Objection against the Caribou Prescribed Fire Restoration Project

To: Objection Reviewing Officer USDA Forest Service Intermountain Region 324 25th Street Ogden, Utah 84401

Thank you for this opportunity to object to the Caribou Prescribed Fire Restoration Project. Please accept this attached objection in pdf format from me on behalf of the Alliance for the Wild Rockies, Native Ecosystem Council, Yellowstone to Uintas Connection, and Wildlands Defense.

1. Objector's Name and Address:

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

And for

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

And for

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



And for

Katie Fite
WildLands Defense

Signed this 14th day of February, 2022 for Objectors

/s/ Michael Garrity

2. Name of the Proposed Project

Caribou Prescribed Fire Restoration Project

3. Location of Project, Name and Title of Responsible Official Caribou National Forest-wide, District: Soda Springs Ranger District, Montpelier Ranger District, Westside Ranger District Counties: Bannock, Bear Lake, Caribou and Franklin Counties in Idaho and Lincoln County in Wyoming

Mel Bolling, Sawtooth Supervisor Caribou-Targhee National Forest 1405 Hollipark Drive Idaho Falls, ID 83401

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

AWR, Y2U, NEC, and Wildlands Defense provided comments on the proposed project on September 4, 2021, and on September 30, 2021.

We wrote in our comments:

Please accept these comments from me on behalf of the Alliance for the Wild Rockies (AWR), Yellowstone to Uintas Connection, Wildlands Defense, and Native Ecosystems Council (NEC) on the proposed Caribou Prescribed Fire Restoration Project. I am also sending via U.S. mail a copy of Chad Hanson's book, "Smokescreen, Debunking Myths to Save our Forests and our Climate." Please include this book in the project record as part of our comments.

I mailed Dr. Hanson's book "Smokescreen" and also "Fire Ecology in Rocky Mountain Landscapes" by Dr. William Baker via U.S. mail to be included in our objection.

Dr. Hanson addressed the myth that forest are not resilient. He writes on page 52, "The problem is when prescribed fire is deployed across expanses of forestland as part of a management paradigm designed to suppress mixed-intensity wildland fires, it mimics neither indigenous culture burning or natural lighting-ignited fires.

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The Alliance for the Wild Rockies, Yellowstone to Uintas Connection 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 for the Project.

- I. NECESSARY ELEMENTS FOR PROJECT EIS: A. Disclose all Caribou-Targhee 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 Caribou-Targhee National Forest's record of compliance with state best management practices regarding stream sedimentation from ground-disturbing management activities;
- J. Disclose the Caribou-Targhee National Forest's record of compliance with its monitoring requirements as set forth in its Forest Plan;
- K. Disclose the Caribou-Targhee National Forest's record of compliance with the additional monitoring

- requirements set forth in previous DN/FONSIs and RODs on the Caribou-Targhee 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 junipersagebrush 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 Caribou-Targhee 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 Caribou-Targhee'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;

The cover letter states: "The environmental assessment analyzes the potential effects of conducting approximately 6,000 acres of prescribed fire activities annually, within 22 burn blocks on the Caribou portion of the Caribou-Targhee National Forest. Fire will be applied to 30 to 50 percent of the burn blocks, but the exact locations of the prescribed burning and pre-treatment activities have not been identified."

The EA states that 266,039 acres will be burned. If the Forest Service know how many acres they will burn they should be able to tell the public where 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/20210510the-us-forest-services-expanding-use-of-condition-basedmanagement/

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 sitespecific analysis until the Forest Service implements the project, which effectively excludes the public from sitespecific 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 onthe-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 sitespecific analysis was needed to satisfy NEPA's "hardlook" 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.

