# Objection against the Dixie Prescribed Fire Landscape Resiliency 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 Dixie National Forest Dixie Prescribed Fire Landscape Resiliency Project. Please accept this objection in pdf format from me on behalf of the Alliance for the Wild Rockies, Native Ecosystem Council, Yellowstone to Uintas Connection, and Wildlands Defense.

1. Objector's Name and Address:

Lead Objector 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

Kristine Akland

Center for Biological Diversity (CBD)

P.O. Box 7274 Missoula, MT 59807

kakland@biologicaldiversity.org

And for

Katie Fite

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

Signed this 8th day of October, 2022 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/dixie/?project=60970

District: All districts (Pine Valley, Cedar City, Powell and Escalante) within Dixie National Forest (DNF), except

Teasdale Ranger District (managed by Fishlake National Forest).

Counties: Garfield, Washington, Iron, Kane, and Piute counties

General Location: Prescribed burning and associated activities would be authorized for use, where it will support achievement of desired conditions, on National Forest System lands managed by the Dixie National Forest. This decision would not apply to the National Forest System lands in the former Teasdale District, which are managed by the Fremont River District of the Fishlake National Forest.

Applicable Management Areas: All management areas except for wilderness and research natural areas.

As a result of the Draft DN, individuals and members of the above mentioned groups, hereafter (Alliance) would be directly and significant-ly 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 DNF). 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

Dixie Prescribed Fire Landscape Resiliency Project

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

Dixie National Forest-wide, This Decision could be applied throughout the Dixie National Forest with the exception of designated Wilderness and Research Natural Areas.

District: All districts (Pine Valley, Cedar City, Powell and Escalante) within Dixie National Forest (the Dixie), except Teasdale Ranger District (managed by Fishlake National Forest).

Counties: Garfield, Washington, Iron, Kane, and Piute counties

General Location: Prescribed burning and associated activities would be authorized for use, where it will support

achievement of desired conditions, on National Forest System lands managed by the Dixie National Forest. This decision would not apply to the National Forest System lands in the former Teasdale District, which are managed by the Fremont River District of the Fishlake National Forest.

### Responsible Official

Kevin Wright, Forest Supervisor, Dixie National Forest, 820 N. Main Street, Cedar City, UT, 84721

The Forest Service proposes to use prescribed fire and associated pre-treatment activities across approximately 1.477 million burnable acres of National Forest lands within the 1.631 million acres managed by the Dixie National Forest. The intent is to authorize the application of prescribed fire on up to 49,500 acres annually across the Dixie National Forest to meet the need identified above. Areas comprising the annual treatment goal would generally not be contiguous, but rather a combination of multiple treatment areas of varied size spread out across the four districts of the Dixie National Forest. The actual acres of prescribed fire implementation in a given year would depend on annual budgets, resource availability, program capacity, appropriate burn windows, vegetative conditions, development of burn plans, and burn plan authorization(s).

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

Alliance, Y2U, NEC, CBD, and Wildlands Defense provided comments on the proposed project on November 17, 2021 and on December 22, 2022.

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.

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 August 25, 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 Dixie National ForestForest 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 DNF). 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 still believe as we wrote in our scoping comments dated 11/17/21that 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 which we wrote in our scoping comments but you apparently ignored so we are resting them below.

Alliance has also included a general narrative discussion on possible impacts of the Project, with accompanying citations to the relevant scientific literature. These references should be disclosed and discussed in the EIS for the Project.

- I. NECESSARY ELEMENTS FOR PROJECT EIS: A. Disclose all Dixie 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 Dixie National Forest's record of compliance with state best management practices regarding stream sedimentation from ground-disturbing management activities;
- J. Disclose the Dixie National Forest's record of compliance with its monitoring requirements as set forth in its Forest Plan;
- K. Disclose the Dixie National Forest's record of compliance with the additional monitoring requirements set forth in previous DN/FONSIs and RODs on the Dixie National Forest;
- L. Disclose the results of the field surveys for threatened, endangered, sensitive, and rare plants in each of the proposed units;
- M. Disclose the level of current noxious weed infestations in the Project area and the cause of those infestations;
- N. Disclose the impact of the Project on noxious weed infestations and native plant communities;

- O. Disclose the amount of detrimental soil disturbance that currently exists in each project area from previous cutting, burning and grazing activities;
- P. Disclose the expected amount of detrimental soil disturbance in each unit after ground disturbance and prior to any proposed mitigation/remediation;
- Q. Disclose the expected amount of detrimental soil disturbance in each unit after proposed mitigation/remediation;
- R. Disclose the analytical data that supports proposed soil mitigation/remediation measures;
- S. Disclose the timeline for implementation;
- T. Disclose the funding source for non-commercial activities proposed;
- U. Disclose the current level of old growth forest in each third order drainage in the Project area;
- V. Disclose the method used to quantify old growth forest acreages and its rate of error based upon field review of its predictions;

- W. Disclose the historic levels of mature and old growth juniper in the Project area;
- X. Disclose the level of mature and old growth juniper necessary to sustain viable populations of dependent wildlife species in the area;
- Y. Disclose the amount of mature and old growth juniper that will remain after implementation;
- Z. Disclose the amount of current habitat for junipersagebrush dependent species in the Project area;
- AA. Disclose the amount of big game (moose and elk) hiding cover, winter range, and security during Project implementation;
- BB. Disclose the amount of big game (moose and elk) hiding cover, winter range, and security after implementation;
- CC. Disclose the method used to determine big game hiding cover, winter range, and security, and its rate of error as determined by field review;
- DD. Disclose and address the concerns expressed by the ID Team in the draft Five-Year Review of the Forest Plan

regarding the failure to monitor population trends of MIS, the inadequacy of the Forest Plan old growth juniper standard, and the failure to compile data to establish a reliable inventory of sensitive species on the Forest;

- EE. Disclose the actions being taken to reduce fuels on private lands adjacent to the Project area and how those activities/or lack thereof will impact the efficacy of the activities proposed for this Project;
- FF. Disclose the efficacy of the proposed activities at reducing wildfire risk and severity in the Project area in the future, including a two-year, five-year, ten-year, and 20-year projection;
- GG. Disclose when and how the Dixie 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 Dixie'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 responded:

All environmental effects will be considered and if a Finding of No Significant Impact (FONSI) cannot be justified or mitigated, an EIS will be prepared.

The FONSI does not adequately demonstrate that an EIS is not required and the EA, Draft Decision Notice and FONSI do not adequately demonstrate that the Forest Plan is being followed nor we all of our questions answered in violation of NEPA, NFMA, the ESA and the APA

## Remedy

Withdraw the Draft Decision Notice and FONSI and write an EIS that fully complies with the law. We wrote in our comments:

The book "Smokescreen: Debunking Wildfire Myths to Save Our Forests and Our Climate" by Chad Hanson, Ph.D. states on page 218-219:

A particularly subtle and misleading term is "resilience." ...In my experience, virtually no one understands what this words means, and nearly everyone uses it incorrectly. According to the United Nations Convention on Biological Diversity, there are two kinds of resilience, and they are diametrically opposed. The forst is "ecological resilience," which refers to natural processes of varying intestines and scales that create natural events across the landscape, including species that depend on natural events such as as high-intensity fire. Forests are not ecological resilient in spite of mixed-intensity fire; they are resilient because of forest fires and other natural events and cycles.

