water quality.

We urge you to consider what the science is telling us: that post-fire habitats created by fire, including patches of severe fire, are ecological treasures rather than ecological catastrophes, and that post-fire logging does far

more harm than good to public forests. We urge Senators to vote against any legislation that weakens or overrides environmental laws to increase post-fire logging or clearcutting of mature forest as degrading to the nation's forest legacy. And, we urge President Obama to veto any such legislation that reaches his desk as inconsistent with science- based forest and climate change planning.

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2http://www.fs.usda.gov/detail/r5/news-events/audiovisual/?cid=stelprdb5431394;

https://vimeo.com/75533376; http://vimeo.com/groups/future/videos/8627070; http://www.youtube.com/watch?v=iTl-naywNyY&list=PL7F70F134E853F520&index=15; http://www.youtube.com/watch?v=1BmTq8vGAVo&feature=youtu.be; http://vimeo.com/3428311

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Veblen (2003) questions the premises the FS often puts forth to justify "uncharacteristic vegetation patterns" discussions, that being to take management activities to alter vegetation patterns in response to fire suppression:

> The premise behind many projects aimed at wildfire hazard reduction and ecological restoration in forests of the western United States is the idea that unnatural fuel buildup has resulted from suppression of formerly frequent fires. This premise and its implications need to be critically evaluated by conducting area-specific research in the forest ecosystems targeted for fuels or ecological restoration projects. Fire regime researchers need to acknowledge the limitations of fire history methodology and avoid over-reliance

on summary fire statistics such as mean fire interval and rotation period. While fire regime research is vitally important for informing decisions in the areas of wildfire hazard mitigation and ecological restoration, there is much need for improving the way researchers communicate their results to managers and the way managers use this information.

Since disruption of fire cycles is identified, the Boise National Forest needs to take a hard look at its fire policies. The development of approved fire management plans in compliance with the Federal Wildland Fire Policy was the number one policy objective intended for immediate implementation in the Implementation Action Plan Report for the Federal Wildland Fire Management Policy and Program Review. In general, the FS lags far behind other federal land management agencies that have already invested considerable amounts of time, money, and resources to implement the Fire Policy. Continued mismanagement of national forest lands and FS refusal to fully implement the Fire Policy puts wildland firefighters at risk if and when they are dispatched to wildfires. This is a programmatic issue, one that the current Forest Plan does not adequately consider. Please

see Ament (1997) as comments on this proposal, in terms of fire policy and Forest Planning.

Many adverse consequences to soil, ecological processes, wildlife, and other elements of the natural environment are associated with thinning. (Ercelawn, 1999; Ercelawn, 2000.) For example: "Salvage or thinning operations that remove dead or decayed trees or coarse woody debris on the ground will reduce the availability of forest structures used by fishers and lynx." (Bull et al., 2001.)

Remedy

Withdraw the EA, Draft Decision Notice and FONSI and write an EIS that takes a hard look at the impacts of the project and discloses specifically what, where and when the Forest Service wants to do. The project as proposed violated NEPA, NFMA, the Clean Water Act, the ESA and the APA.

The EA does not provide site-specific information about the SWIRL Project or its impacts. The EA does not disclose specific locations where logging, road construction, or prescribed burns will occur.

The Forest Service's failure to adequately disclose the specific locations where actions will occur under the Proposed Action or adequately analyze the environmental impacts of the Proposed Action violated NEPA. 42 U.S.C. § 4332(2)(C). The Forest Ser-

vice's Decision Notice was therefore arbitrary, capricious, not in accordance with law, and not in accordance with the procedures required by law. 5 U.S.C. § 706(2)(A), (D).

We wrote in out comments:

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

The Forest Service wrote on page 31 of the EA:

Monarch butterfly (Danaus plexippus) — May Impact Individuals or Habitat

Monarchs require milkweed host plants for breeding and flowering plants to provide nectar for adults. Areas that burned low to moderate may be attracting butterflies as the response of adult monarchs has been reported to be positively correlated with the postfire availability of nectar resources. This causes a significantly higher number of monarchs nectaring or using burned areas compared to unburned areas, especially one year after a fire (The Xerces Society 2018).

Monarch habitat is present in the proposed project area and milkweed has been mapped in several locations distributed across the Forest (USDA Forest Service 2022a). No occurrence records for monarchs were found in the project area, although there have been some outside the boundary on the Emmett and Mountain Home Ranger Districts.

Individuals may be directly impacted during project implementation. Since individuals are only present in Idaho from mid-June through mid-September, the likelihood of impacting individuals is reduced because this will be outside the time frame for prescribed burning in normal years. Effects to the monarch host plant have greater impacts to this species than impacts to individuals. Dependent on timing of activities, host plants could be crushed under mechanical equipment or burned. If present in treatment areas, native milkweed host plants (breeding habitat) and monarch butterfly breeding adults and caterpillars could be lost or temporarily disturbed by implementation activities. Project design elements that protect known sites with individuals or host plants will reduce the likelihood of adverse impacts (appendix B).

Appendix B doe not mention the monarch butterfly or milkweed.

The Forest Service wrote on page 52 of the EA:

The monarch butterfly is currently considered a candidate for listing and is included in this analysis as a sensitive species. Individuals may be directly impacted during project implementation. Since individuals are only present in Idaho from mid-June through mid-September, the likelihood of impacting individuals is reduced because this will be outside the time frame for prescribed burning in normal years. Proposed activities could have temporary negative impacts on milkweed habitat, but prescribed burning and thinning will stimulate the growth of native flowing plants, thereby increasing potential monarch butterfly forage and breeding habitat in the long-term.

The proposed action may impact individuals or habitat but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species for the following Region 4 Sensitive Species: white-headed woodpecker, American three-toed woodpecker, fisher, boreal owl, flammulated owl, great gray owl, northern goshawk, mountain quail, gray wolf, bighorn sheep, peregrine falcon, greater sage- grouse, bald eagle, common loon, and monarch butterfly.

REMEDY

Withdraw the Draft Decision Notice and write an EIS that shows the public how it will avoid monarch butterfly habitat and formal consulted with the U.S. FWS on the impact of the project on the monarch butterfly and its habitat.

We wrote in our comments.

Weeds

Will this Project exacerbate existing noxious weed infestations and start new infestations?

Native plants are the foundation upon which the ecosystems of the Forest are built, providing forage and shelter for all native wildlife, bird and insect species, supporting the natural processes of the landscape, and providing the context within

which the public find recreational and spiritual opportunities. All these uses or values of land are hindered or lost by conversion of plants. The ecological threats posed by noxious weed infestations are so great that a former chief of the Forest Service called the invasion of noxious weeds "devastating" and a "biological disaster." Despite implementation of Forest Service "best management practices" (BMPs), noxious weed infestation on the Forest is getting worse and noxious weeds will likely overtake native plant populations if introduced into areas that are not yet infested. The Forest Service has recognized that the effects of noxious weed invasions may be irreversible. Even if weeds are eliminated with herbicide treatment, they may be replaced by other weeds, not by native plant species.

Invasive plant species, also called noxious weeds, are one of the greatest modern threats to biodiversity on earth. Noxious weeds cause harm because they displace native plants, resulting in a loss of diversity and a change in the structure of a plant community. By removing native vegetative cover, invasive plants like knapweed may increase sediment yield and surface runoff in an ecosystem. As well knapweed may alter organic matter distribution and nutrient through a greater ability to uptake phosphorus over some native species in grasslands. Weed colonization can alter fire behavior by increasing flammability: for example, cheatgrass, a widespread noxious weed on the Forest, cures early and leads to

Weed colonization can also deplete soil nutrients and change the physical structure of soils. The Forest Service's own management activities are largely responsible for noxious weed in-

festations; in particular, logging, prescribed burns, and road reconstruction and use create a risk of weed infestations.

Page 9 of the EA states: "Closed roads may be reopened and used during project activities."

What closed roads will be reopened? How will they be re-opened? Will they be reconstructed?

Does reopening these roads violate Forest Plan elk security standards?

How much logging will you do before you burn? The introduction of logging equipment into the Forest creates and exacerbates noxious weed infestations. Are roadsides throughout the project area are infested with noxious

weeds? Once established along roadsides, invasive plants will likely spread into adjacent grasslands and forest openings.

Will prescribed burning activities within the analysis area cumulatively contribute to increases to noxious weed distribution and populations?

As a disturbance process, fire has the potential to greatly exacerbate infestations of certain noxious weed species, depending on burn severity and habitat type (Fire Effects Information System 2004).

Dry site vegetation types and road corridors are extremely vulnerable, especially where recent ground disturbance has occurred.

Please provide an alternative that eliminates units that have noxious weeds present on roads within units from fire management proposals.

Please address the ecological, social and ascetic impact of current noxious weed infestations within the project area. Include an analysis of the impact of the actions proposed by this project on the long and short term spread of current and new noxious weed infestations. What treatment methods will be used to address growing noxious weed problems?

What noxious weeds are currently and historically found within the project area? Please include a map of current noxious weed infestations which includes knapweed, Saint Johnswort, cheat grass, bull thistle, Canada thistle, hawkweed, hound's-tongue, oxeye daisy and all other Category 1, Category 2 and Category 3 weeds classified as noxious in the IDAHO COUNTY NOXIOUS WEED LIST. 1975).

Are yellow and orange hawkweeds present within the project area?

Please address the cumulative, direct and indirect effects of the proposed project on weed introduction, spread and persistence that includes how weed infestations have been and will be influenced by the following management actions: burning and cutting of trees and shrubs

Noxious weeds are not eradicated with single herbicide treatments. A onetime application may kill an individual plant but dormant seeds in the ground can still sprout after herbicide treatment. Thus, herbicides must be used on consistent, repetitive schedules to be effective.

What commitment to a long-term, consistent strategy of application is being proposed for each weed infested area within the proposed action area? What long term monitoring of weed populations is proposed?

When areas treated with herbicides are reseeded on national forest land, they are usually reseeded with exotic grasses, not native plant species. What native plant restoration activities will be implemented in areas disturbed by the actions proposed in this project? Will disturbed areas including burn units be planted or reseeded with native plant species?

The scientific and managerial consensus is that prevention is the most effective way to manage noxious weeds. The Forest Service concedes that preventing the introduction of weeds into uninfested areas is "the most critical component of a weed management program." The Forest Service's national management strategy for noxious weeds also recommends "develop[ing] and implement[ing] forest plan standards . . .

." and recognizes that the cheapest and most effective solution is prevention. Which units within the project area currently have no noxious weed populations within their

boundaries? What minimum standards are in the Boise Forest Plan to address noxious weed infestations? Please include an alternative in the that includes land management standards

that will prevent new weed infestations by addressing the causes of weed infestation. The failure to include preventive standards violates NFMA because the Forest Service is not ensuring the protection of soils and native plant communities.

