

Objection against the Ashley Forest-wide 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 Ashley National Forest Forest-wide Prescribed Fire Restoration Project. Please accept this objection in pdf format from me on behalf of the Alliance for the Wild Rockies, Center for Biological Diversity, Native Ecosystem Council, Yellowstone to Uintas Connection, and Wildlands Defense.

1. Objector's Name and Address:

Lead Objector Michael Garrity, Director,
Alliance for the Wild Rockies (Alliance), PO Box
505, Helena, MT 59624; phone 406-459-5936

And for

Sara Johnson, Director, Native Ecosystems
Council (NEC), PO Box 125, Willow Creek, MT
59760; phone 406-459-3286

And for

Jason L. Christensen – Director Yellowstone to
Uintas Connection (Y2U)
jason@yellowstoneuintas.org
435-881-6917

And for

Katie Fite
WildLands Defense
PO Box 125
Boise, ID 83701
208-871-5738

Signed this 13th day of November, 2023
for Objectors

/s/ Michael Garrity

Michael Garrity

Description of those aspects of the proposed project addressed by the objection, including specific issues related to the proposed project if applicable, how the objector believes the environmental analysis, Finding of No Significant Impact, and Draft Decision Notice (DDN) specifically violates law, regulation, or policy: The EA and DND are contained in the USFS webpage at:

<https://www.fs.usda.gov/project/ashley/?project=61581>

District: All districts

Counties: Utah: Daggett, Duchesne, Summit, Uintah, Utah, Wasatch.

Wyoming: Sweetwater

General Location: The proposed project area includes approximately 940,000 acres of National Forest System lands across the Ashley National Forest (ANF).

As a result of the Draft DN, individuals and members of the above mentioned groups, hereafter (Alliance) would be

directly and significantly affected by the logging and associated activities. Appellants are conservation organizations working to ensure protection of biological diversity and ecosystem integrity in the Wild Rockies bioregion (including the ANF). The individuals and members use the project area for recreation and other forest related activities. The selected alternative would also further degrade the water quality, wildlife and fish habitat. These activities, if implemented, would adversely impact and irreparably harm the natural qualities of the Project Area, the surrounding area, and would further degrade the watersheds and wildlife habitat.

2. Name of the Proposed Project

Ashley National Forest - Forest-wide Prescribed Fire Restoration Project

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

Ashley National Forest-wide, This Decision could be applied in all management areas and prescriptions except for wilderness and research natural areas.

District: All districts within the Ashley National Forest

Counties: Utah: Daggett, Duchesne, Summit, Uintah, Utah, Wasatch.

Wyoming: Sweetwater

General Location: All of Ashley National Forest – NE Utah and SW Wyoming

Responsible Official: Susan Eickhoff, Forest Supervisor

The proposed project would authorize yearly prescribed burns across the national forest up to 24,000 acres per year for a maximum of 20 years. In the past, each burn unit is typically between 300 and 500 acres, depending on the vegetation and location of the proposed burn. Treatment boundaries would be designed to meet objectives and move areas toward desired conditions in the Ashley Forest Plan. The size of the prescribed fires planned would vary annually. Smaller burn units could be used where infrastructure or other high value resources and assets are present; larger burn units could be designed where prescribed fire objectives permit. Multiple treatment entries

may be required for moving vegetation and habitat characteristics toward desired conditions. The pace and scale of implementation would also be dependent upon funding and capacity. In the context of this proposed action, treatments include not only the type of fire applied to achieve an objective, but also the pre-fire actions, also known as burn preparation, needed to facilitate the application of fire.

The project is proposed across approximately 940,000 acres of the Ashley National Forest on National Forest System lands (figure 2). Within this area, the specific locations for prescribed fire have not been identified at this time. Using the current knowledge of vegetation and habitat conditions, the national forest would identify specific areas for treatment within the broader area considered in this proposal. The relative ability of an area to resist the spread of catastrophic effects of fire, recover after treatment (resilience), and resources within the area would be prime considerations for the selection of prescribed fire treatment areas. This proposed action does not apply to research natural areas, alpine areas, any non- National Forest System lands within the Ashley National Forest boundary, or congressionally designated wilderness areas.

Prescribed fire treatments could be implemented year-round when weather and air-quality conditions allow the Ashley National Forest to meet the objectives and desired conditions for burning.

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

Alliance provided comments on the proposed project on November 17, 2021.

Alliance has also included a general narrative discussion on possible impacts of the Project, with accompanying citations to the relevant scientific literature.

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

6. Suggested Remedies that would Resolve the Objection:

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

7. Supporting Reasons for the Reviewing Office to Consider:

This landscape has very high wildlife values, including for the threatened and wildlife dependent upon unlogged. The project area will be concentrated within some of the best wildlife habitat in this landscape which is an important travel corridor for wildlife such as lynx, grizzly bears, and wolverine. The public interest is not being served by this project.

Suggested Remedies to Resolve the Objection:

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

Thank you for the opportunity to object.

NOTICE IS HEREBY GIVEN that, pursuant to 36 CFR Part 218, Alliance objects to the Draft Decision Notice (DDN) and Finding of No Significant Impact (FONSI) with the legal notice published on September 27, 2023, including the Responsible Official's adoption of proposed or selected Alternative.

Alliance is objecting to this project on the grounds that implementation of the Selected Alternative is not in accordance with the laws governing management of the national forests such as the ESA, NEPA, NFMA, the Ashley National Forest Forest Plan and the APA, including the implementing regulations of these and other laws, and will result in additional degradation in already degraded watersheds and mountain slopes, further upsetting the wildlife habitat, ecosystem and human communities. Our objections are detailed below.

If the project is approved as proposed, individuals and members of the above-mentioned groups would be directly and significantly affected by the burning and associated

activities. Objectors are conservation organizations working to ensure protection of biological diversity and ecosystem integrity in the Wild Rockies bioregion (including the ANF). The individuals and members use the project area for recreation and other forest related activities. The selected alternative would also further degrade the water quality, wildlife and fish habitat. These activities, if implemented, would adversely impact and irreparably harm the natural qualities of the Project Area, the surrounding area, and would further degrade the watersheds and wildlife habitat.

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

We wrote in our comments:

We believe that 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 or in the final EA if you refuse to write an EIS.

I. NECESSARY ELEMENTS FOR PROJECT EA or EIS: A. Disclose all Ashley 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 Utah Division of Wildlife Resources regarding the impact of the Project on wildlife habitat;

D. Solicit and disclose comments from the Utah 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 Ashley National Forest's record of compliance with state best management practices regarding stream sedimentation from ground-disturbing management activities;

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

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

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

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

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

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

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

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

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

S. Disclose the timeline for implementation;

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

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

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

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

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

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

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

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

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

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

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

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

FF. Disclose the efficacy of the proposed activities at reducing wildfire risk and severity in the Project area in

the future, including a two-year, five-year, ten-year, and 20- year projection;

GG. Disclose when and how the Ashley 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 Ashley'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. Disclose maps of the area that show the following elements:

- 1. Past, current, and reasonably foreseeable logging 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 Forest Service did not respond to most of what we wrote in violation of NEPA. The Forest Service did write the following response about juniper:

It is important to differentiate persistent pinyon-juniper from expansion pinyon-juniper. Persistent pinyon-juniper generally consists of sites with pre-settlement trees present or where evidence indicates that pre-settlement pinyon-juniper vegetation type trees were present (such as skeletal remains of trees and evidence of fire). The

*Ashley National Forest Assessment
Terrestrial Ecosystems, System Drivers, and
Stressor Report (referenced as USDA 2017)
utilizes Historical and modern disturbance
regimes of piñon-juniper vegetation in the
western U.S. (referenced as Romme et al.
2007) to provide the distinction between
persistent and expansion pinyon-juniper.*

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

The Forest Service relied in regards to old growth:

Page 5-6 of the Forest-Wide Prescribed Fire Restoration, Vegetation Effects Analysis states:

Old Growth

The Ashley Forest Plan (1986) does not provide a definition for old growth. However, the Intermountain Region (Region 4) does support the use of minimum criteria identified in “Characteristics of Old-

Growth in the Intermountain Region” as compiled by Ronald C. Hamilton in 1993. This document provides a description of minimum quantification/measures for old growth for the various forest types found within the Region. This document can be found in the project record.

While the 1986 forest plan does have a forest-wide standard and guideline to “designate and protect old growth for dependent species”, this is an independent requirement, and a compliant quantity is not provided by the forest plan. The other standard and guideline related to old growth within the 1986 forest plan is to retain 5 percent of area (management areas n, e, and l) in old growth conditions at all times. As a result, management area n is the only management area of the national forest that has old growth designated for retention. As of 2021, 5.1 percent of management area n was designated as old growth and designated for retention. Roughly 60 percent of these old growth areas of management area n are in stands of at least 160 acres. Spatially explicit datasets (GIS data) for old growth within management area n can be found within the project record.

A design and implementation element (OG 1) is in place to preserve old growth during the prescribed fire project development phase. This element would require the coordination with the forest silviculturist and a wildlife biologist to ensure any retained old growth within burn areas are maintained as old growth according to the Hamilton’s minimal criteria or other agreed upon criteria.

In other words, coordination would be required with the forest silviculturist and wildlife biologist to ensure that management activities would not modify areas of old growth in retention to a state that these areas would no longer be designated as old growth.

The report continues:

*The persistent aspen, seral aspen, and lodgepole pine forests are fire-dependent ecosystems for the purposes of regeneration. The quaking aspen (*Populus tremuloides*) is vulnerable to top kill from fire, due to thin bark, while the root system persists and produces shoots which develop more quickly than competition following fire (Howard 1996). Although lodgepole pine (*Pinus contorta*) is also easily killed from fire due to thin bark, it also has a regeneration-based adaptation. Lodgepole pine often has serotinous cones which can be retained on trees for several years and open from the heat of fire (Anderson 2003). Mature lodgepole pines can survive low severity fire and can be fire resistant in open stands with low levels of fuels and open canopies (Anderson 2003).*

*Species typical of the spruce-fir forest are the Engelmann spruce (*Picea engelmannii*) and subalpine fir.*

The Engelmann spruce is easily killed by fire due to the thin and resinous bark, shallow root systems, low branches, and the dense stand structure that is typical for a spruce-fir forest (Uchytel 1991b). Similarly, the subalpine fir is also very vulnerable to fire due to thin bark, shallow root systems, low branches, very flammable

foliage, and the dense stand structure that this typical for the spruce-fir forest (Uchytel 1991a).

These trees tend to occupy high elevation, cold and wet areas where fire is generally uncommon and stand replacing. These species may encroach upon mixed conifer stands where fire has been excluded.

*The Rocky Mountain juniper (*Juniperus scopulorum*), Utah juniper (*Juniperus osteosperma*), and two-needle piñon (*Pinus edulis*) are typical tree species for the various piñon-juniper woodlands of the Ashley.*

The Rocky Mountain juniper is vulnerable to fire when young, less than 4 feet tall, due to thin bark and compact crowns, but becomes more resistant as the tree matures and the bark becomes thicker (Scher 2002). The Utah juniper also is vulnerable to fire when young (less than 4 feet in height), while larger trees can survive surface fires (Zlatnik 1999). Two-needle piñon is vulnerable to surface fires due to the fuel loads that tend to accumulate around these trees, thin bark, flammable foliage.

Within the sagebrush communities of the Ashley National Forest, the mountain big, Wyoming big, and black sagebrush are most common. In general, fire within these communities is considered to be of a “replacement” level severity and causes high levels of mortality as sagebrush is vulnerable to fire.

The draft decision notice and FONIS is violating President Biden's

executive order on mature and old forests (EO 14072, attached).

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

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

The agency is violating the NEPA by using vague, unmeasurable 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 species)? 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.

Please find our Ashley Aspen project objection attached since these two projects are both forest-wide burning projects. The Draft decision notice and FONSI did not consider the cumulative impacts of the Ashley Aspen burning project and the Ashley Forest-wide prescribed burning project. Since both projects are conditions based management projects, the projects violate NEPA, NFMA, the ESA and the APA.

The Ashley N.F.'s Forest plan does not have any standards for old growth. If there are no standards to protect old growth in the Forest Plan and since the Forest Service is not telling the public where and how they are burning, the project violates the hard look provision of NEPA and also NFMA and the APA.