The opposite of ecological resilience is "engineering resilience." This term is essentially synonymous with "forest health," in that it pertains to policies that seek to command and control nature and minimize or suppress natural processes to further an agenda of commodity production and resource extraction. Engineering resilience is the antithesis of biodiversity conservation, yet nearly every time the word "resilience" is used in relation to forests, it means engineering resilience…

I am mailing via USPS, a copy of "Smokescreen" to be included with my comments.

The project as designed will not meet the purpose and need of the project. It will make the forest less ecological resilient, not more.

The agency is violating the NEPA by using vague, unmeasureable terms to rationalize the proposed logging 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.

What species will benefit from this project?

What species will be harmed by this project?

The agency will violate the NFMA by failing to ensure that old growth forests are well-distributed across the landscape. The project is in violation of NFMA and the ESA for not insuring viable populations of natives species including California Condors, Mexican spotted owls, Mexican Prairie Dogs, Desert Tortoise, Last Chance Townsendia, Yellowbilled Cuckoo, Aquairius, Paintbrush, Rabbit Valley Gilia, Monarch Butterflies, and sage grouse.

When was the last time you surveyed for California Condors, Mexican spotted owls, Mexican Prairie Dogs, Desert Tortoise, Last Chance Townsendia, Yellowbilled Cuckoo, Aquairius, Paintbrush, Rabbit Valley Gilia, Monarch Butterflies, and sage grouse?

What was the results of these surveys?

#### 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 Caribou- Targhee Forest Plan to address noxious weed infestations? Please include an alternative in the that includes land management standards that will prevent new weed infestations by addressing the causes of weed infestation. The failure to include preventive standards

violates NFMA because the Forest Service is not ensuring the protection of soils and native plant communities.

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

The basis for a determination that this fuels project will improve habitat for wildlife was never provided. In addition, the term "wildlife" includes a large suite of wildlife species.

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

Use of an EA for this project is also invalid because the proposed vegetation treatments would occur within Inventoried Roadless Areas (IRA). This qualifies as an extraordinary circumstance that invalidates use of an EA.

Although the presence of an extraordinary circumstance does not automatically preclude use of an EA, application of an EA requires documentation. It is the existence of a cause- effect relationship between a proposed action and the potential effects on these resource conditions and if such a relationship exists, the degree of the potential effects of a proposed action on these resource conditions that determine whether extraordinary circumstances exist (36 CFR 220.g(b).

There is no analysis in the EA that defines why forest thinning and prescribed burning will not significantly affect the area's value to wildlife. We contend that the proposed thinning and burning will have significant adverse impacts on many wildlife species, impacts that are not currently present within IRAs. The EA does not identify any adverse impacts that have been identified to wildlife from the current habitat conditions in IRAs. Since the current conditions are beneficial to wildlife, and the proposed conditions will be detrimental to wildlife, this means that the proposed action will eliminate existing values of the IRA. This would be a cause-effect relationship, invalidating the use of a CE.

Please explain include a discussion of the following:

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

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

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

How will this project effect pinyon jays?

Please see the attached petition to list the piton jay for protection under the Endangered Species Act?

The EA does not identify why burning juniper and shrubs enhances wildlife habitat. There is no information in the EA that defines why a lack of fire has degraded wildlife habitat. One has to assume that the presence of juniper woodlands is considered an adverse impact on wildlife, and if burned up, would improve wildlife habitat. We have cited a number of publications, just as examples, that in fact identify the high value of juniper woodlands to wildlife. This value includes forage for mule deer, a species that is to be emphasized on this identified winter range. The value of juniper species to mule deer was identified long ago. For example, Lovaas (1958) reported that the primary winter forage for mule deer in the Little Belt Mountains of Montana were several species of juniper. More recently, this importance was again identified in a published research article. Coe et al. (2018) reported that juniper trees are important to mule deer on their winter ranges in Oregon. There is no information in

the notice that indicates why juniper removal will benefit mule deer or elk or any wildlife.

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

landscape. The Intermountain Region recognizes old growth juniper (Hamilton 1993). How much old growth juniper is believed as essential for optimal nongame bird management, and where is this old growth juniper going to be maintained in this IRA and project?

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

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

In addition to the concern about juniper mortality resulting from climate change, we also note that forest

thinning in general exacerbates climate change. Milman (2018) recently reported on this issue, noting that scientists say halting deforestation is just as urgent as reducing emissions to address climate change, given the function they provide as a carbon sink. Forest thinning reduces this carbon sink function.

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

There is a considerable awareness today regarding the problems of noxious weed infestations on public lands. One activity that is clearly promoting noxious weeds are fuels reduction and prescribed burning projects. We cite only a few examples at this time. One example is a Joint Fire Science Report by Coop and Magee (Undated), where they note that fuels and juniper reduction treatments resulted in rapid, large and persistent increases in the frequency, richness and cover of 20 nonnative plant species including cheatgrass; exotic plant expansion appeared linked to the disturbance associated with treatment activities, reduction in tree canopy, and alterations to ground cover; exotic species were much

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

Kerns and Day (2014) also reported that juniper treatments resulted in at least a short-term conversion of juniper woodlands to an exotic grassland. And Kerns (undated) reported similar findings in another Joint Fire Science Program report; she stated that it is a significant challenge for land managers to apply thinning and burning fuel treatments in a manner that does not exacerbate existing weed and associated resource problems due to the reduction of ecological resistance that fuel reduction activities created, combined with the aggressive nature of exotic species present. Kerns also noted that weed problems were also caused in slash pile burning, which is planned for the Rowley Canyon project.

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

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

The agency notes that the project will not only reduce juniper, but various shrubs as well. Although we noted

above that juniper woodlands have a very high value to many wildlife species, it is not clear that replacing juniper with grasses, including cheatgrass, balances out the loss of wildlife species removed due to juniper removal by replacement with other wildlife species that use only grasses as habitat. For example, the scooping notice did not identify that mule deer on this winter range use grasses as winter forage. The value of cheatgrass to elk in the winter is also not demonstrated. Cheatgrass seeds are extremely sharp, and use by elk in the winter seems unlikely. Cheatgrass use by wildlife in the summer is also unlikely after early spring, since this grass cures out by summer. The seeds of cheatgrass are also responsible to mortality through blinding of grassland birds (McCrary and Bloom 1984).

General comments on the proposal are as follows:

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

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

One issue that is generally ignored in the EA is what shrubs are present, and will be targeted for masticating and burning. Do these control efforts include sagebrush? There is extensive documentation that sagebrush is highly valuable to both elk and deer on winter ranges (Wambolt 1998, Petersen 1993). Removing sagebrush to increase grasses on winter range, as is suggested in the EA, does not promote mule deer and elk. Sagebrush has a high protein content of almost 13% in the winter, while dormant grasses have a protein content of less than 4% (Peterson 1993). There can be no valid reason to remove sagebrush and replace it with grasses for big game winter forage. The actual replacement species the agency claims

are going to be managed for are never identified. But at a minimum, the rationale for removing shrubs and replacing them with grasses on winter range needs to be documented, as is required by the NEPA.

