

June 18, 2026

Adam Shaw,
Salt Lake District Ranger
6914 S 3000 E,
Salt Lake City, UT 84121

Re: Big Cottonwood Canyon Watershed Restoration Project
proposal

Dear Ranger Shaw,

Please accept these comments from me on behalf of the Alliance for the Wild Rockies, Council on Wildlife and Fish, and Native Ecosystems Council on the Uinta-Wasatch-Cache National Forest's Big Cottonwood Canyon Watershed Restoration Project proposal.

The Alliance for the Wild Rockies, Council on Wildlife and Fish, and Native Ecosystems Council (collectively "Alliance") submit the following comments to guide the development of the environmental analysis for the proposal. 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.

It appears that the Big Cottonwood Canyon Watershed Restoration Project proposal mostly tiering to old EAs and Determination of NEPA (DNA)s which courts have repeatedly said are not NEPA documents. The Forest Service cannot use a Determination of NEPA adequacy because the NEPA documents the DNA tiers to do not fully cover all the impacts in the Proposed Action.

The Draft EA does not have a Roadless Report or a Wildlife Report in violation of NEPA, NFMA, and the APA.

The Forest Service claims actions they proposed create and promote conditions in Big Cottonwood Canyon that reduce the risks of and effects from wildfires by thinning vegetation and creating shaded fuel breaks over approximately 4,900 acres of NFS lands within the approximate 18,680 acre project boundary. How does the Forest Service define resiliency? Please prove that the project will make the watershed less susceptible to severe wildfires, insects, and disease? What is the matter with insects and disease?

We share with the Forest Service for the public safety but we believe the project is not following the best available science.

Please see the following article:

Montana researchers urge towns to focus on wildfire preparation

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

Laura Lundquist

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

In mid-December, six researchers published a paper in the Proceedings of the National Academy of Sciences journal warning that communities across the nation, but particularly those in the West, aren't prepared to survive an urban conflagration such as the one that devastated Lahaina, Hawaii, in August.

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

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

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

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

The emphasis is placed on modifying the house and the home ignition zone, a region within 100 feet of a house where debris and vegetation should be eliminated or minimized to reduce the chance of fire getting close to the house.

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

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

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

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

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

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

Each wildfire had very little connection to most of the burning buildings, Cohen said. A wildfire is the source of initial ignition, but from that point on, it’s a series of structure fires that lead to more structure fires. For example, with the Four Mile Canyon Fire in Boulder, Colo., the state of Colorado and the Forest Service had completed a number of fuel treatments nearby that they touted as protective. But high winds carried fire brands to ignite the houses far from the fire. Cohen found

that while 168 houses burned, a lot of vegetation around the houses didn't, "so the wildfire didn't sweep through town."

"In the past five years, a number of incidents with more than 100 houses burning have been initiated by grass fires, which burn quickly. The grass fires pass through and are gone while the community continued to burn," Cohen said. "What I've found, particularly over the past five or six years, is that extreme wildfire is not dependent on closed-canopy conifers that produce big flames. The only time these urban disasters occur is under extreme conditions. That typically means it's very windy."

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

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

"The ignition initiated where the grassfire came down, and that was it - it was a conflagration," Cohen said. "You don't want to be in a high-density community when you can't control the fire. Thirteen of the 26 fatalities in the 1991 Oakland

Hills Fire occurred in the street when two-story buildings were burning on both sides of the street and the road became blocked. The heat was untenable.”

One house in Lahaina stood untouched and was dubbed “the miracle house.” But Cohen said it was just a good example of the points he and his fellow authors have been trying to communicate about defensible space and being fire-adapted. The owners had recently renovated the house with a nonflammable roof. It had wood walls, but the nearest building was about 30 feet away - far enough to prevent radiant heat from starting a fire - and there was little debris on the grounds or the house to actively spread the fire.

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

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

But more than likely, Cohen said, they’ll be writing a similar paper in another few years, trying to make politicians and the public understand. It doesn’t help that they’re fighting some in

their own agency, the Forest Service, who insist that logging, not home modification, will save communities.

“Fire is inevitable. But nobody’s figuring it out,” Cohen said. “We’re starting from the presumption that it’s wildfire that spreads through a community that lays it to waste. We even have the agencies responding in that fashion by being obsessed with this notion of wildfire control. So they do fuel treatments to have safe firefighting. That’s not only counter ecologically, it doesn’t work.”

Contact reporter Laura Lundquist at lundquist@missoulacurrent.com.

Please find, “Wildland-urban fire disasters aren’t actually a wildfire problem,” by Calkin et al. 2023 attached. Calkin et al. 2024 found that to protect homes from wildfire we have to harden homes, not cut and burn forests.

The project area should be within 100 feet of homes not on Forest Service lands unless a home is within 100 feet of the national Forest. The purpose and need are not based on the best available science and is in violation of the 2012 Planning Rule, NEPA, NFMA and the APA.

How much will this project cost taxpayers? Wouldn’t it make more sense to spend the money to help people harden their homes and businesses?

Please find attached a paper titled, “Toward a more ecologically informed view of severe forest fires” by Hutto, R. L., R. E. Keane, R. L. Sherriff, C. T. Rota, L. A. Eby, and V. A. Saab. 2016.

The following abstract of the paper disputes the purpose and need of the project.

Abstract. We use the historical presence of high-severity fire patches in mixed-conifer forests of the western United States to make several points that we hope will encourage development of a more ecologically informed view of severe wildland fire effects. First, many plant and animal species use, and have some- times evolved to depend on, severely burned forest conditions for their persistence. Second, evidence from fire history studies also suggests that a complex mosaic of severely burned conifer patches was common historically in the West. Third, to maintain ecological integrity in forests born of mixed-severity fire, land managers will have to accept some severe fire and maintain the integrity of its aftermath. Lastly, public education messages surrounding fire could be modified so that people better understand and support management designed to maintain ecologically appropriate sizes and distributions of severe fire and the complex early-seral forest conditions it creates.

The 1960 [Multiple Use-Sustained Yield Act \(MUSYA\)](#) mandated that national forests be administered for multiple, combined uses—specifically outdoor recreation, range, timber, watershed,

and fish/wildlife—rather than single-purpose management. It appears that the Big Cottonwood Canyon project is violating the Multiple Use-Sustained Yield Act, NFMA, NEPA, the APA, and the Forest Plan by trying to manage the project area as a make work project for the Forest Service and ignoring the outdoor recreation, watershed, and wildlife and fish.

The MUSYA states: 'Multiple use' means: *The management of all the various renewable surface resources of the national forests so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; that some land will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output.*

(b) "Sustained yield of the several products and services" means the achievement and maintenance in perpetuity of a high- level annual or regular periodic output of the various renewable re- sources of the national forests without impairment of the productiv- ity of the land.

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 Uinta-Wasatch-Cache National Forest (UWCNF) 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 air and 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 Uinta-Wasatch-Cache National Forest's record of compliance with state best management practices regarding stream sedimentation from ground-disturbing management activities;

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

K. Disclose the Uinta-Wasatch-Cache National Forest's record of compliance with the additional monitoring requirements set forth in previous DN/FONSIIs and RODs on the Uinta-Wasatch-Cache 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 in the Project area;

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

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

Z. Disclose the amount of current habitat for old growth 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 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 Uinta-Wasatch-Cache 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 Uinta-Wasatch-Cache National Forest's policy decision to replace natural fire with logging and prescribed burning;

II. Disclose how Project complies with the Roadless Rule;

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

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

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

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

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

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

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

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

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

3. Density of human residences within 1.5 miles from the

Project unit boundaries;

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

5. Old growth forest in the Project area;

6. Big game security areas;

7. Moose winter range;

The Draft EA states that the project will have no effect on wolverines. It is almost impossible for the project to have no effect on wolverines. According to the Salt Lake Tribune, **May & July 2021 (Antelope Island & Layton)**: Wildlife officials received confirmed photos and videos of a wolverine running across the Bridger Bay campground at Antelope Island. A couple of months later, a wolverine was caught on a Ring doorbell camera and spotted by trail-goers in west Layton. The ESA is not limited to protecting only breeding species. The ESA follows the species. Please formally consult in the impact of the project on wolverines.