The Forest Plan does not ensure preservation of sufficient old growth to provide for diversity of plant and animal communities, in violation of NFMA, Sec. 6(g)(3)(B), 36 CFR 219.27

Management Requirements; (a) All management prescriptions shall - (5) Provide for and maintain diversity of plant and animal communities to meet overall multiple-use objectives, as provided in paragraph (g) of Section 6.

The Plan's standards and definitions do not ensure preservation of sufficient old growth to provide for diversity. The Plan does not provide an inventory of old growth and quantitative data making possible

the evaluation of diversity necessary in terms of its prior and present condition.

The Plan has no management allocation for old growth. Moreover, the Plan does not provide a sufficient distribution of old growth in the forest to maintain diversity.

It appears that the 1986 Plan is still in effect. If that means the 1982 Regs are still in play, The Plan does not provide an inventory of old growth and quantitative data making possible the evaluation of diversity necessary in terms of its prior and present condition, in violation of 36 CFR 219.26 Diversity.

Maintenance of diversity is a minimum management requirement. 36 CFR 219.27(a)(5).

The EA and draft decision notice did not explain 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.

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. Please see the attached petition to list the pinyon jay for protection under the Endangered Species Act. The U.S. Fish and Wildlife Service found:

Based on our review, we find that the petitions to list the bleached sandhill skipper (Polites sabuleti sinemaculata), blue tree monitor lizard (Varanus macraei), Bornean earless monitor lizard (Lanthanotus borneensis), and pinyon jay (Gymnorhinus cyanocephalus) present substantial scientific or commercial information indicating that the petitioned actions may be warranted.

Please find the FWS 90-DAY FINDING ON A PETITION TO LIST THE PINYON JAY (Gymnorhinus cyanocephalus) AS A THREATENED OR ENDANGERED SPECIES UNDER THE ENDANGERED SPECIES ACT attached.

The FWS wrote on page 8 of their finding: Yes. The petition presents credible evidence that reducing the extent and density of piñon-juniper woodlands, often with complete tree removal, is taking place across the majority of the range of the pinyon jay (Bombaci et al. 2017, 63; Defenders of Wildlife 2022, 66-78) (1) to improve wildlife habitat (e.g. Greater Sage-Grouse, mule deer) (Bender et al. 2013, 55-56; Bergman et al. 2014, 449; Bombaci and Pejchar 2016, 40; Kramer et al. 2015, 30 and 33; Boone et al. 2018, 191) and livestock forage (Aro 1971, entire), (2) to reduce fuels and support fire mitigation plans (Schoennagel and Nelson 2011, 273-275), (3) to improve watershed function and reduce soil erosion (Jacobs 2015, 1427), and (4) increase plant community heterogeneity (Miller et al. 2014, 479).

The project will destroy pinyon jay habitat throughout the Ashley National Forest.

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

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 juniper juniper. Given the documented high value of old growth

juniper forests to wildlife, the EA or EIS 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 The EA did not explain 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, the flooring newspaper article by Maffly (20189) reported on the mystery of why junipers are dying in Utah; widespread loss of junipers would have far- reaching consequences for Utah's fragile environments.

Turns out, southern Utah's juniper trees aren't so indestructible after all. But what is killing them?

<https://www.sltrib.com/news/environment/2019/06/25/turns-out-southern-utahs/>

*Late last fall, about 20 federal scientists toured southeastern Utah, prodding sickly and dead juniper trees, peeling back bark, snapping off branches and digging the dirt around root collars in search of clues to what could be **killing the West's most hardy tree species.***

Trip leader Liz Hebertson, a plant pathologist with the U.S. Forest Service's Forest Health Protection program, buried her face in a dying juniper's foliage, which had turned a telltale shade of deep yellow, dabbing at the trunk with a small hatchet to get a look at the nutrient-moving phloem beneath the bark.

"Look very carefully and sometimes you'll see fine little threads," said Hebertson, who describes her work as "CSI: Nature."

"Those threads could be produced by defoliating insects. They could be produced by mites. We're looking for webbing, fine threads. We're looking in all of the crevices for frass that's either been kicked out of the inner bark tissues or out of the bark," said Hebertson, her hair dotted with the yellow juniper needles falling from the branches. "Frass is just fundamentally a mixture of insects' poop and boring dust."

Hebertson and her colleagues could see the galleries and dust trails left by beetles, but was the damage enough to kill these trees on Alkali Ridge?

*Most likely not, according to a preliminary report. Several months after the scientists' two-day field trip, the mystery persists although most signs indicate **last year's severe drought**, the worst on record for the Four Corners region, may be pushing many junipers over the edge.*

However, the report continued, "pinyon pine, a species less tolerant to drought, had not exhibited symptoms of drought-induced stress last spring. This observation suggested that perhaps other abiotic factors, damaging insects, or diseases might be contributing to, or were primarily responsible for, the juniper decline."

Trees under attack

The die-off was documented last year by Kay Shumway, a retired science educator and botanist from Blanding who first noticed the junipers turning yellow on the southern end of Cedar Mesa. Thanks to his tireless efforts to document the deaths of the region's signature tree, the Forest Service and other federal agencies began investigating last fall and academic scientists are setting up studies to figure out why an organism so well equipped for survival is now dying in droves in Utah's San Juan County.

Although juniper is sometimes treated as a trash tree to be ripped out of the ground in the name of habitat restoration, it is a vital part of southern Utah's ecosystem, stitching together fragile desert landscapes. Widespread juniper mortality would deliver an ecological blow similar

to what Utah has experienced where bark beetles have run amok in national forests.

But explanations for the juniper deaths are not nearly as clear cut as they are for the Uinta Mountains' lodgepole pines and Wasatch Plateau's Engelmann spruce.

Those trees look like they were eaten alive, their bark dripping with pitch produced by the trees in a failed effort to repel the attackers. The afflicted junipers, by contrast, show only modest levels of infestation.

"In all the large-diameter trees we examined, the total number of flat-headed wood-boring beetle galleries in the inner bark tissues of trunks and large branches was not sufficient to have completely interrupted vascular transport [girdle] within the tree," the report said.

The scientists searched for signs of fungal infections but found little.

"Declining and dead trees had evidence of secondary insect attack. Although some juniper had died, many symptomatic trees had healthy, green sprigs of foliage growing from their lowermost branches," the report said. "We did not find evidence of insects or diseases in the root systems of trees we examined."

The report recommends continued monitoring and asked the Forest Service to complete an aerial survey this summer to "assess the extent and severity of the juniper

decline and crown dieback" across the Four Corners region.

Twice the Forest Service scheduled such surveys, and both times they were canceled due to inclement weather, according to John Guyon of the Forest Health Protection program based in Ogden.

Mapping the juniper mortality is crucial for understanding the extent of the problem and detecting patterns that could bring the causes into sharper focus. It would also provide a baseline against which to measure the spread of mortality.

Rains returned

The region's drought reversed shortly after the scientists' visit when precipitation returned to San Juan County in record amounts. Southeastern Utah enjoyed a snowpack containing more than double the amount of moisture it receives in a typical winter.

Will that put the brakes on the juniper die-off? It's hard to say without the baseline data that aerial surveys could provide, said William Anderegg, a University of Utah biology professor who studies the impact of climate change on forests.

"It's crucial to have that part," Anderegg said. "We would like to know regionally how many trees are dying and you can only know from a plane or satellite."

Anderegg's lab has been approved for a Forest Service grant to study the juniper mortality, and it has already set up a monitoring instrument known as an eddy covariance tower in a spot with dying junipers.

"It measures total carbon take-up and water lost in a patch of forest, a good metric of the overall health of the trees. A healthy forest will be taking up a lot of carbon," Anderegg said. "It puts a sensor above the trees sensing the eddies of air and recording the carbon dioxide concentrations going up and going down. By measuring wind and carbon levels, you can determine how much carbon is being taken up."

His research will couple these measurements with data collected from the trees' tissues.

"We are trying to figure out if drought is killing these trees," he said, "and what are the effects on an ecosystem scale."

Currently, the juniper mortality is far from uniform. Some parts of San Juan County appear unaffected, such as the middle of Cedar Mesa, while junipers are dead and dying on the mesa's southern and eastern margins, said Shumway, who acted as a guide on the scientists' field trip.

"The concern is what is going to happen next year if the beetle flies off and lays eggs in some more trees," said

Shumway, while surveying the dying trees around Alkali Ridge.

This area east of Blanding appears to be a hot spot where about half the junipers are afflicted, with the smaller trees showing the greatest severity.

In recent dry years, junipers across the border in Colorado turned bronze but then recovered when rains returned. Utah's yellowed junipers, on the other hand, are goners.

Forest Service scientists gathered beetles from trees they inspected last fall and cut down a few dead junipers to remove cross sections of the trunk for further study in a lab, where they coaxed out more clues.

“We’ll seal off the ends with wax. We’ll put it in an enclosed box that’s totally black on the inside, and we seal off all seams in the box,” Hebertson said. “There’s one little window of light that attracts the insects when they emerge. They head toward the light. They get into a trap and they fall down into a cup.”

The goal was to identify the beetles residing in the tree, although Hebertson said she was not aware of any wood-boring species that would be considered a primary killer of juniper.

The types of insects later identified were those that typically infest trees weakened by harsh weather, poor site conditions and other stressors, according to the report.

“Abiotic factors such as air pollution, smoke, or temperature extremes might explain the scale of symptoms we observed,” the report said, “but drought-induced stress remains the most plausible explanation.”

Whatever the cause, the juniper die-off adds to a litany of woes facing Western forests that will likely complicate land management for years and keep the scientific community busy looking for answers.



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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.

Remedy

Withdraw the draft decision notice and FONSI and write an EIS that fully complies with the law

We wrote in our comments:

Disclose how Project complies with the Roadless Rule; Please analyze the wilderness characteristics of both the inventoried and uninventoried roadless areas and wilderness study areas in the project area.

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.

Roadless areas provide opportunities for dispersed outdoor recreation, opportunities that diminish as open space and natural settings are developed elsewhere. Id. They also serve as bulwarks against the spread of non-native invasive plant species and provide reference areas for study and research. Id.

Other values associated with roadless areas include: high quality or undisturbed soil, water, and air; sources of public drinking water; diversity of plant and animal communities; habitat for threatened, endangered, proposed, candidate, and sensitive species and for those species dependent on large, undisturbed areas of land;

primitive, semi-primitive non-motorized, and semi-primitive motorized classes of dispersed recreation; reference landscapes; natural appearing cultural properties and sacred sites; and other locally identified unique characteristics.

The Roadless Rule mandates:

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

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

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

(1) The cutting, sale, or removal of generally small diameter timber is needed for one of the following purposes and will maintain or improve one or more of the roadless area characteristics as defined in § 294.11.

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

(ii) To maintain or restore the characteristics of ecosystem composition and structure, such as to reduce the risk of

uncharacteristic wildfire effects, within the range of variability that would be expected to occur under natural disturbance regimes of the current climatic period;

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

... .

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

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

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

66 Fed. Reg. 3258.

Are the roadless areas in the project area currently within the natural historic

range of variability? Is the project area within natural range for wildfire conditions? Will this prescribed Fire Project substantially alter the Roadless characteristics in the inventoried roadless areas within the project area? 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 a EA. 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)).

In relevant part, regarding the prohibition on tree cutting, the Roadless Rule mandates: Prohibition on timber cutting, sale, or removal in inventoried roadless areas. 1. Timber may not be cut, sold, or removed in inventoried roadless areas of the National Forest System, except as provided in paragraph (b) of this section. 2. Notwithstanding the prohibition in paragraph (a) of this section, timber may be cut, sold, or removed in inventoried roadless areas if the Responsible Official determines that one of the following circumstances exists. The cutting, sale, or removal of timber in these areas is expected to be infrequent. 1. The cutting, sale, or removal of generally small diameter timber is needed for one of the

following purposes and will maintain or improve one or more of the roadless area characteristics as defined in § 294.11. 1. To improve threatened, endangered, proposed, or sensitive species habitat; or 2. To maintain or restore the characteristics of ecosystem composition and structure, such as to reduce the risk of uncharacteristic wildfire effects, within the range of variability that would be expected to occur under natural disturbance regimes of the current climatic period; 2. The cutting, sale, or removal of timber is incidental to the implementation of a management activity not otherwise prohibited by this subpart; 36 C.F.R. §294.13 (2005).