Additionally, the omission of an alternative that includes preventive measures would violate NEPA because the Forest Service would fail to consider a reasonable alternative.

Rare Plants

The ESA requires that the Forest Service conserve endangered and threatened species of plants as well as animals. In addition to plants protected under the ESA, the Forest Service identifies species for which

population viability is a concern as "sensitive species" designated by the Regional Forester (FSM 2670.44). The response of each of the sensitive plant species to management activity varies by species, and in some cases, is not fully known. Local native vegetation has evolved with and is adapted to the climate, soils, and natural processes such as fire, insect and disease infestations, and windthrow. Any management or lack of management that causes these natural processes to be altered may have impacts on native vegetation, including threatened and sensitive plants. Herbicide application – intended to eradicate invasive plants – also results in a loss of native plant diversity because herbicides kill native plants as well as invasive plants. Although native species have evolved and adapted to natural disturbance such as fire on the landscape, fires primarily occur in mid to late summer season, when annual

plants have flowered and set seed. Following fall fires, perennial root-stocks remain underground and plants emerge in the spring. Spring and early summer burns could negatively impact emerging vegetation and destroy annual plant seed.

What threatened, endangered, rare and sensitive plant species and habitat are located within the proposed project area? What standards will be used to protect threatened, rare, sensitive and culturally important plant species and their habitats from the management actions proposed in this project?

Describe the potential direct and indirect effect of the proposed management actions on rare plants and their habitat. Will prescribed burning occur in the spring and early summer; please give justifications for this decision using current scientific studies as reference.

The implementation of an EA does not free the Forest Service from the requirements of the National Environmental Policy Act (NEPA). The basis for a determination that this fuels project will improve habitat for wildlife was never provided. In addition, the term "wildlife" includes a large suite of wildlife species.

Pages 15-16 of the EA states:

Threatened, Endangered or Sensitive Plants, Fish and Wildlife

Federally listed species have suitable habitat or designated critical habitat within the Forest analysis area and could be affected by the proposed action. Regional Sensitive Species also could be affected by the project. Additional information re-

garding effects to threatened, endangered, or sensitive species can be found in the respective sections within this document. In addition, bird species protected by the Migratory Bird Treaty Act are present in the areas proposed for treatment in the Boise National Forest. Each species has unique habitat requirements, which often contrast as one species may require open or early successional habitat while another species requires mature forest. The Forest provides a diverse range of sustainable habitats for many species.

Demonstrating that all wildlife species will be benefited by this project would seem to require some rather extensive documentation to the public, none of which was provided in the EA. We believe that the NEPA requires the agency to adequately demonstrate that the determination that this project will benefit all wildlife species needs to be included in the public involvement process, which in this case is the EA.

The Forest Service did not respond to our comments in violation of NEPA.

Did the Boise National Forest drop any lynx analysis units without taking public comment?

REMEDY

Choose the No Action Alternative or withdraw the draft decision notice and FONSI and write an EIS that fully complies with the

law. The EIS mud demonstrate that the project complies with NEPA and NFMA and the Forest Plan's standards.

We wrote in our comments:

Use of an ES for this project is also invalid because the proposed vegetation treatments would occur within Inventoried Roadless Areas (IRA). This qualifies as an extraordinary circumstance that invalidates use of a EA. Although the presence of an extraordinary circumstance does not automatically preclude use of a EA, application of a EA requires documentation . It is the existence of a cause-effect relationship between a proposed action and the potential effects on these resource conditions and if such a relationship exists, the degree of the potential effects of a proposed action on these resource conditions that determine whether extraordinary circumstances exist (36 CFR 220.g(b).

There is no analysis in the EA that defines why forest thinning and prescribed burning will not significantly affect the area's value to wildlife. We contend that the proposed thinning and burning will have significant adverse impacts on many wildlife species, impacts that are not currently present within IRAs. The EA does not identify any adverse impacts that have been identified to wildlife from the current habitat conditions in IRAs. Since the current conditions are beneficial to wildlife, and the proposed conditions will be detrimental to wildlife, this

means that the proposed action will eliminate existing values of the IRA. This would be a cause-effect relationship, invalidating the use of an EA.

Please explain include a discussion of the following:

1. Baker and Shinneman. 2004. Fire rotation for high- severity fire in juniper is estimated at 400-480 years.

2. Floyd and others. 2004. Stand replacing fires in juniper 400 years or longer.

3. Bauer and Weisberg. 2009. The fire cycle in pinyon- juniper was estimated at 427 years.

Please see the attached paper by Dr. William Baker titled: "Are High-Severity Fires Burning at Much Higher Rates Recently than Historically in Dry-Forest Landscapes of the Western USA?"

Dr. Baker writes: "Programs to generally reduce fire severity in dry forests are not supported and have significant adverse ecological impacts, including reducing habitat for native species dependent on early-successional burned patches and decreasing landscape heterogeneity that confers resilience to climatic change."

Dr. Baker concluded: "Dry forests were historically renewed, and will continue to be renewed, by sudden, dramatic, high-in-

tensity fires after centuries of stability and lower-intensity fires."

Based on Dr. Baker's paper, the proposed action will not meet the purpose and need of the project. Baker writes on p. 20:

"Management issues

The evidence presented here shows that efforts to generally lower fire severity in dry forests for ecological restoration are not supported."

Dr. Baker's paper is the best available science. Please explain why this project is not following the best available science. The Draft Decision Notice is in violation of NEPA.

Please find Schoennagel et al (2004) attached. Schoenagel states: "we are concerned that the model of historical fire effects and 20th-century fire suppression in dry ponderosa pine forests is being applied uncritically across all Rocky Mountain forests, including where it is inappropriate.

Schoennagel et al (2004) states: "High-elevation subalpine forests in the Rocky Mountains typify ecosystems that experience infrequent, high-severity crown fires []. . . The most extensive subalpine forest types are composed of Engelmann spruce (Picea engelmannii), subalpine fir (Abies lasiocarpa), and lodgepole pine (Pinus contorta), all thin-barked trees ea- sily killed by fire. Extensive stand-replacing fires occurred historically at long intervals (i.e., one to many centuries) in subalpine forests, typically in association with infrequent high-pressure blocking systems that promote extremely dry regional climate patterns."

Schoennagel et al (2004) states: "it is unlikely that the short period of fire exclusion has significantly altered the long fire intervals in subalpine forests. Furthermore, large, intense fi- res burning under dry conditions are very difficult, if not impossible, to suppress, and such fires account for the majority of area burned in subalpine forests.

Schoennagel et al (2004) states: "Moreover, there is no consistent relationship between time elapsed since the last fire and fuel abundance in subalpine forests, further undermining the idea that years of fire suppression have caused unnatural fuel buildup in this forest zone."

Schoennagel et al (2004) states: "No evidence suggests that spruce–fir or lodgepole pine forests have experienced sub- stantial shifts in stand structure over recent decades as a re- sult of fire suppression. Overall, variation in climate rather than in fuels appears to exert the largest influence on the size, timing, and severity of fires in subalpine forests []. We conclude that large, infrequent stand replacing fires are 'business as usual' in this forest type, not an artifact of fire suppression.".

Schoennagel et al (2004) states: "Contrary to popular opinion, previous fire suppression, which was consistently effective from about 1950 through 1972, had only a mini-

mal effect on the large fire event in 1988 []. Reconstruction of historical fires indicates that similar large, high-severity fires also occurred in the early 1700s []. Given the historical range of variability of fire regimes in high-elevation subalpine forests, fire behavior in Yellow-stone during 1988, although severe, was neither unusual nor surprising."

Schoennagel et al (2004) states: "Mechanical fuel reduction in sub- alpine forests would not represent a restoration treatment but rather a departure from the natural range of variability in stand structure."

Schoennagel et al (2004) states: "Given the behavior of fire in Yellowstone in 1988, fuel reduction projects probably will not substantially reduce the frequency, size, or severity of wildfires under extreme weather conditions."

Schoennagel et al (2004) states: "The Yellowstone fires in 1988 revealed that variation in fuel conditions, as measured by stand age and density, had only minimal influence on fire behavior. Therefore, we expect fuel- reduction treatments in high-elevation forests to be generally unsuccessful in reducing fire frequency, severity, and size, given the overriding importance of extreme climate in controlling fire regimes in this zone. Thinning also will not restore subalpine forests, because they were dense historically and have not changed significantly in re- sponse to fire suppression. Thus, fuel- reduction efforts in most Rocky Mountain sub- alpine forests probably would not effectively mitigate the fire hazard, and these efforts may create new ecological problems by moving the forest structure outside the historic range of variability."

Likewise, Brown et al (2004) states: "At higher elevations, forests of subalpine fir, Engelmann spruce, mountain

hem- lock, and lodgepole or whitebark pine predominate. These forests also have long fire return intervals and contain a high proportion of fire sensitive trees. At periods averaging a few hundred years, extreme drought conditions would prime the- se forests for large, severe fires that would tend to set the forest back to an early successional stage, with a large carry- over of dead trees as a legacy of snags and logs in the regenerating forest . . . . natural ecological dynamics are largely preserved be- cause fire suppression has been effective for less than one natural fire cycle. Thinning for restoration does not appear to be appropriate in these forests. Efforts to manipulate stand structures to reduce fire hazard will not only be of limited effectiveness but may also move systems away from pre-1850 conditions to the detriment of wildlife and watersheds." "Fuel levels may suggest a high fire 'hazard' un-

der conventional assessments, but wildfire risk is typically low in these settings."

Likewise, Graham et al (2004) states: "Most important, the fire behavior characteristics are strikingly different for cold (for example, lodgepole pine, Engelmann

spruce, subalpine fir), moist (for example, western hemlock, western redcedar, western white pine), and dry forests. Cold and moist forests tend to have long fire- return intervals, but fires that do occur tend to be high- intensity, stand-replacing fires. Dry forests historically had short intervals between fi- res, but most important, the fires had low to moderate severity."

According to Graham et al (2004), thinning may also increase the likelihood of wildfire ignition in the type of forests in this Project area: "The probability of ignition is strongly rela- ted to fine fuel moisture content, air temper-

ature, the amount of shading of surface fuels, and the occurrence of an ignition source (human or lightning caused) . . . . There is generally a warmer, dryer microclimate in more open stands (fig. 9) compared to denser stands. Dense stands (canopy cover) tend to provide more shading of fuels, keep- ing relative humidity higher and air and fuel temperature lower than in more open stands. Thus, dense stands tend to maintain higher surface fuel moisture contents com- pared to more open stands. More open stands also tend to allow higher wind speeds that tend to dry fuels compared to dense stands. These factors may in- crease probability of ignition in some open canopy stands compared to dense canopy stands."

