Objection against the Skyline Healthy Forests Restoration Act 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 Skyline Healthy Forests Restoration Act Project (Skyline Project). Please accept this objection in pdf format from me on behalf of the Alliance for the Wild Rockies, Native Ecosystem Council, and Council on Wildlife and Fish,

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;

And for

Steve Kelly
Council on Wildlife and Fish
P.O. Box 4641

Bozeman, MT 59772

Signed this 7th day of February, 2025 for Objectors

/s/
Michael Garrity
Lead Objector

/s/ 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 Draft Decision Notice are contained in the USFS webpage at: https://www.fs.usda.gov/project/mantilasal/?project=64839

2. Name of the Proposed Project

Skyline Healthy Forests Restoration Act Project

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

The Skyline HFRA Project is approximately 100,000 acres and covers slopes of the Wasatch Plateau on the Sanpete and Price/Ferron Ranger Districts.

Approximately 55,000 acres of the project is within inventoried roadless areas (IRA).

RESPONSIBLE OFFICIAL:
Barabra Van Alstine
Forest Supervisor
Manti La-Sal National Forest
599 W. Price River Dr.

Price, UT 84501

As a result of the Draft DN, individuals and members of the above mentioned groups, hereafter (Alliance) would be directly and significantly affected by the logging and associated activities. Appellants are conservation advocates working to ensure protection of biological diversity and ecosystem integrity in the Wild Rockies bioregion including the Manti La-Sal National Forest (MLSNF). 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.

The Forest Service proposes the following actions to meet the purpose and need. The project area is approximately 103,000 acres of which 47,570 acres are proposed for logging and masticating and 45,920 acres are proposed for intentional burning. Note that logging and masticating and burning may occur on the same acreage. Approximately 28,290 additional acres would be a maximum management area. Maximum Manageable Areas would not be actively ignited through burning and don't include logging and masticating but should fire carry into them as a result of the surrounding intentional burning they would be managed for fuels reduction.

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Propsed Activity **Proposed Activity/Treatment Acres**

Treatment Type	**Inside IRA**	**Outside IRA**	**Total**
Vegetation	24,355	23,215	47,570
Fuels	23,786	22,134	45,920
MMA	12,107	16,183	28,290

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

Alliance provided comments on the proposed project on October 19, 2023.

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

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

6. Suggested Remedies that would Resolve the Objection:

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

7. Supporting Reasons for the Reviewing Office to Consider:

This landscape has very high wildlife values, including for the threatened and wildlife dependent upon unlogged. The project area will be concentrated within some of the best wildlife habitat in this landscape which is an important travel corridor for wildlife such as Mexican Spotted Owl, Northern Goshawk, Monarch Butterfly and California Condors. 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 January 8, 2025, 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 APA, the Migratory Bird Treaty Act, and the Manti La-Sal National Forest Forest Plan

Forest Plan and the APA, including the implementing regulations of these and other laws, and will result in additional degradation in already degraded watersheds and mountain slopes, further upsetting the wildlife habitat, ecosystem and human communities. Our objections are detailed below.

If the project is approved as proposed, individuals and members of the above-mentioned groups would be directly and significantly affected by the burning and associated activities. Objectors are conservation organizations working to ensure protection of biological diversity and ecosystem integrity in the Wild Rockies bioregion (including the 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 October 19, 2023 comments:

We believe that the Forest Service must complete a full environmental impact statement (EIS) for this Project because the scope of the Project will likely have a significant individual and cumulative impact on the environment. Alliance has reviewed the statutory and regulatory requirements governing National Forest Management projects, as well as the relevant case law, and compiled a check-list of issues that must be included in the EIS for the Project in order for the Forest Service's analysis to comply with the law. Following the list of necessary elements, Alliance has also included a general narrative discussion on possible impacts of the Project, with accompanying citations to the relevant scientific literature. These references should be disclosed and discussed in the EIS for the Project or in the final EA if you refuse to write an EIS.

I. NECESSARY ELEMENTS FOR PROJECT EA or EIS: A. Disclose all Manti-La Sal 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 Manti-La Sal National Forest's record of compliance with state best management practices regarding stream sedimentation from ground-disturbing management activities;

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

K. Disclose the Manti-La Sal National Forest's record of compliance with the additional monitoring requirements

set forth in previous DN/FONSIs and RODs on the Manti-La Sal National Forest;

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

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

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

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

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

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

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

S. Disclose the timeline for implementation;

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

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

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

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

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

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

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

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

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

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

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

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

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

GG. Disclose when and how the Manti-La Sal 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 Manti-La Sal'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;

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

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

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

Please demonstrate that the project will comply with NEPA by having detailed maps where the logging and burning will occur. If you are building any roads or skid trails please tell the public where these will be.

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

The project is in violation of the Forest Plan Disclose the amount of big game (moose and elk) hiding cover, winter big game (moose and elk) hiding cover, winter range, and security.

The Skyline project is in violation of NEPA, NFMA, the ESA, the Migratory Bird Treaty Act and the APA. The EA failed to complete “hard look” and “cumulative effects” analysis and provide effective alternatives.

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

Another reason that an EIS is need is to analyze the cumulative impacts is that the Skyline project’s burning, manipulation and logging project represent a foreseeable large-scale loss and fragmentation of habitat for many sensitive species, declining migratory birds, native carnivores and other wildlife.

The Prescribed Fires turned wildfires in New Mexico - one of which was a pile burn that smoldered and then blew up - have highlighted serious risks with activities involved in this project. (I assume they will be pile burring in some of these aspen ’treatments”? An EIS is needed to analyze the threat of the prescribed fires getting out of control.

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

Please find attached, the Rosenberg paper on migratory bird declines which concluded, ***Our results signal an urgent need to address the ongoing threats of habitat loss,***

agricultural intensification, coastal disturbance, and direct anthropogenic mortality, all exacerbated by climate change, to avert continued biodiversity loss and potential collapse of the continental avifauna.

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

The EA provides little additional information on where burnings, logging will be or how the specifics on how the burning will occur. The EA is programmatic in that they want to log whenever and wherever for the next 20 years with no public over site of their activities. The EA does not take a hard look at the potential impacts of the project. This is a violation of NEPA, NFMA, the APA, and the ESA.

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

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

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

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

Wednesday's ruling ends the U.S. Forest Service's plan to open 37.5 square miles of old-growth forest on Prince of Wales Island to commercial logging, CoastAlaska reported.

The ruling by Judge Sharon L. Gleason also stops road construction for the planned 15-year project.

Conservationists had already successfully blocked the federal government's attempt to clear large amounts of timber for sale without identifying specific areas where logging would have occurred.

Gleason allowed the forest service to argue in favor of correcting deficiencies in its review and moving forward without throwing out the entire project, but ultimately ruled against the agency.

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

The method used in the Prince of Wales Landscape Level Analysis was the first time the agency used it for environmental review on an Alaska timber sale.

The forest service, which can appeal the decision, did not return calls seeking comment.

Gleason's decision affects the Prince of Wales Island project and the Central Tongass Project near Petersburg and Wrangell.

The ruling triggers a new environmental review under the National Environmental Policy Act, said Meredith Trainor, executive director of the Southeast Alaska Conservation Council.

The ruling in the lawsuit brought by the council includes a requirement for public input on specific areas proposed for logging, Trainor said.

Tessa Axelson, executive director of the Alaska Forest Association, said in a statement that the ruling "threatens the viability of Southeast Alaska's timber industry."

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

May 10, 2021

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

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

https://www.americanbar.org/groups/environment_energy_resources/publications/fr/20210510-

[the-us-forest-services-expanding-use-of-condition-based-management/]()

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

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

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

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

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

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

Only two federal cases have addressed CBM's legality. In WildEarth Guardians v. Connor, 920 F.3d 1245 (10th Cir. 2019), the Tenth Circuit approved a CBM approach for a

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

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

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

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

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

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

But this is not the time to shortchange the most consequential decisions that the agency must make: determining where and how to act. During the final two

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

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

We attached the Federal District Court of Alaska's ruling on condition-based management to our earlier comments.