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

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

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

The EA never provides any monitoring data, or references any current science, as to what the specific problems are in this landscape for wildlife. How did the agency determine that the current conditions are causing problems for wildlife? In general, one would not expect

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

The proposed action is very extensive for conclusions that it will not significantly change and degrade conditions for wildlife. It is not clear how this was determined. The EA lacks some important information, such as what species of shrubs are going to be slashed and burned. Why aren't these shrubs being used by wildlife?

Overall, this EA is a huge violation of the NEPA because the public is provided essentially no 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 also did not provide any information as to how the resource specialists determined that the project will not lead to any significant effects on wildlife. These conclusions need to be documented for the public, including criteria that were used and evaluated to measure levels of significant impact. As just one question,

if the Forest Plan standard to manage this area to promote big game species on their winter range is not being followed, this would most likely trigger significant impacts. It seems like that this is an intentional Forest Plan violation to promote livestock grazing over wildlife in this landscape. Juniper removal has been a long-standing practice to promote livestock grazing, not wildlife. The EA did not discuss the current grazing use of this area by livestock. This information needs to be included as important information to the public.

Finally, the EA is a violation of the NEPA because the fact that these activities are being planned in the IRAs without and analysis of the impact of the project on wilderness characteristics is never specifically noted in the notice.

There is no explanation of why this project complies with the Roadless Rule. This is clearly a violation of the Roadless Area Conservation Rule, as the agency is imposing artificial management activities in areas that are to be maintained via natural processes. The scientific basis for implementing management actions in this IRA needs to be fully provided to the public. In particular, the massive increase of exotic grasses within an IRA is hardly a restoration activity.

There is no information ever provided as to what the vegetation types are in the areas not proposed for treatment. Instead, the entire forest with the exception of wilderness areas is proposed to be set on fire. What was the basis for determining areas for treatment?

Overall, the EA is devoid of any useful information to the public as to why this project enhances wildlife habitat, or is needed to maintain natural ecosystem processes within an IRA. 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 the Forest Service is planning resource management activities.

The best available science, Christensen et al (1993), recommends elk habitat effectiveness of 70% in summer range and at least 50% in all other areas where elk are one of the primary resource considerations.

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

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

Christensen et al (1993) state that if an area is not meeting the 50% effectiveness threshold of 1.7 mi/sq mi, the agency should admit that the area is not being managed for elk: "Areas where habitat effectiveness is retained at lower than 50 percent must be recognized as making only minor contributions to elk management goals. If habitat effectiveness is not important, don't fake it. Just admit up front that elk are not a consideration." The Project EIS does not make this admission.

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

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

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

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

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

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

What best available science supports the action alternatives?

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

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

centuries) in subalpine forests, typically in association with infrequent high-pressure blocking systems that promote extremely dry regional climate patterns."

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

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

Schoennagel et al (2004) states: "No evidence suggests that spruce—fir or lodgepole pine forests have experienced 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 fuelreduction 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, fuelreduction 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, standreplacing fires. Dry forests historically had short intervals between fires, but most important, the fires had low to moderate severity."

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

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

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

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

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

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

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

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

Please explain to the public what wildlife species will be benefited by this project and what species will be harmed/ We believe that the NEPA requires the agency to adequately demonstrate that the determination that this project will benefit all wildlife species needs to be included in the public involvement process, which in this case is scoping.

Use of an EA for this project is also invalid because the proposed vegetation treatments would occur within Inventoried Roadless Areas (IRA). This qualifies as an extraordinary circumstance that invalidates use of 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.

- (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).

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.

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

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

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 Montana federal district court recently addressed a similar issue. Hunters v. Marten, 470 F.Supp.3d 1151, 1167-1169 (D. Mont. 2020). The Court held: "It is simply not true that the Forest Service had no duty to communicate its transportation plan to the public. NEPA imposes upon the agency the duty to take a 'hard look' when it plans its actions and 'to provide for broad dissemination of relevant environmental information." Id. The Court further held:

"[Plaintiffs] contend that the final EIS is inadequate because it is misleading. []. The Court agrees with the latter. Having already discussed at length why the Forest Service's treatment of the roadwork in the final EIS is inadequate and indicates bad faith, there is little more to say on the second issue. On remand, the Forest Service will be required to thoroughly develop its plan to bring heavy machinery into the roadless area."

What scientific analysis did the Forest Service do to find that the National Forest System lands on the Dixie are departed from the natural range of variability? 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 Dixie 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 bluenests, 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.

For all of these reasons, the Project violates the

Rule and the Project EA fails to take hard look and provide accurate information and analysis to the public regarding Roadless Rule compliance, in violation of the APA and NEPA.

Please explain why forest thinning and prescribed burning will not significantly affect the area's value to wildlife. We contend that the proposed thinning and burning will have significant adverse impacts on many wildlife species, impacts that are not currently present within IRAs. Please explain any adverse impacts that have been identified to wildlife from the current habitat conditions in IRAs. Since the current conditions are beneficial to wildlife, and the proposed conditions will be detrimental to wildlife, this means that the proposed action will eliminate existing values of the IRA. This

would be a cause-effect relationship, invalidating the use of a EA.

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.

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

Kerns and Day (2014) also reported that juniper treatments resulted in at least a short-term conversion of juniper woodlands to an exotic grassland. And Kerns (undated) reported similar findings in another Joint Fire Science Program report; she stated that it is a significant challenge for land managers to apply thinning and burning fuel treatments in a manner that does not exacerbate existing weed and associated resource problems due to the reduction of ecological resistance that fuel reduction activities created, combined with the aggressive nature of exotic species present. Kerns also noted that weed problems were also caused in slash pile burning, which is planned for the Rowley Canyon project.

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

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 scooping notice did not identify that mule deer on this winter range use grasses as winter forage. The value of cheatgrass to elk in the winter is also not demonstrated. Cheatgrass seeds are extremely sharp, and use by elk in the winter seems unlikely. Cheatgrass use by wildlife in the summer is also unlikely after early spring, since this grass cures out by summer. The seeds of cheatgrass are also responsible to mortality through blinding of grassland birds (McCrary and Bloom 1984).

General comments on the proposal are as follows:

Parts of this very large project area are big game winter range as per the Forest Plan. 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 estimate how many bird's nests will be burned and how many birds will be killed by the proposed prescribed fire project?

How will the project effect the California Condor, bald eagle, golden eagle, and Mexican spotted owl?

Please formally consult with the U.S. FWS on the impact of the proposed project on the California Condor, bald eagle, golden eagle, and Mexican spotted owl.

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 longstanding 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 best available science, Christensen et al (1993), recommends elk habitat effectiveness of 70% in summer range and at least 50% in all other areas where elk are one of the primary resource considerations.

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

th

Do any of the 6 Code watersheds in the Project area meet either of these road density thresholds? It appears the

Project area as a whole also far exceeds these thresholds. Please disclose this type of Project level or watershed analysis on road density.