The Forest Service responded:

The Forest Service did not respond specifically other than to write:

The forest has also made changes to the design elements based on public comment. The changes to design elements include: evaluation of potential old growth and mature/late seral habitat prior to implementation of prescribed fire activities to meet Revised Forest Plan standards and guidelines; evaluation of past management at the 5th code hydrological unit code (HUC) to determine the size and scope of proposed activities to meet Revised Forest Plan standards and guidelines; application of fire within burn blocks; application of fire where timber harvest in not feasible; application of fire within grazing allotments; measures to be taken in aquatic influence zones; coordination with grazing permittees; information sharing with permittees and the public about where prescribed burning is planned; identification of what type of monitoring will occur following treatment; and other resource specific design elements. Additional information regarding the process of review by resource specialists and line officer approval has also been added to the implementation checklist.

Several comments suggested that the proposal was too broad or lacked specific locations or survey data necessary to do environmental analysis. Others similarly suggested that it would be appropriate to use a programmatic environmental assessment. As stated in the purpose and need, the project is designed intentionally to allow for flexibility needed to address changing conditions. Rather than identifying specific locations for prescribed fire now, this project uses design elements

and the implementation checklist to provide sideboards to the actions; ensure consistency with other laws, regulations, and policies; and to reduce environmental effects. Our analysis considers application of fire and associated treatments within the analysis area, along with the design elements and location-specific review required in the implementation checklist. When all these pieces are considered, our analysis found that the proposal would not have a significant adverse effect (see National Environmental Policy Act (NEPA) section). The Caribou-Targhee National Forest has decades of experience analyzing and implementing prescribed fire actions. This proposed action framework draws on our experience with forest conditions and analysis to allow for a meaningful evaluation of impacts and sufficient level of detail necessary to inform the required NEPA determinations.

There is a need to take actions to improve the health and resiliency of vegetation communities and habitats in these firedependent ecosystems to meet the following purposes:

• Reduce the risk of uncharacteristic wildfire to key ecosystem components by modifying and reducing natural fuel accumulation.

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Caribou Prescribed Fire Restoration
Project

- Increase resiliency of existing vegetation groups to future stressors like wildfire and drought by improving plant vigor, stand structure, and species composition.
- Improve the proper ecological function of vegetative communities.

Additionally, restoration of fire-dependent ecosystems would also help to manage fuel loading to allow for suppression strategies to protect values at risk and improve

firefighter and public safety in the event of a wildfire.

LANDFIRE datasets were used to evaluate vegetation condition class data and to identify major departures from the natural (pre-settlement or historical) fire regime (LANDFIRE 2014, National Interagency Fuels Fire and Technology Transfer System 2010). Based on this analysis, we found that there are over 223,535 acres in the Caribou Prescribed Fire Restoration Project Area that can be characterized as being moderately or highly departed from their natural regime of vegetation characteristics; and fire frequency. LANDFIRE data were also used to compare historic range mean fire return interval as well as approximate acres burned for each vegetation type (LANDFIRE 2014). This information provides an

This information provides an approximation of how many acres should be targeted for burning on an annual basis to restore a more resilient stand

composition and structure. Approximately 98 percent of the forest stands in the project area are classified as mature/late seral age class, while the 2003 Revised Forest Plan for the Caribou National Forest (Revised Forest Plan) identifies a desired condition of 20 to 40 percent mature/late seral stands across the forest. Prescribed fire is a management tool that can introduce disturbance incrementally into forest stands to create a greater diversity of age classes to improve resiliency. When considering this information and guidance from the Revised Forest Plan, the Caribou Prescribed Fire Restoration Project proposes to treat approximately 6,000 acres annually, with up to 60,000 acres to be treated over the next decade. Compared to current annual prescribed burning, which has averaged 200 to 3,500 acres per year across the forest, this demonstrates an increase in prescribed burning to create vegetation

conditions that are more resilient to future disturbance.

The project is in violation of NEPA, NFMA, the ESA, the Clean Water Act, the Forest Plan, and the APA. The Forest Service's response states the project was intentionally designed to not tell the public when and where the Forest Service plans to burn.

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

The purpose of this project is to improve big game and grouse habitat and to make the forest more resilient and plan for a more historic fire regime. Based on Dr. Baker's paper, the proposed action will not meet the purpose and need of the project.