Please see the attached report titled: "Have western USA fire suppression and megafire active management approaches become a contemporary Sisyphus?" By Dominick A. DellaSala[a,], Bryant C. Baker[b,c], Chad T. Hanson[d], Luke Ruediger[e,f], William Baker[g]*

The abstract of the paper states:

Fire suppression policies and "active management" in response to wildfires are being carried out by land managers globally, including millions of hectares of mixed conifer and dry ponderosa pine (Pinus ponderosa) forests of the western USA that periodically burn in mixed severity fires. Federal managers pour billions of dollars into command-and-control fire suppression and the MegaFire (landscape scale) Active Management Approach (MFAMA) in an attempt to contain wildfires increasingly influenced by top down climate forcings. Wildfire suppression activities aimed at stopping or slowing fires include expansive dozerlines, chemical retardants and igniters, backburns, and cutting trees (live and dead), including within roadless and wilderness areas. MFAMA involves logging of large, fire-resistant live trees and snags; mastication of beneficial shrubs; degradation of wildlife habitat, including endangered species habitat; aquatic impacts from an expansive road system; and logging-related carbon emissions. Such impacts are routinely dismissed with minimal environmental review and defiance of the precautionary principle in environmental planning. Placing restrictive bounds on these activities, deemed increasingly ineffective in a change climate, is urgently needed to overcome their contributions to the global biodiversity and climate crises. We urge land managers and decision makers to address the root cause of recent fire increases by reducing greenhouse gas emissions across all sectors, reforming industrial forestry and fire suppression practices, protecting carbon stores in large trees and recently

burned forests, working with wildfire for ecosystem benefits using minimum suppression tactics when fire is not threatening towns, and surgical application of thinning and prescribed fire nearest homes.

This conclusion of this paper is that the purpose and need of the project will not be met by your proposed management activities. This paper is now the best available science. Why does the the Southwest Idaho Resilient Landscape [roject proposal not follow the best available science?

Please find attached Baker 2023, "Countering Omitted Evidence of Variable Historical Forests and Fire Regime in Western USA Dry Forests:
The Low-Severity-Fire Model Rejected"

William L. Baker [1,*]

, Chad T. Hanson [2], Mark A. Williams [3] and Dominick A. DellaSala [4]

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Abstract: The structure and fire regime of pre-industrial (historical) dry forests over ~26 million ha of the western USA is of growing importance because wildfires are increasing and spilling over into communities. Management is guided by current conditions relative to the historical range of variability

(HRV). Two models of HRV, with different implications, have been debated since the 1990s in a complex series of papers, replies, and rebuttals. The "low-severity" model is that dry forests were relatively uniform, low in tree density, and dominated by low- to moderate-severity fires; the "mixed-severity" model is that dry forests were heterogeneous, with both low and high tree densities and a mixture of fire severities. Here, we simply rebut evidence in the low-severity model's latest review, including its 37 critiques of the mixed-severity model. A central finding of high-severity fire recently exceeding its historical rates was not supported by evidence in the review itself. A large body of published evidence supporting the mixed-severity model was omitted. These included numerous direct observations by early scientists, early forest atlases, early newspaper accounts, early oblique and aerial photographs, seven paleo-charcoal reconstructions, ≥18 tree-ring reconstructions, 15 land survey reconstructions, and analysis of forest inventory data. Our rebuttal shows that evidence omitted in the review left a falsification of the scientific record, with significant land management implications. The low-severity model is rejected and mixed-severity model is supported by the corrected body of scientific evidence.

Dr. Baker's and DellaSala's paper are the best available science. Please explain why this project is not following the best available science.

What evidence do you have that shows fire has been suppressed in the area?

Baker and Shinneman (2004), Bauer and Weisberg (2009), and Floyd et al. 2004) that demonstrate that the fire cycle in juniper woodlands is very long, up to 400 years or longer, and has not been impacted by any fire suppression actions since settlement. In addition, Coop and Magee (Undated) noted that low-severity fire is not generally considered to have played an important role in shaping patterns of pre- settlement pinyon-juniper woodland structure, where fire regimes were mostly characterized by rare stand-replacing fire; as a result, they noted that direct management interventions such as thinning or fuel reductions may not represent ecological restoration.

The EA does not identify why burning juniper and shrubs enhances wildlife habitat, which is the basis for an EA.

There is no information in the EA that defines define why a lack of fire has degraded wildlife habitat. One has to assume that the presence of juniper woodlands is considered an adverse impact on wildlife, and if burned up, would improve wildlife habitat. We have cited a number of publications, just as examples, that in fact identify the high value of juniper woodlands to wildlife. This value includes forage for mule deer, a species that is to be emphasized on this identified winter range. The value of juniper species to mule deer was identified long ago. For example, Lovaas (1958) reported that the primary winter forage for mule deer in the Little Belt Mountains of Montana were several species of juniper. More recently, this importance was again identified in a published research article. Coe et al. (2018) reported that juniper trees are important

to mule deer on their winter ranges in Oregon. There is no information in the notice that indicates why juniper removal will benefit mule deer or elk or any wildlife.

Juniper woodlands are also important habitat for many nongame birds (Coop and Magee undated; Reinkensmeyer 2000; Magee et al. 2019).. Coop and Magee (undated) noted that juniper removal treatments substantially reduced the occupancy of pinon-juniper specialists and conifer obligate species, including the pinyon jay. There One such species, the pinyon jay, is a species of conservation concern who is associated with juniper habitats (Boone et al. 2018); this paper warns of the detrimental impacts to this declining species due to juniper thinning projects. More recently, Magee et al. (2019) reported that juniper removal projects resulted in decreased occupancy of many associated bird species, including the pinyon jay. These research reports are consistent with a 2000 report by Reinkensmeyer that juniper woodlands provide important habitat for many bird species, with bird species diversity and density increasing as woodlands progress into old growth juniper. Given the documented high value of old growth juniper forests to wildlife, the EA at a minimum needed to discuss how old growth juniper is being managed in this landscape. The Intermountain Region recognizes old growth juniper (Hamilton 1993). How much old growth juniper is believed as essential for optimal nongame bird management, and where is this old growth juniper going to be maintained in this IRA and project?

The agency does not address the likely adverse impacts of climate change on the persistence of juniper woodlands or values of forests as carbon sinks.

There is no mention in the EA about how climate change could affect the long-term persistence of juniper woodlands. If the persistence of these woodlands will be adversely impacted by climate change, juniper thinning operations will promote the long-term demise of this important conifer. This impact was noted by Coop and Mcgee (Undated). Indeed, a recent newspaper article by Maffly (2018) reported on the mystery of why junipers are dying in Utah; widespread loss of junipers would have far- reaching consequences for southern Utah's fragile desert environments.

In addition to the concern about juniper mortality resulting from climate change, we also note that forest thinning in general exacerbates climate change. Milman (2018) recently reported on this issue, noting that scientists say halting deforestation is just as urgent as reducing emissions to address climate change, given the function they provide as a carbon sink. Forest thinning reduces this carbon sink function.

The impact of juniper treatments on the spread of noxious weeds was generally ignored and downplayed in the EA, even though this is very likely a significant adverse impact of this proposal.

There is a considerable awareness today regarding the problems of noxious weed infestations on public lands. One activity that is clearly promoting noxious weeds are fuels reduction and prescribed burning projects. We cite only a few examples

at this time. One example is a Joint Fire Science Report by Coop and Magee (Undated), where they note that fuels and juniper reduction treatments resulted in rapid, large and persistent increases in the frequency, richness and cover of 20 non-native plant species including cheatgrass; exotic plant expansion appeared linked to the disturbance associated with treatment activities, reduction

in tree canopy, and alterations to ground cover; exotic species were much more frequently encountered at treated than control sites, occurring at 86% of sample plots in treatments and 51% of untreated sample plots; richness of exotic species in treatments was more than double that of controls. What is also interesting in this study is that cheatgrass showed a negative effect of tree canopy, which means that cheatgrass was benefited by canopy removal. They noted that models for chestgrass alone and all non- native species together indicate strong negative associations with tree canopies, indicating that increased light availability, or perhaps below-ground resources such as moisture or nitrogen, enhance colonization and growth in treatments. Increases in exotic plant species in treatment areas was one of the reasons these researchers concluded that managers need to be cautious about implementing treatments in light of the persistent, negative ecological impacts that accompany woodland thinning in pinyon pine- juniper ecosystems; this includes an increase in fire frequency.

Kerns and Day (2014) also reported that juniper treatments resulted in at least a short-term conversion of juniper woodlands to an exotic grassland. And Kerns (undated)

reported similar findings in another Joint Fire Science Program report; she stated that it is a significant challenge for land managers to apply thinning and burning fuel treatments in a manner that does not exacerbate existing weed and associated resource problems due to the reduction of ecological resistance that fuel reduction activities created, combined with the aggressive nature of exotic species present. Kerns also noted that weed problems were also caused in slash pile burning, which is planned for the Rowley Canyon project.

Perchemlides et al. (2008) reported similar problems with juniper thinning projects in Oregon; exotic annual grass cover increased, whereas cover by native perennial grasses did not, in treatment areas; they noted that fuel reduction thinning may have some unintended negative impacts, including expansion of exotic grasses, reduction in native perennial species cover, persistent domination of annuals, and increased surface fuels.

The EA failed to provide any documentation that conversion of juniper woodlands to grasslands, including cheatgrass, improves habitat for all wildlife species.

The agency notes that the project will not only reduce juniper, but various shrubs as well. Although we noted above that juniper woodlands have a very high value to many wildlife species, it is not clear that replacing juniper with grasses, including cheatgrass, balances out the loss of wildlife species removed due to juniper removal by replacement with other wildlife species that use only grasses as habitat. For example, the scooping notice did not identify that mule deer on this winter range use grasses as winter forage. The value of cheatgrass

to elk in the winter is also not demonstrated. Cheatgrass seeds are extremely sharp, and use by elk in the winter seems unlikely. Cheatgrass use by wildlife in the summer is also unlikely after early spring, since this grass cures out by summer. The seeds of cheatgrass are also responsible to mortality through blinding of grassland birds (McCrary and Bloom 1984).

General comments on the proposal are as follows:

Parts of this very large project area are big game winter range as per the Forest Plan. The EA failed to define what the specific habitat objectives are for this winter range, including hiding and thermal cover, as well as forage. Juniper and sagebrush are key forage plants for big

game on winter ranges. What are the objectives for these forage species? The Forest Plan direction for this management area is binding. If the agency is going to claim that the Forest Plan is being implemented, you need to specifically define how this is being done, instead of simply claiming that juniper and shrub removal is improvement on big game winter range. Also, the science and monitoring behind this claim need to be provided. Currently mule deer populations have been in decline across the western U.S.. We haven't seen any science that reported increases of mule deer populations following removal of juniper and shrubs on their winter ranges.