The Forest Service also claimed the project area is 100,000 acres which is how many acres the Forest Service will log and burn. The Draft Decision Notice says the project covers slopes of the Wasatch Plateau on the Sanpete and Price/Ferron Ranger District.

Sanpete and Price/Ferron Ranger Districts are over 800,000 acres. It is a violation of NEPA to only count the area the project treats as the project area because it eliminates the areas no logged and burn as a baseline.

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

The Forest Service violates NEPA because it fails to take a hard look at the Skyline Project's impacts on the environment and fails to disclose sufficient information to the public.

NEPA requires the Forest Service to discuss direct, indirect, and cumulative effects of the Project. 40 C.F.R. §§ 1502.16; 1508.1(g).

NEPA requires that agencies take a "hard look" at the environmental consequences of its proposed actions *before* the agency chooses a particular course of action, without favoring a pre-determined outcome.

NEPA further requires that relevant information be made available to the public so that they may play a role in both the decision making and implementation of the Project.

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

The EA does not adequately address the direct, indirect, and cumulative effects of the Project on the human environment.

The Forest Service therefore violates the hard-look and public disclosure requirement of NEPA and fails to provide sufficient site-specific information or analysis about the Project and it's impacts to foster informed decision making and public participation.

The Forest Service therefore violates NEPA and is not in accordance with law and without observance of procedure required by law under the APA.

We attached attached the petition to list the piton jay for protection under the Endangered Species Act to our earlier comments.

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 is 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, please find attached, Magee et al. (2019) who 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). Please find "Mature and Old-Growth Forests: Definition, Identification, and Initial Inventory on Lands Managed by the Forest Service and Bureau of Land Management" attached where they define old growth juniper as being 200 or more years old. How much old growth juniper is believed as essential for optimal non-game bird management, and where is this old growth juniper going to be maintained in this IRA and project?

The following recommendations by were not considered or even mentioned in the EA, DDN and FONSI in violation of NEPA, NFMA, the APA, and the Migratory Bird Treaty Act.

Please find attached "Conservation Strategy for the

Pinyon Jay (Gymnorhinus cyanocephalus)"

This strategy was developed by the Pinyon Jay Multi-State Working Group, led by Scott Somershoe, Land Bird Coordinator, Migratory Bird Program, Legacy Region 6, U.S. Fish and Wildlife Service, Lakewood, Colorado.

Please find their full report attached.

Please see the excerpt below describing the considerations of the location of Woodland Treatments which the EA did not consider in violation of NEPA, NFMA, the APA and the Forest Plan.

Considerations for the Location of Woodland Treatment Projects

Pinyon Jay use of the landscape within a flock's home range is likely to vary across a dailycycle, a seasonal cycle, and possibly across years. Although it is important to model Pinyon Jay habitat and occupancy at multiple scales (Johnson et al. 2014, 2015, 2016, 2017), standardized, site-specific assessments to determine whether Pinyon Jays are present in a proposed treatment area and how they are using the habitat may be especially useful in informing management at the treatment scale. These assessments can include surveys to locate nests during the breeding season (e.g.; "clearance surveys", as typically used for Migratory Bird Treaty Act [MBTA] compliance) or other surveys to identify whether Pinyon Jays use the area for other activities, such as caching or foraging.

Vegetation thinning within a traditional nesting colony site can cause the birds to abandon treated areas (Johnson et al. 2018b) or alter the suitability of the habitat (Johnson et al. 2019), and complete removal of the colony site removes nesting substrate altogether. Therefore, avoiding treatment of nest colony sites is recommended. Pinyon Jays often use the same generalarea each year for nesting, with colony site shifts of up to 550 yards (~500 meters) between years

(Marzluff and Balda 1992, Johnson et al. 2017c, J. Boone and E. Ammon, pers. comm.). Thus, a buffer of undisturbed habitat of 550 yards (~500 meters) around a known breeding colony is recommended and allows for typical colony shifts across years (Johnson et al. 2017c).

The Working Group website (https://www.partnersinflight.org/resources/pinyon-jay-working-group/) provides information about how to conduct clearance surveys for Pinyon Jays. Similar guidance is available from Natural Heritage New Mexico (Petersen et al. 2014) and Great Basin Bird Observatory (www.gbbo.org). Additional information and assistance with conducting more generalized occupancy surveys that incorporate caching and foraging habitat use can be *obtained by contacting partners in the Working Group with Pinyon Jay survey experience.*

Considerations for the Timing of Woodland Treatment Projects

It is preferable to conduct treatments outside of the Pinyon Jay breeding season, especially if an active nest colony is within the area where a treatment must occur. Pinyon Jays tend to breed earlier than most passerine land birds. Data from Nevada (J. Boone and E. Ammon, unpublished data), Utah, and Colorado (R. Norvell and L. Rossi, unpublished data) indicate that nesting activity in these regions begins in late February or early March and ends in late May. Studies in New Mexico suggest that nesting phenology may occur later than in more northerly regions, except in the case of a mast crop the previous fall (Johnson et al. 2014, 2015, 2017c); however, Pinyon Jays in New Mexico still breed earlier than most piñon-juniper bird species. The specific timing of the breeding season may vary from year-to-year depending on the severity of the preceding winter and on the availability and abundance of nuts cached during the previous fall (Balda 2002).

Documenting the Effects of Woodland Treatments on Pinyon Jays

If a woodland treatment is conducted in an area that is occupied by Pinyon Jays, conducting systematic, standardized pre- and post-treatment monitoring of Pinyon Jay habitat use and vegetation parameters will help to determine the effects of the treatment on Pinyon Jays. If treatments are conducted within a known nesting colony, post-treatment monitoring should be completed to determine if the colony moves and if the new habitat has similar characteristics to the original colony location. Pre- and post-treatment monitoring of vegetation measures (e.g., tree size, tree density, canopy cover, tree vigor, and piñon nut productivity) is necessary for

understanding the impacts of thinning treatments on Pinyon Jays (Johnson et al. 2018a, 2018b, 2019).

Post-treatment monitoring could be conducted by the agency performing the treatment, but may be facilitated by collaboration between managers and Pinyon Jay researchers. We strongly encourage this collaboration to take advantage of the information gathering opportunities presented by ongoing woodland treatments and among

researchers to compare and contrast regionally-specific findings to strengthen our overall knowledge of Pinyon Jay conservation needs.

Considerations for Implementation of Woodland Treatments

If a woodland treatment is conducted in an area that is, or could be, occupied by Pinyon Jays, particularly during the breeding season, the following considerations and implementation parameters may help to reduce negative impacts to Pinyon Jays. The information presentedbelow is organized according to regions and by woodland treatment types and objectives. The bulk of this material is derived from research conducted in the Southwest (mostly New Mexico); less information is available about the Great Basin and other regions occupied by Pinyon Jays.

Some of the information shown below may be applicable across the broader Pinyon Jay range, but this remains to be determined.