Dr. Baker's paper and his book which I mailed via U.S. mail is the best available science. Please explain why this project is not following the best available science.

Dr. Hanson writes in his book when he criticizes prescribed burning, "One of the biggest issues is that forests and woodlands are capable of re-burning in a weather-driven wildfire just a year or two after a prescribed fire."

Please see the attached paper by Scott L. Stephens et al. 2009 which found that prescribed burning is not effective and preventing large wildfires.

The Draft Decision of EA do not meet the purpose and need since prescribed burning is not effective and preventing large wildfires or hotter fires.

Remedy:

Withdraw the draft Decision Notice and write an EIS that shows the public where

prescribed burns will be and if any logging with occur to carry the fire. The EIS must fully complies with the law

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

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

Forest Service response:

Some commenters suggested an alternative that eliminates units that have noxious weeds present on roads and an alternative that includes land management plan standards that will prevent new weed infestations by addressing the causes of weed infestation. The proposed action includes design elements developed to address weed infestations. As described in Appendix 1, weed prevention and control would be incorporated into project layout and design and to prevent new weed infestations and the spread of existing weeds, avoid or remove sources of weed seed and propagules or manage fire as an aid in control of weeds.

The project is in violation of NEPA, NFMA, and the APA. Adaptive management does no work with out baselines and the project does not have any baseline monitoring.

Remedy:

Withdraw the draft Decision Notice and write an EIS that fully complies with the law with detailed maps of where the burning will occur and when it will occur.

We wrote in our comments:

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.

Forest Service response:

Whitebark pine are not known to occur on the Caribou National Forest, including the project area.

The Forest Service did nt search for whitebark pine

The project is in violation of NEPA, NFMA, ESA, and the APA

Remedy:

Withdraw the draft Decision Notice, consult with the U.S. Fish and Wildlife Service on the impact of the project on whitebark pine and other proposed or listed plants and write an EIS that fully complies with the law.

We wrote in our comments:

The scoping notice states that a CE for this project will be implemented on the basis that it qualifies as a "Timber stand and/or habitat improvement project." However, there is no actual data provided in the scoping notice to demonstrate to the public how this has been determined. Even implementation of a CE 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.

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 scoping notice. 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 scoping.

Use of an EA 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 an EA. Although the presence of an extraordinary circumstance does not automatically preclude use of an EA, application of an 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 scoping notice 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 scoping notice 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 a CE.

Please explain include a discussion of the following:

- 1. Baker and Shinneman. 2004. Fire rotation for highseverity 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.

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 scoping notice does not identify why thinning juniper and shrubs enhances wildlife habitat, which is the basis for a CE.

There is no information in the scoping notice 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 scoping notice 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 scoping notice 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 scoping notice, 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 nonnative 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 scoping notice 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 scoping notice 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 scoping document 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 scoping notice, 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 scoping notice 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 scoping notice did not provide any actual science to indicate that thinning will reduce fires, and thereby increase "resiliency" of this winter range.

The scoping notice 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 scoping notice 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 scoping notice 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 scoping notice 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 scoping notice is a huge violation of the NEPA because the public is provided essentially no information as to why this project will benefit wildlife. The CE exemption for 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 scoping notice 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 scoping notice 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 scoping notice 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 is never specifically noted in the notice.

There is no explanation of why 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 scoping notice 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. Iff juniper is so flammable, it is not clear why it has to be slashed before it can be burned. 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 best available science, Christensen et al (1993), recommends elk habitat effectiveness of 70% in summer range and at least 50% in all other areas where elk are one of the primary resource considerations.

According to Figure 1 in Christensen et al (1993), this equates to a maximum road density of approximately 0.7 mi/sq mi. in summer range and approximately 1.7 mi/sq mi. in all other areas.

Do any of the 6 Code watersheds in the Project area meet either of these road density thresholds? It appears the Project area as a whole also far exceeds these thresholds. Please disclose this type of Project level or watershed analysis on road density.