Second wolverine sighting likely 'transient' creature

<https://www.sltrib.com/news/2021/07/03/second-wolverine-sighting/>

Wolverines were once driven out of Utah, but some seem to be starting to return, an expert says.



(James Shook | Utah Division of Wildlife Resources) Visitors to Utah's Antelope Island saw a wolverine on May 4 running across Bridger Bay at the northwest end of the island in the Great Salt Lake. The rare predator is almost never seen in Utah, but state wildlife biologists have confirmed the animal in this and other photos and video footage shot July 1 appears to be a wolverine.

By  **Jordan Miller**
| July 3, 2021, 6:00 p.m.

A wolverine was spotted in west Layton Thursday morning, according to a Ring video posted by the Utah Division of Wildlife

Resources — the second time one of the carnivores was spotted in just a few months.

One of the animals was also spotted on Antelope Island May 4, and biologists from the Division of Wildlife resources believe it's likely the same wolverine — a species described as rare in Utah and typically found in high mountain areas.

The DEA indicates the project will rely on Best Management Practices. These are assumed to be effective and relied upon. However, a fundamental aspect of NEPA is to take a “hard look” at current management, conditions, assumptions and implementation.

The Forest Service appears to be trying to escape accountability for current degraded conditions it claims, such as conifer encroachment into aspen. But, what is the mechanism of this conifer encroachment and lack of recruitment in aspen stands. Is it past fire suppression? Livestock grazing?

What is the past history of this project area? What Forest actions or permitted activities play a role in the current state of aspen, wildlife habitat, watershed health and other ecosystem attributes? There is no analysis of:

- Validity of assumptions from previous NEPA processes
- Accuracy of predictions from previous NEPA processes
- Adequacy of Forest Service implementation of previous decisions

- Effectiveness of actions taken in previous decisions.

These above items are critical for effective decisions and outcomes and for the public to be informed. This can only be done under a NEPA process. Without this critical link the validity of the current assumptions cannot be determined. Without analyzing the accuracy and validity of the assumptions used in previous NEPA processes one has no way to judge the accuracy and effectiveness of the current analysis and proposals.

The predictions made in previous NEPA processes also need to be disclosed and analyzed because if these were not accurate, and the agency is making similar decisions, then the process will lead to failure. For instance, if in previous processes the agency or permittee said they were going to do a certain monitoring plan or implement a certain type of management, meet certain goals and objectives, and these were never effectively implemented, it is important for the reader and the decision maker to know. If there have been problems with implementation in the past, it is not logical to assume that implementation will now be appropriate.

If prior projects have not been monitored to document and compare post project initiation conditions to baseline data, then there is no proof that models or BMPs are accurate, effective, or can be relied upon. What commitments have been made in the Forest Plan and subsequent project plans? Have these been realized?

The reliance on BMPs is a flawed approach that assumes they work. Ziemer and Lisle (1993) indicated that there are no reliable data showing that BMP's are cumulatively effective in protecting aquatic resources. Espinosa et al. (1997) provided evidence from case histories in Idaho that BMP's thoroughly failed to cumulatively protect salmonid habitats and streams from severe damage from roads and logging. In analyses of case histories of resource degradation by stereotypical land management (logging, grazing, mining, roads) several researchers have concluded that BMP's increased watershed and stream damage because they encourage heavy levels of resource extraction under the false premise that resources can be protected by BMP's (Stanford and Ward, 1993 , Rhodes et al., 1994 Espinosa et al., 1997). Stanford and Ward (1993) termed this phenomenon the "illusion of technique."

The "Action" Alternative, the Proposed Action, is to conduct vegetation treatments and fuels reduction treatments to approximately 4,910 acres of mechanical thinning and up to approximately 11,794 acres of prescribed burning of National Forest System lands in the Big Cottonwood Canyon and its tributaries.

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. Since the Big Cottonwood Canyon proposal calls for pile burning in some of these aspen stands 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/>

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 increased 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 transitions, 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 conservation 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 in violation of NEPA, NFMA, and the APA.

It is not clear how vast acres of national forest lands can be intensively manipulated without a single wildlife management objective identified. This means that the agency cannot be meeting the NFMA requirements to maintain a diversity of wildlife. And it also means that the stated purpose and need is invalid, and a violation of the NEPA, because vegetation and fuels management have a direct impact on wildlife, which means that wildlife management also has to be included as a purpose and need. In effect, the purpose and need of the project is to remove wildlife habitat, but this is never identified to the public, in violation of the NEPA.

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

How can the public measure “resiliency?” What are the specific criteria used to define resiliency, and what are the ratings for each proposed logging unit before and after treatment? How is the risk of fire as affected by the project being measured so that the public can understand whether or not this will be effective? How is forest health to be measured so that the public can see that this is a valid management strategy? What specifically constitutes a diversity of age classes, how is this to be measured,

and how are proposed changes measured as per diversity? How are diversity measures related to wildlife (why is diversity needed for what species)? If the reasons for logging cannot be clearly identified and measured for the public, the agency is not meeting the NEPA requirements for transparency.

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

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

The project does not meet the purpose and need of the project. Please see the attached paper by Baker et al. 2023. This landmark study found a pattern of "Falsification of the Scientific Record" in government-funded wildfire studies.

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

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

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

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

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, 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?

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

Why Prescribed Burning Is Seldom Effective

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

George Wuerthner September 29, 2021



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

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

Increasingly we also hear that tribal people kept fires from becoming large by the frequent burning of the landscape—as if this was a secret tool no one in the fire fighting agencies knew about. The evidence suggests that tribal burning likely reduced fuels in the IMMEDIATE area around villages but seldom influenced the larger landscape fire rotation. You can read more on this at <https://www.thewildlifenews.com/2020/11/23/indigenous-burning-myths-and-realities/>

A prescribed burn, whether done by Indians for cultural purposes or a firefighter with a drip torch, may reduce fuels for a

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

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

Just burning enough of the landscape to have any influence on wildfires is also problematic. The window when burning is safe is frequently very narrow. Concerns about smoke dispersal add to the limitations.

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

A prescribed burn could get away from fire fighters and burn significant acreage as occurred with the [Davis Fire](#) near Canyon Creek, Montana and the Cerro Grande prescribed burn that destroyed homes in [Los Alamos, New Mexico](#). When such planned ignitions get away from fire fighters due to changing weather conditions, the District Ranger or Park Supervisor or other responsible agency personnel get blamed for the destruction of property.



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

The other problem with prescribed burning is that in many ecosystems, burning stimulates plant growth. This additional biomass results from the removal of competing vegetation and release more nutrients, water, and sunlight for the remaining plants. Consequently, within a few years of a prescribed burn,

you will often get more fine fuels like grass, shrubs, and small trees than before the burn.

In addition, frequent burning was not the dominant fire regime in many ecosystems. Chaparral, sagebrush, and higher elevation conifer forests like fir, lodgepole, spruce, and others all had naturally long fire rotations and intentionally burning them harms them.

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

The following two photos demonstrate this idea. The first photo was taken a week after the Bridger Foothills Fire swept across forests, hayfields, and pastures in September 2020.

Note that the hayfield has very little grass after being mowed. But strong winds drove the fire across even one-inch stubble.

The second photo taken in nearly the exact location shows how rapidly the grass regrew after a fire. In other words, without continuous “maintenance,” the burn would have little impact on slowing or stopping a fire.



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



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

All this said I don't oppose the strategic use of prescribed burning so long as people recognize the limitations. Reducing fuels around communities and homes can be effective if and when a blaze threatens structures. However, the idea that somehow prescribed burning is an effective panacea that can reduce or preclude climate-driven blazes is questionable.

The Proposed Action calls for burning 1255 acres.

The EPA and other Agencies have been monitoring [visibility in national parks and wilderness areas](#) since 1988. In 1999, the U.S. Environmental Protection Agency announced a major effort to improve air quality in national parks and wilderness areas. The Regional Haze Rule calls for state and federal agencies to work together to improve visibility in 156 national parks and wilderness areas such as the Wilderness Areas on the Wasatch Front, Mount Olympus Wilderness, Twin Peaks Wilderness, and Lone Peak Wilderness.