Southwest Region - Woodland Thinning and Herbicide Treatments

The information in this section is informed primarily by research conducted in New Mexico and to a lesser extent, Arizona. In this region, most woodland treatments involve thinning, with a limited occurrence of herbicide treatments and large scale woodland removal. The goals of these projects are often fuels reduction, but may also include reduction of juniper to increase grass and forbs for ungulates (i.e., big game) and cattle, management for other wildlife species, and watershed restoration. Treatment plans that include plans for collaboration with Pinyon Jay researchers allow managers to identify whether particular treatment parameters (e.g., different percentages of retained canopy cover and/or tree density) can meet primary management objectives while remaining within the range of suitable nesting, caching, and foraging habitat.

a. Pinyon Jays often use the same general area each year for nesting, with colony site shifts of up to 550 yards (~500 meters) between years (Marzluff and Balda 1992, Johnson et al. 2017c, J. Boone and E. Ammon, pers. comm.). Thus, if a buffer area of 550 yard (~500 meters) around a known breeding colony remains undisturbed, it

allows for colony shifts across years (Johnson et al. 2017c).

b. If thinning in persistent piñon-juniper woodlands or wooded shrublands, creating a patchy-clumpy mosaic of suitable nesting habitat within the treated area, as opposed to evenly spaced thinning, allows for shifting colony locations. This treatment pattern also better mimics how fire would have impacted the landscape in persistent piñon-juniper woodlands and wooded shrublands (Romme et al. 2009). Provided that sufficient suitable habitat is retained throughout the treatment area, retaining as many larger trees as possible within areas of higher tree density and/or higher canopy cover will likely conserve more Pinyon Jay nesting habitat than thinning all size/age classes to a uniform density. For example, a guideline is to retain trees within the 25–75% quartiles of these measures at the target site or similar sites (Johnson and Sadoti 2019).

c. If using herbicide treatments in juniper or piñon-juniper woodlands, a mosaic of treated and untreated areas better mimics the natural landscape setting than large monomorphic treatment areas. If juniper is the

target species, avoiding treating areas that contain piñontrees avoids compromising piñon nut production.

d. As piñon nut production is critical to Pinyon Jays, mast-producing trees are particularly valuable. Therefore, thinning may be particularly detrimental in known productive piñon woodlands containing old or very old trees, likely of prime piñon nut producing age, and trees of moderate age to support future nut production (Parmenter et al. 2018, Crist et al. 2019). Parmenter et al. (2018) identified age and size of P. edulis as an indicator of probable nut productivity: little to no productivity (<3.5 inches or <9 centimeter diameter at breast height [dbh]); medium productivity (3.5–5.9 inches or 9–15 centimeter dbh); and high productivity (>6.3 inches or >16 centimeter dbh) (Zlotin and Parmenter 2008). Old and very old trees likely produce more mast due to their large size and larger number of fruiting branches (Parmenter et al. 2018).

e. South- and west-facing slopes, as opposed to north- and east-facing slopes, may be more suitable for treatments avoiding impacts to Pinyon Jays because north- and east-facing slopes are projected to better survive future climate change scenarios (Rondeau et al. 2017). Sites with lower

heat load (north-facing) are also favored for Pinyon Jay colony sites (Johnson et al. 2017b).

f. Large and densely crowned trees are particularly valuable for Pinyon Jay nesting, particularly when they occur within areas of higher tree density (Wiggins 2005, Johnson et al. 2014, 2015, Johnson and Sadoti 2019).

g. Retaining and promoting native grasses, forbs, and shrubs in the understory may increase available invertebrate prey for Pinyon Jays (Bombaci and Pejchar 2016).

h. If cheatgrass and other invasive annual plants are in the vicinity of a planned treatment area, aggressive invasive species control in post-treatment management plans decreases fire risk and fire intensity (Chambers et al. 2017), thus lowering the risk to stands important to Pinyon Jays. A minimum of 20% perennial native herbaceous cover in a treatment area is recommended for preventing a large increase in cheatgrass and other annual invasive plants post-treatment (Chambers et al. 2017).

Great Basin Region - Sagebrush Restoration and Thinning Treatments In the Great Basin, the dominant woodland treatment involves complete tree removal of generally lower-elevation patches of woodland to reclaim or improve shrubland habitat to benefit Greater Sage-Grouse and other sagebrush obligate species. Compared to the Southwest, there is less information about Pinyon Jay habitat use in the Great Basin upon which to base suggested treatment parameters.

a. Pinyon Jays often use the same general area each year for nesting, with colony site shifts of up to 550 yards (~500 meters) between years (Marzluff and Balda 1992, Johnson et al. 2017c, J. Boone and E. Ammon, pers. comm.). Thus, if a buffer area of 550 yard (~500 meters) around a known breeding colony remains undisturbed, it allows for colony shifts across years (Johnson et al. 2017c).

b. Pinyon Jays appear to use Phase I woodlands most frequently, Phase II woodlands at an intermediate level, and Phase III woodlands rarely (J. Boone and E. Ammon, unpublished data). Therefore, preferentially treating denser woodlands as opposed to less-dense woodlands is recommended. We recognize that Phase III *woodlands are rarely the target of typical woodland treatments in this region at the current time for several reasons, including their low potential to revert to high-quality shrubland habitat after complete removal.*

c. Treatments that create "feathered" transition zones of approximately 270–550 yards (250–500 meters) between the treated area and untreated piñon-juniper woodlands more accurately mimic the transitional zones that Pinyon Jays use most often in the Great Basin. More specifically, a woodland / shrubland ecotone that is irregular, diverse, and gradual is likely to be more favorable for Pinyon Jays than a linear ecotone with sharp transition from open shrubland to dense woodland (Crist et al. 2019, J. Boone and E. Ammon, unpublished data).

d. If using herbicide treatments in juniper or piñon-juniper woodlands, a mosaic of treated and untreated areas more accurately mimics the natural variation in woodland cover. If juniper is the target species, treating areas with piñon trees will compromise piñon nut production.

e. If cheatgrass and other invasive annual plants are in the vicinity of a planned treatment area, aggressive

invasive species control in post-treatment management plans decreases fire risk and fire intensity (Chambers et al. 2017), thus lowering the risk to stands important to Pinyon Jays. A minimum of 20% perennial native herbaceous cover in a treatment area is recommended for preventing a large increase in cheatgrass and other annual invasive plants post-treatment (Chambers et al. 2017).

The agency does not address the likely adverse impacts of the project on pinyon jays or on 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, the following article newspaper article by Maffly (2019) in the Sale Lake Tribune 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.

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

By Brian Maffly
| June 25, 2019

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

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

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

"Those threads could be produced by defoliating insects. They could be produced by mites. We're looking for webbing, fine threads. We're looking in all of the crevices for frass that's either been kicked out of the inner bark

tissues or out of the bark," said Hebertson, her hair dotted with the yellow juniper needles falling from the branches. "Frass is just fundamentally a mixture of insects' poop and boring dust."

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

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

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

Trees under attack

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

Although juniper is sometimes treated as a trash tree to be ripped out of the ground in the name of habitat restoration, it is a vital part of southern Utah's ecosystem, stitching together fragile desert landscapes. Widespread juniper mortality would deliver an ecological blow similar to what Utah has experienced where bark beetles have run amok in national forests.

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

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

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

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

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

The report recommends continued monitoring and asked the Forest Service to complete an aerial survey this summer to "assess the extent and severity of the juniper decline and crown dieback" across the Four Corners region.

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

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

Rains returned

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

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

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

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

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

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

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

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

"The concern is what is going to happen next year if the beetle flies off and lays eggs in some more trees," said Shumway, while surveying the dying trees around Alkali Ridge.

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

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

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

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

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

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

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

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

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.

Page 25 of the final EA/DN states:

The pinyon-juniper forest cover types within the project area are abundant, covering about 23 percent of the area. Overstories are dominated by pinyon and juniper species, the tendency is for lower canopy layers to consist of juniper species and generally speaking there is limited amount of pinyon regeneration occurring. The majority of the area consists of trees that are likely relatively young trees (e.g. less than 150-year-old pre-European settlement), those less than 12" at the root crown. Trees that established over the last century are now maturing and densities increasing. As a result, there has been a homogenization of fuel continuity and the potential fire intensities have increased with departure from historic conditions. Dwarf mistletoe (disease) is widespread in

juniper. Ips beetle is present in pinyon and is causing pockets of mortality.

The EA states that ***"The majority of the area consists of trees that are likely relatively young trees (e.g. less than 150-year-old pre-European settlement), those less than 12" at the root crown."*** But this is just an assumption that the EA fails to provide any evidence to back up this assumption.

The attached article by Rathner, 2024 titled, "The Invasion of the Pinyon Juniper," found that the BLM under estimated the age of juniper in the Grand Staircase National Monument which borders the projects area. The EA and Decision Notice are in violation of NEPA, NFMA and the APA for giving the public in correct information about the age of the pinyon-juniper trees. It appears that the project area contains old growth juniper that are much older than what the Decision Notice assumes. Ratner found that Pinyon-Juniper in the area were "from 211 to 426 years old" which is much older than under 150 years the EA/ Decision Notice claims.