The Roadless Rule further explains the meaning of the phrase "incidental to" in

subsection (b)(2) above as follows:

Paragraph (b)(2) allows timber cutting, sale, or removal in inventoried roadless areas when incidental to implementation of a management activity not otherwise prohibited by this rule. Examples of these activities include but are not limited to trail construction or maintenance; removal of hazard trees adjacent to classified road for public health and safety reasons; fire line construction for wildland fire suppression or control of prescribed fire; survey and maintenance of property boundaries; other authorized activities such as ski runs and utility corridors; or for road construction and reconstruction where allowed by this rule. Page 4 of the scoping notice states: "Use of

prescribed fire is proposed on the remaining national forest system lands within the Forest, which includes inventoried roadless areas." It appears that the Project authorizes tree cutting on in roadless areas, the Project EA is not clear how the Forest Service will access those units. It is unclear whether the Forest Service will be reconstructing old roads, using illegal user-created roads, or using roads already closed by the Travel Plan in the Inventoried Roadless Area in order to conduct these activities. Please clarify what roads will be used. Page 37 of the EA states: Effects of the proposed action would occur at the burn unit scale and would be of low intensity as per the application of design elements during burn plan development prior to

implementation. The proposed action meets all applicable forest plan standards and is compliant with the 2001 Roadless Area Conservation Rule. Cutting of trees within IRAs is incidental to other activities not otherwise prohibited (for instance, prescribed burning) and therefore meets exceptions in § 294.25). The proposed action includes limited cross- country motorized vehicle travel, where resource conditions allow, but no construction of roads. Page 49 of the EA states: Aspen restoration projects should generally be large- scale spatially in order to minimize aspen regeneration failure. Projects designed to regenerate aspen by cutting down, burning, or removing overstory aspen stems should be no less than 75 acres in size, except

where silvicultural prescriptions specify smaller treatment areas. Project design should not consist of a series of disjunct small treatments that are less than 10 acres and interspersed within persistent aspen, which can disrupt those factors that trigger aspen sprouting. Page 56 of the EA states: Flush cut or low-cut stumps to less than 12 inches in height or less than half the diameter when visible from roads, trails, dispersed and developed recreation sites, and private property. Cut as low as practical in non-visible areas. Re:-cutting is not "incidental to" another management activity; it is the management activity. The Forest Service fails to acknowledge that the Roadless Rule provides a narrow definition of the phrase "incidental to" in the (b)(2) exemption:

Paragraph (b)(2) allows timber cutting, sale, or removal in inventoried roadless areas when incidental to implementation of a management activity not otherwise prohibited by this rule. Examples of these activities include but are not limited to trail construction or maintenance; removal of hazard trees adjacent to classified road for public health and safety reasons; fire line construction for wildland fire suppression or control of prescribed fire; survey and maintenance of property boundaries; other authorized activities such as ski runs and utility corridors; or for road construction and reconstruction where allowed by this rule. 66 Fed. Reg. 3258. Every one of these examples shows that the management activity

itself is not any form of vegetation management, i.e. tree-cutting - instead the management activities are things like trail management, road management, firefighting, land surveys, ski runs, utility corridors, or lawful road construction. In contrast, here the management activity itself is vegetation management, i.e. tree cutting. The Forest Service's interpretation of exemption (b)(2) is contrary to the explanation of "incidental to" in the Roadless Rule, and if adopted, would swallow the rule. The Forest Service could simply avoid the tree-cutting ban by labeling every tree-cutting activity in a Roadless Area as something other than tree-cutting - such as "restoration" - and thereby circumvent the ban with euphemisms. This is clearly not the

intent of the Roadless Rule. 66 Fed. Reg. 3258. Accordingly, the (b)(2) exemption does not apply here

The Forest Service responded:

Analysis and disclosure of potential impacts of the proposed action within IRAs in the project area is included in the Roadless Characteristics Worksheet and the Wilderness Character Worksheet. The Roadless Characteristics Worksheet includes a table showing the level of vegetation departure in IRAs is 75.49% moderate and 1.44% high. Implementation of prescribed fire within IRAs would maintain or improve the roadless characteristic of naturalness and would maintain or restore the characteristics of ecosystem composition and structure, such as to reduce the risk of

uncharacteristic wildfire effects, within the range of variability that would be expected to occur under natural disturbance regimes of the current climatic period. In addition, proposed mechanical treatments are incidental to implementation of a management activity not otherwise prohibited by the roadless rule and would aid in the implementation of prescribed fire. Access to implement prescribed burns would be determined in site specific implementation plans. The proposed action includes limited cross-country motorized vehicle travel, where resource conditions allow. No construction of temporary or permanent roads is proposed.

The Forest Service did not show that roadless areas were outside the normal range of variability. In fact the Forest Service wrote on page 8 of the IRA Characteristics Analysis:

Past activities such as fire suppression, mining, livestock grazing, and recreation may have had some effects on plant and animal communities;

however, with minimal roaded access, impacts to species diversity and individual populations resulting from past projects or actions in general is expected to be insignificant and localized.

Habitat for TES and species dependent on large undisturbed areas of land

The majority of the TES with suitable habitat on the Ashley are known to occur within or immediately adjacent to the IRAs within the project area.

Since the majority of suitable habitat for TES species is found in roadless areas in the ANF, it seems that the habitat is fine.

Page 3 of the IRA Characteristics Analysis shows only 1.44% of roadless areas have a high level of Vegetation Departure but does not define what Vegetation Departure means. 11.28% of roadless areas have a low rate of Vegetation Departure and 75.49% of roadless areas have a moderate rate of Vegetation Departure.

The Forest Service has not demonstrated that the project complies with the roadless rule and appears to be violating the roadless rule in violation of NFMA, NEPA, and the APA.

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

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

REMEDY

Withdraw the Draft Decision Notice and FONSI and write an EIS that fully complies with the roadless rule.

We wrote in our comments:

We request a more detailed 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?

The Forest Service responded:

Assigning total maximum daily loads (TMDLs) are beyond the scope of the project and jurisdiction of the Forest Service.

The Forest Service responded on page 15 of the BIOLOGICAL ASSESSMENT/BIOLOGICAL EVALUATION & AQUATIC SPECIES REPORT

(Aquatic Species) states: *In 2009, Utah Division of Wildlife Resources (UDWR) crews observed two adult boreal toads in the Burnt Fork Drainage on the north slope of the Uinta Mountains within the High Uintas Wilderness on the Uinta-Wasatch-Cache National Forest (UWCNF). Two adult and several juvenile boreal toads were observed and photographed by UDWR and UWCNF crews conducting fisheries surveys in the Little West Fork Duchesne River drainage on the south slope of the Uinta Mountains in 2009 (Matt Breen – UDWR pers. comm. 2010). Known spotted frog populations occur in the Provo River drainage and the Heber Valley (Bailey et. al. 2006).*

It is important to note, wilderness areas are part of the lands excluded from the proposed action.

Page 19 of the BIOLOGICAL ASSESSMENT/
BIOLOGICAL EVALUATION & AQUATIC SPECIES
REPORT states:

There are no known Boreal toad populations on the Ashley National Forest. Design elements included in the Proposed Action would minimize potential effects to occupied and suitable habitat. In addition, project activities will maintain suitable aquatic habitat.

Therefore, the proposed project is expected to have “No Impact” on Boreal toad populations or their habitat on the Ashley National Forest.

There is no evidence that the Ashley National Forest surveyed for Boreal toads. The BA/BE for aquatic species contradicts itself. First it says that Boreal toads were documented in the Ashley N.F. then it says there is no known Boreal toad populations. Since this is a conditions based management project and the ANF is not telling the public where, when and how they will burn, the project could impact Boreal toads in violation of NEPA, NFMA, and the APA.

Remedy

Withdraw the draft decision, survey for Boreal toads and write an EIS that fully complies with the law including waiting for all TMDLs to be completed in the ANF.

We wrote in our comments:

We also incorporate the following column by George Wuerthner into our comments.

Why Prescribed Burning Is Seldom Effective

thewildlifeneews.com/2021/09/29/why-prescribed-burning-is-seldom-effective/

George Wuerthner September 29, 2021

Prescribed burning is often seen as a way to reduce to the large climate-driven blazes now occurring across the West, however, there are many problems that proponents fail to acknowledge. Photo George Wuerthner

It seems everyone is grasping for some “solution” to big fires. And one of the common assertions is that more prescribed burning would reduce fire spread and allow firefighters to knock down a blaze.

Increasingly we also hear that tribal people kept fires from becoming large by the frequent burning of the landscape—as if this was a secret tool no one in the fire



fighting agencies knew about. The evidence suggests that tribal burning likely reduced fuels in the IMMEDIATE area around villages but seldom influenced the larger landscape fire rotation. You can read more on this at <https://www.thewildlifenews.com/2020/11/23/indigenous-burning-myths-and-realities/>

A prescribed burn, whether done by Indians for cultural purposes or a firefighter with a drip torch, may reduce fuels for a short period. And if a fire were to encounter the burn when fuels were reduced, it might influence fire spread. However, one of the problems with prescribed burning (as well as thinning forests) is the likelihood that any blaze will encounter a “fuel reduction” when it may be effective at influencing fire spread is exceedingly rare. So most prescribed burns (as well as thinning) have no influence whatsoever.

In addition, the very fire people are anxious to stop or control are those burning under extreme fire conditions.

These conditions include high temperatures, low humidity, drought and most importantly high winds. High winds, often blow embers over and through “fuel reductions” like prescribed burns. In other words, even if such prescriptions worked under low to moderate fire weather conditions, fuel reductions including thinning and prescribed burning typically fail to alter fire spread due to wind transport of embers.

Just burning enough of the landscape to have any influence on wildfires is also problematic. The window

when burning is safe is frequently very narrow. Concerns about smoke dispersal add to the limitations.

Furthermore, there is always a chance that a prescribed burn will get away and burn far more of the landscape, including homes, prescribed burning increases the chances of fire losses. Due to the low possibility that any blaze will encounter a prescribed burn during the period when it could change fire behavior whether you would reduce the acreage charred is questionable.

A prescribed burn could get away from fire fighters and burn significant acreage as occurred with the [Davis Fire](#) near Canyon Creek, Montana and the Cerro Grande prescribed burn that destroyed homes in [Los Alamos, New Mexico](#). When such planned ignitions get away from fire fighters due to changing weather conditions, the District

Ranger or Park Supervisor or other responsible agency personnel get blamed for the destruction of property.



This area on the Deschutes National Forest was prescribed burn the previous season. The regrowth of grasses (fine fuels) is now denser than what existed before the burn. Photo George Wuerthner

The other problem with prescribed burning is that in many ecosystems, burning stimulates plant growth. This additional biomass results from the removal of competing vegetation and release more nutrients, water, and sunlight for the remaining plants. Consequently, within a few years of a prescribed burn, you will often get more fine fuels like grass, shrubs, and small trees than before the burn.

In addition, frequent burning was not the dominant fire regime in many ecosystems. Chaparral, sagebrush, and higher elevation conifer forests like fir, lodgepole, spruce,

and others all had naturally long fire rotations and intentionally burning them harms them.

I repeatedly see around the West that agencies will perform a prescribed burn and never bother with the follow-up maintenance. While prescribed burning could be effective if strategically located by communities and repeated continuously, this seldom occurs.

The following two photos demonstrate this idea. The first photo was taken a week after the Bridger Foothills Fire swept across forests, hayfields, and pastures in September 2020. Note that the hayfield has very little grass after being mowed. But strong winds drove the fire across even one-inch stubble. The second photo taken in nearly the exact location shows how rapidly the grass regrew after a fire. In other words, without continuous “maintenance,” the burn would have little impact on slowing or stopping a fire.

Area burned by Bridger Foothill Fire near Bozeman in September 2020. Photo George Wuerthner



Same location (note the burnt fence post) a year later where grass (fuel) regrew. Photo George Wuerthner

All this said I don't oppose the strategic use of prescribed burning so long as people recognize the limitations.