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

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

The Forest Service should provide an analysis of how much of the Project area, Project area watersheds, affected landscape areas, or affected Hunting Districts provide "elk security area[s]" as defined by the best available science,

Christensen et al (1993) and Hillis et al (1991), to be comprised of contiguous 250 acre blocks of forested habitat 0.5 miles or more from open roads with these blocks encompassing 30% or more of the area.

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

What best available science supports the action alternatives?

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 nonnative 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.

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

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

We request a careful analysis of the impacts to fisheries and water quality, including considerations of sedimentation, increases in peak flow, channel stability, risk of rain-on- snow events, and increases in stream water temperature. Please disclose the locations of seeps, springs, bogs and other sensitive wet areas, and the effects on these areas of the project activities. Where livestock are permitted to graze, we ask that you assess the present condition and continue to monitor the impacts of grazing activities upon

vegetation diversity, soil compaction, stream bank stability and subsequent sedimentation. Livestock grazing occurs in the Project area and causes sediment impacts, trampled or destabilized banks, increased nutrient loads in streams, and decreased density, diversity, and function of riparian vegetation that may lead to increased stream temperatures and further detrimental impacts to water quality.

This project is a violation of the National Environmental Policy Act (NEPA) since it is far too large for the agency

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

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.

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.

Even though we wrote in our scoping comments that the "condition-based management" approach will not adequately address the direct, indirect, and cumulative effects of the Project on the human environment, the

Dixie N.F. ignored our comments and is still proposing to use it in violation of NEPA.

Please the 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"

Comments regarding landscape-level analysis and sitespecificity

Several comments suggested that the proposal was too broad or lacked specific locations or survey data necessary to do environmental analysis. Others similarly suggested that it would be appropriate to use a programmatic environmental assessment. As stated in the purpose and need, the project is designed intentionally to allow for flexibility needed to address changing conditions. Rather than identifying specific locations for prescribed fire now, this project uses design features and the implementation checklist to provide sideboards to the actions; ensure consistency with other laws, regulations, and policies; and to reduce environmental effects. Our analysis considers application of fire and associated

treatments within the analysis area, along with the design features and location-specific review required in the implementation checklist. When all these pieces are considered, our analysis found that the proposal would not have a significant adverse effect (see National Environmental Policy Act (NEPA) section). The Dixie National Forest has decades of experience analyzing and implementing prescribed fire actions. This proposed action framework draws on our experience with forest conditions and analysis to allow for a meaningful evaluation of impacts and sufficient level of detail necessary to inform the required NEPA determinations.

This approach to planning is needed to allow for implementation to react to changing on-the-ground conditions (for example unpredictable wildfires) over the next 10 years. Our normal approach to planning can take a season or more of survey work, years to plan, and a decade or more to accomplish, and in the meantime project area conditions can drastically change. In addition, by the time we implement under this existing model, the survey and analysis data has become stale. The landscape level planning approach we are proposing is needed to increase the pace and scale of restoration – we are hoping to increase prescribed burning to better match the ecological need, be more responsive to funding sources, and allow for flexibility with burn windows.

Similarly, several comments suggested that detailed and location-specific resource survey should be completed and addressed in the analysis. Under the proposed action

framework, location specific review and survey to confirm resource conditions and the need for design features or adjustments would occur once areas are identified for planning and prior to implementing prescribed fire. This would help ensure we have the most current and best available information to inform implementation. Resource specialists would review the design features and implementation checklist and determine what work needs to be done in that specific area, depending on the conditions and resources present.

The Forest Service also responded:

Although some flexibility is incorporated into the CBM analysis, conditions may come up that necessitate additional action. If any conditions encountered, management activities needed, or effects identified which were not analyzed and disclosed in the initial analysis may require supplementation and a new decision.

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

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

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

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

https://www.americanbar.org/groups/ environment\_energy\_resources/publications/fr/20210510the-us-forest-services-expanding-use-of-condition-basedmanagement/

Condition-based management (CBM) is a management approach that the U.S. Forest Service has increasingly used to authorize timber harvests purportedly to increase flexibility, discretion, and efficiency in project planning, analysis, and implementation. The agency believes it needs this <u>flexible</u> 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 sitespecific 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 <u>CBM analogues in their</u> 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.

Please find attached DellaSala 2022.

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

Even the EPA complained about the project violating NEPA. THE EPA wrote: We recommend the NEPA document explain how the USFS will evaluate the decision for consistency on the Forest; include the total timeframe for Project implementation; and outline a process and commit to periodic Supplemental Information Reports, made available for public comment, to review and determine the sufficiency of the NEPA analysis and subsequent decision. As the Forest has acknowledged in the EA, conditions on the ground are changing rapidly and the Forest may need to review the NEPA analysis and decision more frequently than every 10 years.

EPA is generally supportive of well-designed prescribed fire projects as an ecologically preferrable forest management practice. However, we continue to recommend the Forest consider developing this project as a programmatic NEPA document that commits to site-specific NEPA post decision that provides opportunities for public involvement and comment on individual treatment projects.

The EA does not contain the actual locations of the individual treatment area projects, what types of pretreatments and prescribed fire will be performed and

where, the types of vegetation that will be burned, the equipment and machinery that will be needed, the timeframes for those treatments, the localized impacts of those treatments, or the specific mitigation and monitoring measures needed for each burn project. Instead, prior to implementing prescribed fire or pretreatment activities, an Interdisciplinary Team would use an implementation checklist to address necessary design features, policy requirements, monitoring, and mitigation (p. 5). Based on this information, individual treatment project design and impact assessment will occur post-FONSI, years after the public comment period on this EA, and outside of the NEPA process. Page 7 of the EA indicates the implementation checklist would direct specific tasks that would need to occur before applying prescribed fire, including determining what public involvement and public notices would be provided. This lack of specificity and informal approach to public engagement after the decision does not provide for as meaningful public participation or full understanding of the potential impacts and mechanisms for avoiding them as would site-specific review through the NEPA process.

**Remedy:** 

Withdraw the draft Decision Notice and write an EIS that shows the public where prescribed burns and cutting of trees and any other treatments will be and if any logging with occur to carry the fire. The EIS must fully complies with the law

We wrote in our comments:

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

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

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

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

designed, somewhat arbitrary treatments as a replacement for naturally-occurring fire.

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

The Forest Service responded:

The proposed action was analyzed in compliance with all required laws and regulations and will be implemented in compliance will all required laws and regulations. The EA discloses that by developing a site specific burn plan for each area burned, that it will meet all applicable laws and regulations.

The project is in violation of NEPA, NFMA, the APA, the ESA, and the Clean Water Act for not conduction NEPA and consulting with the US FWS on the Fire Plan.

## Remedy

Withdraw the Draft Decision Notice and FONSI, consult the the US FWS on the Fire Plan and write an EIS and take public comments on the Fore Plan.

We wrote in our comments:

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

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

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

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

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

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

The Forest Service responded:

Design features have been incorporated into the proposed action that reduce or minimize the potential for introduction and/or spread of noxious species. This

includes but is not limited too; limited ground disturbance in areas of known infestations, adjustments to the type or timing of burning activities, limits on prescribed burning in sensitive areas or areas of high probability of infestation and, rehabilitation. This would also include pre-treatment of areas with known infestations as well as pre-treatment mapping of areas for new infestations. Any new infestations of noxious weeds would be monitored and treated (implementation checklist).