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

Science Report by Coop and Magee (Undated), where they note that fuels and juniper reduction treatments resulted in rapid, large and persistent increases in the frequency, richness and cover of 20 non-native plant species including cheatgrass; exotic plant expansion appeared linked to the disturbance associated with treatment activities, reduction in tree canopy, and alterations to ground cover; exotic species were much more frequently encountered at treated than control sites, occurring at 86% of sample plots in treatments and 51% of untreated sample plots; richness of exotic species in treatments was more than double that of controls. What is also interesting in this study is that cheatgrass showed a negative effect of tree canopy, which means that cheatgrass was benefited by canopy removal. They noted that models for chestgrass alone and all non-native species together indicate strong negative associations with tree canopies, indicating that increased light availability, or perhaps below-ground resources such as moisture or nitrogen, enhance colonization and growth in treatments. Increases in exotic plant species in treatment areas was one of the reasons these researchers concluded that managers need to be cautious about implementing treatments in light of the persistent, negative ecological impacts that accompany woodland thinning in pinyon pine-juniper ecosystems; this includes an increase in fire frequency.

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

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

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

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

General comments on the proposal are as follows:

Parts of this very large project area are big game winter range as per the Forest Plan. The EA failed to define what the specific habitat objectives are for this winter range, including hiding and thermal cover, as well as forage. Juniper and sagebrush are key forage plants for big game on winter ranges. What are the objectives for these forage species? The Forest Plan direction for this management area is binding. If the agency is going to claim that the Forest Plan is being implemented, you need to specifically define how this is being done, instead of simply claiming that juniper and shrub removal is improvement on big game winter range. Also, the science and monitoring behind this claim need to be provided. Currently mule deer populations have been in decline across the western U.S.. We haven't seen any science that reported increases of mule deer populations following removal of juniper and shrubs on their winter ranges.

One issue that is generally ignored in the EA is what shrubs are present, and will be targeted for masticating and burning. Do these control efforts include sagebrush? There is extensive documentation that sagebrush is highly valuable to both elk and deer on winter ranges (Wambolt 1998, Petersen 1993). Removing sagebrush to increase grasses on winter range, as is suggested in the EA, does not promote mule deer and elk. Sagebrush has a high protein content of almost 13% in the winter, while dormant grasses have a protein content of less than 4% (Peterson 1993). There can be no valid reason to remove sagebrush and replace it with grasses for big game winter forage. The actual replacement species the agency claims are going to be managed for are never identified. But at a minimum, the rationale for removing shrubs and replacing them with grasses on winter range needs to be documented, as is required by the NEPA.

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

The 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.

Remedy

Choose the No Action Alternative or withdraw the Draft Decision Notice and FONSI and write an EIS that fully complies with the law.

We wrote in our comments starting with:

II. Disclose how Project complies with the Roadless Rule;

Are the roadless areas in the project area currently within the natural historic range of variability?

Is the project area within natural range for wildfire conditions?

Please analyze the wilderness potential of all of the roadless areas.

Will this project substantially alter the Roadless characteristics in the inventoried roadless areas within the project area?

Use of an CE or even and 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 a CE or even an 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. Please clarify what roads will be used.

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 Manti-La Sal 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?"

Please also find attached Baker 2023.

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 of the Skyline Healthy Forest Restoration Act (HFRA) Project is to reduce the risk and extent of, and increase the resilience to, insect and disease infestation; and to reduce hazardous fuels.

Please also find attached Baker 2023.

. Based on Dr. Baker's papers, the proposed action will not meet the purpose and need of the project.

Dr. Baker's papers are 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 Manti-La Sal Fire and Bootleg Fires, which were among the two largest blazes this past summer in California and Oregon.

For instance, 75% of the Bootleg fire, which burned over 400,000 acres, had previously been "treated" by some

form of "fuels management" with no discernible effect on fire spread.

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

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

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

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

their own, such as bluebirds, chickadees, chipmunks, flying squirrels and many others.

More than 260 scientists wrote 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 Roadless Rule and the Project Scoping documents fail to take hard look and provide accurate information and analysis to the public regarding Roadless Rule compliance, in violation of the APA, NFMA, the Migratory Bird Treaty Act, the Bald and Golden Eagle Protection Act, the ESA, and NEPA.

The Forest Service responded:

IRAs have been established since the 1970s and are governed by the 2001 Roadless Area Conservation Rule, focusing on managing specific characteristics. To analyze the impacts on these characteristics, a Roadless Characteristics Worksheet was developed. In 2018, a Wilderness Evaluation was conducted on the Forest. The units evaluated for wilderness attributes frequently coincide with IRAs, although their boundaries do not always align. Similar to the IRA Worksheet, a Wilderness Qualities and Attributes Worksheet was also completed.

Together, these worksheets provide a comprehensive overview of the conditions of both IRAs and wilderness evaluation units, aiding in the effects analysis. Although the characteristics of IRAs and wilderness attributes have similarities, they are distinguished in their identification. Nonetheless, both are commonly found within IRAs. (See Recreation, Visuals and Inventoried Roadless Areas Effects Analysis for details).

No Action Alternative / Existing Conditions

The existing condition descriptions from the worksheets inform the analysis of the No Action Alternative in the

Skyline HFRA project. Overall, most areas show varying degrees of impact, with some preserving natural qualities

and opportunities for solitude, while others face human influence, complicating management for wilderness

characteristics.

Table 5. IRA Existing Conditions

IRA Existing Condition

Big Bear Creek Dominated by mountain brush and aspen, but high road density detracts from naturalness and solitude.

Big Horseshoe Appears natural with minimal improvements, providing high-quality primitive recreation opportunities despite some large-scale vegetation treatments.

Birch Creek Generally natural but motorized activity limits solitude and primitive recreation, making management to preserve wilderness characteristics difficult.

Black Mountain High elevation areas lack improvements but roads limit solitude and management options for wilderness preservation.

Boulger-Black

Canyon

Mostly natural with few signs of human influence, offering solitude, but has a southern area withmore motorized activity.

Cedar Knoll Mostly natural with some modifications; offers solitude and opportunities for primitive recreation,

making preservation of wilderness characteristics possible.

Dairy Fork Natural in most areas with some signs of civilization, yet offers potential for solitude and primitive recreation.

East Mountain Major past fire impacts, with solitude available in the northern area but more human activities in the south.

Heliotrope Small size limits its wilderness characteristics, but opportunities for solitude exist in Heliotrope Mountain area.

IRA Existing Condition

Muddy Creek –

Nelson Mountain Mostly natural conditions, though human impacts are prevalent in certain areas.

Oak Creek Natural appearance but high human improvements limit solitude and wilderness preservation.

Price River Natural in many areas but some impacts from past projects, allowing for some solitude.

Twelve Mile

Creek Generally natural, but motorized use detracts from solitude and primitive recreation.

White Knoll Largely natural but road proximity limits wilderness characteristics.

White Mountain Mostly natural but with some human activity, providing good opportunities for primitive recreation.

Consequently, IRA conditions would remain unchanged in the short term, but the No Action Alternative would not

mitigate the risk of destructive wildfires in the long term. This inaction could lead to harmful impacts on soil, water quality, biodiversity, and habitats for sensitive species, as evidenced by past large wildfires in the area. The project is designed to improve watershed health, restore ecosystem structure, and reduce wildfire risks—benefits that would not be realized under the No Action Alternative.

Proposed Action Alternative

The Skyline HFRA proposed action is consistent with the 2001 Roadless Rule. The proposed action meets the criteria for exception(s) to the policy. The proposal includes limited and infrequent timber removal, focusing on small-diameter trees, with a goal of enhancing characteristics of the roadless area, restoring ecosystem structure

and composition, and reducing the risk of uncharacteristic wildfires. Although it is consistent with the 2001 Roadless Rule, IRAs may be adversely affected in the short-term but are expected to be beneficially affected in the long term from the proposed action.