One issue that is generally ignored in the EA is what shrubs are present, and will be targeted for masticating and burning. Do these control efforts include sagebrush? There is extensive documentation that sagebrush is highly valuable to both elk and deer on winter ranges (Wambolt 1998, Petersen 1993).

Removing sagebrush to increase grasses on winter range, as is suggested in the EA, does not promote mule deer and elk. Sagebrush has a high protein content of almost 13% in the winter, while dormant grasses have a protein content of less than 4% (Peterson 1993). There can

be no valid reason to remove sagebrush and replace it with grasses for big game winter forage. The actual replacement species the agency claims are going to be managed for are never identified. But at a minimum, the rationale for removing shrubs and replacing them with grasses on winter range needs to be documented, as is required by the NEPA.

The claim that this project will increase diversity is pure unsupported rhetoric. There is no definition as to what constitutes diversity. What criteria are being used to measure diversity, and why isn't this information provided to the public? For example, what is the criteria for a diversity of age classes in juniper woodlands or sagebrush, and what is this based on? The NEPA requires that the agency provide reliable, valid information to the public on projects. This claim that removing juniper and shrubs will improve diversity is a clear violation of the NEPA, as there is no actual basis for it. Worse, it is not clear why eliminating trees and shrubs increases diversity as per the standard definitions. What science claims that a grassland has higher habitat diversity than a woodland or forest, or shrubland? One likely factor driving the proposed project is not promotion of big game species and wildlife, but instead is being done for livestock. This may be why there is no

actual discussion in the EA of current livestock grazing practices in this landscape.

The claim that thinning and removing juniper will increase resiliency of this area is highly questionable. First, these forests are not highly flammable as per the current science. Second, thinning will likely increase flammability by increasing wind speeds and vegetation drying due to a reduction of shade. Third, flammability will surely be increased over current conditions due to an increase of grasses, including exotic species as cheatgrass. The EA did not provide any actual science to indicate that prescribed burning will reduce fires, and thereby increase "resiliency" of this winter range.

The EA did not provide any monitoring data on the effect of the fire on as winter range, or how this fire affected the extent of exotic vegetation, such as cheatgrass and other weeds. Since the proposed actions will be somewhat similar in effect, it would seem to be important for the agency to provide this information to the public.

The EA never provides any monitoring data, or references any current science, as to what the specific problems are in this landscape for wildlife. How did the

agency determine that the current conditions are causing problems for wildlife? In general, one would not expect trees to be a problem for wildlife, especially juniper which is a highly valuable resource for wildlife, not just for forage, including berries, but as hiding and thermal cover. How has the agency determined that hiding cover are too high in this winter range? What are the objectives for hiding and thermal cover which are the target for management intervention?

The proposed action is very extensive for conclusions that it will not significantly change and degrade conditions for wildlife. It is not clear how this was determined. For example, treatment of 1,666 acres within the 3,955 acre project area is a significant acreage for wildlife. These treatments include pre-felling 60-85% of the juniper followed by burning; mastication vehicles will also be used which will provide additional disturbance for weeds on these 263 acres. A larger treatment area of 1,019 acres will remove up to 60% of the juniper; mastication vehicles will be required in some areas, and slash piles will require burning; large fuels will be left on site; it is not clear why these dried large fuels will not increase, rather than reduce fuels. In the third treatment area of 384 acres, shrubs will

be masticated and broadcast burned, and small areas of juniper will also be slashed and burned.

The EA lacks some important information, such as what species of shrubs are going to be slashed and burned. Why aren't these shrubs being used by wildlife? The EA states that these shrubs will be replaced with seedings of "desirable" plant species for wildlife. However, there is no formation as to what these plant species are, and why they will have more value to wildlife than the existing shrubs and juniper that are to be removed.

Overall, this EA is a violation of the NEPA because the public is provided essentially no information as to why this project will benefit wildlife. This project is defined as "wildlife habitat improvement activities." At a minimum, the agency needs to demonstrate to the public that this is in fact the case. The EA also did not provide any information as to how the resource

specialists determined that the project will not lead to any significant effects on wildlife. These conclusions need to be documented for the public, including criteria that were used and evaluated to measure levels of significant impact. As just one question, if the Forest Plan standard to manage this area to promote big game species on their winter range is not being followed, this would most likely trigger significant impacts. It seems like that this is an intentional Forest Plan violation to promote livestock grazing over wildlife in this landscape. Juniper removal has been a long- standing practice to promote livestock grazing, not wildlife. The EA did not discuss the current grazing use of this area by livestock. This information needs to be included as important information to the public.

Finally, the EA is a violation of the NEPA because the fact that these activities are being planned in the IRAs without and analysis of the impact of the project on wilderness characteristics and where they will be.

There is not enough explanation to demonstrate that this project complies with the Roadless Rule. This is clearly a violation of the Roadless Area Conservation Rule, as the agency is imposing artificial management activities in areas that are to be maintained via natural processes. The scientific basis for implementing management actions in this IRA needs to be fully provided to the public. In particular, the massive increase of exotic grasses within an IRA is hardly a restoration activity.

There is no information ever provided as to what the vegetation types are in the areas not proposed for treatment. What was the basis for determining areas for treatment. It seems likely that the nontreatment areas lack any shrubs and trees. If

this is the case, the claims that diversity will be increased by expanding treeless areas in this winter range

Overall, the EA is devoid of any useful information to the public as to why this project enhances wildlife habitat, or is needed to maintain natural ecosystem processes within an IRA. It is clear that this project requires much more information to be provided to the public, and much more documentation to justify vegetation management within IRAs. And as previously noted, the criteria which the resource specialists used to estimate the level of impact needs to be provided, as well, to the public. It seems readily apparent that this project requires at a minimum an environmental assessment in order to comply with the NEPA, including the provision of valid, reliable information to the public when the Forest Service is planning resource management activities.

The Forest Service's representations and/or omissions in the EA, and its authorizations regarding tree cutting in an Inventoried Roadless Area, violate NEPA, the APA, and the Roadless Rule.

In the late 1990s, the Forest Service reached several findings regarding roads on National Forest lands: (1) use of the National Forests had "shifted substantially toward recreation," (2) there were insufficient funds to maintain existing roads, and (3) there was an "accumulation of new scientific information" suggesting that "ecological impacts from existing roads are more extensive than previously thought." Alaska v. USDA, 273 F.Supp.3d 102, 108 (D.D.C. 2017)(quoting 63 Fed. Reg. 4350, 4350 (Jan. 28, 1998)). Subsequently, on January 12,

2001, the Forest Service published the final Roadless Rule. 66 Fed.

Reg. 3244 (Jan. 12, 2001). The Roadless Rule prohibits road construction and tree cutting in designated "Inventoried Roadless Areas" subject to limited exceptions. See Alaska, 273 F.-Supp.3d at 108.

For over 15 years, the Roadless Rule was the subject of litigation. See, e.g., Kootenai Tribe of Idaho v. Veneman, 313 F.3d 1094, 1126 (9th Cir. 2002); California ex rel. Lockyer v. USDA., 575 F.3d 999, 1007 (9th Cir. 2009); Wyoming v. USDA, 661 F.3d 1209, 1272 (10th Cir. 2011); Organized Vill. of Kake v. USDA, 795 F.3d 956, 962 (9th Cir. 2015) (en banc); Alaska, 273 F.Supp.3d at 108–12. The Roadless Rule withstood these legal challenges. In relevant part, regarding the prohibition on tree cutting, the Roadless Rule mandates:

Prohibition on timber cutting, sale, or removal in inventoried roadless areas.

(a) Timber may not be cut, sold, or removed in inventoried roadless areas of the National Forest System, except as provided in paragraph (b) of this section.

(b) Notwithstanding the prohibition in paragraph (a) of this section, timber may be cut, sold, or removed in inventoried roadless areas if the Responsible Official determines that one of the following circumstances exists. The cutting, sale, or removal of timber in these areas is expected to be infrequent.

(1) The cutting, sale, or removal of generally small diameter timber is needed for one of the following purposes and will

maintain or improve one or more of the roadless area characteristics as defined in § 294.11.

(i) To improve threatened, endangered, proposed, or sensitive species habitat; or

(ii) To maintain or restore the characteristics of ecosystem composition and structure, such as to reduce the risk of uncharacteristic wildfire effects, within the range of variability that would be expected to occur under natural disturbance regimes of the current climatic period;

(2) The cutting, sale, or removal of timber is incidental to the implementation of a management activity not otherwise prohibited by this subpart;

... .
36 C.F.R. §294.13 (2005)(emphases added).

The Roadless Rule further explains the meaning of the phrase "incidental to" in subsection (b)(2) above as follows:

Paragraph (b)(2) allows timber cutting, sale, or removal in inventoried roadless areas when incidental to implementation of a management activity not otherwise prohibited by this rule. Examples of these activities include, but are not limited to trail construction or maintenance; removal of hazard trees adjacent to classified road for public health and safety reasons; fire line construction for wildland fire suppression or control of prescribed fire; survey and maintenance of property boundaries; other authorized activities such as ski runs and utility corridors; or for road construction and reconstruction where allowed by this rule.

66 Fed. Reg. 3258.
In this project, the Project area is located thoughout the Ashley National Forest including in Inventoried Roadless Area. B2b:0004747. The Project allows tree-cutting in this Inventoried Roadless Areas across the forest.

It is unclear whether the Forest Service will be reconstructing old roads, using illegal user-created roads, or using roads already closed by the Travel Plan in the Inventoried Roadless Area in order to conduct these activities.

One exception to the ban on tree-cutting in a Roadless Area is the allowance for tree cutting when it "is needed . . . [t]o maintain or restore the characteristics of ecosystem composition and structure . . . within the range of variability that would be expected to occur under natural disturbance regimes. . . ." 36 C.F.R. §294.13 (b)(1)(ii). Thus, in order to determine whether the "outside historic range of variability" exception applies, it is necessary to compare the existing condition to the historic range.

There is no mention of this in the EA or the Roadless Evaluation.

Tree-cutting is not "incidental to" another management activity; it is the management activity. The Forest Service fails to acknowledge that the Roadless Rule provides a narrow definition of the phrase "incidental to" in the (b)(2) exemption:

Paragraph (b)(2) allows timber cutting, sale, or removal in inventoried roadless areas when incidental to implementation of a management activity not otherwise prohibited by this rule. Examples of these activities include, but are not limited to trail

construction or maintenance; removal of hazard trees adjacent to classified road for public health and safety reasons; fire line construction for wildland fire suppression or control of prescribed fire; survey and maintenance of property boundaries; other authorized activities such as ski runs and utility corridors; or for road construction and reconstruction where allowed by this rule.

