

June 2 2025

RE: HTNF Forest-Wide Prescribed Fire Restoration EA

Humboldt-Toiyabe Forest Supervisor

Humboldt-Toiyabe Forest

1200 Franklin Way

Sparks, NV 89431

Objection submitted by email to objections-intermttn-regional-office@usda.gov

Jon Stansfield, Responsible Official

Objection Reviewing Officer: No name given in legal notice.

RE: OBJECTION to Humboldt-Toiyabe Forest-Wide Prescribed Fire EA

To: Jon Stansfield, Responsible Official and Humboldt-Toiyabe Forest Service Supervisor and Objection Reviewing Officer

Pursuant to 36 CFR Part 218, WildLands Defense (WLD) Lead Objector, Alliance for the Wild Rockies (AWR), Native Ecosystems Council (NEC), and Council on Fish and Wildlife are submitting this Objection to the Humboldt-Toiyabe National Forest (HTNF) Prescribed Fire Restoration EA, found at: <https://www.fs.usda.gov/r04/humboldt-toiyabe/projects/57860> . The project website states the legal notice was published April 20, 2025.

Here is an Objection from Wildlands Defense, lead Objector, Alliance for the Wild Rockies and Center for Native Ecosystems in the matter of the Humboldt-Toiyabe National Forest (HTNF) Prescribed Fire Restoration EA and Draft Decision Notice (DDN) to conduct large-scale native vegetation manipulation including extensive broadcast, pile, jackpot and other burning, heavy equipment mastication, chain-sawing, use of retardant, seeding, linked herbicide for project-caused weeds and other activities across vast areas of the Forest for 15-20 years. This is a weed-vulnerable rugged often very arid mountainous landscape. The habitats are already complex and diverse— and home to a host of rare and sensitive species and biota of state and federal conservation concern a broad diversity of migratory birds including many dependent on the communities the Fire EA will disturb, destroy and fragment. with declining species. The project area includes over 300 Inventories Roadless Areas (IRAs) subject to the project's radical and often heaped and overlapping disturbances. There have already been enormous recent vegetation treatments all across many adjacent BLM lands and in areas on the HTNF like the Bridgeport

region. There are a host of other, additional foreseeable HTNF native forest and shrubland disturbance causing significant habitat fragmentation and loss for PJ, mountain mahogany, sagebrush and higher elevation forested site projects (Jarbridge Deer Creek, East Humboldt-South Ruby). EHSR is a new project not known at the time of the previous Fire EA comment are being planned by the Forest.

Objector Organizational Interests: The following Objection is based on WLD, AWR and NEC's concerns about the very significant short, mid and long-term (including irreversible) Forest manipulation caused habitat loss and population declines for native biota like Pinyon Jay, Sage-grouse, Flammulated Owl, Northern Goshawk, California Spotted Owl, Lahontan Cutthroat Trout, Jarbridge Bull Trout, Columbia Spotted Frog. This project would also degrade and often destroy areas of natural wild unroaded landscapes and watersheds of great value to the public. The project's losses to biodiversity, essential and irreplaceable wildlife habitats- including lands vital to USFS MIS species, sensitive species, state species of concern, and ESA-listed species and trammeling of spectacular biodiverse wild lands. The profligate year-round use of fire and chain-sawing, heavy equipment mastication, bulldozing and other activities will cause irreversible flammable weed infestation and spread – including in lands already suffering from major livestock grazing conflicts with ecological health and flammable weed infestations. See Belsky and Gelbard 2000, Reisner 2013 Dissertation, Reisner et al, 203, Chuong et al, 2015, Williamson et al 2019, Kauffman et sl. 2022, Molvar et al. 2024.

Pursuant to 36 CFR Part 218, WildLands Defense (WLD) Lead Objector, Alliance for the Wild Rockies (AWR), Native Ecosystems Council (NEC) and Council on Fish and Wildlife (CFW) Object to the HTNF Forest-wide Prescribed Fire EA.