Reducing fuels around communities and homes can be effective if and when a blaze threatens structures. However, the idea that somehow prescribed burning is an effective panacea that can reduce or preclude climate-driven blazes is questionable.

Please see the attached paper by Dr. William Baker titled:

“Are High-Severity Fires Burning at Much Higher Rates Recently than Historically in Dry-Forest Landscapes of the Western USA?”

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

Dr. Baker concluded: “Dry forests were historically renewed, and will continue to be renewed, by sudden, dramatic, high-intensity fires after centuries of stability and lower-intensity fires.”

The purpose of this project is the need to restore a fire regime to the landscape. Based on Dr. Baker’s paper, the proposed action will not meet the purpose and need of the project.

Dr. Baker’s paper is the best available science. Please explain why this project is not following the best available science.

Much of the acreage that has burned in the Rockies is higher elevation lodgepole pine and subalpine fir forests that have long fire rotations of hundreds of years and have not been influenced to any great degree by fire suppression.

Furthermore, fuel treatment often enhances fire advancement by increasing the fine fuels (needles, branches, grass growth) on the surface. Plus, opening the forest by thinning can lead to greater drying and wind penetration, both major factors in fire spread.

The advocates for thinning continue to ignore that most large fires around the West, including those in mixed conifer and ponderosa pine, have occurred in lands under "active forest management." That includes the Ashley Fire and Bootleg Fires, which were among the two largest blazes this past summer in California and Oregon.

For instance, 75% of the Bootleg fire, which burned over 400,000 acres, had previously been "treated" by some form of "fuels management" with no discernible effect on fire spread.

There is plenty of proof from numerous fires where active forest management had no apparent effect on fire behavior or fire spread.

A review of 1500 fires across the West found that as a generalization, areas under "active forest management," which includes thinning and prescribed burning, tend to burn at higher severity than lands like wilderness areas where "fuel treatments" are prohibited.

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

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

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

We can no more suppress forest fires during extreme fire weather than we can stand on a ridgetop and fight the wind. It is hubris and folly to even try. Fires slow and stop

when the weather changes. It makes far more sense to focus our resources on protecting rural homes and other structures from fire by creating “defensible space” of about 100 feet between houses and forests. This allows fire to serve its essential ecological role while keeping it away from our communities.

The Forest Service responded:

The reference cited is a general summarization of historical fires in the western US. The current conditions specific to the Ashley National Forest are disclosed in the Proposed Action, E.A. and the Vegetation and Fuels report. Vegetation Condition Class (VCC) for the project area is the general level to which current vegetation is different from the estimated historical vegetation reference conditions. The departure from historic conditions based upon this data for each biophysical setting

and fire regime are site specific to the project area and are included in the Vegetation specialist report for the project.

The project is not meeting the purpose and need of the project in violation of NEPA, NFMA and the APA.

In “Fire Ecology in Rocky Mountain Landscapes” by William Baker, Dr. Baker writes on page 435, “ ...a prescribed fire regime that is too frequent can reduce species diversity (Laughlin and Grace 2006) and favor invasive species (M.A. Moritz and Odion 2004). Fire that is entirely low severity in ecosystems that historically experience some high-severity fire may not favor germination of fire- dependent species (M.A. Moritz and Odion 2004) or provide habitat key animals (Smucker, Hutto, and Steele 2005).” Baker continues on page 436: “Fire rotations equal the average mean fire interval across a landscape and are appropriate intervals at which individual points or the whole landscape is burned. Composite fire intervals underestimate mean fire interval and fire rotation (chap 5) and should not be used as prescribed burning intervals as this would lead to too much fire and would likely lead to

adversely affect biological diversity (Laughlin and Grace 2006).”

Please find (Laughlin and Grace 2006) attached.

Dr. Baker estimates the high severity fire rotation to be 135 - 280 years for lodgepole pine forests. (See page 162.).

Baker writes on page 457-458 of Fire Ecology in Rocky Mountain Landscapes:

“Fire rotation has been estimated as about 275 years in the Rockies as a whole since 1980 and about 247 years in the northern Rockies over the last century, and both figures are near the middle between the low (140 years) and high (328 years) estimates for fire rotation for the Rockies under the HRV (chap. 10). These estimates suggest the since EuroAmerican settlement, fire control and other activities may have reduced fire somewhat in particular places, but a general syndrome of fire exclusion is lacking. Fire exclusion also does not accurately characterize the effects of land users on fire or match the pattern of change in area burned at the state level over the last century (fig 10.9). In contrast, fluctuation in drought linked to atmospheric conditions appear to match many state-level patterns in burned area over the last century. Land uses that also match fluctuations include logging, livestock grazing, roads and

development, which have generally increased flammability and ignition at a time when the climate is warming and more fire is coming.”

The following article contends that large scale prescribed burning does not meet the purpose and need of the project.

Myths of Prescribed Fire: The Watering Can that Pretends to be a River

By [Bryant Baker](#), M.S., Conservation Director, [Los Padres ForestWatch](#)

and [Douglas Bevington](#), Ph.D., Forest Program Director, [Environment Now](#)

Editors’ note: This article originally appeared in the Environment Now foundation’s report, [“Working from the Home Outward: Lessons from California for Federal Wildfire Policy.”](#) Baker and Bevington’s piece focuses on California’s ecosystems. The role of fire varies by ecosystem, and readers are encouraged to consider their local conditions when assessing the role of prescribed fire. The “Home Outward” report also includes pieces by experts on other key dimensions of fire issues, including home retrofits for public safety during wildfires.

The use of prescribed fire—intentionally setting fires in forests and other ecosystems under planned circumstances—has received increased attention in California and elsewhere in recent years. On the one hand, it is good that there is growing recognition that fire is a natural and necessary part of forests and other ecosystems. On the other hand, current advocacy for large-scale prescribed fire

across vast areas is often built on outdated assumptions and overstated claims, while downplaying problems stemming from how prescribed fire is actually being implemented. This factsheet identifies five key sets of myths regarding prescribed fire and shows how they can lead to misguided policies and missed opportunities to better accomplish public safety and ecological restoration goals in a more cost-effective manner. To create effective fire policies, we need to face these facts—Prescribed fire increases fire and smoke. Prescribed fire is inefficient for public safety compared to home retrofits. Prescribed fire is inefficient for ecological restoration compared to managed wildfire. Prescribed fire can be harmful. And prescribed fire and cultural burning are not the same.

Prescribed fire increases fire and smoke.

A central myth is that increasing prescribed fire will lead to less fire and smoke overall. Proponents of prescribed fire highlight examples where a portion of a wildfire halted when it encountered a previously burned area, but these anecdotes are the exception rather than the rule. The reality is that wildfires can burn through previously burned areas as soon as eight months after the prior fire (Stephens and Moghaddas 2005). Over 106,000 acres within the 2020 LNU Lightning Complex in California had burned within the previous five years, with 67,000 acres having burned just two years prior. As fire researchers have stated, “fuel treatments are not intended to stop wildfires” (Omi and Martinson 2004). Instead, the main goal of prescribed fire is to somewhat alter subsequent fire intensity in the affected area, though that may not occur under unfavorable

weather conditions. In other words, prescribed fire is additive to, rather than being a substitute for, wildfire. Even in instances where prescribed fire has been found to limit wildfire extent, the acreage of a prescribed burn significantly exceeds the acreage of subsequent wildfire reduction, with 3-4 units of prescribed fire needed to reduce wildfire by one unit (Fernandes 2015). Furthermore, the effects of prescribed fire on wildfire behavior fade within a few years. Within as little as 2 or 3 years after prescribed fire, combustible understory vegetation can return to levels equal to or greater than levels prior to prescribed burning (Knapp et al. 2007). Thus, prescribed fires would need to be reapplied on a regular basis, repeatedly adding fire to many places that otherwise might not encounter a wildfire until many years in the future. For all these reasons, increased use of prescribed fire will likely lead to a net increase in the total amount of fire (Hunter and Robles 2020).

With that additional fire comes additional smoke. Proposals to implement landscape-wide prescribed fire could result in ten times as much smoke (Hanson 2021; see also p. 12 in this [report](#)). In addition to increasing the total amount of smoke, increasing prescribed fire also increases the duration of smoke exposure. While wildfire smoke is concentrated in the height of fire season—and landscape-scale use of prescribed fire would not preclude this—prescribed fires are typically lit in the “shoulder seasons” when wildfires are less likely, and thus prescribed fires prolong smoke exposure into times when it would not

otherwise occur. There can be circumstances where it is appropriate to use prescribed fire, but it should be done knowing that the effect will be an overall increase in the amount and duration of fire and smoke.

Prescribed fire is inefficient for public safety compared to home retrofits.

Prescribed fire is an inefficient and relatively ineffective way to protect homes and communities during wildfires. As Dr. David Lindemayer recently summarized, “The peer-reviewed evidence is that burning forest miles from houses doesn’t protect those houses” (Foley 2021). As discussed above, prescribed fires generally do not stop subsequent wildfires, and altering fire intensity is largely irrelevant to community safety because home ignitions during wildfires are rarely caused by direct contact with high-intensity fire (Cohen and Stratton 2008, Syphard et al. 2017). Instead, home fire-safety retrofits (“home hardening”) offer the most effective ways to keep communities safe during wildfire. Yet the resources to help communities with fire-safety retrofits are currently quite limited compared to the government funding for prescribed fire and associated “fuel treatments” in wildlands. For example, in California’s 2021 proposed budget for wildfire preparedness, less than 4% of the funding is directed to “community hardening” (LAO 2021). While prescribed burning adjacent to communities can potentially have some benefits, proposals to use large-scale prescribed fire across vast landscapes away from communities represent a remarkably indirect and inefficient

way to protect houses when compared with the direct benefits of home retrofits.

Prescribed fire is inefficient for ecological restoration compared to managed wildfire.

One positive outcome of the greater attention on prescribed fire is that it has contributed to growing recognition that fire is a necessary part of forests and other ecosystems, and that currently many forests have a shortage of fire compared to levels prior to modern fire suppression.

Unfortunately, many advocates for prescribed fire rely on an outdated “good fire/bad fire” dichotomy that is out of step with the science. In this false dichotomy, prescribed fires are characterized as “good” because they are associated with low-intensity fire, whereas wildfires are characterized as “bad” because they are associated with mixed-intensity fire that includes some areas of high-intensity fire. However, there is a growing body of research showing that high-intensity fire has always been a part of forests and other ecosystems, and it produces ecological benefits by creating excellent wildlife habitat and stimulating nutrient cycling (DellaSala and Hanson 2015). In contrast, low-intensity fire associated with prescribed burning does not generate the habitat creation and the nutrient cycling associated with higher-intensity fire. Each type of fire intensity has its role in a mixed-intensity fire regime, and low-intensity fire is not a substitute for the benefits from some higher-intensity effects in forests.



High-intensity fire has always been a part of forests and other ecosystems, and it produces ecological benefits
(Source: Doug Bevington)

Another myth repeated by some prescribed advocates is the erroneous notion that forests that previously experienced fire suppression will now “burn up” in all or mainly high-intensity fire when a wildfire occurs, unless those forests first get prescribed fire or other “fuel treatments.” But multiple studies have shown that areas that experience wildfire following long periods of fire suppression still burn mainly at low and moderate intensity, along with some high-intensity patches that provide the benefits described above (Odion and Hanson 2008, Miller et al. 2012). In fact,

research has found that forests with the longest fire exclusion actually burn at somewhat lower intensity (Odion et al. 2010). This is exciting news for efforts at ecological restoration because it means that large-scale prescribed fire or other “treatments” are not needed as a precondition to allowing mixed-intensity wildfire back into forests.

Instead, managed wildfire offers a much more efficient way to restore fire to forests that currently have a shortage of fire, and this has economic and practical benefits. Managed wildfire (also known as wildland fire use) differs from fire suppression in that, rather than trying only to extinguish a wildfire, fire managers seek to shepherd the fire away from communities and into wildland areas where the fire will provide ecological benefits. This is less intensive and costly than full suppression. Likewise, managed wildfire differs from prescribed fire because the latter has an extensive planning process and often quite restrictive parameters before a prescribed fire ignition can occur, whereas managed wildfire works with natural fire ignitions to provide more fire where it is needed in a more expeditious manner.