The proposal covers approximately 100,000 acres of treatment, including 52,717 acres within 15 IRAs, emphasizing two treatment types: mechanical harvest and mastication, without constructing new or temporary roads. Although treatment would temporarily impact IRA characteristics—affecting visual aesthetics and primitive recreation opportunities —especially in areas with human activity from mechanical operations—the projected benefits over time are important to improving watershed health and forest resiliency. Additionally, the proposed treatments in IRAs are designed to ensure that both the integrity and the characteristics of IRAs (see design features IRA1 and IRA2, Scernery1, Scenery3 – Scernery5).

Most of the IRAs affected by proposed treatments would experience minimal impact due to the relatively small proportion of each IRA undergoing treatment. However, three IRAs; Big Horseshoe, Oak Creek, and Heliotrope, would see broader portions impacted by the treatments. Despite the broader portions of these IRAs affected, the necessity for treatment outweighs the potential impacts. As these IRAs are located at the headwaters of canyons that serve as the primary water source for Sanpete County. The Skyline HFRA project aims to enhance watershed health, restore ecosystem structure and composition, and mitigate wildfire risks amidst increasing mortality in late seral conifer stands due to drought, insects, and disease. This situation poses a high wildfire threat, risking watershed stability.

In the Big Horseshoe IRA, out of a total of 6,568 acres, the proposal includes masticating 2,811 acres and performing mechanical harvesting and prescribed burning on 3,757 acres, mostly in the northern and central sections. The implementation would involve about 34 miles of forwarding trails, which may limit solitude during this period. Evidence of human activity could persist for 30 to 40 years; while some wilderness attributes could still be preserved, the overall manageability of the wilderness attributes may decline due to the treatments. Although the remaining portion of this IRA could still be managed to preserve wilderness and IRA characteristics, this project would reduce manageability as wilderness. Reduced manageability is primarily due to the extent of acres treated, percent of the IRA impacted, the amount of proposed forwarding trails, and the length of time wilderness attributes may be impacted.

The Heliotrope IRA covers 4,523 acres. Approximately 2,015 acres of mechanical harvesting is proposed to occur generally on the north facing slopes of Heliotrope Mountain. 342 acres of mastication is proposed to occur generally on the south facing slopes of Heliotrope Mountain. Logs would be moved to cold decks and traditional landings using skid trails and forwarding trails. Approximately 12 miles of forwarding trails are proposed within Heliotrope IRA. Solitude and opportunities for primitive and unconfined recreation would be limited during treatment activities in these portions of the IRA but would return once treatments are completed. Each harvest unit would display evidence of *human influence for the next 30-40 years. These treatment actions would render this IRA insufficient in size to be managed as wilderness. Remaining untreated acreage is so fragmented by treatment areas that opportunities to feel alone and to engage in primitive and unconfined recreation would be slow to return following treatment. Although wilderness manageability is low to begin with, this project would reduce manageability as wilderness due to over half of the IRA receiving treatment, the extent of forwarding trails, and the length of time wilderness attributes may be impacted.*

Oak Creek IRA covers 16743 acres. Approximately, 8,105 acres of mechanical harvesting is proposed to occur throughout the entirety of the IRA. 3,392 acres of mastication is proposed to occur in smaller units scattered throughout the IRA. Approximately, 5,246 acres of Oak Creek IRA would be left untreated. Logs would be moved to cold decks and traditional landings using skid trails and forwarding trails. Approximately 55 miles of forwarding trails are proposed within Oak Creek IRA. The prevalence of fragmented treatment activities leaves small parcels of untreated areas that would no longer be manageable as wilderness due to it not meeting the size criteria of 5,000 acres. The 11,497 treated acres would no longer meet the naturalness criteria, at least for the foreseeable future (30-40 years). It is worth noting that the wilderness evaluation for Oak Creek IRA currently ranks its manageability is low due to the prevalence of existing improvements, presence and extent of other uses, and the existence of noticeable past vegetation treatments.

Although the presence of other uses and the prevalence of improvements occurs throughout the area, this project would further reduce manageability as wilderness. Reduced manageability is primarily due to the extent of acres treated, percent of the IRA impacted, the amount of proposed forwarding trails, and the length of time wilderness attributes may be impacted. Notably, 5,246 acres will remain untreated.

In contrast, the remaining 12 IRAs will experience less than 25% impact from proposed treatments, many of which already have low wilderness manageability. Although the project may temporarily degrade certain wilderness characteristics, it is designed to accelerate the development of mature forest structures and mitigate risks posed by wildfires, thus providing long-term ecological benefits. Solitude and primitive recreation opportunities for visitors are expected to return after treatment, with improved scenic integrity as vegetation reestablishes over time. While short-term adverse effects are expected, long-term benefits include accelerated ecological recovery and improved watershed health, ultimately restoring mature forest ecosystems faster than natural regeneration processes would allow. Visitors will still find opportunities for recreation and solitude, as treated areas recover over time and maintain larger areas suitable for primitive experiences, alongside gradually improving scenic integrity as vegetation reestablishes.

The Forest Service is building 101 miles of “forwarding trails” in roadless areas to haul the logs out so they can be taken to a timber mill.

The Forest Service defines trails and roads as:

What is the definition of a National Forest System Road?

A road serving the National Forest System that the Forest Service determines is necessary for the protection, administration, and utilization of the National Forest System and the use and development of its resources. These classified roads are designated as NFSR indicating they are National Forest System Roads.

What is the difference between a road and a motorized trail?

A road is a motor vehicle route over 50 inches in width, unless identified and managed as a trail

(36 CFR 212.1). A trail is a route 50 inches or less in width or a route over 50 inches wide that is identified and managed as a trail (36 CFR 212.1).

https://www.fs.usda.gov/forestmanagement/equipment-catalog/logtransport.shtml

The Forest Service also explains:

Forwarders are extraction machines that remove material from the woods fully suspended in bunks.

Mechanical Configurations

Forwarders are articulated machines consisting of an operator's cab and a log bunk. They are basically tractors pulling a wagon load of wood. Forwarders currently exist having up to eight wheels. The cab may be fixed or capable of rotating on the chassis. Many forwarders have a boom mounted grapple for loading and unloading material.

Traction and flotation can be increased by adding tracks that slide on over the dual wheels or by opting for wider tires. Tire chains may also be applied for additional traction in snow or mud.

https://www.fs.usda.gov/forestmanagement/equipment-catalog/forwarders.shtml

Logging equipment to haul trees to logging decks are much wider than 50 inches. The Forest Service define equipment to haul trees out of the forest, logging trucks which are much wider than 50 inches. They vary in width from 8 feet to 10.5 feet.

https://www.tigercat.com/product/1085c-forwarder/

https://www.deere.com/en/forwarders/1110g-forwarder/

https://www.veritread.com/specs/forestry/forwarders/timberpro/tf840b#width

The Forest Service is violating NEPA and the Roadless Rule by building 101 miles of roads into Inventoried Roadless Area but telling the public that they are trails.

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

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

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

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

The Roadless Rule mandates:

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

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

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

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

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

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

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

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

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

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

66 Fed. Reg. 3258.

Are the roadless areas in the project area currently within the natural historic range of variability? Is the project area within natural range for wildfire conditions? Will this intentional burning and logging Project substantially alter the Roadless characteristics in the inventoried roadless areas within the project area?

Use of an EA for this project is also invalid because the proposed vegetation treatments would occur within Inventoried Roadless Areas (IRA). This qualifies as an extraordinary circumstance that invalidates use of a EA. It is the existence of a cause- effect relationship between a proposed action and the potential effects on these resource conditions and if such a relationship exists, the degree of the potential effects of a proposed action on these resource conditions that determine whether extraordinary circumstances exist (36 CFR 220.g(b).