The Forest Service's interpretation of exemption (b)(2) is contrary to the explanation of "incidental to" in the Roadless Rule, and if adopted, would swallow the rule. The Forest Service could simply avoid the tree-cutting ban by labeling every tree-cutting activity in a Roadless Area as something other than tree-cutting – such as "restoration" – and thereby circumvent the ban with euphemisms. This is clearly not the intent of the Roadless Rule. 66 Fed. Reg. 3258. Accordingly, the (b)(2) exemption does not apply here.

What evidence to you have that supports your contention that the area used to have a fragrant fire regime that burned light surface fuel?

Schoennagel et al (2004) states: "we are concerned that the model of historical fire effects and 20th-century fire suppression in dry ponderosa pine forests is being applied uncritically across all Rocky Mountain forests, including where it is inappropriate.

Schoennagel et al (2004) states: "High-elevation subalpine forests in the Rocky Mountains typify ecosystems that experience infrequent, high-severity crown fires []. . . The most extensive subalpine forest types are composed of Engelmann spruce (Picea engelmannii), subalpine fir (Abies lasiocarpa), and lodgepole pine (Pinus contorta), all thin-barked trees easily killed by fire. Extensive stand- replacing fires occurred historically at long s (i.e., one to many centuries) in subalpine forests, typically in association with infrequent high-pressure blocking systems that promote extremely dry regional climate patterns."

Schoennagel et al (2004) states: "it is unlikely that the short period of fire exclusion has significantly altered the long fire intervals in subalpine forests. Furthermore, large, intense fires burning under dry conditions are very difficult, if not impossible, to suppress, and such fires account for the majority of area burned in subalpine forests.

Schoennagel et al (2004) states: "Moreover, there is no consistent relationship between time elapsed since the last fire and fuel abundance in subalpine forests, further undermining the idea that years of fire suppression have caused unnatural fuel buildup in this forest zone."

Schoennagel et al (2004) states: "No evidence suggests that spruce–fir or lodgepole pine forests have experienced substantial shifts in stand structure over recent decades as a result of fire suppression. Overall, variation in climate rather than in fuels appears to exert the largest influence on the size, timing, and severity of fires in subalpine forests [].

We conclude that large, infrequent standreplacing fires are 'business as usual' in this forest type, not an artifact of fire suppression.".

Schoennagel et al (2004) states: "Contrary to popular opinion, previous fire suppression, which was consistently effective from about 1950 through 1972, had only a minimal effect on the large fire event in 1988 []. Reconstruction of historical fires indicates that similar large, high-severity fires also occurred in the early 1700s []. Given the historical range of variability of fire regimes in high-elevation subalpine forests, fire

behavior in Yellowstone during 1988, although severe, was neither unusual nor surprising."

Schoennagel et al (2004), please find attached, states: "Mechanical fuel reduction in subalpine forests would not represent a restoration treatment but rather a departure from the natural range of variability in standstructure."

Schoennagel et al (2004) states: "Given the behavior of fire in Yellowstone in 1988, fuel reduction projects probably

will not substantially reduce the frequency, size, or severity of wildfires under extreme weather conditions."

Schoennagel et al (2004) states: "The Yellowstone fires in 1988 revealed that variation in fuel conditions, as measured by stand age and density, had only minimal influence on fire behavior. Therefore, we expect fuel- reduction treatments in high-elevation forests to be generally unsuccessful in reducing fire frequency, severity, and size, given the overriding importance of extreme climate in controlling fire regimes in this

zone. Thinning also will not restore subalpine forests, because they were dense historically and have not changed significantly in response to fire suppression. Thus, fuel- reduction efforts in most Rocky Mountain subalpine forests probably would not effectively mitigate the fire hazard, and these efforts may create new ecological problems by moving the forest structure outside the historic range of variability."

Likewise, Brown et al (2004) states: "At higher elevations, forests of subalpine fir, Engelmann spruce, mountain hemlock, and lodgepole or whitebark pine predominate. These forests also have long fire return intervals and contain a high proportion of fire sensitive trees. At periods

averaging a few hundred years, extreme drought conditions would prime these forests for large, severe fires that would tend to set the forest back to an early successional stage, with a large carry- over of dead trees as a legacy of snags and logs in the regenerating forest . . . . natural ecological dynamics are largely preserved because fire suppression has been effective for less than one natural fire cycle. Thinning for restoration does not appear to be appropriate in these forests. Efforts to manipulate stand structures to reduce fire hazard will not only be of limited effectiveness but may also move systems away from pre-1850 conditions to the detriment of wildlife and watersheds." "Fuel levels may suggest a high fire 'hazard' under conventional assessments, but wildfire risk is typically low in these settings."

Likewise, Graham et al (2004) states: "Most important, the fire behavior characteristics are strikingly different for cold (for example, lodgepole pine, spruce, subalpine fir), moist (for ex-

ample, western hemlock, western redcedar, western white pine), and dry forests. Cold and moist forests tend to have long fire- return intervals, but fires that do occur tend to be high-intensity, stand-replacing fires. Dry forests

historically had short intervals between fires, but most important, the fires had low to moderate severity."

According to Graham et al (2004), thinning may also increase the likelihood of wildfire ignition in the type of forests in this Project area: "The probability of ignition is strongly related to fine fuel moisture content, air temperature, the amount of shading of surface fuels, and the occurrence of an ignition source (human or lightning caused) . . . . There is generally a warmer, dryer microclimate in more open stands (fig. 9) compared to denser stands. Dense stands (canopy cover) tend to provide more shading of fuels, keeping relative humidity higher and air and fuel temperature lower than in more open stands. Thus, dense stands tend to maintain higher surface fuel moisture contents compared to more open stands. More open stands also tend to allow higher wind speeds that tend to dry fuels compared to dense stands. These factors may increase probability of ignition in some open canopy stands compared to dense canopy stands."

Please analyze the wilderness characteristic of the both the inventoried and uninventoried roadless areas and wilderness study areas in the project area. The roadless areas are proposed as wilderness in the Northern Rockies Ecosystem Protection Act, H.R. 1321 and S. 827.

The Forest Service recognizes the value of forestland unencumbered by roads, timber harvest, and other development. Sometimes these areas are known as "inventoried roadless areas" if they have been inventoried through the agency's various Roadless Area Review Evaluation processes, or "unroaded areas" if they have not been inventoried but are still of significant size and ecological significance such that they are eligible for congressional designation as a Wilderness Area.

Roadless areas provide clean drinking water and function as biological strongholds for populations of threatened and endangered species. Special Areas; Roadless Area Conservation; Final Rule, 66 Fed. Reg. 3,244, 3,245 (Jan. 12, 2001) (codified at 36 C.F.R. Part 294). They provide large, relatively undisturbed landscapes that are important to biological diversity and the long- term survival of many at-risk species. Id. Roadless areas provide opportunities for dispersed outdoor recreation, opportunities that diminish as open space and natural settings are developed elsewhere. Id. They also serve as bulwarks against the spread of non-

native invasive plant species and provide reference areas for study and research. Id.

Other values associated with roadless areas include: high quality or undisturbed soil, water, and air; sources of public drinking water; diversity of plant and animal communities; habitat for threatened, endangered, proposed, candidate, and sensitive species and for those species dependent on large, undisturbed areas of land; primitive, semi-primitive non-motorized, and semi-primitive motorized classes of dispersed recreation; reference landscapes; natural appearing

cultural properties and sacred sites; and other locally identified unique characteristics.

We request a careful analysis of the impacts to fisheries and water quality, including considerations of sedimentation, increases in peak flow, channel stability, risk of rain-on- snow events, and increases in stream water temperature. Please disclose the locations of seeps, springs, bogs and other sensitive wet areas, and the effects on these areas of the project activities. Where livestock are permitted to graze, we ask that you assess the present condition and continue to monitor the impacts of grazing activities upon vegetation diversity, soil compaction, stream bank stability and subsequent sedimentation. Livestock grazing occurs in the Project area and causes sediment impacts, trampled or destabilized banks, increased nutrient loads i, and decreased density, diversity, and function of riparian vegetation that may lead to increased stream temperatures and further detrimental impacts to water quality.

This project is a violation of the National Environmental Policy Act (NEPA). It is far too large for the agency to provide adequate information to the public, and far too large for the public to understand how the project will impact natural resources. As an example, we expect that there will not be anything close to valid wildlife surveys, including for the goshawk, great gray owl, black-backed woodpecker, and other sensitive/ management indicator species and Montana Species of Concern, as the brown creeper and Cassin's finch, and several species of bats.

This information needs to be provided to the public before a decision is made so that the public can understand how the agency is managing these wildlife resources. Saying that surveys will be completed later denies the public the information as to occupancy of the project areas by wildlife, which is a NEPA violation.

The Project will violate the NEPA if there are no valid snag surveys done for the project area both within and outside proposed harvest units.

The project will violate the NEPA if there are no valid surveys for old growth habitat within each project area, as identified by Green et al. 1992; old growth types need to be defined and quantified by timber types, such as lodgepole pine, Douglas-fir, mixed conifer, spruce, subalpine fir, and limber pine.

The project will likely violate the NEPA if the mitigation measures for MIS, sensitive species, and Idaho Species of Concern (birds, mammals including bats) are not clearly defined, and demonstrated to be effective as per the current best science.

The Forest Service did not respond to our comments in violation of NEPA.

The SWIRL project does not demonstrate it is complying with the Idaho Roadless Rule. It does not explain what different types of roadless areas are in the project area and what the decision athorizes in each roadless area in violation of the Idaho Roadless Rule, NEPA, NFMA, the APA, the ESA, the Migratory Bird treaty Act and the Clean Water Act.

Idaho's roadless rule (Idaho Rule) established five different management classifications within IRAs: Wild Land Recreation; Special Areas of Historic or Tribal Significance; Primitive; Backcountry/Restoration; and General Forest, Rangeland, and Grassland. The Idaho Rule specifies a "management continuum" across these classifications related to the extent certain activities may occur. Across the general categories mentioned above, the Idaho Rule places fewer restrictions on activities in General Forest, Rangeland, or Grassland areas and more restrictions on Wild Land Recreation areas. The FS identified 9.3 million IRA acres in Idaho that were subject to the Idaho Rule. The Idaho Rule was applied to approximately 9.0 million acres. The remaining acres, deemed forest plan special areas, were excluded.

The Draft decison notice and the EA do not state what is being done in the different type of roadless areas. Therefore the public can not be sure that the project is complying with the Idaho roadless rule.