This is not to say that prescribed fire does not have a role in fire policy, but instead that role has been overstated. Prescribed fire is a useful tool when there are special circumstances where fine-scale control over fire is needed. In this regard, prescribed fire has a role equivalent to the role of a watering can. A watering can is a good tool for tending the plants around your house, but if you are faced

with a dry field in need of irrigation, it would be absurd to propose buying thousands of watering cans. Yet this is basically equivalent to current proposals relying mainly on prescribed fire to restore fire to vast areas. Instead, the right way to water a large field is through large-scale irrigation—a river, not a watering can—and the most efficient way to restore fire to large landscapes is through managed wildfire. Yet, despite its benefits, managed wildfire currently gets surprisingly little attention in current fire policy discussions, compared to prescribed fire.

Prescribed fire can be harmful.

Prescribed fire is sometimes called “good fire” by its proponents, but the reality is that, while it can be useful in some circumstances, prescribed fire can also cause ecological damage. One example is when prescribed fire policies get applied to non-forest ecosystems such as chaparral, Great Basin sagebrush, or pinyon-juniper woodlands. Research over the past few decades has established that these ecosystems naturally and historically burned infrequently, with several decades or even centuries between fires (Floyd et al. 2004, Baker 2006, Mensing 2006, Keeley and Zedler 2009, Baker and Halsey 2020). In these ecosystems, the use of prescribed fire can shorten fire-free intervals needed for slow-growing shrubs to re-establish, and such fire conducted outside of the natural fire season can inhibit seed germination for many species while favoring growth of non-native plants that can be more

flammable (Parker 1987, Le Fer and Parker 2005, Baker 2006, Syphard et al. 2006).

Prescribed fire can also be harmful in forests, especially when done outside of the main fire season. Wildlife have evolved strategies to coexist with summer forest fires, but prescribed fires are often lit in the spring when bird eggs and nesting chicks cannot get away from fires (Hanson 2021). There can also be significant ecological damage when logging (“thinning”) is treated as a prerequisite for prescribed fire. On national forests, this means that Forest Service projects involving prescribed fire can also include substantial amounts of logging that damages wildlife habitat. Furthermore, logging results in cut vegetation debris that then gets piled up and burned. The Forest Service is now calling this pile burning “prescribed fire,” but it causes sustained burning in a concentrated location that can scorch and sterilize the soil, and it does not produce the beneficial post-fire wildlife habitat created during genuine forest fire restoration (Korb et al. 2004). In light of these potential harms, projects involving prescribed fire should not be exempted from proper environmental review.

Prescribed fire and cultural burning are not the same.

As attention on prescribed fire has grown in recent years, there has also been broader awareness that Native Americans have long traditions of applying fire to the land

in practices known as cultural burning. Cultural burning was outlawed or severely restricted when federal and state policymakers imposed their wildfire suppression policies on Indigenous peoples. Now some Indigenous groups seek to restore their ability to do more cultural burning. Traditionally, burning has been done for a variety of purposes, including stimulating the growth of plants that are particularly useful to their communities, such as for basket-weaving or food production. In this regard, traditional cultural burning is notably different from current approaches to prescribed fire from the Forest Service and other agencies that primarily focus on trying to suppress forest fire intensity across vast areas. Yet, the Forest Service's approach to prescribed fire often gets conflated with traditional cultural burning in discussions of fire policy. This can result in cultural appropriation that superimposes Forest Service goals on Tribal practices. The evidence is clear that, prior to modern fire suppression policies, Native American cultural burning and mixed-intensity forest fires were both much more common than they are now (Odion et al. 2014, 2016, Vachula et al. 2019, Wahl et al. 2019). They coexisted, and one did not preclude the other. Both have been suppressed and marginalized by federal and state agencies.

Conclusion—The disappointing results of prescribed fire

When all is said and done, the actual results from broad-scale application of prescribed fire would likely be disappointing for most people. Those who thought it would

reduce fire would instead experience more fire and smoke from large-scale prescribed burning. Those who are concerned about public safety would realize that communities would have been much safer if the money used to subsidize backcountry prescribed fires and associated “fuel treatments” had instead been focused on directly assisting with fire-safety home retrofits as part of a home-outward strategy. Those who want to help ecosystems would realize that managed wildfire offers a more efficient and practical way to restore fire to forests, whereas prescribed fire is often tied to increased logging. And those who want to support Tribes’ cultural burning would find traditional practices getting appropriated by federal and state agencies. While prescribed fire can have some benefits in special circumstances, it is important to not overstate the role of prescribed fire—a watering can should not pretend to be a river—or we risk missing more effective and cost-efficient solutions using managed wildfire, traditional cultural burning, and home fire-safety retrofits.

Please see the attached paper by Baker et al. 2023. This landmark study found a pattern of "Falsification of the Scientific Record" in government-funded wildfire studies.

This unprecedented [study](#) was published in the peer-reviewed journal *Fire*, exposing a broad pattern of scientific misrepresentations and omissions that have caused a "falsification of the scientific record" in recent

forest and wildfire studies funded or authored by the U.S. Forest Service with regard to dry forests of the western U.S. Forest Service related articles have presented a falsified narrative that historical forests had low tree densities and were dominated by low-severity fires, using this narrative to advocate for its current forest management and wildfire policies.

However, the new study comprehensively documents that a vast body of scientific evidence in peer-reviewed studies that have directly refuted and discredited this narrative were either misrepresented or omitted by agency publications. The corrected scientific record, based on all of the evidence, shows that historical forests were highly variable in tree density, and included "open" forests as well as many dense forests. Further, historical wildfire severity was mixed and naturally included a substantial component of high-severity fire, which creates essential snag forest habitat for diverse native wildlife species, rivaling old-growth forests.

These findings have profound implications for climate mitigation and community safety, as current forest policies that are driven by the distorted narrative result in forest management policies that reduce forest carbon and increase carbon emissions, while diverting scarce federal resources from proven community wildfire safety measures like home hardening, defensible space pruning, and evacuation assistance.

"Forest policy must be informed by sound science but, unfortunately, the public has been receiving a biased and inaccurate presentation of the facts about forest density and wildfires from government agencies," said Dr. William Baker in their press release announcing the publication of their paper.

"The forest management policies being driven by this falsified scientific narrative are often making wildfires spread faster and more intensely toward communities, rather than helping communities become fire-safe," said Dr. Chad Hanson, research ecologist with the John Muir Project in the same press release. "We need thinning of small trees adjacent to homes, not backcountry management."

"The falsified narrative from government studies is leading to inappropriate forest policies that promote removal of mature, fire-resistant trees in older forests, which causes increased carbon emissions and in the long-run contributes to more fires" said, Dr. Dominick A. DellaSala, Chief Scientist, Wild Heritage, a Project of Earth Island Institute concluded in the press release.

Please also find attached DellaSala 2022 which also shows the amendments do not follow the best available science.

Please see the attached paper by Faison et al. 2023 that finds that unmanaged forests are the most resilient.

The amendment is therefor in violation of the purpose and nee, NEPA, NFMA and the APA .

REMEDY

Withdraw the Draft Decision Notice and write an EIS that filly 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 Utah 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 Ashley 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.

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?

Please provide us with the full BA for the lynx, wolverines, pine martins, northern goshawk, yellow-billed cuckoo, Ute ladies'-tresses, and Monarch Butterfly and any other

threatened, endangered or proposed species in the Ashley National Forest.

The Forest Service responded:

The non-native invasive plant risk assessment (Appendix C of the Botany Biological Evaluation) discusses the impact of the project on noxious weed introduction and spread. It describes noxious weed species presence and abundance within the project area. A map of known noxious weed

infestations has been included. No yellow or orange hawkweeds have been documented within the project area.

Page 28 of the Botany BABE states:

Current Management Direction

Land and Resource Management Plan

The Forest Plan, as amended, for the Ashley National Forest (USDA Forest Service 1986) provides the following direction for noxious weeds:

- ***Control all group 1 noxious weeds by 1990 and all group II noxious weeds by 2000, as defined by***

FSM 2200.

- ***Only land application of approved herbicides to control noxious weeds will be allowed provided***

that herbicides are not allowed to contaminate surface water.

- ***In priority and general habitat management areas, sagebrush focal areas, and Anthro Mountain,***

where practical and available, all fire-associated vehicles and equipment should be inspected and

cleaned using standardized protocols and procedures and approved vehicle/equipment

decontamination systems before entering and exiting the area beyond initial attack activities to

minimize the introduction of invasive annual grasses and other invasive plant species and noxious weeds.

Forest Service Manual

Forest Service Manual 2900 (USDA Forest Service 2011) policy directs Forest Service units to determine

the risk of introducing, establishing, or spreading invasive species associated with any proposed action, as

an integral component of project planning and analysis, and where necessary provide for alternatives or

mitigation measures to reduce or eliminate that risk prior to project approval.

Page 15 of the Botany BABE states:

There are four known occurrences of Ute

ladies'-tresses within the project analysis area. Effects to Ute ladies'-tresses are discussed in the

Environmental Consequences section of this document.

Page 20 of the BABE state:

Threatened, Endangered and Proposed Species

Ute ladies'-tresses (Spiranthes diluvialis)

Affected Environment

Ute ladies'-tresses is a perennial orchid with a spike of numerous small white flowers arranged in

a gradual spiral. The US Fish and Wildlife service describes habitat as:

“...moist meadows associated with perennial stream terraces, floodplains, and oxbows at

elevations between 4,300-6,850 feet (1,310-2,090 meters).

Surveys since 1992 have expanded the

number of vegetation and hydrology types occupied by Ute ladies'-tresses to include seasonally

flooded river terraces, sub irrigated or spring-fed abandoned stream channels and valleys, and

lakeshores. In addition, 26 populations have been discovered along irrigation canals, berms,

levees, irrigated meadows, excavated gravel pits, roadside barrow pits, reservoirs, and other

human-modified wetlands. New surveys have also expanded the elevational range of the species

from 720-1,830 feet (220-558 meters) in Washington to 7,000 feet (2,134 meters) in northern

Utah. Over one-third of all known Ute ladies'-tresses populations are found on alluvial banks,

point bars, floodplains, or ox-bows associated with perennial streams.”

Ute ladies’-tresses was listed as a federally threatened species in February of 1992. Critical

habitat rules have not been published. Ute ladies’-tresses is endemic to west-central North

America ranging from British Columbia, southward to Washington and Montana, eastward to

Idaho, Wyoming, Nebraska, and south to Colorado, Utah and Nevada (NatureServe 2022). At the

time of listing, the total number of individuals was estimated to be less than 6,000 plants in 10

populations covering a total area of 170 acres (USDI Fish and Wildlife Service 1992). By the

time the recovery plan was published in 1995, the number of estimated individuals increased to

20,500 in 12 populations (USDI Fish and Wildlife Service 1995). As of 2005, the total number of

populations was estimated to be 78 with the estimated area of occupancy of 674 to 784 acres

(Fertig et al. 2005).

Threats to Ute ladies’-tresses at the time of listing, included habitat loss and modification,

overcollection, competition from exotic weeds, and herbicides as the current and potential effects

to the long term persistence of the species. Additional threats have been added including

recreation, haying, grazing, hydrology changes, fewer pollinators, scarcity of mycorrhizal

symbionts, and conflicting management with other rare species (USDI Fish and Wildlife Service

2022b).

Ute ladies'-tresses is known to occur adjacent to the National Forest boundary along the Green

River between Little Hole and downstream to the Forest Boundary. It is also known from along

the rivers of the south slope of the Uinta Mountains including the Yellowstone, Uinta, Lake Fork,

and Rock Creek Rivers.

Forest-wide Prescribed Fire Project Botany Biological Evaluation/Biological Assessment

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Direct, Indirect and Cumulative Effects

Design element WLF 4 would cease project implementation activities if new occurrences of Ute

ladies'-tresses are found. Design element BOT 5 would omit prescribed fire and other fuels

treatments within known occurrences and suitable habitat if treatments neither sustain long-term

plant persistence nor maintain and/or enhance plant habitat's ecological integrity and resilience.