The rule requires the states, in coordination with the Environmental Protection Agency, the National Park Service, U.S. Fish and Wildlife Service, the U.S. Forest Service, and other interested parties, to develop and implement air quality protection plans to reduce the pollution that causes visibility impairment. The first State plans for regional haze were due in December 2007. States, tribes, and five multi-jurisdictional [regional planning organizations](#) worked together to develop the technical basis for these plans. Comprehensive periodic revisions to these initial plans are currently due in 2021, 2028, and every 10 years thereafter.

Federal Clean Air Act; 42 U.S.C. 7470. Congressional declaration of purpose the purposes of this part are as follows:

(1) to protect public health and welfare from any actual or potential adverse effect which in the Administrator's judgment may reasonably be anticipate to occur from air pollution or from exposures to pollutants in other media, which pollutants originate as emissions to the ambient air), notwithstanding attainment and maintenance of all national ambient air quality standards;

*(2) To preserve, protect, and enhance the air quality in national parks, national wilderness areas, national monuments, national seashores, and other areas of special national or regional natural, recreational, scenic, or historic value;*⁴²

U.S.C. 7491. Visibility protection for Federal class I

areas(a) Impairment of visibility; list of areas; study and

report(1) Congress hereby declares as a national goal the

prevention of any future, and the remedying of any exist-

ing, impairment of visibility in mandatory class I Federal

areas whose impairment results from manmade air pollu-

tion. As usual, the agency is long on promises, and short on

concrete evidence and analysis when dealing with protection

of Class I air quality of the Lone Peak Wilderness, Twin

Peaks Wilderness, and Mount Olympus Wilderness. Please

demonstrate and disclose in the evidence of any coordina-

tion with Salt Lake County, the Utah Division of Air Quality

within the Utah Department of Environmental Quality and the EPA with regard to preserving, protecting, and enhancing the air quality in the park. To not do so is a violation of the clear purpose and intent of the cumulative effects requirements of NEPA and the Clean Air Act. Please also demonstrate that the Big Cottonwood Canyon project will not impair the air shed over the Wilderness Areas on the Wasatch Front or the Air Shed over the Salt Lake Valley as required by the Clean Air Act.

In total, on a national scale, emissions from prescribed burns are just as damaging to human health as those from wildfires. A , recent study, titled, “Smoke from US wildfires, prescribed burns caused premature deaths, billions in health damages” (attached) concluded that annually, nationwide, wildfire smoke and prescribed burns combined to cause the deaths of 20,000 Americans a year, and slightly more than half of those deaths were caused by prescribed burns. If that is the case, it challenges the assumption that human health is being protected by prescribed burns.

The smoke from the prescribed fires will sink into the Salt Lake Valley at night and possibly also into Park City. How many people will be killed by this smoke?

[A review article](#), by Reid et al. 2025 (attached), of research on characteristics of biomass burning emissions establishes several important factors on the issue of whether or not the more intense wildfires that prescribed burns are supposed to prevent, are in fact more harmful to human health. It is not just the amount of

particulate pollution being emitted, many factors influence toxicity of biomass burning emissions: the size and shape of the particles, their chemical composition, the age of the particles in the atmosphere, and the type and species of biomass being burned. In turn many factors influence those characteristics, such as the intensity or temperature of the burn, the amount of oxygen in the flame, combustion efficiency, and the progression phase of the burn, i.e. flame or smoldering.

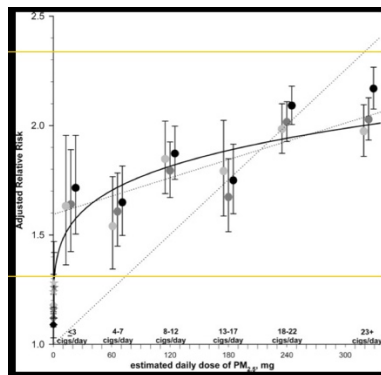
The review found that very intense fires, as opposed to lower-intensity burns like prescribed burns, had higher concentrations of incomplete combustion, and created larger particles. Particle size is extremely important in assessing toxicity of the particles. Smaller particles are more easily inhaled, more difficult to exhale, more easily picked up by the blood stream in the lungs, and then more easily penetrate organs, tissues, and individual cell membranes once those particles are distributed systemically in the blood stream. Moreover, the smaller the particle the greater the surface area for an equal amount of particle mass. The greater surface area allows more toxic chemicals and heavy particles to be adsorbed on to the particle and greater chemical surface reactivity with body molecules. The smallest particles trigger the most oxidative stress, inflammation, tissue injury, and DNA damage.

Although inhaled particulate matter of any size can cause health problems, in general, the smaller the particles the more damage they can do compared to an equal amount of particle mass consisting of larger particles. On that basis alone, the larger particles of more intense wildfires are less toxic than smaller particles

typical of prescribed burns. Other [studies](#) have shown that per ton of biomass burned, low intensity burns [produce more smoke emissions](#) than higher intensity burns.

It is well known by every relevant medical organization and governmental regulatory agency in the world, there is [no safe level of air pollution](#), it is harmful at even very low concentrations. Please find editorial, titled, “Misuse of Pollution Reference Standards: No Safe Level of Air Pollution”, attached.

Furthermore, it is also well known that the dose response curve between air pollution concentration and adverse health outcomes is not linear, but hyperbolic, i.e. steepest at the lowest concentrations. Every critical organ system can be harmed by air pollution, [including every cell in the body](#).



Hyperbolic, air pollution dose response curve. This graph demonstrates there is no safe level of particulate pollution, and that the relationship between dose exposure and disease is the strongest at the lowest doses.

This means that even small increases in exposure to communities in rural areas is harmful to their health, and that includes

from prescribed burns and slash pile burning from forest thinning.

Please find attached a paper titled, “Smoke from US wildfires, prescribed burns caused premature deaths, billions in health damage.”

Please find attached a paper by Reid et al. 2005 titled, “A review of biomass burning emissions part II: intensive physical properties of biomass burning particles”

A [recent study](#) by is cited inappropriately as justification for prescribed burns in the Western United States. Kelp et al. (2025) (attached) found no significant reduction in wildfire severity from thinning, but did find a significant reduction in fire severity from prescribed fire conducted less than two years prior to wildfire. The study also reported substantial reductions in particulate emissions from prescribed fire. However, on page 10 of that study, the authors base their results regarding particulate emissions reduction on the assumption that "on average 75% of the land treated by Rx [prescribed] fire burns in a wildfire within the next 8 years", which the authors say "agrees well with encounter rates for Northern California (Beidler et al., 2024)." However, only a small portion of one western U.S. state (California) had an encounter rate (prescribed fire area later burned in wildfire) anywhere near this high, and that tiny portion of the western U.S. was a profound outlier. [Beidler et al.](#) (2024) (attached) reported, in Table S8 (Supplemental Information Table S8), that even over the course of 10 years the encounter rate in western US states ranged from 7% to 17%, not 75%. Therefore, the par-

ticulate emissions reduction results reported by Kelp are not applicable to the vast majority of areas in the western U.S., either because wildfires mostly do not encounter previous prescribed burn units within a given decade, or because prescribed fire would have to be conducted far more often--unrealistically often--to achieve a higher encounter rate.

Please don't poison people and the air shed over Yellowstone National Park and the Absaroka-Beartooth Wilderness area.

Weeds

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

and noxious weeds will likely overtake native plant populations if introduced into areas that are not yet infested. The Forest Service has recognized that the effects of noxious weed invasions may be irreversible. Even if weeds are eliminated with herbicide treatment, they may be replaced by other weeds, not by native plant species.

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

Weed colonization can also deplete soil nutrients and change the physical structure of soils. The Forest Service's own management activities are largely responsible for noxious weed infestations; in particular, logging, prescribed burns, and road construction and use create a risk of weed infestations.

How much logging will you do before you burn? The introduction of logging equipment into the Forest creates and exacerbates noxious weed infestations. Are roadsides throughout the project area are infested with noxious weeds? Once established along roadsides, invasive plants will likely spread into adjacent grasslands and forest openings.

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

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

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

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

Please address the ecological, social and ascetic impact of current noxious weed infestations within the project area. Include an analysis of the impact of the actions proposed by this project

on the long and short term spread of current and new noxious weed infestations. What treatment methods will be used to address growing noxious weed problems?