Christensen et al (1993) state that if an area is not meeting the 50% effectiveness threshold of 1.7 mi/sq mi, the agency should admit that the area is not being

managed for elk: "Areas where habitat effectiveness is retained at lower than 50 percent must be recognized as making only minor contributions to elk management goals. If habitat effectiveness is not important, don't fake it. Just admit up front that elk are not a consideration." The Project EIS does not make this admission.

The Forest Service should provide an analysis of how much of the Project area, Project area watersheds, affected landscape areas, or affected Hunting Districts provide "elk security area[s]" as defined by the best available science, Christensen et al (1993) and Hillis et al (1991), to be comprised of contiguous 250 acre blocks of forested habitat 0.5 miles or more from open roads with these blocks encompassing 30% or more of the area.

Please provide a rational justification for the deviation from the Hillis security definition and numeric threshold that represent the best available science on elk security areas.

Are all roads called for being closed under the Travel management Plans closed? If not how many miles of roads are still open that the Travel management Plan Decision authorize to be closed.

How many road closure violations have there been in the Sawtooth National Forest in the last 5 years?

Does the elk habitat effectiveness and security areas calculations take into account ineffective road closures?

Does the elk habitat effectiveness and security areas calculations take into account roads that are still open that the Travel Plan says are closed?

What best available science supports the action alternatives?

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 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 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

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 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 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."

Forest Service response:

Some commenters suggested that there should be an alternative that specifically addresses climate change, livestock grazing impacts on forest stands, understory conditions and aspen recruitment. The purpose and need defined for this project focuses on the need to restore fire to reduce the risk of uncharacteristic wildfire, improve resiliency of vegetation communities to disturbances, and improve ecological function. Therefore, the proposed action is limited to the use of prescribed fire and associated activities to address trends such as reduced winter precipitation, earlier spring snowmelt, and longer dry seasons which are associated with a changing climate. These conditions have created a need for a more proactive use of prescribed fire to reduce the severity of effects from a large, uncontrolled wildfire. The project also identifies

that aspen restoration is one of the themes that be used to identify treatment locations as suggested by the commenter. Design elements identify that monitoring will occur following prescribed burns to determine if livestock is using the treated area in a way that is detrimental to resources, but the management of livestock itself is outside the scope of the proposed action.

The Forest Service's representations and/or omissions in the EA and Draft Decision Notice and authorizations regarding tree cutting in an Inventoried Roadless Area, violate NEPA, the APA, and the Roadless Rule. The project also is not following the best available science. The project needs to focus on the home ignition zone rather than trying to fireproof forests, which is a fool's errand.

Please see the article below from the January 19, 2022 Missoulian, titled: "Fire strategy stuck with old tactics, experts warn." https://missoulian.com/news/local/fire-strategy-stuck-with-old-tactics-experts-warn/article_d8361d9f-2fb5-5f47-a333-e3487e49530d.html

Fire Strategy stuck with old tactics

Although it uses the words "paradigm shift" 13 times, the U.S. Forest Service's new wildfire crisis strategy appears stuck on old tactics, according to area fire experts.

"I saw no new strategy but rather a potential increase in the same fire control strategy of 'fuel treatment' to enhance fire control," retired Forest Service fire scientist Jack Cohen said after reviewing the documents released on Tuesday.

On Tuesday, U.S. Agriculture Secretary Tom Vilsack announced plans to spend upward of \$50 billion to fight catastrophic wildfire. The strategy focuses on "firesheds" — forest landscapes of about 250,000 acres that are likely to burn and have lots of homes and infrastructure at risk.

Those firesheds would get intensive work to return 35-45% of their acreage to fire-adapted conditions through hazardous fuels removal, logging and prescribed fires.

The plan identifies five firesheds in Montana, including four along the Idaho border in the Lolo, Bitterroot and Nez-Perce/Clearwater national forests, and one in the Flathead National Forest surrounding Kalispell.

The strategy calls for treating up to 20 million acres of national forest lands and up to 30 million acres of other federal, tribal, state and private lands over the next 10

years. Nationwide, the strategy will create 300,000 to 575,000 jobs, protect property values, and stimulate local economies.