Project design elements, including HYD 1 – 6, will minimize soil erosion however, small scale

soil erosion may occur on some sites with moderate to high soil burn severity including jackpot

burning or pile burning. Prior to implementing any proposed activities, the forest ecologist and

hydrologist would be consulted to determine appropriate buffers to ensure sediment or erosion

will not impact the Ute ladies'-tresses population. With the incorporation of these design element,

direct and indirect impacts would be avoided.

Determination

With the incorporation of design elements and implementation elements, the proposed action is

not expected to impact Ute ladies'-tresses. Therefore, the proposed project has the determination

of no effect for Ute ladies'-tresses.

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

Because the Forest Service is not telling the public where the burning will occur, the public has no way of telling that the project will comply with law including the ESA. No surveys were done for Utes Ladies'-tresses so the statement that the project will have no effect on Utes Ladies'-tresses can not be confirmed.

Remedy

Withdraw the Draft Decision Notice and FONSI, formally consult with the FWS on the impact of the project on Utes Ladies'-tresses and write an EIS that fully complies with the law.

We wrote in our comments:

The scoping notice indicates that the Forest Service will use “condition-based management” scheme, an approach that does not meet the minimum requirements of NEPA as enacted by the United States Congress and has been soundly rejected by the courts. Condition-based management means the Forest Service authorized the Project before identifying specific locations for logging, road construction, prescribed burns, and other fuel reduction activities.

The “condition-based management” approach will not adequately address the direct, indirect, and cumulative effects of the Project on the human environment. Please provide the public a clear basis for choice among alternatives. Please give the public sufficient information to foster informed decision-making or informed public participation. Failing to do so will violate NEPA, 42 U.S.C. § 4332(2)(C), and is therefore “not in accordance with law” under 5 U.S.C. § 706(2)(A) and “without observance of procedure required by law” under 5 U.S.C. § 706(2)(D).

Please see the article below about a similar project in Alaska which a federal district court ruled was illegal. I have attached the court’s order for your information.

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 re- view and moving forward without throwing out the entire project, but ultimately ruled against the agency.

Gleason's ruling said the economic harm of invalidating the timber sales did not outweigh "the seriousness of the errors" in the agency's handling of the project.

The method used in the Prince of Wales Landscape Level Analysis was the first time the agency used it for 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.”

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

The Forest Service responded:

We are aware of and considered this court ruling during the development of this project.

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

May 10, 2021

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

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

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

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

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

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

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

to comment and influence the decision based on localized conditions.

While CBM is not a new management tool, the Forest Service has employed it for over a decade and it was used sparingly during the Obama administration. However, its use accelerated during the Trump administration and shows no sign of slowing. To date, dozens of Forest Service projects across the country have used CBM. See, e.g., [Red Pine Thinning Project](#), Ottawa National Forest; [Medicine Bow Landscape Vegetation Analysis](#), Medicine Bow-Routt National Forest; [Sage Hen Integrated Restoration Project](#), Boise National Forest.

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

Only two federal cases have addressed CBM's legality. In WildEarth Guardians v. Connor, 920 F.3d 1245 (10th Cir. 2019), the Tenth Circuit approved a CBM approach for a logging project in southern Colorado in Canada lynx habitat. The environmental assessment utilized CBM and analyzed three different alternatives, one of which was a worst-case scenario. For the worst-case scenario, the Forest Service assumed that the entire lynx habitat in the project area would be clear-cut. The Forest Service "took the conservative approach" because it "did not know precisely" where it would log in the lynx habitat areas. WildEarth Guardians, 920 F.3d at 1255. Based on this conservative approach, coupled with a comprehensive, region-wide lynx management agreement and its associated environmental impact statement, the court agreed with the Forest Service that its future site-specific choices were "not material" to the effects on lynx—i.e., that no matter where logging occurred, "there would not be a negative effect on the lynx." Id. at 1258–59.

However, a second case addressing CBM found that site-specific analysis was needed to satisfy NEPA's "hard-look" standard. In Southeast Alaska Conservation Council v. U.S. Forest Service, 443 F. Supp. 3d 995 (D. Ak. 2020), the court held that the Forest Service's Prince of Wales Landscape Level Analysis Project—a 15-year logging project on Prince of Wales Island in the Tongass National Forest—violated NEPA. The project would have authorized the logging of more than 40,000 acres, including nearly 24,000 acres of old growth, along with 643 miles of new and temporary road construction, but it

“d[id] not include a determination—or even an estimate—of when and where the harvest activities or road construction . . . w[ould] actually occur.” Id. at 1009. The court found that this analysis was not “specific enough” without information about harvest locations, methods, and localized impacts. Id. at 1009–10. The court further held that a worst-case analysis could not save the project, because site-specific differences were consequential. Id. at 1013.

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

For some projects, the Forest Service has tried to avoid this tension by conducting section 7 consultation prior to each phase of a CBM project, but this approach has run headlong into the general rule against segmenting project consultation duties under the ESA. See, e.g., Conner v.

Burford, 848 F.2d 1441, 1457 (9th Cir. 1988). With few exceptions, section 7 consultation must cover the overall effects of the entire project at the initial stage before the project can commence. Thus, regardless of whether agencies choose to consult up front or to consult in stages, the Forest Service is likely to face significant legal hurdles when its CBM project “may affect” listed species.

CBM is not only legally dubious, but also unnecessary. The Forest Service already has NEPA-compliant methods to deal with situations that require a nimble response to the needs of a dynamic landscape. In these cases, the Forest Service can complete a [single “programmatic” analysis](#) to which future site-specific decisions will be tiered. This programmatic approach allows the Forest Service to speed the consideration and implementation of site-specific, step-down proposals. Unlike CBM, this approach allows for public review of site-specific decision-making and administrative review of those decisions.

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

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

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

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

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

The Draft decision notice and FONSI do not show that the project is comply with the Forest Plan.

Remedy

Withdraw the draft decision notice and FONSI and write an EIS that fully complies with the law.

We wrote in our comments:

Please disclose whether you have conducted surveys in the Project area for this Project for lynx, pine martins, northern goshawk, yellow-billed cuckoo, Ute ladies'- tresses, and Monarch Butterfly.

Please disclose the last time the Project area was surveyed for lynx, wolverines, pine martins, northern goshawk, yellow-billed cuckoo, Ute ladies'- tresses, and Monarch Butterfly.

•

Please disclose how often the Project area has been surveyed for lynx, wolverines, pine martins, northern goshawk, yellow-billed cuckoo, Ute ladies'-tresses, and Monarch Butterfly.

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Would the habitat be better for lynx, wolverines, pine martins, northern goshawk, yellow-billed cuckoo, Ute ladies'-tresses, and Monarch Butterfly in the no action alternative was chosen?

Please provide us with the full BA for the lynx, wolverines, pine martins, northern goshawk, yellow-billed cuckoo, Ute ladies'-tresses, and Monarch Butterfly and any other

threatened, endangered or proposed species in the Ashley National Forest.

The Forest Service responded:

The forest has a monitoring strategy and

results are available on the Forest website.

In addition, surveys/monitoring done by State agencies is included in the existing condition in the BE/BA. Prior to implementation, an interdisciplinary review, including a wildlife biologist would occur (proposed action including design elements).

Both the BE and BA are included in the project record.

Page 7 of the Biological Evaluation for Terrestrial Wildlife Species states:

- *Incorporate project design elements agreed upon through Section 7 consultation with U.S. Fish and Wildlife Service and forest biologist to avoid negative impacts to TEP species (for instance, Canada lynx, etc.). Cease project activities if a threatened, endangered, proposed, or sensitive species is discovered within or adjacent to the project area, until it is recommended how best to proceed by the appropriate specialist (wildlife, botany, aquatics, etc.).*

Please see the column below from the November 28, 2004 Salt Lake Tribune that states lynx were in the Ashley National Forest in 2004 and could easily be there today.

Next time, let the missing lynx stay in Utah

https://archive.sltrib.com/story.php?ref=/opinion/ci_2475529

By Mike Medberry

.

November 28, 2004

A lone male Canada lynx living in Utah was recently captured and transported to Colorado for fear that bobcat hunters would trap and kill it. While that might have been a good decision one time for the Utah Division of Wildlife, it should not be repeated.

Lynx are a small cat about the size of a bobcat. They are beautiful, shy and a bit mysterious. They live at high elevations, where their enormous feet allow them to travel efficiently in deep snow. Their diet consists almost entirely of snowshoe hares and red squirrels.

They are nothing to be alarmed at. They don't bother sheep or cattle - or ranchers. They don't bother hunters. They are an important part of the ecological web of life.

Still, they have been declared a threatened species under the Endangered Species Act because their numbers have

declined precipitously throughout their former range in the United States, including Utah. That has been due mainly to trapping and habitat destruction. Indeed, the last documented native wild lynx in Utah were caught in traps in the Uinta Mountains a couple of decades ago.

During the past few years, the state of Colorado, in an effort to restore its lynx population, reintroduced lynx captured in Canada into the San Juan Mountains. This last spring several litters were produced and the population appears to be growing.

There is no doubt that dispersing lynx from Colorado, and perhaps from Wyoming, will again travel to Utah in search of new territory. Their fate will be in the hands of Utah citizens, particularly state wildlife management officials.

Lynx are known to travel widely in search of vacant home ranges containing adequate prey sources or in search of mates. This lynx, which was fitted with a satellite collar to allow tracking of its movements, traveled from southern Colorado to the Uinta Mountains near Vernal in July, swimming the Colorado and the Green Rivers along the way.

Despite the fact that the Uintas offer the best lynx habitat in the state, it kept moving, traversing the south slope of the range to the mouth of Weber Canyon on the Wasatch front. From there it moved down the center of the state to near Kanab, then back to the Wasatch Plateau in Emory

county, where it remained when the first snows of the season came. At the request of the Utah Division of Wildlife Resources (DWR), Colorado wildlife officials captured it and took it back to Colorado.

Alternatively, DWR might have simply protected the lynx by closing the region around it to trapping and by educating trappers that a lynx was in the area. Perhaps they chose not to do this for fear that someone would have deliberately caught and killed it. If so, that is a sad commentary on one class of Utah citizens. Whatever the reason, instead of allowing it to remain, they had it removed.

It is important to realize that this lynx - and two others that moved from Colorado to Utah this summer - was not lost. There is suitable habitat for lynx in Utah and they belong here. Most likely these animals are searching for the best available habitat and for mates. In the course of time they might settle down and remain.

That lynx are native to Utah and are a threatened species only adds to reasons why they should be welcomed back to our state with open arms.

The Uintas provide excellent habitat for lynx, as Utah DWR mammals program coordinator Kevin Bunnell's recent scientific reports confirm, and moving the trapped lynx there would have put him closer to a female lynx known to be living in Utah where they might have mated.

Why the DWR did not choose another option that would have allowed this lynx to remain in Utah is hard to say. For example they might have protected the lynx in Utah and sought to recover a species that is rare and well-loved by the public. This former resident of our state should be greeted and welcomed as an old friend. It will return, as friends are wont to do, so what is the point of sending dispersing lynx back to Colorado?

We believe that the Utah DWR should prepare a recovery plan for lynx as soon as possible. This plan should identify actions that citizens of Utah would support in recovering lynx to Utah and should be backed by professional scientific information. It would be a good thing for lynx and for the citizens of Utah.

Mike Medberry is program coordinator for the Western Wildlife Conservancy. He has worked for 15 years on conservation issues in Idaho and Utah. The conservancy's mission is to protect and conserve wildlife in an ecosystem stretching from Utah to Yellowstone with short-term goals of recovering lynx and wolves and protecting puma and bear in this region.

The Wildlife BA BE states on page 9:

In summary, the likelihood of an individual lynx being exposed to human activities facilitated by the project is very low given that the Ashley is considered unoccupied and that there are likely very few, if any lynx, on the Ashley NF other than the occasional wandering lynx transplant from Colorado at this point in time (Berg and Inman 2010, Christensen 2015, ILBT 2013, USDA Forest Service 2006, USDA Forest Service 2007ab&c, USDA Forest Service 2010-2017).

In Case 9:12-cv-00027-DLC, the federal district court in Montana ruled that the Forest Service must consult with the U.S. Fish and Wildlife Service on the impact on a species even if the species is only transitory.