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

Are yellow and orange hawkweeds present within the project area?

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

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

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

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

The scientific and managerial consensus is that prevention is the most effective way to manage noxious weeds. The Forest Service concedes that preventing the introduction of weeds into uninfested areas is “the most critical component of a weed management program.” The Forest Service’s national management strategy for noxious weeds also recommends “develop[ing] and implement[ing] forest plan standards . . .” and recognizes that the cheapest and most effective solution is prevention. Which units within the project area currently have no noxious weed populations within their boundaries?

What minimum standards are in the Uinta-Wasatch-Cache National Forest Plan to address noxious weed infestations? Please

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

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

Rare Plants

The ESA requires that the Forest Service conserve endangered and threatened species of plants as well as animals. In addition to plants protected under the ESA, the Forest Service identifies species for which population viability is a concern as “sensitive species” designated by the Regional Forester (FSM 2670.44). The response of each of the sensitive plant species to management activity varies by species, and in some cases, is not fully known. Local native vegetation has evolved with and is adapted to the climate, soils, and natural processes such as fire, insect and disease infestations, and windthrow. Any management or lack of management that causes these natural processes to be altered may have impacts on native vegetation, including threatened and sensitive

plants. Herbicide application – intended to eradicate invasive plants – also results in a loss of native plant diversity because herbicides kill native plants as well as invasive plants. Although native species have evolved and adapted to natural disturbance such as fire on the landscape, fires primarily occur in mid to late summer season, when annual plants have flowered and set seed. Following fall fires, perennial root-stocks remain underground and plants emerge in the spring. Spring and early summer burns could negatively impact emerging vegetation and destroy annual plant seed.

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

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

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

Are the roadless areas in the project area currently within the natural historic range of variability? Page 10 of the Draft EA states:

The project was reviewed for consistency with the 2001 Roadless Rule and found to meet the exception 36 CFR 294.13 for timber and vegetation cutting in Roadless Areas except: 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.

Nowhere in the draft EA is it demonstrated that the project area is outside the normal range of variability.

Please prove that the project will reduce the risk of uncharacteristic wildfire effects.

Is the project area within natural range for wildfire conditions?

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

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

In relevant part, regarding the prohibition on tree cutting, the Roadless Rule mandates:

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

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

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

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

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

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

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

36 C.F.R. §294.13 (2005).

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

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

thorized activities such as ski runs and utility corridors; or for road construction and reconstruction where allowed by this rule.

The Project EA is not clear how the Forest Service will access those units in roadless areas. 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.

The public is provided almost no information on this proposed project in regards to implementation. We are requesting that the following information be provided in a Revised draft EA.

1. Please provide a map that displays both the project area and the cumulative effects area, including locations of other ongoing and completed projects; or any other projects within a cumulative effects area or the project area, including past treatments completed between 1973 and 2025.
2. Please provide a map of the Inventoried Roadless Area (IRA).
3. Please provide a large, readable map of the proposed treatment areas so that individual treatment units can be defined to the public.
4. Please provide a summary of the wildlife inventories that were completed by the UWCF in the last 5 years, along with the

mitigation measures that were implemented around raptor and Three-toed Woodpecker nesting sites.

5. Please identify each proposed treatment unit for the Big Cottonwood Canyon Project, along with unit locations on a map, along with acres to be treated within each unit; please define if the proposal for each and which units include prescribed burning.

6. Please provide the results of wildlife inventories that have been completed for each proposed treatment unit.

7. Please define the current vegetation within each of the proposed treatment units by habitat type, tree species, canopy cover, basal area, total trees per acre, total trees per acre over 10 inches dbh, and total snags over 10 inches dbh per acre.

8. Please include the science that shows that forested habitat types can exceed their stand density/basal area, and under what conditions?

9. Please define the planned vegetation to be retained in proposed treatment units, including tree species, canopy cover, and basal area, total trees per acre over 10 inches dbh, total trees per acre, and total snags per acre over 10 inches dbh.

10. Please map all the proposed treatment areas within riparian zones, including unit number, and unit acres, and type of treatment planned, including commercial and noncommercial treatments.

11. Please define the current annual utilization level on riparian vegetation by livestock.

12. Please provide photos of the proposed riparian treatment areas for each planned treatment unit.

13. Please provide a map of all existing roads in the project area, and define their current status as per public and/or administrative access.

14. Please map any of the existing roads that will require “reconstruction” for this project to be implemented.

15. Please provide a “readable” map, along with road identification, for all planned temporary roads to be constructed for this project.

16. Please map all planned stream crossing that require new roads and/or crossing with motorized equipment.

17. Please provide a readable map of all ground disturbing activities planned for the project area, and give the details of what these entail, including descriptions of treatments, and acres of disturbances.

18. Please map the Wildland Urban Interface in the Project Area, including the location and data for each “interface” and “intermix” community-at-risk (density of

human population). Please demonstrate that you are following the plain language of the Healthy Forest Restoration Act.

19. Please define which treatment units in the IRA will require the use of what motorized equipment, and what type of equipment this entails.

20. Please provide the complete silviculture prescription for each proposed logging unit, including the diameter at breast height (dbh) of the trees that will be commercially harvested.

21. Please define the nonnative tree species that are to be removed to prevent genetic contamination of native trees.

22. Please define what the priorities specifically are for implementing treatments to “protect values at risk.”

What are these values at risk that need to be protected?

23. What are the “key ecosystem services” that may be lost in the project area without the proposed treatments?

24. What are the specific, quantifiable objectives for the proposed treatments, including for wildlife?

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

The Draft Decision Notice and FONSI are also in violation of the NEPA because the fact that these activities are being planned in the IRAs without an analysis of the impact of the project on wilderness characteristics is never specifically noted in the notice.

Another reason that an EIS is needed is to analyze the cumulative impacts is that the Big Cottonwood Canyon project represents 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 burning 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 Big Cottonwood Canyon project needs to comply with the Migratory Bird Treaty Act and analyze the effect of the project on birds.

The DDN and FONSI provides little additional information on where burnings, logging will be or how the specifics on how the burning will occur. The DDN and FONSI is programmatic in that they want to log whenever and wherever for the next 10 years with no public over site of their activities. The DDN and FONSI do 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/](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.*

The DDN and FONSI are in Violation of the Roadless Area Conservation Rule and the NEPA.

There is no doubt the proposed Big Cottonwood Canyon DDN and FONSI Violates the Roadless Area Conservation Rule (Roadless Rule). The unsupported "assumption" provided in the draft DDN and FONSI for this project is that fuels management activities are essential within IRAs in order to prevent "Cat-

astrophic Fires” and “Epidemics of Insects and Diseases,” and thus are needed to maintain the “healthy” wildlife populations that existed historically.

However, there was no analysis provided to demonstrate why stand replacement fire and insect and disease epidemics harm wildlife. This is a violation of the NEPA, which requires the agency to provide more than conclusions. The agency is required to support conclusions with actual high quality information. We would like to know specifically why stand replacement fire and insects and disease epidemics degrade and/or destroy wildlife habitat within IRAs, and as such, require management intervention to protect wildlife habitat from these ecosystem processes. This analysis needs to include the citation of published, peer-reviewed scientific articles where insects and disease processes, as well as stand replacement fires, did not occur historically on these forests. Also, given the ongoing plight of western forest birds as well as riparian-associated birds, with ongoing declines, the purpose of IRAs requires that these reserves provide high quality habitat to address habitat losses elsewhere on developed, roaded lands.

B. Violation of the Prohibition of Commercial Logging, Road-building, and Road-reconstruction in IRAs

The Big Cottonwood Canyon DDN and FONSI clearly violate the Roadless Rule by implementing commercial logging activities, as well as new road construction. The fragmentation im-

pacts to wildlife also were not discussed in the Draft Decision Notice and FONSI, in violation of NEPA.