Wildlands Defense is a 501c3 public interest organization dedicated to protecting and improving the ecological and aesthetic qualities of the wildlands and wildlife communities of the western United States for present and future generations. WLD does so by fostering the natural enjoyment and appreciation for wildlands habitats and wildlife by means of legal and administrative advocacy, wildland and wildlife habitat protection and scientific research, and by supporting and empowering active public engagement. Wildlands Defense has offices in Boise and Hailey, Idaho.

Alliance for the Wild Rockies is a 501c3 public interest organization whose mission is to secure the ecological integrity of the Wild Rockies Bioregion through citizen empowerment and the application of conservation biology, sustainable economic models, and environmental law.

Native Ecosystems Council is a 501c3 public interest organization whose staff reviews Forest Service National Environmental Policy Act (NEPA) assessments of logging impacts on wildlife in Montana and Idaho. NEC is headquartered in Willow Creek, Montana.

Council on Fish and Wildlife is a 501c3 public interest organization based in Montana that fights to protect western wild lands and the critical fish and wildlife habitats they provide.

Our organizations staff and members would be directly affected by this project and past and ongoing actions by the Forest Service on these lands and watersheds that are vital for

biodiversity protection and wild lands preservation, for the viability of species like migratory birds and rare native carnivores. The HTNF Fire EA project would directly and significantly harm us and our members, who use this National Forest, other Region 4 Forests. Our interests in biodiversity and natural wild land ecosystems in project area lands in jeopardy - enjoyment of the natural world, wild land recreation, bird watching, nature photography, scientific pursuits, aesthetic and spiritual purposes.

This Objection is on significant information on harms caused by the loose and uncertain CBM EA's disturbance and manipulation of native forest and shrub lands, climate stress effects that add to project risk of adverse outcomes and uncertainty, major looming foreseeable threats and habitat losses for sensitive species and wild land areas, the sole alternative, use of open-ended Condition-Based Management (CBM) methods with no site-specific hard look analysis and many other flaws and conflicts as described below. There is also new scientific information (such as new cheatgrass publications), new threats from both Interior and USFS actions and proposals. Sensitive Species of significant concern are also suffering new habitat loss, and USFWS has found species like Pygmy Rabbit may warrant ESA listing.

This major project will harm the Forest environmental and biodiversity values that it is our groups organizational mission to protect, and harm our members recreational, spiritual, aesthetic, scientific, and other uses and enjoyment of National Forest lands. It will also harm the planet due to the large-scale release of currently sequestered carbon dioxide and other global heating gases into the atmosphere. It will create new hotter, drier local microclimates. It also relies upon under loose, uncertain "Condition-Based Management NEPA and NFMA-violating EA. This harms our groups strong interests in protection of biodiversity, clean water, rare species and forest-based wild land recreational and other uses.

The EA is a form of Condition-Based Management that has been struck down by courts. It thwarts the very purpose of NEPA, and informed decision-making, and thwarts informed public participation in agency processes. The FS is essentially asking the public to put blind faith in future closed door cursory site reviews as the basis for deciding what specific land areas and habitats across the immense and highly diverse HTNF are targeted for high levels of project burning, mastication, chainsawing, herbiciding disturbances for 15-20 years – with management based on Forest Plans that are nearly 40 years old in 2025. The EA even violates the wildlife and native species protections that are found in these old plans.

The Forest's massive Fire EA deforestation scheme in this Forest (where ¼ million domestic livestock AUMs are being grazed within the project area) will overwhelmingly burn and fragment vast areas of mature and old growth native woody vegetation communities – because these are communities that the EA's spurious Landfire modeling claims are "departed" from the modeled ideal. Yet indeed these beautiful native plant communities and all the essential wildlife habitat they provide - will in fact soon be departed from the face of the earth if this project goes forward. They will soon be swirling around in the atmosphere in molecular form --- helping heat the planet and worsening the climate crisis.