The order, starting on page 18 states:

The Forest Service all but admits that lynx may be present on the Forest. See e.g. FP:A02:343 ("The analysis in the EA does not state that lynx do not occur in the mountain range. What it says is that the Forest(and project area) is currently considered 'unoccupied' by the USFWS."); BDNF:Ll- 370:36-39 (recognizing that unoccupied secondary areas provide connectivity and linkages for lynx between core areas as well as for aging habitat). Similarly, the Wildlife Service, in its Biological Opinion on the Lynx Direction, emphasized that unoccupied habitat should be managed to "continue[] to facilitate and allow dispersal of lynx" and to "avoid or reduce effects on lynx." BDNF:Ll-384; BDNF:Ll-370:39. Thus, both agencies recognize that lynx may "occur,"travel through,

or forage in "unoccupied" areas, and that management actions in unoccupied areas may affect those transient lynx as well as any lynx attempting to establish new home areas.

If a species "may" be present, the ESA obligates the agency to perform a biological assessment or inter informal consultation with the Wildlife Service to ensure that the proposed action will not adversely affect the species. Defendants have not provided a reasoned basis for its construction that the "may be present" standard requires occupancy. The Wildlife Service itself, analyzing section 7, once rejected the argument of a commenter who urged the Service "to include only species actually known or believed to occur in the action area":

The Service agrees that the species list should be tailored to the action area and that field personnel should take care that the list is not over inclusive. However, the Act requires the Service to provide a list of all listed or proposed species that "may be present" in the action area. Thus, migratory species that "may be present" at some point within the action area must be included in the species list.

Interagency Cooperation-Endangered Species Act of 1973, as Amended; Final Rule, 51 FR 19926-01 (Jun. 3, 1986). Defendants now attempt to distinguish this response by distinguishing "migratory species" from transient species like the lynx, but the focus of the

commentary was not limited in this manner. The Wildlife Service clearly rejected a standard which would require a species to be "actually known or believed to occur" in an area because it would conflict with the statutory language.

Although evidence of the presence of lynx in the Forest is not overwhelming, some evidence nevertheless exists that lynx may be present. Specifically, Squires et al. (2003), documented one set of lynx tracks in 2001 in the Anaconda range, part of which lies within the Big Hole landscape area, which is within the analysis area for wildlife security for the Project. Berg (2009) identified "possible" and "probable" lynx tracks in the Forest. Additionally, Berg found that though "most of the BDNF was ... likely not good lynx habitat," there were "significant exceptions" to this. FWS:004347. For example, "[r]esident lynx may have been present in the West Fork/Middle Fork Rock Creek vicinity" given the abundance of snowshoe hare and forest structure, and "habitat was also pretty good in the Pioneer Mountains." Id. Berg also concluded:

The West Fork/Middle Fork Rock Creek and MacDonald Pass areas are likely important 'stepping stones' for lynx that may move between currently occupied habitat for this species in northwest Montana and the Greater Yellowstone Ecosystem. . . .[I]t is very likely that lynx were present on MacDonald Pass on the Helena NF, which is just north of the BDNF [and lynx] that use the

MacDonald Pass area may also use adjacent forests on the BDNF.

Id. A 2003 Wildlife Service map also suggests the Forest may be within the range of resident and dispersing lynx, FP:0-04: 264, and radio-collared lynx are actually known to have traveled through mountain ranges in the Forest, though they did not stay in the Forest for long, FP:J075a:3.

None of this evidence is reliable enough to fit the criteria for "occupancy," and other evidence cited is arguably stale. But the Wildlife Service's decision to reject the evidence entirely is arbitrary and capricious, particularly considering the Wildlife Service's earlier position that the "may be present" standard does not require actual occurrence. On its face, the question of whether lynx "may be present" in an area is less rigorous than the question of whether lynx "occupy" an area. Applying the occupancy definition to the first step in the process "create[s] metric more stringent than, and contrary to, what the ESA dictates." Alliance for Wild Rockies v. Lyder, 728 F. Supp. 2d 1126, 1137 (D. Mont. 2010).

Of course, the Wildlife Service's construction is expedient-the agencies undoubtedly anticipate that they would conclude that an action in an unoccupied area that allegedly complies with the Lynx Direction would not adversely affect the lynx-but that does not permit the agencies to take the procedural shortcut that has occurred here. The agencies must first determine whether a species "may be present," under a reasonable interpretation of the

Act's plain language. Only then should they consider the likelihood that the species will be affected, and that inquiry should be based on the performance of a biological assessment or informal consultation. Because the Wildlife Service substituted its "occupancy" standard for the ESA's "may be present" standard, the agencies did not enter into informal consultation or have the opportunity to agree in writing that the action is "not likely to adversely affect" the lynx, despite the fact there is some evidence that lynx "may" be in the area. 50 C.F.R. § 402.13(a).

*In summary, the Wildlife Service's "occupancy" standard bypasses the procedural protections of section 7, allowing it to ignore any evidence that does not fit the more rigorous standard. The agencies' interagency agreement to reach this result in unoccupied areas cannot override the statutory and regulatory language of the ESA or the Ninth Circuit's direction that "the minimum threshold for an agency action to trigger consultation with the Wildlife Service is low," *W: Watersheds Project*, 632 F.3d at 496, and "any possible effect, whether beneficial, benign, adverse, or of an undetermined character, triggers the formal consultation requirement." /d. (citations omitted). Accordingly, the Project must be enjoined until the Wildlife Service reconsiders its listing determination in accordance with this opinion.*

Please find the order for Case 9:12-cv-00027-DLC attached.

The DDN violates the ESA, NEPA, NFMA, and the APA Based on Impacts to Canada Lynx.

“The main cause of lynx mortality is starvation (USDA Forest Service 2007a, page 141). Therefore, lynx habitat conservation measures are currently focused on maintaining adequate quantities of winter snowshoe hare habitat. Livestock grazing (and trampling) has the potential to reduce the regeneration of aspen, conifer, and willow communities, which in turn could reduce the amount and quality of snowshoe hare habitat.”

The Forest Service Must Formally Consult on Lynx.

The agencies concede that the Project is likely to adversely affect the lynx. However, FWS failed to prepare a biological opinion for the Project. Instead, the agencies rely on 5-year old biological opinion for the Region-wide Northern Rockies Lynx Management Direction. This Region-wide programmatic biological opinion cannot and does not adequately substitute for a Project-specific biological opinion. The agencies’ failure to complete ESA consultation before authorizing and implementing the Project violates the ESA. Additionally, the programmatic biological opinion relied upon does not address all the relevant factors for the Project and is not based on best available science.

The Agencies Must Complete A New Biological Assessment, Biological Opinion, Incidental Take Statement, And Lynx Management Direction Amendment For The Forest Plan For Lynx.

The agencies do not have in place a legally and scientifically adequate biological assessment, biological opinion, and incidental take statement for lynx for the Forest Plan for the Ashley N.F. although the agencies rely on the Forest Plan amendment amending the Northern Rockies Lynx.

Please find Kosterman attached and Holbrook attached. Kosterman 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 inches 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.

The Forest Service response to our Ashley Apen comments:

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 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.

Formally Consult with the U.S. Fish and Wildlife Service on the impact of the project on lynx and write an EIS that fully complies with the law.

Wolverine

We wrote in our comments:

Please disclose the last time the Project area was surveyed for lynx, wolverines, pine martins, northern goshawk, yellow-billed cuckoo, Ute ladies'- tresses, and Monarch Butterfly.

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Please disclose how often the Project area has been surveyed for lynx, wolverines, pine martins, northern goshawk, yellow-billed cuckoo, Ute ladies'- tresses, and Monarch Butterfly.

.

Would the habitat be better for lynx, wolverines, pine martins, northern goshawk, yellow-billed cuckoo, Ute ladies'- tresses, and Monarch Butterfly in the no action alternative was chosen?

Please provide us with the full BA for the lynx, wolverines, pine martins, northern goshawk, yellow-billed cuckoo, Ute ladies'- tresses, and Monarch Butterfly and any other threatened, endangered or proposed species in the Ashley National Forest.

The Forest Service responded:

May impact individuals or habitat, but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species

Rocky Mountain bighorn sheep

North American wolverine

Pygmy rabbit

Bald eagle

Peregrine falcon

Boreal owl

Great gray owl

Flammulated owl

Northern goshawk

Greater sage-grouse

Monarch

Recently, a US District Court ruling remanded the USFWS Withdrawal of its Proposed Rule to list the

distinct population segment of the North American wolverine occurring in the contiguous United States as a threatened species under the Endangered Species Act for further consideration.³² The ruling reviewed the science relating to the selection of denning sites in combination with snow presence during the natal period and recent analyses of potential climate change effects to snow pack that indicate a severe reduction in snow cover during this century with negative implications to wolverine populations. This factor alone should place ...

The Forest Service responded:

Comment was made during initial scoping period prior to EAFONSI. Habitat is present, but species is unlikely to occur on the Ashley.

Page 9 of the Ashley Aspen project BA BE states:

In 2014 a wolverine was documented on the north slope of the Uintas on the Uinta/Wasatch/Cache NF, and possible wolverine tracks were found by the UDWR near Dutch John on the Flaming Gorge RD that same year (Christensen 2015). However, these were likely a transient since no other documentation has been acquired since, and since no other occurrences were documented in the Uintas in the previous 20+ years (USDA Forest Service 2006, Berg and Inman 2010, Christensen 2015, USDA Forest Service 2010- 2017, USFWS 2020). A wolverine was trapped and collared in Rich County, Utah in March of 2022 and released on the North Slope of the Uinta mountains (UDWR 2022). This wolverine spent a brief

time in the Uinta mountains and then traveled west and north back to the area of Rich County (within a few weeks of its capture), where the signal was lost (personal communication UDWR 2022b). Wolverine are considered dispersers and there is no evidence of wolverine reproducing in Utah (USDA Forest Service 2006, Berg and Inman 2010, Christensen 2015, USDA Forest Service 2010-2017, USFWS 2020).

Therefore the Forest Service admits that wolverines do use the Ashley National Forest. In spite of this, there is no evidence that the Forest Service asked for a list a proposed, threaten, and endangered species in the project area as required by the Endangered Species Act.

Before you can sign the decision for the Ashley National Forest Forestwide prescribed fire project, the Forest Service must consult or conference with the U.S. Fish and Wildlife Service on the impact of the project on wolverines and Monarch Butterflies. Since the Forest Service has not done this, the project is in violation of the Endangered Species Act (ESA). This is new information that was not available when we submitted our comments.

The Forest Service admits that there is wolverine habitat in the project area but states there were no wolverines even though the Wildlife BE, BA wolverines do use the project area. The purpose of the Endangered Species Act is to recover a species not to keep their population at a threatened or endangered level in limited occupied habitat.

There is no evidence that the Forest Service searched for wolverines or Monarch Butterflies

Please see the March 15, 2022 article below from the Salt Lake Tribune which states a wolverine was caught killing sheep six miles west of Randolph, Utah, and it is now wolverine in the first roaming the state wearing a GPS collar.

Caught killing sheep in Utah, a wolverine is now the first roaming the state wearing a GPS collar

<https://www.sltrib.com/news/environment/2022/03/14/caught-killing-sheep-utah/>

[By Brian Maffly](#)

| March 14, 2022, 12:50 p.m.

| Updated: March 15, 2022, 7:36 a.m.

A chance of a lifetime arose last week for wildlife biologists to track the West's most rare and elusive predators when a wolverine was captured after attacking sheep in northern Utah.

The Utah Division of Wildlife Resources, [DWR](#), released the 4-year-old male, only the eighth confirmed wolverine sighting in Utah since 1979, after equipping it with a GPS collar, which will enable officials to track its movements.

“It’s amazing to get a chance to see a wolverine in the wild, let alone catch one,” DWR northern region wildlife manager Jim Christensen said. “Having a collar on this wolverine will teach us things about wolverines in Utah that would be impossible to learn any other way.”

Last year, [wolverines](#) were seen at least four times in Utah.

“Were we seeing the same animal or different animals?” Christensen said. “Having a collar on this animal will help us solve that riddle.”