That represents a tempo of work four times greater than current activity in the West, the report claims.

It should also bring down the Forest Service's annual firefighting costs, which averaged \$1.9 billion a year between 2016 and 2020.

The report notes that wildfires in 2020, 2017 and 2015 burned a total of more than 10 million acres. The National Interagency Fire Center has stopped labeling fires larger than 100,000 acres as exceptional events, because they have become so common.

Missoula is home to the Forest Service's Fire Sciences Lab as well as an extensive community of academic and professional forestry and fire experts. It started developing a Community Wildfire Protection Plan in 2005, and updated it in 2018.

"The use of tired, old, ill-defined language such as 'hazardous fuels' does little to describe what the fuels (i.e., wildland vegetation) is hazardous to," said Missoula County Commissioner Dave Strohmaier, who helped revise the latest version of the plan. "We seem to have

learned nothing from recent fires that have resulted in community destruction, such as Denton, Montana. This was a grass fire, and there were no forests to thin or otherwise eliminate the risk of crown fire from."

The West Wind fire on Nov. 30 destroyed 25 homes and six commercial buildings in Denton, including the town's granary. The Marshall fire on Dec. 30 burned almost 1,100 houses with an estimated \$513 million in total damage. It was primarily a grass fire pushed by 110 mph winds.

And despite 11 of the report's 23 photo illustrations depicting burned houses or fire-threatened neighborhoods, Strohmaier couldn't find the words "home ignition zone" anywhere in the document.

"Community destruction is (a home ignition zone), not a fire control problem," Strohmaier said. Throwing more money at treatments that won't get the expected outcomes "does no one any good and sets up false expectations as to what will truly reduce the risk of community destruction and improve ecological and community resilience."

Cohen found no evidence that the writers considered best available science, which shows that wildland-urban disasters are mainly a factor of how houses catch fire, not forest management, he said. He cited extensive research explaining how community wildfire destruction (incidents where more than 100 homes get destroyed) happens when fires overrun the fuel breaks and forest treatments intended to control them. But it's not the "big flames of high intensity wildfires (that) cause total home destruction," but rather "lofted burning embers (firebrands) on the home and low intensity surface fire spreading to contact the home" that did the damage, often hours after the main fire had subsided or moved elsewhere.

At the same time, Cohen noted that the fireshed approach appears headed in two contradictory directions. On one hand, it acknowledges the need for large-scale burning to improve forest health and ecology. But it doesn't acknowledge the Forest Service's "inherent management aversion to fires burning at landscape scales that cannot be under tight control."

"The press release and full document are just more of the same management that enables continuation of the wildfire problem," Cohen concluded.

The Wildfire Today blog reviewed the strategy with an eye for its funding. It noted that the Forest Service called for an additional \$2 billion a year to get ahead of its hazardous fuels backlog.

"The growth of the climate crisis, which has contributed to the 'wildfire crisis,' appears to be exceeding the estimates of scientists," Wildfire Today moderator Bill Gabbert wrote on Tuesday. "Changes are occurring even more quickly than previously expected. So low-balling the funding for protecting our homeland will mean we will fall even further behind in treating fuels and attempting to keep fires from wiping out more communities."

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

Remedy:

Withdraw the draft Decision Notice and write an EIS that fully complies with the law.

We wrote in our comments:

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 semiprimitive motorized classes of dispersed recreation; reference landscapes; natural appearing cultural properties and sacred sites; and other locally identified unique characteristics.

Forest Service response:

Use of prescribed fire is proposed in recommended wilderness and inventoried roadless areas in compliance with Revised Forest Plan direction and other agency policy. (Page 4 of the Draft Decision Notice.)

The project is in violation of NEPA, NFMA, and the APA. The Northern Rockies Ecosystem Protection Act current bill numbers are H.R. 1755 and S. 1276

Remedy:

Withdraw the draft Decision Notice and write an EIS that fully complies with the law.