In relevant part, regarding the prohibition on tree cutting, the Roadless Rule mandates: Prohibition on timber cutting, sale, or removal in inventoried roadless areas. 1. Timber may not be cut, sold, or removed in inventoried roadless areas of the National Forest System, except as provided in paragraph (b) of this section. 2. Notwithstanding the prohibition in paragraph (a) of this section, timber may be cut, sold, or removed in inventoried roadless areas if the Responsible Official determines that one of the following circumstances exists. The cutting, sale, or removal of timber in these areas is expected to be infrequent. 1. The cutting, sale, or removal of generally small diameter timber is needed for one of the following purposes and will maintain or improve one or more of the roadless area characteristics as defined in § 294.11. 1. To improve threatened, endangered, proposed, or sensitive species habitat; or 2. To maintain or restore the characteristics of ecosystem composition and structure, such as to reduce the risk of uncharacteristic wildfire effects, within the range of variability that would be expected to occur under natural disturbance regimes of the current climatic period;

2. The cutting, sale, or removal of timber is incidental to the implementation of a management activity not otherwise prohibited by this subpart; 36 C.F.R. §294.13 (2005).

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

Paragraph (b)(2) allows timber cutting, sale, or removal in inventoried roadless areas when incidental to implementation of a management activity not otherwise prohibited by this rule. Examples of these activities include but are not limited to trail construction or maintenance; removal of hazard trees adjacent to classified road for public health and safety reasons; fire line construction for wildland fire suppression or control of prescribed fire; survey and maintenance of property boundaries; other authorized activities such as ski runs and utility corridors; or for road construction and reconstruction where allowed by this rule. Page 4 of the scoping notice states: "Use of prescribed fire is proposed on the remaining national forest system lands within the Forest, which includes inventoried roadless areas." It appears that the Project authorizes tree cutting on in roadless areas, the Project EA is not clear how the Forest Service will access those units by building 101 miles of logging roads.

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 Skyline project is involution of the Roadless Conservation Rule, NEPA, NFMA, and the APA.

The Skyline Project violates the Roadless Rule because, among other things: Neither the Skyline Project EA nor any of the anti La-Sal National Forest's supporting documents defines what constitutes a "small diameter" tree for any of the stands within the project area's Inventoried Roadless Areas except to write on page 75 of the DDN:

In order to reduce fuels to a level deemed low risk, much of the biomass must be removed or consumed with fire. Historical markets show 10-14 inches diameter at breast height (DBH) is the smallest diameter considered feasible for harvest. Generally small-diameter trees with an average DBH of 14 inches or less would be removed from the IRA. Under regional guidance the smallest diameter merchantable is 8 inches DBH. The removal of smaller diameter timber, specifically an average of 14 inches DBH or less, aligns with the following established definitions.

The Vegetation Structural Stage (VSS) classification system serves as a standardized framework for both the public and Forest Service employees, allowing for a shared understanding of the various stages of forest development.

This system includes six classifications: grass-forb/shrub (0 - 1 inch DBH); seedling-sapling (1 - 5 inches DBH); young forest (5 - 12 inches DBH); mid-age forest (12 - 18

inches DBH); mature forest (18 inches DBH and larger); and old growth.

Furthermore, according to Hamilton (1993), old growth for spruce and fir in Utah is characterized by a DBH of 20 inches or more. Interior Douglas fir, old growth is defined as having a DBH greater than 24 inches on good sites and over 18 inches on poorer sites.

But the Forest Service's justification is not part of the roadless rule.

The Forest Service definition of a small tree in Regions One and Four found in the attached document, titled, "A Compendium of NFS Regional Vegetation Classification Algorithms" states that a small tree is 5 - 10 inches in diameter. Trees smaller than that are consider seedlings and samplings. Therefore the Skyline EA, Decision Notice and FONSI is violating the Roadless rule based on the Forest Service's own definition of a small tree.

The Skyline project is not just commercially logging a few larger trees, the EA says the project area is overstocked with middle age trees. "Generally small-diameter trees with an average DBH of 14 inches or less would be removed from the IRA" trees is not a valid exception to the roadless rule. Cutting all trees with an average DBH of 14 inches means half the trees would be bigger than 14 inches DBH.

The decision also has no limit on the size of a tree that they can cut in violation of the Roadless Rule, NEPA, NFMA and the APA.

Neither the Skyline EA nor any of the Dixie National Forest's supporting documents limits the cutting, sale, or removal of trees in Inventoried Roadless Areas to generally small diameter trees.

In fact, the Decision Notice and final EA states on page 10 that one of the purposes of the project is to remove late serial or large trees. This is not incidental to the purpose of the project. It is one of the purposes of the project.

REMEDY

Withdraw the Draft Decision Notice and FONSI and write and EIS that fully complies with the law.

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 the IRA. 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.

While the Forest Service does not explain how any of the Skyline Project provisions will limit logging to small diameter trees.

Neither the Skyline Project EA and DDN nor any of the Dixie National Forest's supporting documents provides stand-level data for inventoried roadless areas to allow the public or the decision-maker to discern either the size of trees in stands in the project area, or the size of trees to be removed.

Neither the Skyline Project EA nor any of the Dixie National Forest's supporting documents alleges or demonstrates that stands proposed for logging are out of the range of normal variablity.

NEPA and its implementing regulations require federal agencies, including the Forest Service, to take a "hard look" at the environmental consequences of proposed actions and the reasonable alternatives that would avoid or minimize such impacts or enhance the quality of the human environment. See 42 U.S.C. § 4332(2)(C)(i); 40 C.F.R. Parts 1502 and 1508 (1978). Agencies must take a hard look at the direct, indirect, and cumulative impacts of a proposed agency action and all alternatives in an EA. 40 C.F.R. §§ 1508.7, 1508.8 (1978). The information presented in the EA must be of high quality and include "accurate scientific analysis," and disclose that information and analysis, and its limitations, to the public. 40 C.F.R. § 1500.1(b)–(c) (1978).

NEPA also requires environmental analysis to disclose existing conditions in the project area to provide a baseline against which the impacts of alternative courses of action can be compared.

The Forest Service failed to take the required “hard look” to consider and disclose the Skyline Project’s direct, indirect, and cumulative impacts, including impacts of logging in Inventoried Roadless Areas.

For example, the NEPA and its implementing regulations require federal agencies, including the Forest Service, to take a “hard look” at the environmental consequences of proposed actions and the reasonable alternatives that would avoid or minimize such impacts or enhance the quality of the human environment. See 42 U.S.C. § 4332(2)(C)(i); 40 C.F.R. Parts 1502 and 1508 (1978). Agencies must take a hard look at the direct, indirect, and cumulative impacts of a proposed agency action and all alternatives in an EA. 40 C.F.R. §§ 1508.7, 1508.8 (1978). The information presented in the EA must be of high quality and include “accurate scientific analysis,” and disclose that information and analysis, and its limitations, to the public. 40 C.F.R. § 1500.1(b)–(c) (1978).

NEPA also requires environmental analysis to disclose existing conditions in the project area to provide a baseline against which the impacts of alternative courses of action can be compared. The Forest Service did not take a hard look at an alternative that stayed out of IRAs.

The Forest Service failed to take the required "hard look" to consider and disclose the Skyline Project's direct, indirect, and cumulative impacts, including impacts of logging in Inventoried Roadless Areas.

For example, the Skyline EA fails to demonstrate that the forest stands within Inventoried Roadless Areas where tree removal can occur are outside the normal range of variability, overstocked with small trees, or where specific types of logging will occur within Inventoried Roadless Areas, thus making it impossible for the Forest Service or the public to understand the impacts of the proposed action, especially whether the Skyline project complies with the Roadless Rule.

The Forest Service's failure to take the required "hard look" at the Skyline Project's baseline, and the direct, indirect, and cumulative impacts and the agency's action violates NEPA. By relying on the defective EA, DN and FONSI for its decision, the Forest Service's action is arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law, and accordingly the Decision Notice and EA must be held unlawful and set aside. 5 U.S.C. § 706(2)(A). The EA fails to disclose the nature of forest stands within Inventoried Roadless Areas where tree removal can occur, or where specific types of treatments will occur within Inventoried Roadless Areas, thus making it impossible for the Forest Service or the public to understand the impacts of the proposed action, especially whether the Aspen Project can comply with the Roadless Rule.