Wolverines are the largest land-dwelling member of the weasel family, famous for taking down much larger animals for prey and scaring larger predators off their kills. With their huge paws, they evolved are for over-snow travel and are known to cover vast distances.

Although wolverines have been pushed off much of their native range in the United States because of historic trapping and ongoing habitat loss, these rare animals have never been listed for protection under the endangered species act.

Declining snow cover from climate change and motorized recreation are now leading threats to wolverine’s survival, according to the [Center for Biological Diversity](#). The group says only 300 known wolverines remain in the lower 48 states.

The opportunity to track a Utah wolverine arose around March 10 when a rancher discovered an animal killing sheep six miles west of Randolph, according to DWR. The animal fled and the rancher counted 18 sheep dead or injured in the attack.

Wildlife Services, an arm of the U.S. Department of Agriculture that eliminates wild animals that threaten livestock, searched for the animal by plane. After spotting a wolverine running through the snow, the searchers contacted DWR rather than shoot the rare predator.

State biologists immediately responded to try and capture the alleged culprit alive using barrel traps.

“There was so much activity in the area that morning,” Christensen said, “I thought the wolverine would be long gone and we wouldn’t be able to catch it.”

All the deceased sheep were removed from the area, while the traps were deployed and rigged, each containing part of a sheep carcasses.

The next day, the shepherd checked the traps to discover one containing the first wolverine ever captured in Utah.

DWR officials brought the animal to the Ogden office, where they sedated it, drew blood samples and examined it. The wolverine weighed 28 pounds and measured 41 inches in length.

“The animal had good, sharp teeth,” Christensen said. “It was in really good condition.”

They finally placed a GPS-equipped collar around its neck and transported it to the north slope of the Uinta Mountains where it was released into the Uinta-Wasatch-Cache National Forest on March 11.

According to DWR, the GPS data derived from the wolverine’s collar will show when and where the animal travels, the extent of its home range and the type of habitats it uses at different times of the year. Such information will be helpful for learning about the wolverine’s behavior and for managing the species in Utah, which is the southern edge of the wolverine’s range.

The project is in violation of NEPA, NFMA, the ESA, and the APA for not telling the public that there are wolverines in the Ashley National Forest, for not asking the U.S. FWS for a list of species that may be present in the project area, for not surveying for wolverines and for not formally consulting or conferring with the U.S. FWS on the impact of the project on wolverines.

Remedy: Formally Consult or Conference with the U.S. Fish and Wildlife Service on the impact of the project on wolverines and Monarch Butterflies, then write an EIS that fully complies with the law.

We wrote in our comments:

Please explain include a discussion of the following:

- 1. Baker and Shinneman. 2004. Fire rotation for high-severity fire in juniper is estimated at 400-480 years.*
- 2. Floyd and others. 2004. Stand replacing fires in juniper 400 years or longer.*
- 3. Bauer and Weisberg. 2009. The fire cycle in pinyon-juniper was estimated at 427 years.*

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.

Please explain why a lack of fire has degraded wildlife habitat. One has to assume that the presence of juniper

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

juniper removal will benefit mule deer or elk or any wildlife.

Juniper woodlands are also important habitat for many nongame birds (Coop and Magee undated; Reinkensmeyer 2000; Magee et al. 2019).. Coop and Magee (undated) noted that juniper removal treatments substantially reduced the occupancy of pinon-juniper specialists and conifer obligate species, including the pinyon jay. There One such species, the pinyon jay, is a species of conservation concern who is associated with juniper habitats (Boone et al. 2018); this paper warns of the detrimental impacts to this declining species due to juniper thinning projects. More recently, Magee et al. (2019) reported that juniper removal projects resulted in

decreased occupancy of many associated bird species, including the pinyon jay. These research reports are consistent with a 2000 report by Reinkensmeyer that juniper woodlands provide important habitat for many bird species, with bird species diversity and density increasing as woodlands progress into old growth juniper. Given the documented high value of old growth juniper forests to wildlife, the EA or EIS 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.

Please explain 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.

Please explain the impact of juniper treatments on the spread of noxious weeds.

There is a considerable awareness today regarding the problems of noxious weed infestations on public lands. One activity that is clearly promoting noxious weeds are fuels reduction and prescribed burning projects. We cite only a few examples at this time. One example is a Joint Fire Science Report by Coop and Magee (Undated), where they note that fuels and juniper reduction treatments resulted in rapid, large and persistent increases in the frequency, richness and cover of 20 non-native plant species including cheatgrass; exotic plant expansion appeared linked to the disturbance associated with treatment activities, reduction in tree canopy, and alterations to ground cover; exotic species were much more frequently encountered at treated than control sites, occurring at 86% of sample plots in treatments and 51% of untreated sample plots; richness of exotic species in treatments was more than double that of controls. What is also interesting in this study is that cheatgrass showed a

negative effect of tree canopy, which means that cheatgrass was benefited by canopy removal. They noted that models for cheatgrass 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.

Please show scientific 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 scoping 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. Please 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.

Please explain 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. Please explain in the EA or EIS the impact 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. Please

provide evidence that any actual published scientific papers that show that prescribed on such a large scale will reduce fires, and thereby increase “resiliency” of this winter range.

Please provide in the EA or EIS 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.

Please provide in the EA or EIS 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?

Please explain what species of shrubs are going to be slashed and burned. Why aren't these shrubs being used by wildlife?

NEPA requires that the Forest Service provide the public is provided information as to why this project will benefit wildlife. At a minimum, the agency needs to demonstrate to the public that this is in fact the case. The EA or EIS must document any scientific 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. Please discuss the current grazing use of this area by livestock. This information needs to be included as important information to the public.

The project will violate NEPA activities are being planned in the IRAs are done without an analysis of the impact of the project on wilderness characteristics.

Please 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

Please provide information to the public as to why this project enhances wildlife habitat, or is needed to maintain natural ecosystem processes within an IRA. If 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 and where the Forest Service is planning resource management activities.

The Forest Service responded:

Need larger resilience discussion???

Resilience would be assessed following treatment with respect to if the affected environment is functioning within the natural range of variability (NRV). The Ashley

National Forest Assessment (within project record as “USDA 2017”) describes the NRV of alpine, coniferous forest, aspen, sagebrush, pinyon-juniper woodlands, and desert shrub vegetation types found on the Ashely NF. Monitoring activities would be conducted prior to treatment and following treatment in accordance with the monitoring plan developed for the individual treatment area. Specific monitoring plans would be developed on a site-specific basis prior to any potential treatments.

The Forest Service is violating NEPA by not telling the public where, when and what they will do and the effect of the project in violation of NEPA, NFMA and the APA. The Forest Service often refers to this new attempt to violate NEPA, “conditions based management.”

Please identify specifically where the prescribed burns will be and where before a decision is made so that the public

can understand how the agency is managing these wildlife resources.

Saying that they will decide later denies the public the information needed to make informed comments and 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, old growth types need to be defined and quantified by timber types, such as lodgepole pine, Douglas-fir, mixed conifer, spruce, subalpine fir, and limber pine.

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

This is a violation of NEPA to not identifying specific areas where logging would have occurred and where roads and how many roads will be built.

Another reason that an EIS is need is to analyze the cumulative impacts. The Ashley Forest also has signed a draft decision for the Ashley Aspen project, a major

"condition-based" Prescribed Fire EA - for burning up to 24,000 acres per year. There are similar large-scale Prescribed Fire EAs proposed across Region 4 (Salmon-Challis, Sawtooth, Caribou-Targhee, Fishlake, Manti-LaSal and Dixie Forests each of which would burn thousands or tens of thousands of acres of native vegetation communities representing habitats for a great diversity of wildlife species. These fire EAs, on top of all the other treatment/manipulation and logging projects represent a foreseeable large-scale loss and fragmentation of habitat for many sensitive species, declining migratory birds, native carnivores and other wildlife.

The Prescribed Fires turned wildfires in New Mexico - one of which was a pile burn that smoldered and then blew up - have highlighted serious risks with activities involved in this project. An EIS is needed to analyze the threat of the prescribed fires getting out of control.

<https://www.krqe.com/news/wildfires/officials-calf-canyon-fire-caused-by-pile-burn/>

Please find attached, the Rosenberg paper on migratory bird declines which concluded, ***Our results signal an urgent need to address the ongoing threats of habitat loss, agricultural intensification, coastal disturbance, and direct anthropogenic mortality, all exacerbated by climate***

change, to avert continued biodiversity loss and potential collapse of the continental avifauna.

The EA needs to comply with the Migratory Bird Treaty Act and analyze the effect of the project on birds.

The EA provides little additional information on where burnings, logging 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 oversight of their activities. This is a violation of NEPA, NFMA, the APA, and the ESA.

The agency is violating the NEPA by promoting fuel reduction projects as protection of the public from fire, when this is actually a very unlikely event; the probability of a given fuel break to actually have a fire in it before the fuels reduction benefits are lost with conifer regeneration are extremely remote; forest drying and increased wind speeds in thinned forests may increase, not reduce, the risk of fire.

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

mistletoe, or that these increase the risk of fire once red needles have fallen.

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

The agency is violating the NEPA by using vague, unmeasurable 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 species)? 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.

Remedy:

Withdraw the draft decision notice and FONIS and write an EIS that fully complies with the law.

We wrote in our comments;

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.

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;

The Forest Service responded:

The proposed action does not include construction of temporary or permanent roads. Existing roads would be used for implementation, with cross-country motorized vehicle travel limited as resource conditions allow.

The project is in violation of the Forest Plan, NFMA, NEPA and the APA for not responding to our comments and for not ensuring elk security habitat.

REMEDY

Withdraw the draft decision and FONSI and write an EIS that fully complies with the law.

Please identify specifically where the prescribed burns will be and where before a decision is made so that the public can understand how the agency is managing these wildlife resources.

Saying that they will decide later denies the public the information needed to make informed comments and 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, old growth types need to be defined and quantified by timber types, such as lodgepole pine, Douglas-fir, mixed conifer, spruce, subalpine fir, and limber pine.

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

We wrote in our comments:

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 substantial shifts in stand structure over recent decades as a result of fire suppression. Overall, variation in climate rather than in fuels appears to exert the largest influence on the size, timing, and severity of fires in subalpine forests [].

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

Schoennagel et al (2004) states: “Contrary to popular opinion, previous fire suppression, which was consistently effective from about 1950 through 1972, had only a minimal effect on the large fire event in 1988 [].

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

Schoennagel et al (2004), please find attached, states: “Mechanical fuel reduction in subalpine forests would not

represent a restoration treatment but rather a departure from the natural range of variability in standstructure.”

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

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

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

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

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

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

(for 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.”

The Forest Service responded:

The provided reference focusses on specific cases of " high elevation subalpine forests" which are only a portion of the proposed project area.

The Ashely National Forest states on its website:

<https://www.fs.usda.gov/main/ashley/about-forest#:~:text=The%20elevation%20varies%20from%20a,visual%20quality%20on%20the%20Forest>.

Forest landscape ranges from high desert country to high mountain areas. The elevation varies from a low of 6,000

feet to a high of 13,528 feet above sea level at the summit of Kings Peak.

Since the Ashely National Forest's own website states the entire forest is high elevation, the response to comments violate NEPA.

REMEDY

Withdraw the draft decision and FONSI and write an EIS that fully complies with the law. Then write an EIS that follows the best available science and fully complies with the law.

The agency is violating the NEPA by promoting fuel reduction projects as protection of the public from fire, when this is actually a very unlikely event; the probability of a given fuel break to actually have a fire in it before the fuels reduction benefits are lost with conifer regeneration are extremely remote; forest drying and increased wind speeds in thinned forests may increase, not reduce, the risk of fire.

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

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

The agency is violating the NEPA by using vague, unmeasurable 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 species)?

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

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

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 UT 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 be given a chance to comment on this.

The Forest Service did not respond to our comments in violation of NEPA, NFMA, SHPO and the APA.

Remedy

Withdraw the draft decision and FONSI and write an EIS that fully complies with the law.

Thank you for your time and consideration of our objection.

Sincerely yours,

/s/

Mike Garrity

Executive Director

Alliance for the Wild Rockies

And for

Sara Johnson, Director, Native Ecosystems
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59760; phone 406-459-3286

And for

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