We wrote in our comments:

There is also a huge problem with the current Forest Plan direction for the Northern Rockies Lynx Management

Direction. This amendment will be applied to the South Plateau project. The deficiencies of this Amendment need to be addressed prior to project analysis, since the NRLMD does not address, or provide, criteria for habitat fragmentation and minimum levels of lynx winter habitat. It is clear from the scoping document that the projects will create movement barriers for the lynx, and that the NRLMD does not prohibit this severe impact. Also, the NRLMD does not prevent prescribed burning and forest thinning in recruitment winter habitat for lynx, even if existing levels of this key habitat are insufficient as per historical levels.

As per the NRLMD, it is not clear in the why extensive precommercial thinning is planned, and how this is allowed under the NRLMD. It is also not clear exactly what types of areas are being thinned, such as if they are natural forest or old harvest units. Since the agency did

not actually address this important issue in the scoping document, the general public may not be aware of the conflicts of the proposed actions with existing Forest Plan direction. This lack of transparency is an important NEPA issue with us.

We are specifically requesting that the agency provide the biological assessment and the biological opinion, including terms and conditions and allowed incidental take of grizzly bears and lynx, PRIOR to the objection process, so that the public can see how the Forest Service is going to manage these species with project implementation.

The project is far too large to provide meaningful information or analysis to the public, and thus prevents agency transparency in management of public lands. It is not clear why the Forest Service believes that such a large

project is either needed, or can be meaningfully understood and reviewed by the public.

It is clear from the massive impacts proposed in grizzly bear and Canada lynx habitat that an environmental impact statement is needed for each individual project area.

The project is not following the best available science and therefore is in violation of NEPA, NFMA, the APA and the ESA. The best available science is now Kosterman's masters Thesis, Correlates of Canada Lynx Reproductive Success in Northwestern Montana and Holbrook

Please find Kosterman attached and Holbrook attached. Kosternman finds that 50% of lynx habitat must be mature undisturbed forest for it to be optimal lynx habitat where lynx can have reproductive success and no more than 15% of lynx habitat should be young clearcuts, i.e. trees under 4 inched dbh. This contradicts the agency's assumption in the Lynx Amendment that 30% of lynx habitat can be clearcut, and that no specific amount of

mature forest needs to be conserved. It is now the best available science out there that describes lynx habitat in the Northern Rockies related to lynx viability and recovery. Kosterman's study demonstrates that the Lynx Amendment standards are not adequate for lynx viability and recovery, as previously assumed by the Forest Service.

Holbrook says all of lynx habitat has to be monitored. Have you monitored all 1.2 million acres for lynx?

The project will "Likely to adversely affect lynx which means that listed resources are likely to be exposed to the action or its environmental consequences and will respond in a negative manner to the exposure.

The project does not have a take permit from the U.S. F.W.S. and is in violation of the E.S.A., NFMA, the APA and NEPA. The ESA (Section 3) defines take as "to harass, harm, pursue, hunt, shoot, wound, trap, capture,

USFWS further defines "harm" as "significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering", and "harass" as "actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not

Since this is now the best available science we are hereby formally requesting that the Forest Service write a supplemental EIS for the Northern Rockies Lynx Management Direction and reinitiate consultation with the FWS for the Lynx Amendment to publicly disclose and address the findings of this study, and to allow for further public comment on this important issue of lynx recovery.

Forest Service response:

The Bear River range, Gannett Hills area, and McCoy Creek are linkage areas. Lynx may use the area as transient habitat and could be displaced in the short-term by project activities, no denning occurs in the project area, lynx historically have inhabited fire-adapted ecosystems, reintroducing fire to the area to increase resiliency may benefit lynx.

The proposed action may affect but is not likely to adversely affect Canada lynx. The project is in violation of NEPA, NFMA, ESA and the APA.

Remedy:

Withdraw the draft Decision Notice and write an EIS that fully complies with the law.

We wrote in our comments:

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.