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.

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 Dixie 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.

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

### **Remedy:**

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

### Rare Plants

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

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

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

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

The Forest Service responded:

The Botany Biological Evaluation and Assessment analyzes effects of the proposed action on Federally listed threatened, endangered, proposed, and Regional Forester Sensitive Species (referred to as sensitive species). Design elements are part of the proposed action, and incorporated into the analysis. Specifically Plant 1 would

avoid known occurrences and any newly discovered occurrences. The implementation checklist also ensures a botanist will be consulted to determine if pre-implementation surveys are needed. Analysis of State listed rare plants is not required by law, regulation, or policy. However, coordination with the Utah Division of Wildlife is built into the implementation checklist which will allow for information sharing on the presence of state listed species.

The Forest Service did n0t search for rare plants.

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

### Remedy:

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

We wrote in our comments:

Please see the following article by Dr. Moench about the problems associated with large scale prescribed burning.

## Brian Moench: Everyone has taken up smoking in Summit County

Forest Service idea of preventing wildfires is poisoning the air.

https://www.sltrib.com/opinion/commentary/2022/12/14/brian-moench-everyone-has-taken/

Everyone in Summit County has taken up smoking — Mormons, non-Mormons, infants, adults, pregnant mothers, athletes, the elderly, everyone. Not tobacco, wood smoke. And that's worse.

Under the guise of wildfire prevention, Uinta-Wasatch-Cache National Forest Service officials are busy "thinning" forests in the county with chain saws, creating thousands of piles of dead and live trees and setting them on fire. The smoke has been blanketing Summit County for the last two years.

Wood smoke is the worst type of pollution the average person ever inhales, more toxic than tobacco smoke. Wood smoke consists of uniquely small pollution nanoparticles. The smaller the particle, the more easily it is inhaled, the more easily the blood stream picks it up from the lungs, and ultimately the more easily it penetrates and damages every organ system.

Magnifying the hazard, the smoke contains a witches' brew of toxic chemicals and heavy metals. Burning 10 pounds of wood in a fireplace for one hour emits as many polycyclic aromatic hydrocarbons (PAHs) as tens of

thousands of packs of cigarettes. Wood smoke easily seeps into even the most tightly sealed residences where it lingers long after the burning is over, perpetuating exposure.

Years ago, our physicians group convinced Summit County Health Department to ban fireplaces in new home construction. We worked with the EPA to help 32 Summit County families using wood stoves, exchange them for cleaner heat sources, to the benefit of the entire community. Now this achievement in Summit County is being smothered by the U.S. Forest Service (USFS).

Much like the Bureau of Land Management often behaves as a subsidiary of the cattle industry, the USFS has a long history of protecting the timber, fossil fuel and ski industries instead of the forests. (Like their recent approval of the Uinta Basin Railway, Utah's own fossil fuel carbon bomb.)

The narrative promoted by land management agencies that thinning the forests is necessary or even useful to control wildfires is controversial at best, with the bulk of the supportive research funded by the timber industry or USFS.

While removing biomass surrounding mountain homes reduces fire risk, large scale "forest thinning" is a different matter. Over 40 studies from different countries contradict conventional wisdom that "fuel reduction logging" controls wildfires.

In the largest study ever done, the authors concluded the more forest "thinning," the more quickly and intensely a wildfire burns.

"Dense, mature forests tend to burn less ... because they have higher canopy cover and more shade, which creates a cooler, moister microclimate. The higher density of trees of all sizes can act as a windbreak, buffering gust-driven flames. Thinning and other activities that remove trees, especially mature trees, reverse those effects, creating hotter, drier, and windier conditions."

Because no crystal ball reveals the time or location of future wildfires, unless thinning is done on an impossibly massive scale, it has little chance of happening at the right time or place to minimize a wildfire.

If there is legitimate debate about forest thinning, there is no debate that setting hundreds of forest bonfires is creating a pollution and public health nightmare in Summit County. Limiting bonfires to "good air quality" days is false comfort, a complete misunderstanding of the medical research.

There is no safe level of pollution. In fact, pollution released into a back ground of clean air actually does more damage to public health than the same amount of pollution released into an already polluted airshed, because the dose response curve between pollution and disease is steeply hyperbolic, not linear.

Intentionally cutting and burning trees is also climate malpractice. Per BTU produced, wood combustion releases 30% more CO2 than coal, 2.5 times more than natural gas. The global carbon equation of just the next few years will determine whether or not temperature rises exceed 1.5 degree C, the threshold at which scientists warn of an irreversible spiral into climate disaster because of positive feed-back loops and atmospheric tipping points.

Killing carbon absorption of live trees and releasing the carbon by burning them, just for a "theoretical, possible, perhaps, maybe some-day" less intense future wildfire is a fool's bargain, not supported by any evidence.

For the forest service to be igniting countless bonfires is a stunning sacrifice of human and climate health for a highly dubious pursuit of "forest health," and an ironic example of "not seeing the forest through the trees."

Brian Moench, M.D., Salt Lake City, is president of Utah Physicians for a Healthy Environment and board chair of Doctors and Scientists Against Wood Smoke Pollution, an international coalition seeking to end wood burning.

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

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

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

The Forest Service responded:

The agency incorporates the best available science to develop and analyze proposed actions that fulfill the purpose and need for the project.

The EPA wrote in their comments:

The EA does not contain a climate change impact analysis, rather on page 40 it states, "In compliance with these Executive Orders signed by President Biden in 2021 and 2022 [EO 14057, Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability, and EO 14008, Tackling the Climate Crisis at Home and Abroad] and under direction given by USDA WO in 2009, analysis utilizing relevant research, agency guidance, climate model scenarios and other information applicable to climate change was considered and is incorporated by reference in this analysis (Halofsky, Peterson, et al., 2018)." We recommend any documents incorporated by reference are summarized in the NEPA document and related to the Proposed Action. This will aid the reader in understanding how these documents support the proposed action.

The Forest Service replied to the EPA:

Thank you for your comment

The EA does not include an adequate analysis of climate change and how that will impact the project.

The Forest Service fails to quantify the Project's impacts on the loss of carbon storage and sequestration.

The agency's decision declining to address the project's impacts because they are allegedly "negligible" in comparison to the role the world's (or nation's) forests play in climate change is thus not only misleading, it masks the fact that every additional bit of climate pollution, or elimination of carbon sequestration ability, makes the problem worse, and that every bit of sequestration and storage is critical to the solution. The Forest Service's approach does not adequately consider the Project's impacts on climate change. NEPA requires federal agencies, including the Forest Service, to take a "hard look" at the direct, indirect, and cumulative impacts of proposed major federal actions. 42 U.S.C. § 4332(C)(i)-(ii); 40 C.F.R. §§ 1502.16 (1978), 1508.25(c) (1978). Among the impacts NEPA requires agencies to disclose are climate impacts.

The EA, Draft Decision Notice and FONSI fail to adequately disclose the climate change impacts of the Project. Specifically, the Forest Service fails to disclose the Project's impacts on carbon storage, sequestration and impacts to global climate change.