C. Violation of the Function of Roadless Lands to Provide Undisturbed Habitat for Wildlife

Roadless lands are some of the few areas on National Forest lands where wildlife habitat is maintained in a natural, undisturbed condition. One of the benefits of these areas is that wildlife habitat is not removed by management activities. This includes nesting habitat for sensitive raptor species as the Northern Goshawk, Boreal Owl, and Flammulated Owl. At best, the agency “claims” that nesting sites for owls and goshawks will be located prior to treatments, and protected. If there were actual agency requirements for raptor surveys, why haven’t these already been done? The completion of valid, reliable surveys for owls and goshawks is a very labor-intensive process, requiring hundreds if not thousands of survey hours.

If the agency is going to claim that reliable wildlife surveys will be done for the Soapstoen Project, they need to demonstrate that this has previously been done for other projects in this IRA and show them to the public before a decision is signed.

What is clear is that the proposed treatment units are just “random habitat removal” for forest raptors. These treatment areas have been designed without any information on forest raptors on these 7,736 acres. And

even if actual valid wildlife surveys are done, only the nest tree and surrounding area will be protected during treatment activities. A small nesting area is not all the habitat that these species need. In general, this project will remove 7,736 acres of habitat for 3 sensitive raptor species, and the sensitive Three-toed Woodpecker. This demonstrates that treatments within roadless lands do not protect wildlife, but instead are just a continuation of the same processes that destroy wildlife nesting areas and habitat in roaded lands. It is also clear that proposed treatments in IRAs triggers considerable other mortality levels to wildlife, in addition to the loss of nesting sites and nesting habitats for sensitive forest raptors. One would not expect the agency to promote mortality of forest birds in protected IRAs. However, many forest and riparian bird nests will be destroyed during cutting/slashing/logging activities. Any prescribed burning activities will also kill an untold number of birds due to toxicity, and if birds are not killed, their fitness would be reduced, reducing long-term survival. Added to these mortality impacts would be the increased nesting loss due to cowbirds, who benefit from forest thinning and forest fragmentation. As well, there will be increased mortality of both young and mature forest birds due to reduced thermal and hiding cover in forest stands. Predation on sensitive forest owls may increase from Great Horned Owls and Red-tailed Hawks, birds that prefer open forest habitats. And the loss of thermal cover will increase bird mortality from not only increasingly severe weather events, including precipitation and winds, but as well, due to high heat

levels within forest stands in the summer, and colder heat levels in the winter, due to forest thinning. All of these increased mortality risks to birds will add to existing population declines in recent years, as well as what appear to be massive population losses the last several years from the avian bird flu. It is not clear why the proposed management intervention, or a continuation of this management intervention, into the IRA is a benefit to existing ecosystems, which of course include birds.

The Forest Service recognizes the value of forestland unencumbered by roads, timber harvest, and other development. Sometimes these areas are known as “inventoried roadless areas” if they have been inventoried through the agency’s various Roadless Area Review Evaluation processes, or “unroaded areas” if they have not been inventoried but are still of significant size and ecological significance such that they are eligible for congressional designation as a Wilderness Area. Roadless areas provide clean drinking water and function as biological strongholds for populations of threatened and endangered species. Special Areas; Roadless Area Conservation; Final Rule, 66 Fed. Reg. 3,244, 3,245 (Jan. 12, 2001) (codified at 36 C.F.R. Part 294). They provide large, relatively undisturbed landscapes that are important to biological diversity and the long- term survival of many at-risk species.

Roadless areas provide opportunities for dispersed outdoor

recreation, opportunities that diminish as open space and natural settings are developed elsewhere. Id. They also serve as bulwarks against the spread of non-native invasive plant species and provide reference areas for study and research. Id. Other values associated with roadless areas include: high quality or undisturbed soil, water, and air; sources of public drinking water; diversity of plant and animal communities; habitat for threatened, endangered, proposed, candidate, and sensitive species and for those species dependent on large, undisturbed areas of land; primitive, semi-primitive non-motorized, and semi-primitive motorized classes of dispersed recreation; reference landscapes; natural appearing cultural properties and sacred sites; and other locally identified unique characteristics.

The Roadless Rule mandates:

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

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

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

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

area characteristics as defined in § 294.11.

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

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

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

... .

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

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

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

66 Fed. Reg. 3258.

Are the roadless areas in the project area currently within

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

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

In relevant part, regarding the prohibition on tree cutting, the Roadless Rule mandates: Prohibition on timber cutting, sale, or removal in inventoried roadless areas. 1. Timber may not be cut, sold, or removed in inventoried roadless areas of the National Forest System, except as provided in paragraph (b) of this section. 2. Notwithstanding the prohibition in paragraph (a) of this section, timber may be cut, sold, or removed in inventoried roadless areas if the Responsible Official determines that one of the following circumstances exists. The cutting, sale, or removal of timber in these areas is expected to be infrequent. 1. The cutting, sale, or removal of generally small diameter timber is needed for one of the following purposes and will maintain or improve one or more of the roadless area characteristics as defined in § 294.11. 1. To improve

threatened, endangered, proposed, or sensitive species habitat; or 2. To maintain or restore the characteristics of ecosystem composition and structure, such as to reduce the risk of uncharacteristic wildfire effects, within the range of variability that would be expected to occur under natural disturbance regimes of the current climatic period;

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

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

The Project authorizes tree cutting on in roadless areas, the DDN and FONSI are 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. 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.

It appears the UWCNF is not being truthful to the public in violation of NEPA and the Roadless Rule.

The Big Cottonwood Canyon project is in violation of the Roadless Conservation Rule, NEPA, NFMA, and the APA.

The Roadless Rule states: "Timber may not be cut, sold, or removed ..."

The project will still remove trees even you don't call it a commercial timber sale in violation of the roadless rule.

The Big Cottonwood Canyon Project violates the Roadless Rule because, among other things: Neither the Big Cottonwood Canyon project's DDN and FONSI nor any of the UWCNF'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 in the roadless report that the average diameter at breast height for a Douglas fir tree that will be removed is anticipated to be up to 36 inches . Under regional guidance the smallest diameter non-saw merchantable timber is 8” Diameter at Breast Height (DBH). But the Forest Service’s justification is not part of the roadless rule.

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 DDN and FONSI nor any of the UWCNF’s supporting documents limits the cutting, sale, or removal of trees in Inventoried Roadless Areas to generally small diameter trees.

What will happen to the trees that are removed? If you remove trees that can be cut up by a mill will you give them the trees?

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

Overall, the scoping letter is devoid of any useful information to the public as to why this project enhances wildlife habitat, or is needed to maintain natural ecosystem processes within an IRA. It seems readily apparent that this project requires at a minimum an Environmental Impact Statement in order to comply with the NEPA, including the provision of valid,

reliable information to the public when the Forest Service is planning resource management activities.

The scoping letter does not 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.

Nothing the UWCNF has shown the public demonstrates that stands proposed for logging are “overstocked” with small diameter trees that require thinning

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 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. *Id.*

The Forest Service failed to take the required “hard look” to consider and disclose the Soap Stone Project’s direct,

indirect, and cumulative impacts, including impacts of logging in Inventoried Roadless Areas.

For example, the UWCNF fails to demonstrate that the forest stands within Inventoried Roadless Areas where tree removal can occur are 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 Big Cottonwood Canyon project DDN and FONSI complies with the Roadless Rule.

Will and new roads be built for this project?

The Forest Service's failure to take the required "hard look" at the Big Cottonwood Canyon Project's baseline, and the direct, indirect, and cumulative impacts and the agency's action violates NEPA. By relying on the DDN 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 UWCNF 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 Big Cottonwood Canyon Project can comply with the Roadless Rule.

The Forest Service's failure to take the required "hard look" at the Big Cottonwood Canyon Project's baseline, and the direct, indirect, and cumulative impacts and the agency's action violates NEPA. By relying on the DDN 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.

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.

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

* Correspondence: bakerwl@uwyo.edu Abstract: The structure
and fire regime of pre-industrial

(historical) dry forests over ~26 million ha of the western
USA is of growing importance because wildfires are
increasing and spilling over into communities.

Management is guided by current conditions relative to the
historical range of variability (HRV). Two models of HRV,
with different implications, have been debated since the
1990s in a complex series of papers, replies, and rebuttals.