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

Page 9 of the EA states:

Watersheds: The project area includes 109 category 4a streams and 120 category 5 streams, which are listed as impaired water quality and require a TMDL on the 2018/2020 303(d) list for sediment or other parameters (State of Idaho, 2018)

A detailed erosion analysis was completed and determined there was there is no upland erosion or sediment that would reach stream channels in all modeling scenarios. (P. 21 of the Draft DN.)

If burn areas include waters designated as "water quality limited" (Clean Water Act Section 303(d)), ensure that proposed activities would not contribute to further degradation of water quality. Execute applicable elements of completed total maximum daily load (TMDL) implementation plans. (P. 47 of the Draft Decision Notice).

Forest Service response:

I have no idea if the Forest Service responded to these comments since the website is down.

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

Remedy:

Withdraw the draft Decision Notice and write an EIS that fully complies with the law after TMDLs are written for all the WQLS streams in the project area.

We wrote in our comments:

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, (birds, mammals including bats) are not clearly defined, and demonstrated to be effective as per the current best science.

The project will violate the Forest Plan by constructing new roads for timber management in MA 15. Production of timber is not planned for MA 15 as well, except adjacent to existing roads.

Forest Service response:

Minimize fireline construction in or around riparian areas, wetlands or areas highly prone to erosion unless

needed to protect life, property or wetlands or approved by Fisheries Biologist, Hydrologist or Soil Scientist.

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Rehab and make un-travelable all firelines within 150' of water that could become new livestock trails

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

Remedy:

Withdraw the draft Decision Notice and write an EIS that fully complies with the law.

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.

Forest Service response:

The Forest Service responded to these comments. The draft decision notice and the EA are in violation of NEPA, NFMA, the APA, and the national Historic Preservation Act.

Remedy:

Withdraw the draft Decision Notice and write an EIS that fully complies with the law.

We wrote in our comments:

The project will be a NFMA violation because it will promote the demise of aspen stands by burning out conifers without providing protection from livestock browsing.

The agency is violating the NEPA by claiming that conifer encroachment needs to be removed to promote aspen, when livestock 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 Presribed 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 logging 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 logging 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 scoping document does not identify what habitat objectives will be addressed with burning, so the public is unable to understand how to comment on this claim.

Forest Service response:

Some commenters suggested that there should be an alternative that specifically addresses climate change, livestock grazing impacts on forest stands, understory conditions and aspen recruitment. The purpose and need defined for this project focuses on the need to restore fire to reduce the risk of uncharacteristic wildfire, improve resiliency of vegetation communities to disturbances, and improve ecological function. Therefore, the proposed action is limited to the use of prescribed fire and associated activities to address trends such as reduced winter precipitation, earlier spring snowmelt, and longer dry seasons which are associated with a changing climate. These conditions have created a need for a more proactive use of prescribed fire to reduce the severity of effects from a large, uncontrolled wildfire. The project also identifies that aspen restoration is one of the themes that be used to identify treatment locations as suggested by the commenter. Design elements identify that monitoring will

occur following prescribed burns to determine if livestock is using the treated area in a way that is detrimental to resources, but the management of livestock itself is outside the scope of the proposed action.

The project is in violation of NEPA, NFMA, and the APA.

The Forest Service ignored our comments and concerns. The project is not following the best available science.

Across the western U.S., livestock grazing is a well-identified problem in regards to the lack of recruitment in aspen stands. As just one example, in an analysis area on the Beaverhead-Deerlodge National Forest, only 1 out of 40 surveyed aspen stands had successful regeneration, due to livestock browsing. Removal of livestock has been identified as a successful restoration activity for aspen (Beschta et al. 2014, Earnst et al. 2012). Without a limit to livestock utilization of no more than 20% of the current years liter growth, successful recruitment in aspen stands is not likely to happen (Burton 2004).

Remedy:

Withdraw the draft Decision Notice and write an EIS that fully complies with the law.

Thank you for your time and consideration of our concerns.

Sincerely yours,

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

And for

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

And for

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

And for

Katie Fite WildLands Defense