The Forest Service's failure to take the required "hard look" at the Skyline Project's baseline, and the direct, indirect, and cumulative impacts and the agency's action violates NEPA. By relying on the defective EA, DN and FONSI for its decision, the Forest Service's action is arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law, and accordingly the Decision Notice and EA must be held unlawful and set aside.

REMEDY

Choose the No Action Alternative or withdraw the Decision Notice and FONSI and write and EIS that fully complies with the law.

We wrote in our comments:

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

Please find attached DellaSala et al 2022. Please also find attached, Baker 2023.

Countering Omitted Evidence of Variable Historical Forests and Fire Regime in Western USA Dry Forests: The Low-Severity-Fire Model Rejected

William L. Baker [1,]*

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

1 2 3 4

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Abstract: The structure and fire regime of pre-industrial (historical) dry forests over ~26 million ha of the western USA is of growing importance because wildfires are increasing and spilling over into communities. Management is guided by current conditions relative to the historical range of variability (HRV). Two models of HRV, with different implications, have been debated since the 1990s in a complex series of papers, replies, and

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

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

Please explain include a discussion of the following:

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

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

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

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

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

Please find Schoennagel et al (2004) attached.

Schoenagel states: "we are concerned that the model

of historical fire effects and 20th-century fire

suppression in dry ponderosa pine forests is being *applied uncritically across all Rocky Mountain forests, including where it is inappropriate.*

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

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

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

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

Schoennagel et al (2004) states: "Contrary to popular opinion, previous fire suppression, which was consistently effective from about 1950 through 1972, had only a 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 Yellow-stone during 1988, although severe, was neither unusual nor surprising."

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

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

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

Likewise, Brown et al (2004) states: "At higher elevations, forests of subalpine fir, Engelmann spruce, mountain hem- lock, and lodgepole or whitebark pine predominate. These forests also have long fire return intervals and contain a high proportion of fire sensitive trees. At periods averaging a few hundred years, extreme drought conditions would prime the- se forests for large, severe fires that would tend to set the forest back to an early successional stage, with a large carry- over of dead *trees as a legacy of snags and logs in the regenerating forest . . . . natural ecological dynamics are largely preserved be- cause fire suppression has been effective for less than one natural fire cycle. Thinning for restoration does not appear to be appropriate in these forests. Efforts to manipulate stand structures to reduce fire hazard will not only be of limited effectiveness but may also move systems away from pre-1850 conditions to the detriment of wildlife and water- sheds." "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, Engelmann

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

According to Graham et al (2004), thinning may also increase the likelihood of wildfire ignition in the type of forests in this Project area: "The probability of ignition is strongly rela- ted to fine fuel moisture content, air 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, keep- ing relative humidity higher and air and fuel temperature lower than in more open stands. Thus, dense stands tend to maintain higher surface fuel moisture contents com- pared to more open stands. More open stands also tend to allow higher wind speeds that tend to dry fuels compared to dense stands. These factors may in- crease probability of ignition in some open canopy stands compared to dense canopy stands."

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

Which wildlife species and ecosystem processes, if any, does the fire-proofing in the proposed project benefit? Which species and processes do fire-proofing harm?

What is your definition of healthier?

What evidence do you have that this logging will make the forest healthier for fish and wildlife? What about the role of mixed severity and high severity fire – what are the benefits of those natural processes?

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

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

What beneficial ecological roles do beetles play? You didn't answer this in violation of NEPA, NFMA and the APA.

Can the forest survive without beetles?

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?

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

The Forest Service responded:

The purpose of the Skyline Healthy Forest Restoration Act (HFRA) Project is to reduce the risk and extent of, and increase the resilience to, insect and disease infestation; and to reduce hazardous fuels.

There is a need to act timely and reduce the risk of severe impacts from high-intensity, large scale stand replacing fire which impact developments, both private and public, soil, water, air quality, and the safety of firefighters.

The Skyline HFRA Project is approximately 100,000 acres and covers slopes of the Wasatch Plateau on the Sanpete and Ferron/Price Ranger Districts where National Forest System lands intersect with numerous private properties, structures, infrastructure, and critical watersheds. Approximately 53,0003 acres of the project area is within inventoried roadless areas (IRA) (see Map

1). These watersheds are dominated by late seral conifer stands undergoing increased mortality from prolonged drought, insects, and disease (see Maps 2 and 3) which present a high risk of stand replacing wildfires with potentially catastrophic results to infrastructure and overall watershed stability. Recently, several large wildfires have burned within and adjacent to the Skyline HFRA project in the same vegetation type.

This project aims to enhance the resiliency of forest ecosystems to current environmental stressors, including drought, wildfire, insects and diseases, and to foster their capacity to adapt to future climate conditions. The Intermountain Adaptation Partnership found that climate change would likely increase frequency and magnitude of disturbances (drought, insect outbreaks, wildfire), which would likely reduce the area of mature forest, affect wildlife populations (some beneficially, some adversely), damage infrastructure and cultural resources, degrade the quality of municipal water supplies, and reduce carbon sequestration (Halofsky and others 2018; McKinley and others 2020). The project would also implement the Wildfire Crisis Strategy (USDA, through increased use of climate-informed planned ignitions and thinning treatments (USDA, 2022b). The concern from climate change is not limited to lower elevation, high frequency fire regimes. Research by Alizadeha et al. (2021) determined that the reduced precipitation frequency and warming associated with climate change are effectively changing the fire regime of higher elevation forests. High-elevation forests comprise species

and fuels where crown fires can readily spread, and the shift in climate suggests that fuel treatments here could be as appropriate as in forests where management intervention in fire has led to fuel accumulations, particularly in proximity to inhabited areas.

3 Approximate reduction of 2,000 acres from the Skyline HFRA notice of proposed action.

4 Forest resilience is a measure of adaptability. It focuses on retaining a forest's essential structure and composition to a range of stresses or complex disturbances. In essence, a resilient forest might experience some tree loss due to drought, fire, or insect infestations; however, the rate of mortality will not surpass the forest's capacity to sustain growth and provide habitat.

The Forest Service did not answer all of our questions and offered no evidence that the project will make the Forest more resilient or a healthier forest in violation of NEPA, NFMA and the APA.

The project is not meeting the purpose and need.

Remedy

Withdraw the draft Decision Notice and FONSI and write an EIS that fully complies with the law or choose the No Action Alternative.

We wrote in our comments starting with:

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;

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

Please explain how climate change could affect the long-term persistence of juniper woodlands. If the persistence of these woodlands will be adversely impacted by climate change, juniper thinning operations will promote the long-term demise of this important conifer. This impact was noted by Coop and Mcgee (Undated). Indeed, a recent newspaper article by Maffly (2018) reported on the mystery of why junipers are dying in Utah; widespread

loss of junipers would have far- reaching consequences for southern Utah's fragile desert environments.

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

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

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

Fire Science Report by Coop and Magee (Undated), where they note that fuels and juniper reduction treatments resulted in rapid, large and persistent increases in the frequency, richness and cover of 20 non-native plant species including cheatgrass; exotic plant expansion appeared linked to the disturbance associated with treatment activities, reduction in tree canopy, and alterations to ground cover; exotic species were much more frequently encountered at treated than control sites, occurring at 86% of sample plots in treatments and 51% of untreated sample plots; richness of exotic species in treatments was more than double that of controls. What is also interesting in this study is that cheatgrass showed a negative effect of tree canopy, which means that cheatgrass was benefited by canopy removal. They noted that models for 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).

We also wrote starting with:

To evaluate the Project's impact on climate change,

including on carbon storage and sequestration, the Forest

Service relied on a "Carbon Report" that fails to

adequately consider years of climate science and does not

adequately analyze the Project's broader climate impacts.

This is not taking a hard look at the effects of the project on climate change in violation of NEPA.

The Forest Service responded on page 4 of the carbon report:

Due to the currently departed conditions of timber stands across the area, the treatments proposed in this project would increase longterm forest health and ecosystem resilience, promote long-term carbon storage and stability, and reduce the risk of uncharacteristic wildfire which would have a detrimental impact on carbon storage and ecosystem health.