Page 36 of the EA states:

Greater sage-grouse (*Centrocercus urophasianus)* — May Impact Individuals or Habitat

General habitat for the greater sage-grouse is sagebrush, including foothills, plains, and mountain slopes often with a mixture of meadows and aspen in close proximity (NatureServe 2022). Brood-rearing habitat requires a sagebrush overstory, herbaceous understory, and plenty of insects to provide a high-protein diet for broods. Summer brood habitat consists of sagebrush mixed with areas of wet meadows, riparian areas, or irrigated fields.

Disturbance from project activities could temporarily displace individual greater sage-grouse. Adults and fledged young are expected to escape harm and find adjacent available habitat during project implementation. Reproduction is unlikely to be impacted because lek sites are protected by a 3.1-mile buffer during the breeding season (appendix B). Prescribed burning in sagebrush communities will occur only when the objective is specifically to enhance sagebrush-dominated habitats and will be implemented using measures to reduce short- and long-term adverse impacts on habitat (appendix B). Therefore, loss of viability of greater sage-grouse within the planning area is unlikely to occur.

How many nests will the project burn? How birds will be killed by either fire or smoke from the project? What birds will be affected by the project?

REMEDY

Choose the No Action Alternative or withdraw the Draft Decision Notice and Write an EIS that demonstrates that the SWIRL Project fully complies with the law including the Idaho Roadless Rule, NEPA, NFMA, the ESA, the Clean Water Act, the Migratory Bird Treaty Act, and the Sage Grouse Forest Plan Amendment.

The Migratory Bird Treaty Act (MBTA) prohibits the take (including killing, capturing, selling, trading, and transport) of pro-

tected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service.

Please consult with the U.S. FWS to get a take permit to comply with the Migratory Bird Treat Act since the project will burn up nests of migratory birds.

We wrote in our comments:

FAILURE TO REVIEW AND PROTECT CULTURAL AND HISTORICAL RESOURCES

Consultation with the State Historic Preservation Office (SHPO) must be completed prior to a decision being signed. Any required protection measures provided from SHPO will be incorporated into my final decision.

Crucial to the preservation of the historical and cultural foundations of the nation, Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations, 36 C.F.R. Part 800 (PDF) (revised August 5, 2004) require Federal agencies to consider the effects of projects they carry out, approve, or fund on historic properties. Additionally, Federal agencies must provide the Advisory Council on Historic Preservation (ACHP) opportunity to comment on such projects prior to the agency's final decision.

A Federal project that requires review under Section 106 is defined as an "undertaking." An undertaking means a project,

activity or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; and those requiring a Federal permit, license, or approval.

Section 110 of the NHPA

Added to the NHPA in 1992, Section 110 requires Federal agencies to emphasize the preservation and enhancement of cultural resources. Section 110 directs agencies to initiate measures necessary to direct their policies, plans, and programs in such a way that federally-owned sites, structures, and objects of historical architectural or archaeological significance are preserved, restored, and maintained for the inspiration and benefit of the public. The agencies are also encouraged to institute (in consultation with the ACHP) procedures to assure Federal plans and programs contribute to the preservation and enhancement of non-Federally owned sites, structures, and objects of historical, architectural, and archaeological significance.

The ID SHPO has not yet received this survey. Currently this project is in violation of the National Historic Preservation Act and NEPA. The cultural surveys need to be done before the NEPA and NHPA process can be completed, which has not occurred. The project must be approved by the SHPO and the public needs to given a chance to comment on this.

The Forest Service did not respond to our comments in violation of NEPA.

Page 39 of the EA states:

The forest intends to implement a phased approach in compliance with Section 106 of the National Historic Preservation Act. This phased approach is permitted and outlined in 36 CFR 800.4(b)(2).

Consultation with the State Historic Preservation Office has not been initiated yet. Full Section 106 compliance surveys, site identification, reporting, and consultation will occur after individual treatment projects are identified and prior to the implementation of the projects. The phased approach and the design elements outlined in this environmental assessment provide for the protection of all historic properties, as well as current and future compliance with Section 106 of the National Historic Preservation Act.

This is a violation of NEPA and the National Historic Preservation Act because the public can not ensure that the project is complying with the National Historic Preservation Act since everything the Forest Service wrote on page 39 will supposedly happen in the future after the decision is signed.

REMEDY

Choose the No Action Alternative or withdraw the Draft Decision Notice and Write an EIS that fully complies with the law including NEPA and the National Historic Preservation Act.

We wrote in our comments:

Did the Forest Service conduct NEPA analysis (i.e. an EA or EIS) for the Fire Plan the Forest is using for this project? To not respond to this in violation of NEPA, NFMA, and the APA.

If the Forest Service did not conduct NEPA for the Fire Plan, please immediately start that NEPA process.

Please provide a map showing the WUI and the locations of all homes in comparison to the project area.

If the Forest Service did not conduct NEPA for the Fire Plan, please disclose the cumulative effects of Forest-wide implementation of the Fire Plan in the South Plateau project EIS, or EA if you refuse to write an EIS, to avoid illegally tiering to a non-NEPA document. Specifically analyze the decision to prioritize mechanical, human- designed, somewhat arbitrary treatments as a replacement for naturally-occurring fire.

Did the Forest Service conduct ESA consultation for the Fire Plan?

The Forest Service did not respond to our comments in violation of NEPA.

REMEDY

Choose the No Action Alternative or withdraw the Draft Decision Notice and Write an EIS that fully complies with the law including NEPA

We wrote in our comments:

Will the Forest Service be considering binding legal standards for noxious weeds in its revision of the Boise Forest Plans?

How effective have BMPs been at stopping (i.e. preventing) new weed infestations from starting during prescribed burning and related road operations?

Is it true that new roads are the number one cause of new noxious weed infestations?

Why isn't the Forest Service considering a Forest Plan amendment in this Project to amend the Forest Plan to include binding legal standards that address noxious weeds?

Is it true that noxious weeds are one of the top threats to biodiversity on our National Forests?

How can the Forest Service be complying with NFMA's requirement to maintain biodiversity if it has no legal standards that address noxious weeds?

What MIS did you find, how many and how did you look for these MIS?

How will the decreased elk security and thermal cover affect wolverines? Please formally consult with the US FWS on the impact of this project on wolverines.

Which wildlife species and ecosystem processes, if any, does fire-proofing benefit?

Which species and processes do fire-proofing harm?

What evidence do you have that this prescribed will make the forest healthier for fish and wildlife? What about the role of mixed severity and high severity fire – what are the benefits of those natural processes? You didn't answer this.

How have those processes (mixed and high severity fire) created the ecosystems we have today?

Over how many millennia have mixed and high severity fire have been occurring without human intervention?

Will all WQLS streams in the project area have completed TMDLs before a decision is signed?

Will this project leave enough snags to follow the Forest Plan requirements and the requirements of sensitive old growth species such as flammulated owls and goshawks?

Is this Project consistent with "research recommendations (Krankina and Harmon 2006) for protecting carbon gains against the potential impacts of future climate change? That study recommends "[i]ncreasing or maintaining the forest area by avoiding deforestation," and states that "protecting forest from logging or clearing offer immediate benefits via prevented emissions."

Please list each visual quality standard that applies to each unit and disclose whether each unit meets its respective visual quality standard.

Please disclose whether you have conducted surveys in the Project area for this Project for whitebark pine, northern Idaho ground squirrel, wolverines, pine martins, northern goshawk, Snake River Summer Steelhead Trout, Snake River Spring/Summer Chinook Salmon, and bull trout as required by the Forest Plan.

Please disclose the last time the Project area was surveyed for whitebark pine, northern Idaho ground squirrel, wolverines, pine martins, northern goshawk, lynx, Snake River Spring/ Summer Chinook Salmon, and bull trout.

Please disclose how often the Project area has been surveyed for Snake River Spring/Summer Chinook Salmon, Snake River Summer Steelhead Trout, whitebark pine, northern Idaho ground squirrel, wolverines, pine martins, northern goshawks, lynx, and bull trout.

Would the habitat be better for whitebark pine, Snake River Summer Steelhead Trout, wolverines, pine martins, northern goshawks, lynx, northern Idaho ground squirrel, Snake River Spring/Summer Chinook Salmon, and bull trout if roads were removed in the Project area?

Please provide us with the full BA for the Snake River Summer Steelhead Trout , Snake River Spring/Summer Chinook Salmon, whitebark pine, wolverines, pine martins, northern goshawks, lynx, and bull trout.

The Forest Service did not respond to our comments in violation of NEPA.

The habitat for the threatened bull trout, including critical habitat, is not identified in the scoping notice; this important information needs to be identified to the public in a scoping notice, including specific information on how habitat for this threatened fish has been managed in the past; it seems highly likely that this project represents a violation of the Endangered Species Act (ESA) in regards to bull trout.

Bull trout are not doing well in most of the waterways they occupy. The scoping notice needs to address the current status of this threatened species in the project area, and what any of the ongoing problems are believe to be.
Then the EA needs to define how these problems will be corrected, or fish habitat quality "restored," with this proposal. It seems highly unlikely that this project will benefit the bull trout in any manner,
given the massive sedimentation that will be caused from building vast miles of new roads, along with vast acres of logging and prescribed burning.

Overall, it is not clear how this restoration project has been designed with bull trout in mind.

Because the project will kill more than 125 whitebark pine trees you must consult with the Fish and Wildlife Service on the impact of the project and tell the public exactly where all the whitebark trees are. Do do this you first need to survey for whitebark pine.

Not all ecosystems or all Rocky Mountain landscapes have experienced the impacts of fire exclusion. In some wilderness areas, where in recent decades natural fires have been allowed to burn, there have not been major shifts in vegetation composition and structure (Keane et al. 2002). In some alpine ecosystems, fire was never an important ecological factor. In some upper subalpine ecosystems, fires were important, but their rate of occurrence was too low to have been significantly altered by the relatively short period of fire suppression (Keane et al. 2002).

For example, the last 70 to 80 years of fire suppression have not had much influence on subalpine landscapes with fire intervals of 200 to several hundred years (Romme and Despain).

Consequently, it is unlikely that fire exclusion has yet to significantly alter stand conditions or forest health within Rocky Mountain subalpine ecosystems.

Whitebark pine seedlings, saplings and mature trees, present in subalpine forests proposed for burning, would experience mortality from project activity. Whitebark pine is fire intolerant (thin bark). Fire favors whitebark pine regeneration (through canopy opening and reducing competing vegetation) only in the presence of adequate seed source and dispersal mechanisms (Clarks Nutcracker or humans planting whitebark pine seedlings).

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

Mountain pine beetle prefer large, older whitebark pine, which are the major cone producers. In some areas the few remaining

whitebark that show the potential for blister rust resistance are being attacked and killed by mountain pine beetles, thus accelerating the loss of key mature cone- bearing trees.