Further, the Forest Service fails to disclose the climate pollution impacts of project implementation – the use of fossil fuel engines to build roads, cut trees, and remove and transport cut logs to mills – compared to the no action alternative. The Forest Service thus failed to take a "hard look" at the Dry Riverside Project's climate pollution impacts, in violation of NEPA.

The failure of the Forest Service to take the required "hard look" at the climate pollution impacts of the South

Plateau Project violates NEPA and is arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law. 5 U.S.C. § 706(2)(A).

The Federal District Court of Montana recently ruled against the Forest Service similar analysis on a case challenging the Kootenai National Forest Climate analysis for the Black Ram Project. Please find the order attached.

What is the cumulative effect of National Forest intentional burning on U.S. carbon stores? How many acres of National Forest lands are intentionally burned every year? How much carbon is lost by that intentional burning?

Is this Project consistent with "research recommendations (Krankina and Harmon 2006) for protecting carbon gains against the potential impacts of future climate change? That study recommends "[i]ncreasing or maintain- ing the forest

area by avoiding deforestation," and states that "protecting forest from logging or clearing offer immediate benefits via pre-vented emissions."

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

It is now time to speak honestly about unrealistic expectations relating to desired future condition. Forest managers have failed to dis- close that at least five common tree species, including aspens and four conifers, are at great risk unless atmospheric greenhouse gases and associated temperatures can be contained at today's levels of concentration in the atmosphere. This cumulative ("reasonably foreseeable") risk must not continue to be ignored at the project-level, or at the programmatic (Forest Plan) level.

Global warming and its consequences may also be effectively irreversible which implicates certain legal consequences under NEPA and NFMA and ESA (e.g., 40 CFR § 1502.16; 16 USC §1604(g); 36 CFR §219.12; ESA

Section 7; 50 CFR §§402.9, 402.14). All net car- bon emissions from logging represent "irretrievable and irreversible commitments of resources."

It is clear that the management of the planet's forests is a nexus for addressing this largest crisis ever facing humanity. Yet the EA and Draft Decision Notice fails to even provide a minimal quantitative analysis of project- or agency-caused CO<sub>2</sub> emissions or consider the best available science on the topic. This is immensely unethical and immoral. The lack of detailed scientific discussions in the EA and Draft Decision Notice concerning climate change is far more troubling than the document's failures on other topics, because the consequences of unchecked climate change will be disastrous for food production, sea level rise, and water supplies, resulting in complete turmoil for all human societies. This is an issue as serious a nuclear annihilation (although at least with the latter we're not already pressing the button).

The EA provided a pittance of information on climate change effects on project area vegetation. The EA provides no analysis as to the veracity of the project's Purpose and Need, the project's objectives, goals, or desired conditions. The FS has the responsibility to inform the public that

climate change is and will be bringing forest change. For the Galton project, this did not happen, in violation of NEPA.

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

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

The EA does not analyze or disclose the body of science that impli- cates logging activities as a contributor to reduced carbon stocks in forests and increases in greenhouse gas emissions. The EA fails to provide estimates of the total amount of carbon dioxide (CO<sub>2</sub>) or other greenhouse gas emissions caused by FS management actions and policies—forest-wide, regionally, or nationally. Agency policy-makers seem comfortable maintaining a

position that they need not take any leadership on this issue, and obfuscate via this EA to justify their failures.

The best scientific information strongly suggests that management that involves removal of trees and other biomass increases atmospheric CO<sub>2</sub>. Unsurprisingly the FSEIS doesn't state that simple fact.

The EA fails to present any modeling of forest stands under different management scenarios. The FS should model the carbon flux over time for its proposed stand management scenarios and for the vari- ous types of vegetation cover found on the DNF.

The EA also ignores CO<sub>2</sub> and other greenhouse gas emissions from other common human activities related to forest management and recreational uses. These include emissions associated with machines used for logging and associated activities, vehicle use for administrative actions, and recreational motor vehicles. The FS is simply ignoring the climate impacts of these management and other authorized activities.

The Committee of Scientists, 1999 recognize the importance of forests for their contribution to global climate regulation. Also, the 2012 Planning Rule

recognizes, in its definition of Ecosystem services, the "Benefits people obtain from ecosystems, including: (2) Regulating services, such as long term storage of carbon; climate regulation..."

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

The District Court of Montana ruled in Case 4:17-cv-00030-BMM that the Federal government did have to evaluate the climate change impacts of the federal government coal program.

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

In March of 2018 the Federal District Court of Montana found the Miles City (Montana) and Buffalo (Wyoming)

Field Office's Resource Management Plans unlawfully overlooked climate impacts of coal mining and oil and gas drilling. The case was brought by Western Organization of Resource Councils, Montana Environmental Information Center, Powder River Basin

Resource Council, Northern Plains Resource Council, the Sierra Club, and the Natural Resources Defense Council.

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

### Remedy:

Choose the No Action Alternative. Revise the Forest Plan to take a hard look at the science of climate change.

Alternatively, draft a new EIS for this project if the FS still wants to pursue it, which includes an analysis that examines climate change in the context of project activities.

The NFMA requires in the face of increasing climate risk, growing impacts of wildfire and insect activity, plus

scientific research findings, the FS must disclose the significant trend in post-fire regeneration failure. The forest has already experienced considerable difficulty restocking on areas that have been subjected to prescribed fire, clear-cut logging, post- fire salvage logging and other even-aged management "systems."

The project goals and expectations are not consistent with NFMA's "adequate restocking" requirement. Scientific research can no longer be ignored.

"At dry sites across our study region, seasonal to annual climate conditions over the past 20 years have crossed these thresholds, such that conditions have become increasingly unsuitable for regenera- tion. High fire severity and low seed availability further reduced the probability of post-fire regeneration. Together, our results demonstrate that climate change combined with high severity fire is leading to increasingly fewer opportunities for seedlings to establish after wildfires and may lead to ecosystem transitions in low-elevation ponderosa pine and Douglas-fir forests across the western United States."

Wildfires and climate change push low-elevation forests

across a critical climate threshold for tree regeneration, PNAS (2018), Kimberley T. Davis, et al. (Please, find attached)

Forests are already experiencing emissions-driven deforestation on both the post-fire and post-logging acreage. Areas where the cumulative effects of wildfire, followed by salvage logging on the same piece of ground are error upon error, with decades of a routine that can rightfully be described as willful ignorance and coverup.

Where is the reference to restocking? Monitoring data and analysis? If monitoring has been done there is no disclosure documenting the scope and probability of post-fire regeneration failures in the project area. NFMA requires documentation and analysis that accurately estimates climate risks driving regeneration failure and deforestation – all characteristic of a less "resilient" forest.

"In the US Rocky Mountains, we documented a significant trend of post-fire tree regeneration, even over the relatively short period of 23 years covered in this analysis. Our findings are consistent with the expectation of reduced resilience of forest ecosystems to the combined impacts of climate warming and wildfire activity. Our results suggest

that predicted shifts from forest to non-forested vegetation." Evidence for declining forest resilience to wildfires under climate change, Ecology Letters, (2018) 21: 243–252, Stevens-Rumens et al. (2018). (Please find attached)

The Forest Plan is based on assumptions largely drawn from our past that no longer hold true. These assumptions, made decades ago, must be challenged, and amended, where overwhelming evidence demon- strates a change of course is critical. It is time to take a step back, as- sess the present and future and make the necessary adjustments, all in full public disclosure to the Congress and the American people. Many acres of (conifers) In many areas, conifers haven't shown "re- silience" enough to spring back from disturbance. Regeneration is already a big problem. (Emphasis added).