If this alarming project moves forward, it will deal an immense and devastating blow to nearly all native species of concern listed in EA Table 1 "TEPC ESA" EA pps. 17-21, and Tables 1

(Bull Trout, Lahontan Cutthroat Trout, Sierra Nevada Yellow-legged Frog, Yosemite Toad, Mount Charleston Blue Butterfly, Sierra Nevada Red Fox, Sierra Nevada Bighorn Sheep, North American Wolverine, California Spotted Owl, Bi-State DPS of Greater Sage-grouse, Whitebark Pine, Webber's Ivesia, and any others. and also in Table 2, Sensitive Species Impact determination (Rocky Mtn Bighorn Sheep, California Bighorn Sheep, Desert Bighorn Sheep, Pygmy Rabbit, Spotted Bat, Townsend's Big-eared Bat, Bald Eagle, Peregrine Falcon, Flammulated Owl, Great Gray Owl, American Goshawk, Mountain Quail, White-headed Woodpecker, Three-toed Woodpecker, Columbia Sharp-tailed Grouse, Pinyon Jay, Sagebrush Sparrow, Black Rosy Finch, Pacific Wren, rare butterflies, (Spring Mountain, Dark Blue, Morand's Checkerspot), Western Bumblebee, Columbia Spotted Frog, Bonneville Cutthroat Trout, , Rare Plants EA pp. 25-26. Tables with "determinations" contain minimal site-specific info, contain no info on current population levels, trends, areas of occupied vs. unoccupied habitats, in relation to Initial and all other treatment areas, very foreseeable threats, habitat quality of EA woody veg destruction targeted lands, etc. The FS also rosily claim that the projects will stop fires. There is nearly no info on the actual habitat conditions and generalized non-mandatory "design features", BMPs – that can be waived after the decision is issued – behind closed doors with no NEPA process. Justifications for this radical habitat disturbance are things like "even-aged stands" – without providing site-specific data on species ages, acreages, importance to species of concern, etc. The FS even resorts to burning up sagebrush, using only the most generalized information on the potential drastic adverse impacts to Pygmy Rabbit and a host of other sensitive FS species.

This further exposes how flawed and harmful the Landfire and other models the FS uses are - for example, "even aged stands". These stands are very likely critical blocks of mature and old growth habitat that will end up seriously fragmented, turned into poor quality habitat and predation sinks, weed-infested, and more likely to burn with the EA actions. How much will the populations of each of these TES, sensitive, MIS species, state species of concern, BLM sensitive species who inhabit both FS and BLM lands), and migratory birds that nest in the targeted HTNF lands be diminished from this Fire EA project? Much of these species habitats will be up in smoke, and even more fragmented and tattered. In many of these woody vegetation types, it will take a century and often multiple centuries to regain the forest structure sufficient to support these species. With irreversible flammable grass invasion and dominance in the wake of the project massive treatment disturbance; with hotter temperatures under climate stress and prolonged unprecedented drought; and with continued high levels of grazing all across the project area --- recovery in many areas is likely to be impossible and take hundreds of years at best. We provide this as background on our Objection and also Object to the use of CBM and failure to address its serious risks and impacts to the environment and public transparency.

Objector Organizational Interests: The following Objection is based on our concerns about the significant and short, mid and long-term (including irreversible) losses to biodiversity, wildlife, wild lands, watersheds and water sustainability, weed risk, site heating and drying/desertification/aridification effects; loss of wild natural areas; and unassessed climate, grazing and regional development and other stresses and impacts acting synergistically to harm project-threatened values, climate change impacts, biodiversity loss, sensitive and imperiled species and other concerns raised in our comments on this project. It also based on grave concerns about the relentless Region 4 Forest-wide assault on sensitive and rare species habitats,

and wild and Roadless areas with a huge battery of “treatment” disturbances coupled with the FS failure to address and evaluate livestock grazing impacts in modern day ecological analyses – all while the FS relies on a woefully out-dated 1980s Forest Plan. This all will harm the Forest environmental values that it is our organization mission to protect, and harm our members recreational, spiritual, aesthetic and other uses and enjoyment of National Forest lands.