Whitebark pine seedlings and saplings are very likely present in the subalpine forests proposed for burning and logging. In the absence of fire, this naturally occurring white- bark 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 regeneration in the project area is prospective rust resistant stock.

Although prescribed burning can be useful to reduce areas of high-density subalpine fir and spruce and can create favorable ecological conditions for whitebark pine regeneration 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. Please find Keane and Arno attached.

Planting of rust-resistant seedlings would likely not be sufficient to replace whitebark pine lost to fire activities.

What surveys have been conducted to determine presence and abundance of whitebark pine re-generation? It appears that you won't do surveys in violation of the ESA, NEPA, NFMA and the APA. If whitebark pine seedlings and saplings are present, what measures will be taken to protect them? Please include an alternative that excludes burning in the presence of whitebark pine regeneration (consider 'Daylighting' seedlings and saplings as an alternative restoration method). Will restoration efforts include planting whitebark pine? Will planted seedling be of rust-resistant stock? Is rust resistant stock available? Would enough seedlings be planted to replace whitebark pine lost to fire activities? Have white pine blister rust surveys been accomplished?

What is the severity of white pine blister rust in proposed action areas?

Does the Boise N.F. have any forest plan biological assessment, biological opinion, incidental take statement, and management direction amendment for whitebark pine?

Please see the attached paper by Six et al 2021 Whitebark Genetics 2021. Six et at found:

Anthropogenic change is creating or enhancing a number of stressors on forests. To aid forests in adapting to these stressors, we need to move beyond traditional spacing and age- class prescriptions and take into account the genetic variability within and among populations and the impact our actions may have on adaptive potential and forest trajectories. Because so little is known about the genetic diversity in most forest trees, and because it is key to effective conservation, studies of genetic diversity and structuring in forest trees should be a top priority in forest adaptation and conservation efforts.

The project is not following the best available science and is not meeting the purpose and need. Since Whitebark pine are now proposed to be listed under the ESA, you must formally recon-

sult 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 is incorrect when it states that the project will have "No significant effects would result from this project or cumulatively with other activities on National Forest or adjacent lands that would affect at-risk plant species' ability to persist on the landscape."

Since you have done no surveys of whitebark pine what is the basis of the "No effect" statement?

Please formally consult with the FWS on the impact of the project on Whitebark pine.

Since whitebark pine are very slow growing trees and take years to mature, what scientific evidence to you have to back up the idea that the project will not effect whitebark pine?

Six et al. 2014 also note:

The hypothesis that light has a strong effect on mountain pine beetle behavior, particularly in reducing attacks, has led to a new treatment called daylighting. This approach is currently being implemented on a broad scale by federal and western state agencies. Daylighting involves removing trees and vegetation from around trees that are targeted for retention and is believed to work by repelling beetles from the boles of trees by increasing light and solar radiation [117]. While widely recommended, the efficacy of this treatment is unknown; there are no published studies on its effects on bark beetles.

Six et al. 2014 found that beetles are selective in killing the least healthy trees but logging occurs without consideration of genetics.

Very importantly, the beetle exercises selectivity in the trees it kills. While extremely high numbers may override this selectivity, evidence is accumulating that, even under outbreak conditions, beetles choose trees that have particular qualities. Beetles commonly select trees for attack that exhibit lower growth rates, defenses, and higher water stress [58,74,77]. While these factors can be influenced both locally and regionally by site conditions and climate, much of the variation in these properties within in-

dividual stands that affect bark beetle choice likely has a genetic basis. Outbreaks can result in strong natural selection against trees with phenotypes (and likely genotypes) favorable for the beetle and for those that possess unfavorable qualities [58,77]. However, when humans thin forests, trees are removed according to size, species, and density, without consideration of genetics. Thus, trees best adapted to surviving beetle outbreaks are as likely to be removed as those that are not.

When humans thin forests, they typically manage for resistance and resilience, rather than adaptation which involves genetic change. It is very important to distinguish between resistance, resilience, and adaptation, as each have different goals and operate on different temporal scales [140]. Resistance is a short-term holding action where we try to maintain an existing state. Approaches focusing on resistance often require massive interventions and increasing physical and financial investments over time. Such approaches may set forests up for future outbreaks [136] and even catastrophic failure as they surpass thresholds in a warming climate [140]. In contrast, practices that promote resilience attempt to allow forests the ability to adjust to gradual changes related to climate change and to recover after disturbance. However, like resistance, resilience is not a long-term solution. In the long term, forests must be able to adapt to change. Adaptation involves genetic change driven by natural selection. Currently, much of forest management, including bark beetle management, focuses on resistance and resilience, mainly through direct and indirect management, respectively. However, neither approach allows for true adaptation. For long term continuity of our forests, it will be imperative to begin to incorporate this aspect of management into our approaches.

Six et al 2014 conclude: One of the biggest problems in assessing the utility of direct controls is a general lack of monitoring or post hoc assessments of the outcomes of implementing these practices. Despite decades of direct control and large-scale implementation of these practices, few rigorous studies on its efficacy have been done and there remains no agreement among scientists or foresters regarding its ability to reduce beetle populations or losses of trees. Studies conducted prior to the current outbreak have variously concluded that direct treatments may merely act to delay infestation of susceptible stands [97], or that if used correctly, can be effective [98,99]. Many studies found that while some treatments slowed the rate of infestation, overall, they had little to no impact on mountain pine beetle populations [97,100–104].

REMEDY

Choose the No Action Alternative or withdraw the Draft Decision Notice and Write an EIS that fully complies with the law including NEPA

We wrote in our comments:

Weeds

Native plants are the foundation upon which the ecosystems of the Forest are built, providing forage and shelter for all native wildlife, bird and insect species, supporting the natural processes of the landscape, and providing the context within which the public find recreational and spiritual opportunities. All these uses or values of land are hindered or lost by conversion of vegetation to invasive and noxious plants. The ecological threats posed by noxious weed infestations are so great that a former chief of the Forest Service called the invasion of noxious weeds "devastating" and a "biological disaster."

Despite implementation of Forest Service "best management practices" (BMPs), noxious weed infestation on the Forest is getting worse and noxious weeds will likely overtake native plant populations if introduced into areas that are not yet infested. The Forest Service has recognized that the effects of noxious weed invasions may be irreversible. Even if weeds are eliminated with herbicide treatment, they may be replaced by other weeds, not by native plant species.

Invasive plant species, also called noxious weeds, are one of the greatest modern threats to biodiversity on earth. Noxious weeds cause harm because they displace native plants, resulting in a loss of diversity and a change in the structure of a plant community. By removing native vegetative cover, invasive

plants like knapweed may increase sediment yield and surface runoff in an ecosystem. As well knapweed may alter organic matter distribution and nutrient through a greater ability to uptake phosphorus over some native species in grasslands. Weed colonization can alter fire behavior by increasing flammability: for example, cheatgrass, a widespread noxious weed on the Forest, cures early and leads to more frequent burning. Weed colonization can also deplete soil nutrients and change the physical structure of soils.

The Forest Service's own management activities are largely responsible for noxious weed infestations; in particular, logging, prescribed burns, and road construction and use create a risk of weed infestations. The introduction of logging equipment and vehicles into the Forest creates and exacerbates noxious weed infestations. The removal of trees through logging and burning can also facilitate the establishment of noxious weed infestations because of soil disturbance and the reduction of canopy closure In general, noxious weeds occur in old clearcuts and forest openings, but are rare in mature and old growth forests. Roads are often the first place new invader weeds are introduced. Vehicle traffic and soil disturbances from road construction and maintenance create ideal establishment conditions for weeds. Roads also provide obvious dispersal corridors. Roadsides throughout the project area are infested with noxious weeds. Once established along roadsides, invasive plants will likely spread into adjacent grasslands and forest openings.

Prescribed burning activities within the analysis area would likely cumulatively contribute to increases to populations. As a

disturbance process, fire has the potential to greatly exacerbate infestations of certain noxious weed species, depending on burn severity and habitat type (Fire Effects Information System 2004). Soil disturbance, such as that resulting from low and moderate burn severities from prescribed fire and fire suppression related disturbances (dozer lines, drop spots, etc.), provide optimum conditions for noxious weed invasion. Dry site vegetation types and road corridors are recent ground disturbance (timber management, road construction) has occurred. Units proposed for burning within project area may have closed forest service access roads (jammers) located within units.

These units have the highest potential for noxious weed infestation and exacerbation through fire activities. Please provide an alternative that eliminates units that have noxious weeds present on roads within units from fire management proposals.

Please address the ecological, social and ascetic impact of current noxious weed infestations within the project area. Include an analysis of the impact of the actions proposed by this project on the long and short term spread of current and new noxious weed infestations. What treatment methods will be used to address growing noxious weed problems? What noxious weeds are currently and historically found within the project area? Please include a map of current noxious weed infestations which includes knapweed, Saint Johnswort, cheat grass, bull thistle, Canada thistle, hawkweed, hound's- tongue, oxeye daisy and all other Category 1, Category 2 and Category 3 weeds classified as noxious in the Idaho COUNTY NOXIOUS WEED LIST. State-listed Category 2 noxious weed

species yellow and orange hawkweeds are recently established (within the last 5 to 10 years) in Montana and are rapidly expanding in established areas. They can invade undisturbed areas where native plant communities are intact. These species can persist in shaded conditions and often grow underneath shrubs making eradication very difficult. Their stoloniferous (growing at the surface or below ground) habit can create dense mats that can persist and spread to densities of 3500 plants per square mile (Thomas and Dale

1975). Are yellow and orange hawkweeds present within the project area?

Please address the cumulative, direct and indirect effects of the proposed project on weed introduction, spread and persistence that includes how weed infestations have been and will be influenced by the following management actions: road construction including new permanent and temporary roads, and skid trails proposed within this project; opening and decommissioning of roads represented on forest service maps; ground disturbance and traffic on forest service template roads, mining access routes, and private roads; removal of trees through prescribed burns. What open, gated, and decommissioned Forest Service roads within the project area proposed as haul routes have existent noxious weed populations and what methods will be used to assure that noxious weeds are not spread into the proposed action units?

Noxious weeds are not eradicated with single herbicide treatments. A onetime application may kill an individual plant but dormant seeds in the ground can still sprout after herbicide

treatment. Thus, herbicides must be used on consistent, repetitive schedules to be effective.

What commitment to a long-term, consistent strategy of application is being proposed for each weed infested area

within the proposed action area? What long term monitoring of weed populations is proposed?

When areas treated with herbicides are reseeded on national forest land, they are usually reseeded with exotic grasses, not native plant species. What native plant restoration activities will be implemented in areas disturbed by the actions proposed in this project? Will disturbed areas including road corridors, skid trails, and burn units be planted or reseeded with native plant species?