There is no scientific basis for the above statement which is arbitrary and capricious and thus in violation of NEPA.

Dellasala et al 2022 and Baker et al. 2023 show that the project will not reduce fires and only result in the release of carbon into the atmosphere and decrease the amount of carbon that the project area can capture by cutting down trees that are hundreds of years old and disturbing soils which will also release carbon into the atmosphere.

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

It is now time to speak honestly about unrealistic expectations relat- ing 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. (See attached map). 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_2 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 condi- tions 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_2) 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_2. 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 CGNF.

The EA also ignores CO_2 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 pro- gram. Please find the order attached.

In March 2019, U.S. District Judge Rudolph Contreras in Washington, D.C., ruled that when the U.S. Bureau of Land Management (BLM) auctions public lands for oil and gas 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.

ii)).

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

"At dry sites across our study region, seasonal to annual climate conditions over the past 20 years have crossed these thresholds, such that conditions have become increasingly unsuitable for regeneration. High fire severity and low seed availability further reduced the probability of post-fire regeneration. Together, our results demon- strate 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 “resilience” enough to spring back from disturbance. Regeneration is already a big problem.

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 pub- licly 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.

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

NEPA requires disclosure of impact on “the human environment.” Climate risk presents important adverse impacts on cultural, economic, environmental, and social aspects of the human environment. – people, jobs, and the economy – adjacent to and near the project area. “Challenges in predicting responses of individual tree species to climate are a result of species competing under a never-before- seen climate regime – one forests may not have experienced before either.

In an uncertain future of rapid change and abrupt, unforeseen transi- tions, adjustments in management approaches will be necessary and some actions will fail. However, it is increasingly evident that the greatest risk is posed by continuing to implement strategies inconsistent with and not informed by current understanding of our novel future....

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

Stands are at risk of going from forest to non-forest, even without the added risk of “management” as proposed in the project area. The project is currently is violation of NEPA, NFMA, and the APA.

REMEDY

Withdraw the Draft Decision Notice and FONSI and wrote and EIS that fully complies with the law or chooses the No Action Alternative.

We wrote in our comments:

Please disclose whether you have conducted surveys in the Project area for this Project for Utah Prairie Dogs, pine martins, northern goshawk, yellow-billed cuckoo, Ute ladies'- tresses, Southwestern Willow Southwestern Willow Flycatcher, Bonytail, Colorado Pike minnow, Humpback Chub, Razorback Sucker, Bald Eagles, Greater Sage Grouse, Northern Goshawk, Spotted Bat, Peregrine Falcon, Spotted Bat, Three-toed woodpecker, Townsend's big-eared bat, Bonneville cutthroat trout, Utah Colorado River Cutthroat Trout, Columbia River Spotted Frog, Southern Leatherside chub, Western Boreal Toad,

Black Rosy-Finch, Brewer's Sparrow, Burrowing Owl, Calliope Hummingbird, Cassin's Finch, Ferruginous Hawk, Fox Sparrow, Gray Vireo, Juniper Titmouse, Lewis's Woodpecker, Loggerhead Shrike, Long-billed Curlew, Olive-sided Flycatcher, Pinyon Jay, Prairie Falcon, Sage Thrasher, Short-eared Owl, Virginia's Warbler,

Western Grebe, Williamson's Sapsucker, Willow Flycatcher, Golden Eagle, Macroinvertebrates, Aquatic Insects, Mule Deer, Northern Goshawk, Rocky Mountain Elk, and Monarch Butterfly.

Please disclose the last time the Project area was surveyed for Utah Prairie Dogs, pine martins, northern goshawk, yellow-billed cuckoo, Ute ladies'- tresses, Southwestern Willow Southwestern Willow Flycatcher, Bonytail, Colorado Pike minnow, Humpback Chub, Razorback Sucker, Bald Eagles, Greater Sage Grouse, Northern

Goshawk, Spotted Bat, Peregrine Falcon, Spotted Bat, Three-toed woodpecker, Townsend's big-eared bat, Bonneville cutthroat trout, Utah Colorado River Cutthroat Trout, Columbia River Spotted Frog, Southern Leatherside chub, Western Boreal Toad, Black Rosy-Finch, Brewer's Sparrow, Burrowing Owl, Calliope Hummingbird, Cassin's Finch, Ferruginous Hawk, Fox Sparrow, Gray Vireo, Juniper Titmouse, Lewis's Woodpecker, Loggerhead Shrike, Long-billed Curlew, Olive-sided Flycatcher, Pinyon Jay, Prairie Falcon, Sage Thrasher, Short-eared Owl, Virginia's Warbler, Western Grebe, Williamson's Sapsucker, Willow Flycatcher, Golden Eagle, Macroinvertebrates, Aquatic Insects, Mule Deer, Northern Goshawk, Rocky Mountain Elk, and Monarch Butterfly.

Please disclose how often the Project area has been surveyed for the Would the habitat be better for Utah Prairie Dogs, pine martins, northern goshawk, yellow-billed cuckoo, Ute ladies'- tresses, Southwestern Willow Southwestern Willow Flycatcher, Bonytail, Colorado Pike minnow, Humpback Chub, Razorback Sucker, Bald Eagles, Greater Sage Grouse, Northern Goshawk, Spotted Bat, Peregrine Falcon, Spotted Bat, Three-toed woodpecker, Townsend's big-eared bat, Bonneville cutthroat trout, Utah Colorado River Cutthroat Trout, Columbia River Spotted Frog, Southern Leatherside chub, Western Boreal Toad, Black Rosy-Finch, Brewer's Sparrow, Burrowing Owl, Calliope Hummingbird, Cassin's Finch, Ferruginous Hawk, Fox Sparrow, Gray Vireo, Juniper Titmouse, Lewis's Woodpecker, Loggerhead Shrike, Long-billed Curlew, Olive-sided Flycatcher, Pinyon Jay, Prairie Falcon, Sage Thrasher, Short-eared Owl, Virginia's Warbler,

Western Grebe, Williamson's Sapsucker, Willow Flycatcher, Golden Eagle, Macroinvertebrates, Aquatic Insects, Mule Deer, Northern Goshawk, Rocky Mountain Elk, and Monarch Butterfly if the no action alternative was chosen?

Please provide us with the full BA for Utah Prairie Dogs, pine martins, northern goshawk, yellow-billed cuckoo, Ute ladies'- tresses, Southwestern Willow Southwestern Willow Flycatcher, Bonytail, Colorado Pike minnow, Humpback Chub, Razorback Sucker, Bald Eagles, Greater Sage Grouse, Northern Goshawk, Spotted Bat, Peregrine Falcon, Spotted Bat, Three-toed woodpecker, Townsend's big-eared bat, Bonneville cutthroat trout, Utah Colorado River Cutthroat Trout, Columbia River Spotted Frog, Southern Leatherside chub, Western Boreal Toad, Black Rosy-Finch, Brewer's Sparrow, Burrowing Owl, Calliope Hummingbird, Cassin's Finch,

Ferruginous Hawk, Fox Sparrow, Gray Vireo, Juniper Titmouse, Lewis's Woodpecker, Loggerhead Shrike, Long-billed Curlew, Olive-sided Flycatcher, Pinyon Jay, Prairie Falcon, Sage Thrasher, Short-eared Owl, Virginia's Warbler, Western Grebe, Williamson's Sapsucker, Willow Flycatcher, Golden Eagle, Macroinvertebrates, Aquatic Insects, Mule Deer, Northern Goshawk, Rocky Mountain Elk, and Monarch Butterfly.

The Forest Service did not respond to our comments in violation of NEPA. The DDN and FONSI also so not demonstrate the the project complies with the Forest Plan in violation of the Forest Plan and NFMA.

REMEDY

Withdraw the DDN and FONSI and write an EIS that fully complies with the law or choose the no Action Alternative.

Thank you for your time and consideration of our concerns.

Sincerely yours,

Lead Objector Mike Garrity, Director, Alliance for
the Wild Rockies, 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

Steve Kelly
Council on Wildlife and Fish
P.O. Box 4641

Bozeman, MT 59772