Both RPA and NFMA mandate long-range planning which impose numerous limitations on commodity production, including grazing, timber harvesting practices and the amount of timber sold annually.

These long-range plans are based on assumptions, which are based on data, expert opinion, public participation and

other factors that all, well almost all, view from a historical perspective. Assumptions that drove forest planning guidance decades ago, when climate risk was not known as it is today, are obsolete today.

Present and future climate risk realities demand new assumptions and new guidance.

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

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

Sec. 6. of the National Forest Management Act states:

(g) As soon as practicable, ... the Secretary shall ... promulgate regulations, under the principles of the Multiple-Use, Sustained-Yield Act of 1960...

The regulations shall include, but not be limited to-

- (3) specifying guidelines for land management plans developed to achieve the goals of the Program which-
- (E) insure that timber will be harvested from National Forest System lands only where-
- (i) soil, slope, or other watershed conditions will not be irreversibly damaged;

NFMA regulations at 36 C.F.R. § 219.27 (Management requirements) state:

- (a) Resource protection. All management prescriptions shall—
- (1) Conserve soil and water resources and not allow significant or permanent impairment of the productivity of the land;
- (b) Vegetative manipulation. Management prescriptions that involve vegetative manipulation of tree cover for any purpose shall--

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

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

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

Given the forest's poor history of restocking success and its failure to employ the best available science, the adequacy of the site-specific and programmatic NEPA/NFMA process begs for further analysis and disclosure of the

reality of worsening climate conditions which threaten — directly and cumulatively — to turn forest into non-forest-ed vegetation, or worse. The desired future condition described in the Purpose and Need, or in the Forest Plan is not deforestation.

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

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

Looking to the Future and Learning from the Past in our National Forests: Posted by Randy Johnson, U.S. Forest Service Research and Development Program, on November 1, 2016 at 11:00 AM http://blogs.usda.gov/2016/11/01/looking-to-the-future-and-learning-from-the-past-in-ournational-forests/

### Excerpt:

"Forests are changing in ways they've never experienced before because today's growing conditions are different from anything in the past. The climate is changing at an unprecedented rate, exotic diseases and pests are present, and landscapes are fragmented by human activity often occurring at the same time and place.

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

Restoration efforts on U.S. Forest Service managed lands call for the use of locally adapted and appropriate native seed sources. The science-based process for selecting these seeds varies, but in the past, managers based deci- sions on

the assumption that present site conditions are similar to those of the past."

"This may no longer be the case."

### REMEDY

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

The selected scientific research presented above is only a sampling of the growing body of evidence that supports the need to disclose the consequences of the proposed action in a proper context – a hotter forest environment, with more frequent drought cycles. This evidence brings into question the Purpose and Need for the project. It also requires the FS

to reconsider the assumptions, goals and expected desired future condition expressed in the existing Forest Plan. Plan expectations must be amended at the programmatic level before proceeding with proposed project-level action(s). According to best available science, implementing the project will most likely accomplish the opposite of the desired future condition. We can adjust as we monitor and find out more. However, to willfully ignore what we do know and fail to disclose it to the public is a serious breach of public trust and an unconscionable act. Climate risk is upon us. A viable alternative to the proposal is not only reasonable and prudent, but it is the right thing to do.

The draft decision is in violation of NEPA, NFMA, the ESA and the APA because the project will adversely affect biological diversity, is not following the best available since and the purpose and need will not work.

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

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

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

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

Please disclose whether you have conducted surveys in the Project area for this Project for whitebark pine, wolverines, pine martins, northern goshawk, yellow-billed Western cuckoo, Erigeron maguirei, Aliciella cespitosa, Mexican Spotted Owl, Monarch Butterfly, and Pediocactus despainii.

Please disclose the last time the Project area was surveyed for whitebark pine, wolverines, pine martins, northern goshawk, yellow-billed Western cuckoo, Erigeron maguirei, Aliciella cespitosa, Mexican Spotted Owl, Monarch Butterfly, and Pediocactus despainii.

.

Please disclose how often the Project area has been surveyed for whitebark pine, wolverines, pine martins, northern goshawk, yellow-billed Western cuckoo, Erigeron maguirei, Aliciella cespitosa, Mexican Spotted Owl, Monarch Butterfly, and Pediocactus despainii.

.

Would the habitat be better for whitebark pine, wolverines, pine martins, northern goshawk, yellow-billed Western cuckoo, Erigeron maguirei, Aliciella cespitosa, Mexican Spotted Owl, Monarch Butterfly, and Pediocactus despainii?

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

are extremely remote; forest drying and increased wind speeds in thinned forests may increase, not reduce, the risk of fire.

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

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

The agency is violating the NEPA by using vague, unmeasureable terms to rationalize the proposed burning to the public. How can the public measure "resiliency?" What are the specific criteria used to define resiliency, and what are the ratings for each proposed logging unit before and after treatment? How is the risk of fire as affected by the project being measured so that the public can understand

whether or not this will be effective? How is forest health to be measured so that the public can see that this is a valid management strategy? What specifically constitutes a diversity of age classes, how is this to be measured, and how are proposed changes measured as per diversity? How are diversity measures related to wildlife (why is diversity needed for what speciese)?

If the reasons for 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:

Finally, the EA is a violation of the NEPA because the fact that these activities are being planned in the IRAs without and analysis of the impact of the project on wilderness characteristics is never specifically noted in the notice.

There is no explanation of why this project complies with the Roadless Rule. This is clearly a violation of the Roadless Area Conservation Rule, as the agency is imposing artificial management activities in areas that are to be maintained via natural processes. The scientific basis for implementing management actions in this IRA needs to be fully provided to the public. In particular, the massive increase of exotic grasses within an IRA is hardly a restoration activity.

There is no information ever provided as to what the vegetation types are in the areas not proposed for treatment. Instead, the entire forest with the exception of wilderness areas is proposed to be set on fire. What was the basis for determining areas for treatment?

Overall, the EA is devoid of any useful information to the public as to why this project enhances wildlife habitat, or is needed to maintain natural ecosystem processes within an IRA. 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.

The Forest Service responded:

The agency incorporates the best available science to develop and analyze proposed actions that fulfill the purpose and need for the project.

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

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

The agency 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.

Please include an easily understandable accounting of all costs for the various types of treatments, including burning

within the IRA. For commercial logging, fuels reduction, and prescribed burning, we would like to know what the estimated cost is "per acre" for that particular treatment. We would also like to know the costs for construction of new temporary roads, reconstruction of existing roads, and road obliteration and/or decommissioning per mile of road.

It is arbitrary and capricious for the Forest Service to undertake NEPA without considering the environmental effects. The environmental effects cannot be considered if the specific locations for individual prescribed fires are not identified.