The “low-severity” model is that dry forests were relatively
uniform, low in tree density, and dominated by low- to
moderate-severity fires; the “mixed-severity” model is that
dry forests were heterogeneous, with both low and high tree
densities and a mixture of fire severities. Here, we simply
rebut evidence in the low-severity model’s latest review,
including its 37 critiques of the mixed-severity model. A
central finding of high-severity fire recently exceeding its
historical rates was not supported by evidence in the review
itself. A large body of published evidence supporting the

mixed-severity model was omitted. These included numerous direct observations by early scientists, early forest atlases, early newspaper accounts, early oblique and aerial photographs, seven paleo-charcoal reconstructions, ≥ 18 tree-ring reconstructions, 15 land survey reconstructions, and analysis of forest inventory data. Our rebuttal shows that evidence omitted in the review left a falsification of the scientific record, with significant land management implications. The low-severity model is rejected and mixed-severity model is supported by the corrected body of scientific evidence. Dr. Baker's and DellaSala's paper are the best available science. Please explain why this project is not following the best available science.

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

Please find Schoennagel et al (2004) attached.

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

Schoennagel et al (2004) states: "High-elevation subalpine forests in the Rocky Mountains typify ecosystems that experience infrequent, high-severity crown fires []. . . The most extensive subalpine forest types are composed of Engelmann spruce (*Picea engelmannii*), subalpine fir (*Abies lasiocarpa*), and

lodgepole pine (*Pinus contorta*), all thin-barked trees easily killed by fire. Extensive stand-replacing fires occurred historically at long intervals (i.e., one to many centuries) in subalpine forests, typically in association with infrequent high-pressure blocking systems that promote extremely dry regional climate patterns.” Schoennagel et al (2004) states: “it is unlikely that the short period of fire exclusion has significantly altered the long fire intervals in subalpine forests. Furthermore, large, intense fires burning under dry conditions are very difficult, if not impossible, to suppress, and such fires account for the majority of area burned in subalpine forests.

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

Schoennagel et al (2004) states: “No evidence suggests that spruce–fir or lodgepole pine forests have experienced substantial shifts in stand structure over recent decades as a result of fire suppression. Overall, variation in climate rather than in fuels appears to exert the largest influence on the size, timing, and severity of fires in subalpine forests []. We conclude that large, infrequent 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 Yellowstone 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 response 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 hemlock, and lodgepole or whitebark pine predominate. These forests also have long fire return intervals and contain a high proportion of fire sensitive trees. At periods averaging a few hundred years, extreme drought conditions would prime these forests for large, severe fires that would tend to set the forest back to an early successional stage, with a large carry-over of dead trees as a legacy of snags and logs in the regenerating forest natural ecological dynamics are largely preserved because fire suppression has been effective for less than one natural fire cycle.

Thinning for restoration does not appear to be appropriate in these forests. Efforts to manipulate stand structures to reduce fire hazard will not only be of limited effectiveness but may also move systems away from pre-1850 conditions to the detriment of wildlife and watersheds.” “Fuel levels may suggest a high fire ‘hazard’ under conventional assessments, but wildfire risk is typically low in these settings.”

Likewise, Graham et al (2004) states: “Most important, the fire behavior characteristics are strikingly different for cold (for example, lodgepole pine, 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 fires, but most important, the fires had low to moderate severity.”

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

Please see the attached report titled: “Have western USA fire suppression and megafire active management approaches become a contemporary Sisyphus?” By Dominick A. DellaSala^a,

^{*}, Bryant C. Baker^{b,c}, Chad T.

Hanson^d, Luke Ruediger^{e,f}, William Baker ^g

The EA and Draft Decision Notice did not provide any

evidence that logging roadless areas will make the forest healthier for fish and wildlife. Nor did it discuss 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, the Roadless Rule and the APA.

There was also no decision on the effect of removing snags and if the project would comply with the Forest Plan requirements and the requirements of sensitive old growth species such as flammulated owls and goshawks?

The draft EA makes some very limited statements regarding project impacts on climate change.

A much more detailed accounting of the project effects on climate change are required as per the NEPA. These include an estimate of the average summer temperature increase in treated stands as opposed to existing summer temperatures, and how this affects the thermal tolerance of birds, including forest owls, such as the Boreal Owl, that are very heat sensitive. Also, how will the increased temperatures triggered from this project affect the threatened wolverine, a species that is also very sensitive to heat. What estimated increase in summer heat levels is

considered a “nonsignificant impact” of this proposal? From ongoing temperature increases that have occurred due to climate change, what is the cumulative expected increase in summer temperatures in treated stands and affected streams?

What is the estimated reduction, per acre, in tons of photosynthetic carbon uptake that will occur as a result of this project? What is the expected increase in carbon emissions that will result from cutting/burning existing vegetation? What is the expected increase in carbon emissions that will result from all the motorized activities required for this project, including cutting/burning trees, constructing roads, logging trees, and constructing PODs, for example.

What will be the differences in contributions of carbon emissions and/or photosynthetic uptake of carbon between the action and no action alternative? Why does or doesn't the proposed action alternative address climate change, which is considered a global threat? The Forest Service responded:

Climate change, GHG, and carbon sequestration analysis for this project was conducted with guidance in effect when this project was scoped and analyzed and did incorporate elements of CEQ guidelines. The Uinta-Wasatch-Cache Forest Carbon Assessment whitepaper, incorporated as reference in the EA, identifies baseline carbon stocks and flux, factors influencing forest carbon, and future carbon conditions. The EA describes potential effects of the Proposed Action and No Action Alternative on carbon emissions and climate change which is in

compliance with EO 14057 and EO 14008.

There are no requirements for identifying average summer temperature in treated stands vs nontreated, thermal cover tolerance for bird species, estimated summer heat levels, temperature effects to streams, reduction per-acre in tons of carbon uptake, specific carbon emissions from project activities, difference in carbon emissions vs. photosynthetic update in law, policy, or regulation.

Please follow NEPA and take a hard look at the impact of the project on climate change.

The UWCNF has not yet accepted that the effects of climate risk represent a significant issue, and eminent loss of forest resilience already, and a significant and growing risk into the “foreseeable future?”

It is now time to speak honestly about unrealistic expectations relating to desired future condition. Forest managers have failed to disclose that at least five common tree species, including aspens and four conifers, are at great risk unless atmospheric greenhouse gases and associated temperatures can be contained at today's levels of concentration in the atmosphere. This cumulative (“reasonably foreseeable”) risk must not continue to be ignored at the project-level, or at the programmatic 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 carbon 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 fails to even provide a minimal quantitative analysis of project- or agency-caused CO₂ emissions or consider the best available science on the topic. This is immensely unethical and immoral. The lack of detailed scientific discussions in the FSEIS 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 as 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 FSEIS 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 FEA fails to consider that the effects of climate change on the project area, including that the “desired” vegetation conditions will likely not be achievable or sustainable. The EA fails to provide any credible analysis as to how realistic

and achievable its desired conditions are in the context of a rapidly changing climate, along an unpredictable 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 implicates 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 (CO₂) 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 CO₂. 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 various types of vegetation cover found on the UWCNF.

The EA also ignores CO₂ 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 greed-iest 1%, or empower ourselves to limit greenhouse gas emissions so not just a couple more generations might survive.

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

In March 2019, U.S. District Judge Rudolph Contreras in Washington, D.C., ruled that when the U.S. Bureau of Land Management (BLM) auctions public lands for oil and gas leasing, 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. The Forest Service violates NEPA because it fails to take a hard look at the Big Cottonwood Canyon Project impacts on the environment and fails to disclose sufficient information to the public.

Please take a hard look at the science of climate change and draft an EIS for this project if the Forest Service still wants to pursue it, which includes an analysis that examines climate change in the context of project activities and Desired Conditions. Better yet, it's time to prepare an EIS on the whole bag of U.S. Government climate policies.

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

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

NFMA (1982) regulation 36CFR 219.27(C)(3) implements the NFMA statute, which requires restocking in five years. Forest managers must analyze and disclose the fact that the UWCNF can no longer “insure that timber will be harvested from the National Forest system lands only where...there is assurance that such lands can be restocked within five years of harvest?” (NFMA§6(g)(3)(E)(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 demonstrate that climate change combined with high severity fire is leading to increasingly fewer opportunities for seedlings to establish after wildfires and may lead to ecosystem transitions in low-elevation ponderosa pine and Douglas-fir forests across the western United States.”