The scientific and managerial consensus is that prevention is the most effective way to manage noxious weeds. The Forest Service concedes that preventing the introduction of weeds into uninfested areas is "the most critical component of a weed management program." The Forest Service's national management strategy for noxious weeds also recommends "develop[ing] and implement[ing] forest plan standards . . . ." and recognizes that the cheapest and most effective solution is prevention. Which units within the project area currently have no noxious weed populations within their boundaries? What minimum standards are in the Custer National Forest Plan to address noxious weed infestations? Please include an alternative in the DEIS that includes land management standards that will prevent new weed infestations by addressing the

causes of weed infestation. The failure to include preventive standards violates NFMA because the Forest Service is not ensuring the protection of soils and native

alternative that includes preventive measures would violate NEPA because the Forest Service would fail to consider a reasonable alternative.

Rare Plants

The ESA requires that the Forest Service conserve endangered and threatened species of plants as well as animals. In addition to plants protected under the ESA, the Forest Service identifies species for which population viability is a concern as "sensitive species" designated by the Regional Forester (FSM 2670.44). The response of each of the sensitive plant species to management activity varies by species, and in some cases, is not fully known. Local native vegetation has evolved with and is adapted to the climate, soils, and natural processes such as fire, insect and disease infestations, and windthrow. Any management or lack of management that causes these natural processes to be altered may have impacts on native vegetation, including threatened and sensitive plants. Herbicide application – intended to eradicate invasive plants – also results in a loss of native plant diversity because herbicides kill native plants as well as invasive plants. Although native species have evolved and adapted to natural disturbance such as fire on the landscape, fires primarily occur in mid to late summer season, when annual plants have flowered and set seed. Following fall fires, perennial root-stocks remain underground and plants emerge in the spring. Spring and early summer burns could

negatively impact emerging vegetation and destroy annual plant seed.

What threatened, endangered, rare and sensitive plant species and habitat are located within the proposed project area? What standards will be used to protect threatened, rare, sensitive and culturally important plant species and their habitats from the management actions proposed in this project?

The Forest Service did not respond to our comments in violation of NEPA.

The Forest Service did write on page 32-33 in the EA:

Snake River Spring/Summer Chinook Salmon (Oncorhynchus tshawytscha); Snake River Summer Steelhead Trout (Oncorhynchus mykiss); Columbia River Bull Trout (Salvelinus confluentus) — Threatened: Not Likely to Adversely Affect

Three federally listed fish species (Snake River spring and summer Chinook salmon; Snake River Basin steelhead; Columbia River bull trout) occur and have critical habitat designated within the project area. Potential direct effects from the proposed action to Endangered Species Act listed fish include impingement from water drafting, fuel contamination from portable pumps and hand tools such as chainsaws, as well as felling of trees into stream channels from hand thinning. Potential effects from these activities are mitigated through design elements regarding drafting procedures, fuel handling, and spill containment requirements.

Effects to Watershed Condition Indicators are expected to be insignificant at the subbasin scale and negligible at smaller scales with the implementation of proposed design elements, implementation checklist requirements, and rehabilitation actions.

Design elements may minimize effects to water quality, sediment delivery, temperature, and bank stability. This can be done in a number of ways, including storage of fuels outside of RCAs, approval from a fish biologist when there is no other option, the use of spill containment plans, prohibiting heavy equipment use within 150 feet of waterbodies, prohibiting direct ignition within 30 feet of waterbodies, implementing erosion control measures, and avoiding felling trees providing bank stability or stream shade. Additionally, the project objective of 90 percent or greater low soil burn severity across any 6th level HUC or other sensitive areas, a maximum of 25 percent of any 5th level HUC, and the consideration of other design elements will all keep potential sediment delivery, riparian vegetation losses, and large woody debris consumption low.

The implementation checklist will further minimize effects to Endangered Species Act-listed fish species and their habitat by requiring coordination during roundtable discussions [see appendix C, Boise National Forest - Pre-Implementation Resource Review (Roundtable)]. Roundtable review of proposed projects will facilitate coordination between the fisheries biologist and appropriate specialists. For example, the roundtable review will include the determination of survey needs and of the need for support of fish biologist and hydrologist resource advisors all assigned to specific burns to aid in preplanning for

the fireline location. The resource advisors will provide guidance to avoid contamination of surface waters, on water drafting locations that avoid listed fish habitat, where possible; on fuel and other toxicant storage locations, and on refueling locations. The implementation checklist also requires review by a hydrologist and soils scientist to ensure effects to RCAs and water quality — specifically sediment delivery — will be limited.

Supporting Project Documentation

Project file 20240315_SWIRL_BiologicalAssessment supports the information provided in this section.

REMEDY

Choose the No Action Alternative or withdraw the Draft Decision Notice and Write an EIS that fully complies with the law including NEPA. Also please make available a copy of the Biological Assessment on the project's website so the public see if the project is protecting critical habitat.

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 specific 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, historically 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 areas. Designating critical habitat also provides vital information to local governments and citizens about where important habitat for endangered species is located — and why they should help conserve it.

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

Please write an EIS must fully and completely analyze the impacts to bull trout and salmon critical habitat and westslope cutthroat trout habitat. What is the standard for sediment in the Forest Plan? Sediment is one of the key factors impacting water 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 beyond 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; Newcombe 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 sediment 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 isolating the effects of sediment to fish is difficult (Castro and Reckendorf 1995d, pp. 2-3). The effects of sediment on receiving water ecosystems are complex and multi-dimensional, 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 exposure,

frequency of exposure, toxicity, temperature, life stage of fish, angularity and size of particle, severity/magnitude 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 suspended 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 establish the specific effects of sediment impacts on fish (Chapman 1988, p. 2). For example, excess fines in spawning 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 independent variables with complex inter-relationships that can influence population size.

The ecological dominance of a given species is often determined 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 communities composed of salmonids and nonsalmonids (Everest et al. 1987, p. 120). Bull trout have more spatially restrictive biological requirements at the individual and population 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 deposition.

Aquatic Impacts

• Classify and analyze the level of impacts to bull trout, salmon, 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 produce fish and sustain populations.
Sublethal: Reduction in feeding and growth rates, decrease in habitat quality, reduced tolerance to disease and toxicants, respiratory impairment, and physiological stress. While not leading to immediate death, may produce mortalities and population decline over time.
Behavioral: Avoidance and distribution, homing and migration, and foraging and predation. Behavioral effects change the activity patterns or alter the kinds of activity usually associated with an unperturbed environment. Behavior effects may lead to immediate death or population decline or mortality over time.

Direct effects:
Gill Trauma - High levels of suspended sediment and turbidity 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 sediment 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, undercut banks, boulders, and pools. Other habitat characteristic important to bull trout include channel and hydrologic stability, substrate composition, temperature, and the presence of migration corridors (Rieman and McIntyre 1993, p. 5).

Physiological effects - Sublethal levels of suspended sediment 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 activity, redistribution and migration to other habitats and locations, disruption of terri-

toriality, and altered homing (Anderson, 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 current condition in the riparian areas?
How will this project protect rather than adversely impact fish habitat and water quality? No cutting, burning, or wireline 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 unpredictability 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 delivery regimes. While not specifically evaluated in this study, in general, it appears that
patterns of upland logging space and time may have cumulative 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 setting 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 temperatures, 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 native fish will be killed during the implementation of the project?

Will this project adversely modify bull trout and salmon critical habitat in the short run?
Please find attached Dr. Frissell's comments on bull trout restoration.

We wrote in our comments:

Whitebark Pine

Not all ecosystems or all Rocky Mountain landscapes have experienced the impacts of fire exclusion. In some wilderness areas, where in recent decades natural fires have been allowed to burn, there have not been major shifts in vegetation composition and structure (Keane et al. 2002). In some alpine ecosystems, fire was never an important ecological factor. In some upper subalpine ecosystems, fires were important, but their rate of occurrence was too low to have been significantly altered by the relatively short period of fire suppression (Keane et al. 2002). For example, the last 70 to 80 years of fire sup-

pression have not had much influence on subalpine landscapes with fire intervals of 200 to several hundred years (Romme and Despain).

Consequently, it is unlikely that fire exclusion has yet to significantly alter stand conditions or forest health within Rocky Mountain subalpine ecosystems.

Whitebark pine seedlings, saplings and mature trees, present in subalpine forests proposed for burning, would experience mortality from project activity. Whitebark pine is fire intolerant (thin bark). Fire favors whitebark pine regeneration (through canopy opening and reducing competing vegetation) only in the presence of adequate seed source and dispersal mechanisms (Clarks Nutcracker or humans planting whitebark pine seedlings).

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

Whitebark pine seedlings and saplings are very likely present in the subalpine forests proposed for burning and logging. In the absence of fire, this naturally occurring whitebark pine re-generation 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 regeneration in the project area is prospective rust resistant stock.

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

What surveys have been conducted to determine presence and abundance of whitebark pine re-generation? If whitebark pine seedlings and saplings are present, what measures will be taken to protect them? Please include an alternative that excludes burning in the presence of whitebark pine regeneration (consider 'Daylighting' seedlings and saplings as an alternative restoration method). Will restoration efforts include planting whitebark pine? Will planted seedling be of rust- resistant stock? Is rust resistant stock available? Would enough seedlings be planted to replace whitebark pine lost to fire activities? Have white pine blister rust surveys been accomplished?

What is the severity of white pine blister rust in proposed action areas?

The Forest Service did not respond to our comments in violation of NEPA.

Page 11 of the EA states:

Whitebark pine stands

Pre-treatment actions and prescribed fire applications would only occur in occupied late seral and climax whitebark pine habitats when determined necessary by a forest botanist, ecologist, or silviculturist to meet restoration and recovery objectives. These objectives must be consistent with Current and Recommended Management Practices for the Restoration of Whitebark Pine (Tomback et al. 2022) and the National Whitebark Pine Restoration Plan (Tomback and Sprague 2022).

There is no map showing where whitebark pine stands are. There is no evidence that the project area has been surveyed for whitebark pine.

Page 12 of the EA states:

For more information regarding the Boise National Forest's whitebark pine conservation approach, including reforestation efforts and resistance to white pine blister rust, see the whitebark pine restoration and recovery section in the project's biological assessment.

The problem with directing the public to ***"see the whitebark pine restoration and recovery section in the project's biological assessment."*** is the project's biological assessment is not on the project's website and is therefore not available for the public to see and comment on in violation of NEPA and the ESA.

REMEDY

Choose the No Action Alternative or withdraw the Draft Decision Notice and Write an EIS that fully complies with the law including NEPA

Thank you for your time and consideration of our concerns.

Sincerely yours,

/s/

Mike Garrity

Executive Director

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