### Remedy:

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

We wrote in our comments:

Disclose the biological assessment for the candidate, threatened, or endangered species with potential and/or actual habitat in the Project area; Disclose the results of the field surveys for threatened, endangered, sensitive, and rare plants in each of the proposed units;

The Forest Service responded:

All environmental effects will be considered and if a Finding of No Significant Impact (FONSI) cannot be justified or mitigated, an EIS will be prepared.

P. 19 of the Wildlife and Plant Biological Assessment states:

# Appendix A: Species Considered but Not Analyzed

Ute ladies'-tresses, Spiranthes diluvialis (T)

Approximately 3,735 acres (0.03 percent) of the 13,042,700 acres of modeled range for this species overlaps the proposed project area (U.S. Fish and Wildlife Service, 2022g) This species has been surveyed for numerous times on Dixie National Forest and does not have any known occurrences or suitable habitat and therefore it is considered non-extant on the forest.

"Numerous times" doesn't tell the public when the surveys occurred. The last surgery could have been decades ago in violation of NEPA, NFMA, ESA and the APA.

Monarch butterfly, Danaus plexippus (Candidate)

Because the monarch butterfly is a candidate species, it receives no statutory protection under the Endangered Species Act.

### **Remedy:**

Conduct scientific surveys for the Ute ladies' tresses and then formally consult with the FWS in addition to following NEPA by telling the public exactly when, where and how the project will be implemented.

Conduct scientific surveys for Monarch Butterflies. Because they are a candidate species the Forest Service is required to formally conference with the US FWS on the effect of the project on Monarch Butterflies.

Page 5 of the Wildlife and Plant Biological Assessment states:

### • Mexican Spotted Owl

- No project activities would occur within 0.5 mile of a protected activity center during the breeding season (February to September)
- If proposed actions would impact potential Mexican spotted owl habitat, surveys would be conducted prior to

### implementation.

- Project activities within spotted owl suitable habitat would follow the guidance in appendix C of the Mexican Spotted Owl Recovery Plan (U.S. Fish and Wildlife Service, 2012). Utah Prairie Dog
- Around active Utah prairie dog colonies, a 350-feet buffer will be used to keep treatment equipment from disturbing or crushing burrows or prairie dogs.
- No treatments will occur in or within 1,000 feet of active Utah prairie dog colonies when prairie dogs are above ground, as determined by a wildlife biologist (generally April 1 through August 31).
- Treatment areas in or within 1,000 feet of active Utah prairie dog colonies will be reseeded (using seed mix that follows recovery plan guidance) if a lack of forage is anticipated for resident or colonizing Utah prairie dogs.

#### **Plants**

• All proposed actions would stay 100 feet from known threatened, endangered, or sensitive plant populations. In the event that an unknown threatened, endangered, and sensitive plant site is discovered in the course of the project, the activity would be stopped and the appropriate measures would be taken to stop any adverse effects to the site. However, treatment activities could be implemented within populations of fire adapted sensitive plant

### species with the coordination of Dixie National Forest botanist.

The Dixie National Forest has no habitat plans to ensure protection of habitat for the Mexican Spotted Owl and the Utah Praire Dog of for threatened, endangered and sensitive plants in violation of NEPA, NFMA, the ESA and the APA.

There are no current or extensive surveys for any threatened, endangered, candidate, or sensitive speices in violation of NEPA, NFMA, ESA and the APA.

### Remedy

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

We wrote in our comments:

How will this project effect pinyon jays?

Please see the attached petition to list the pinyon jay for protection under the Endangered Species Act.

The Forest Service responded:

Pinyon jay are ranked as globally vulnerable (G3) and apparently secure (S4) in the state of Utah (NatureServe). Populations are known to be declining but this species has not been designated as a Regional Forester's

Sensitive Species and the U.S. Fish and Wildlife Service has not proposed this species for listing under the Endangered Species Act. At this time, pinyon jay is included in project analysis as a migratory bird. Project design feature Wildlife 1 ensures that treatments would not occur during the migratory bird nesting period whenever possible (EA, Appendix B). The Project Implementation Checklist states that a wildlife biologist on the interdisciplinary team would review and provide feedback on identifying conservation species and identify additional field surveys to be conducted by qualified personnel that may be needed prior to implementation (EA, Appendix C). As stated in the Migratory Bird analysis (EA p. 32), proposed actions would improve habitat for some species of migratory birds and no significant adverse effects to migratory bird habitat would occur. The pinyon-juniper vegetation analysis (EA, p. 37-38) addresses effects to this vegetation type, including an explanation that 45,000 acres in the analysis area are classified as pinyon-juniper but stands with pinyon pine are not considered in the proposed action for this project. Although pinyon jay may be present in or adjacent to the proposed action area, it is highly unlikely that nesting habitat would be treated or affected. Pinyon jay inhabits various successional stages of pinyon-juniper habitat. The causes behind pinyon jay declines are not understood, as pinyon-juniper woodlands have increased in range and tree densities concurrent with pinyon jay population declines. On-going research efforts are focused on understanding habitat requirements, resource needs, and

movement patterns throughout the annual cycle across this species' range (Somershoe et al, 2020). Locations used by Pinyon jays for foraging, food caching, and nesting have been found to be relatively distinct from one another, though overlapping (Boone et al, 2021). Pinyon jay forage on pinyon nuts and insects. Cache sites are variable and include open areas of juniper savanna or previously burned areas as well as open woodland with high shrub and grass cover. Nest sites are found to have denser tree cover than cache sites (Somershoe et al, 2020). At this time, it is unknown whether vegetation management in pinyon jay habitat has negative or positive impacts on pinyon jay populations (Boone et al 2021; Somershoe et al, 2020). Proposed treatments in juniper woodlands are expected to result in diminished juniper cover and increased grass and forb cover (EA, p. 37), which would increase the amount of habitat for pinyon jay cache sites. Treatments that help prevent catastrophic fire and reduce the threat of insect and disease infestation may have short term or local negative effects on migratory birds, but long term or broader scale benefits for bird populations. Habitat attributes to consider in management planning include nesting habitat protection, creation of patchy mosaic habitat with attention to transition zones between habitat types, pinyon nut mast production, and non-native invasive plant species control (Somershoe et al, 2020).

The project will violate NEPA, NFMA, the Dixie Forest Plan and the APA. Pinyon jay's will be affected by more

than just burning nesting habitat. The project will also burn up their food source, pinyon pines.

Pinyon Jays are not migratory birds as the response to comments state.

The US FWS 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.

We wrote in our comments:

The project has not demonstrated that management area direction in the Forest Plan is being followed.

The Forest Service responded:

All environmental effects will be considered and if a Finding of No Significant Impact (FONSI) cannot be justified or mitigated, an EIS will be prepared.

The project is in violation of NEPA, NFMA, the FOrest Plan, the ESA and the APA for not demonstrating that management area direction in the Forest Plan is being followed.

### **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

Kristine Akland

Center for Biological Diversity

P.O. Box 7274 Missoula, MT 59807

kakland@biologicaldiversity.org

And for

Sara Johnson, Director Native Ecosystems Council

And for

Jason L. Christensen –

Director Yellowstone to Uintas Connection