Wildfires and climate change push low-elevation forests across a critical climate threshold for tree regeneration,

PNAS (2018), Kimberley T. Davis, et al.

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 re- search supporting our comments focus on important data and analy- sis. 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 at the project-level, and programmatic-level) failure to publicly disclose the current and future impacts of climate risk to our national forests. NEPA requires cumulative effects analysis at the programmatic level, and at the project-level. The failure to assess and disclose all

risks associated with vegetative-manipulation (slash and burn) units in the project area in the proper climate-risk context/scenario violates the NFMA, NEPA and the APA. In the face of increasing climate risk, growing impacts of wildfire and insect activity, plus scientific research findings, NEPA analysis and disclosure must address the well-documented trend in post-fire regeneration failure. The project has already experienced difficulty restocking on areas that burned in the 1988 wildfire. NFMA (1982) regulation 36 CFR 219.27(c)(3) implements the NFMA statute, which requires adequate restocking in five years. Given the forest's poor history of restocking success and its failure to employ the best available science, the adequacy of the site-specific and programmatic NEPA/NFMA process begs for further analysis and disclosure of the reality of worsening climate conditions which threaten – directly and cumulatively – to turn forest into non-forested vegetation, or worse. The desired future condition described in the Purpose and Need, or in the Forest Plan is not deforestation.

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

The Draft EA fails to acknowledge the likelihood that "...high seedling and sapling mortality rates due to water stress,

competing vegetation, and repeat fires that burn young stands,” which will likely lead to a dramatic increase in non- forest land acres. Many acres of (conifers) trees already fail to regenerate. (Emphasis added). A map of these areas is required. In many areas, conifers haven’t shown “re- silience” enough to spring back from disturbance.

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

Excerpt: “Forests are changing in ways they've never experienced

before because today's growing conditions are different from anything in the past. The climate is changing at an unprecedented rate, exotic diseases and pests are present, and landscapes are fragmented by human activity often occurring at the same time and place.

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

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

the assumption that present site conditions are similar to those of the past.”“This may no longer be the case.”

Please choose the No Action Alternative or Forest Plan Amendments are needed to establish standards and guidelines which acknowledge the significance of climate risk to other multiple-uses. Amendments must not only analyze forest-wide impacts, but the regional, national and global scope of expected environmental changes.

Based on scientific research, the existing and projected irretrievable losses must be estimated. Impacts caused by gathering climate risk (heat, drought, wind) and its symptoms, including wildfire, insect activity, and regeneration failure and mature tree mortality must be analyzed cumulatively.

The selected scientific research presented above is only a sampling of the growing body of evidence that supports the need to disclose the consequences of the proposed action in a proper context – a hotter forest environment, with more frequent drought cycles. This evidence brings into question the Purpose and Need for the project. It also requires the FS to reconsider the assumptions, goals and expected desired future condition expressed in the existing Forest Plan. Plan expectations must be amended at the programmatic level before proceeding with proposed project-level action(s). According to best available science, implementing the project will most likely accomplish the opposite of the desired future condition. We can adjust as we monitor and find out more. However, to willfully ignore what we do

know and fail to disclose it to the public is a serious breach of public trust and an unconscionable act. Climate risk is upon us. A viable alternative to the proposal is not only reasonable and prudent, but it is the right thing to do. The draft decision is in violation of NEPA, NFMA, the ESA and the APA because the project will adversely affect biological diversity, is not following the best available science and the purpose and need will not work. 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, consult 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.

NFMA, 16 U.S.C. § 1604(i), and HFRA, 16 U.S.C. § 6591d(e), require the Forest Service to demonstrate that its actions comply with the applicable Forest Plan.

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

Please 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 its 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.

The Reliance on Analysis and Draft Decision Notice does not provide any analysis information for the Big Cottonwood Canyon project area. The claims that this project will not have any significant environmental effects is invalid as these NEPA decisions made in other areas of the forest cannot be used for this project area and this project. It appears that this draft DN is being tiered to the Upper Weber analysis and draft DN, which is a violation of the NEPA.

1. The proposal is a violation of the NEPA as there are no descriptions of this project provided to the public, including wildlife inventories.

The only information provided to the public on this project are the acres of planned vegetation treatments, along with 50 miles

of new temporary roads. None of the roads or proposed vegetation treatment units are reasonably identified on maps (basically unreadable), so the public does not know where or how these will be distributed across the landscape, either in regards to each separate unit, or the large natural burn that occurred in this landscape. There have been no wildlife surveys completed in the project area, so this baseline information is not available to the public. This includes inventories of sensitive species as the Boreal Owl, Flammulated Owl, Three-toed Woodpecker, Mexican Spotted Owl, and Northern Goshawk. The design features state that raptor nests will be protected from disturbance. This mitigation measure requires that raptor nests be mapped and the buffer zones mapped as well. Mitigation measures must be demonstrated to be reasonably effective as per the NEPA. The public needs to be able to comment on the validity of claimed mitigation measures for sensitive bird species, otherwise our public involvement opportunities are being denied.

Sensitive bird species on these forests include the Flammulated Owl, Boreal Owl, Northern Goshawk, and Three-toed Woodpecker. We have included a publication that defines the nesting periods for these raptors, and the buffer distances (Romin and Muck 2002). Please define how these buffers are being designed for these 2 forest owls. Also, the Upper Weber NEPA analysis noted that buffer distances for Three-toed Woodpeckers should be 300 feet. Please map these buffer distances for the public for this woodpecker in the Big Cottonwood Canyon project area.

In particular, the agency has failed to disclose how many acres of proposed treatments will be located within Inventoried Roadless Areas. The public needs to be provided maps of all proposed treatment units which display the location in or outside of roadless lands. These maps also need to include roads. Also, use of motorized trails with forwarders also need to be identified as new temporary roads.

A readable map of previously-burned forests in the project area needs to be provided to the public. The existing condition of these burned areas needs to be fully defined to the public, along with how treatments are going to affect these burned forests, especially for wildlife as the sensitive Three-toed Woodpecker.

How much old growth forests are in the project area?

The agency claims that even if old growth is treated in the project area, that it's values to wildlife will not be affected. However, neither Forest Plan FEIS's have done an analysis of how vegetation treatments in old growth forests, including conifer, aspen, and aspen/mixed conifer, affect wildlife, claims that vegetation treatments in old growth do not affect wildlife are a NEPA violation.

The agency has not defined what the current snag density is within this project area as per forest plan standards/guidelines. Are these standards/guidelines currently being met in proposed

vegetation treatment areas, and if not, why wouldn't further snag loss be a significant adverse effect?

The agency did not define how migratory songbirds will be protected due to "beneficial practices" (USDI 2020, USDI 2021) in order to mitigate adverse impacts on these birds, including Birds of Conservation Concern in USFWS Bird Conservation Region 16. What is the expected mortality of birds from the vegetation treatments, including mechanical disturbances, which will destroy nests and trample fledgling, and will kill all birds due to smoke toxicity (Defiance Canyon Raptor Rescue 2022). What level of mortality is considered a non-significant effect on Birds of Conservation Concern?

The Pinyon Jay is a Birds of Conservation Concern. What is the expected impact of these vegetation treatments on this species, and why wouldn't habitat loss exacerbate ongoing declines of this species which are clearly significant?

There is no wildlife report on the website. Therefore the project violates NEPA, NFMA, and the APA because the public can read about how the project affects wildlife and if the project complies with the Forest Plan. The Upper Weber wildlife report notes that Birds of Conservation Concern that occur on this forest will be adversely impacted by vegetation treatments. Potential nesting trees may be removed for the Cassin's Finch; potential nesting and foraging habitat may be removed for the Clark's Nutcracker; thinning treatments will remove some potential nesting/

foraging habitat for the Evening Grosbeak; potential nesting habitat will be removed for the Olive-sided Flycatcher.

2. The agency will violate the National Forest Management Act (NFMA) because of a failure to demonstrate the project will comply with the respective Forest Plans.

The Forest Service has not defined how WL&F standard 9 will be adhered to in the project area. This requires no disturbances in active goshawk nests from March 1-September 30). These nesting areas are not mapped and protected periods identified for these nests.

The agency has not defined how WL&F guideline 8 will be met; this guideline requires the agency to provide goshawk nesting areas that contain one active, two alternate, and three replacement nest sites; each nest site should be approximately 30 acres in size, for a combined total of 180 acres per nest area when sufficient suitable habitat exists; in active nest areas, restrict all management activities and permitted uses, except livestock grazing, during the active nesting season unless such disturbance is unlikely to result in nest abandonment.

The agency has not defined how WL&F guideline 10 will be met in the project area. This guideline requires the agency to

identify post-fledging areas for goshawks which encompass the active, alternate and replacement nest areas and additional habitat needed to raise fledglings; a PFA should be approximately 420 acres in size, exclusive of nest area acres; if sufficient amounts of suitable habitat are not present, using existing suitable habitat where available; openings created in PFAs as a result of mechanical vegetation treatments should not exceed 2 acres in size in mixed conifer forest types, and one acre in size in spruce/fir cover types; in active PFAs, restrict all management activities during the active nesting season.

The agency has not mapped Boreal Toad habitat in order to demonstrate that occupied habitat will not be disturbed during vegetation treatments.

Please demonstrate that old growth requirement will be met for all forest types in this project area.

The agency has not addressed how forest plan snag requirements for snags will be met in vegetation treatment areas.

The agency must adhere to the forest plan direction for sensitive species in the Big Cottonwood Canyon project, Guideline 21, which requires the agency to develop conservation measures and strategies for sensitive species to maintain, improve and/or minimize impacts to species and their habitats. These conservation strategies need to include specific snag management policies for the cavity nesting sensitive species, the Flammulated Owl, Bo-

real Owl, and Three-toed Woodpecker. These strategies also need to include protective buffers around nesting areas as defined by the current best science (Romin and Muck 2022). These buffers for the Flammulated Owl are 0.25 miles from 4/1-9/30; they are 0.25 miles for the Boreal Owl from 2/1-7/31. These buffers have also been identified for the Mexican Spotted Owl, a threatened species, as 0.5 miles from 3/1-8/31. Also, for the Golden Eagle, which requires protection as per the Bald and Golden Eagle Act, the recommended buffer is 0.5 miles from 1/1-8/31. Without location of nests of these 3 owls and the Golden Eagle, the agency has not demonstrated to the public that these species will actually be protected in the Big Cottonwood Canyon project as is required by both the NEPA and the NFMA.

At present, proposed activities in the Big Cottonwood Canyon project conflict with conservation of these sensitive species. The wildlife report for the Upper Weber project noted that there is a potential for goshawks to abandon nests due to disturbance; potential nesting trees for Flammulated Owls may be removed; a buffer will be created “if a nest is found”; foraging and nesting habitat will be removed for the Three-toed Woodpecker; nesting habitat will be removed for the Boreal Owl. The only conservation direction for these 4 sensitive species is for the goshawk.

The agency must adhere to the forest plan guideline 26 to provide security in big game summer concentration areas, as well as protecting key big game calving and fawning areas.

The agency must adhere to the forest plan guideline 29 to avoid disruptive management activities in elk calving areas, elk spring use areas and bighorn sheep lambing area May 1 through June 30. These areas in the project area have not been identified for protection, however.

The agency must adhere to the forest plan guideline 30 to avoid disruptive activities on deer, elk, mountain goat and bighorn sheep winter ranges from November 15 through April 30. These areas in the project area have not been identified for protection.

3. The agency is violating the NFMA and 2012 Planning Rule in a failure to identify and monitor focal species for aspen, aspen/mixed conifer, old growth, and snag habitat, and is violating the NFMA requirement to maintain a diversity of wildlife across the planning areas.

Aspen, aspen/mixed conifer, old growth for aspen and conifers, and snag habitat are all key habitats for western forest birds, 64.5% that are currently in decline (Rosenberg et al. 2019). The 2012 Planning rule requires the

Forest Service to identify and monitor focal species for specific forest vegetation conditions that may be affected by agency management activities. Due to the failure of this forest to identify and monitor focal species for these specific vegetation types, the effect of management actions on represented groups of birds are unknown. As such, the agency is unable to demonstrate that viable populations of native wildlife species are being maintained across this national forest, another NFMA violation. This national forest needs to complete a forest plan amendment to address these violations before any further vegetation management activities are completed.

4. The agency is violating the NFMA and the 2012 Planning Rule due to a failure to address whether vegetation management actions may be contributing to the ongoing decline of goshawks on this forest; no further vegetation treatments should be done until the relationship between goshawk declines and vegetation treatments is fully evaluated, and changes implemented via a Forest Plan amendment.

Both the Upper Weber NEPA analysis, as well as the monitoring report for the Wasatch-Cache National Forest demonstrate that goshawks are in decline on this national forest. This decline may actually be greater than indicated by the agency as 7 abandoned nesting territories have not been counted in the declining territory occupancy on this forest. The NFMA requires the agency not only to monitor MIS/focal species, but to evaluate any declines

in case they are related to management activities. There is no analysis to date that seems to have been completed as to how vegetation management may be contributing to these ongoing declines of this focal species. The Big Cottonwood Canyon project is a good example of this failure. Expansive vegetation treatments are planned without any consideration as to how these treatments may be affecting goshawk populations. All of the various other projects identified in the Big Cottonwood Canyon document have the same failure. It is clear that this forest needs to terminate all ongoing and planned vegetation treatments until the NFMA/NEPA requirement is fulfilled as to an analysis as to why goshawks are declining; needed changes to ensure viability of this species likely require a forest plan amendment to address conflicts between goshawk viability and vegetation management.

5. The agency is violating the NEPA by claiming that wildlife must be protected from fire and insects and disease, including within Inventoried Roadless Areas.

Given that 2 sensitive owls and the Three-toed Woodpecker depend upon snags for nesting, and the Three-toed Woodpecker also depends upon fire as foraging habitat, it is a violation of the NEPA for the agency to claim that these species require expansive vegetation treatments to prevent stand-replacement fire within roadless lands. In addition, the agency did not demonstrate why migratory birds also require vegetation treatments to

prevent stand replacement fire. We have attached a paper by Hutto and Patterson (2016) which chronicled a 11-year period of bird use following a mixed severity fire. This paper clearly demonstrates that natural fire creates a diverse habitat for birds. We have also attached a paper summarizing birds that use snags for nesting (at least 24 species that likely occur on the Uinta-Wasatch-Cache National Forest (USDA 2018).

6. The Uinta-Wasatch-Cache National Forest has no conservation strategy for birds that benefit from mixed-severity fire; until this deficiency is corrected with a Forest Plan amendment, the agency cannot legally salvage within burned forest areas, including the Big Cottonwood Canyon project area.

There are no existing conservation strategies on this forest for the Three-toed Woodpecker, a sensitive species on this forest. Other Birds of Conservation Concern also have strong associations with burned forest, such as the Olive-sided Flycatcher. In addition, the abundance of snag habitat that is created by mixed severity fire is likely critical and mitigation for the landscape loss of snags within logging areas. Snag restoration in these areas will require up to 100 years, so this is a long term loss. Before salvage of burned forests is planned anywhere on this forest, the agency needs to develop the required conservation strategies for birds in a Forest Plan amendment. Otherwise, what

are likely huge significant adverse effects from a landscape lack of snag habitat for wildlife will be exacerbated.

7. The agency is not making biennial monitoring reports required by both forest plans available to the public; these monitoring reports are not referenced in the NEPA summary for the Big Cottonwood Canyon project; there is no evidence that the agency has monitored wildlife effects for all the various projects cited in the Big Cottonwood Canyon report for determinations of no significant impacts; without monitoring, the determination of significant impacts on focal species and sensitive species is arbitrary and a violation of the NEPA as well as the NFMA.

We were unable to find any biennial monitoring reports on the agency's web site for the Wasatch-Cache National Forest. The monitoring report for the Uinta Forest Plan does not include any information on sensitive wildlife species. If the agency is not completing these monitoring requirements, the basis for claiming that various vegetation treatments are not having significant impacts on focal and sensitive wildlife species is arbitrary.

Sincerely yours,

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