Relation Between Objection Points and Comments

The 2024-2025 Specialist Reports were not available before. The FS failed to effectively respond to our extensive earlier comments and scientific and other information we submitted previously so we have many carried over from them forward in this Objection. Therefore, this Objection refers extensively to our past comments, and also includes significant new information since the early 2022 comment period.

We base this Objection on comments submitted during this process, and new information that has emerged since the previous comment period, and new information presented in the EA – such as the large “initial project areas” - as shown in the Mapping Appendix. Objector comments previously submitted are included in significant part herein. They serve as the basis for the Objection, along with new information relevant to unknown and unrevealed information on project components that were not laid out by the FS – like the ITAs. We also incorporate new and current information on emerging threats and diseases, other federal agency projects impacting local habitat areas and/or populations of species also impacted by the Fire EA, and new or updated scientific information that has arisen since the 2022 comment period.

We Object to the Lack of An Adequate Current Baseline of Environmental Conditions in This Landscape

NEPA requires a “full and fair discussion” of direct, indirect, foreseeable/cumulative impacts of the proposed action. This entails establishing a solid environmental baseline against which to compare agency claims, analysis and predictions of the severity of the effects of the proposed action and to develop a range of reasonable alternatives. Without establishing baseline environmental conditions, there is no way to objectively or accurately determine what effect an action will have on the environment and, consequently, no way to comply with NEPA, or to ensure compliance with the Forest Plans and NFMA.

We Object that Current systematic baseline inventories for all affected Forest values/resources across the affected landscape were not conducted to adequately and accurately analyze the background/baseline conditions of Forest lands, watersheds, aquatic and terrestrial species, Roadless Areas, historical and cultural sites, wild land recreational and roadless conditions, pleasing visual settings and scenery. A hard look must be taken at the full range of Forest values that will be potentially affected/impaired or destroyed by the Project, including water quality and quantity, wildlife including migratory birds, sensitive species, Roadless Area values, cultural and historical values, as required by NEPA and the NEPA implementing regulations. NEPA and its implementing regulations require federal agencies to prepare an environmental impact statement (“EIS”) for all “major Federal actions significantly affecting the quality of the human environment. Where an agency attempts to avoid the EIS requirement by relying on mitigation

measures, its discussion of the proposed mitigation measures must be carefully considered, based on scientific studies, and effective to avoid significant impacts. Further, the agency's environmental analysis must "provide full and fair discussion of significant environmental impacts."

The FS must also adequately and accurately define and analyze mitigation measures, and take a hard, science-based look at the effectiveness of those measures, as required by NEPA and the NEPA implementing regulations applicable to the Project. Whether the agency prepares an EA or an EIS, the agency must take a "hard look" at direct, indirect, and foreseeable environmental impacts of the proposed action and its alternatives.

As we have described in scoping comments, the host of outstanding and also threatened and imperiled species and other Forest values jeopardized by this project necessitate an EIS – or, in fact, several EISs given the vast land areas involved and host of conflicts with destruction of mature and old growth native vegetation communities, IRAs, and lands critical to biodiversity and rare species, and/or high in cultural values.

We Object to the continued lack of a solid environmental baseline, and the failure to prepare an EIS for a project of such magnitude that certainly constitutes a major federal action. The HTNF is the largest National Forest in the lower 48 states, and the EA sets the stage for massive manipulation and biodiversity loss under a highly uncertain, lax, non-site specific CBM scheme where the public is kept in the dark about what subset of land areas deemed "uncharacteristic" by black box ever-changing Landfire models – will be burned - broadcast burning, scorched earth jackpot and pile burning, heavy equipment mastication where PJ or other forests are reduced to a biotic crust smothering mat 3 inches deep on the earth, or have trees chainsawed down with cut wood piled by hand or heavy equipment into soil-scalding burn piles, or mature sagebrush masticated, burned or variously cut.

This EA contains these initial project areas (often including large amounts of Mature and Old Growth (MOG) forest/shrublands – note we are concerned that the HTNF PJ forests may have been downplayed in this MOG mapping) are the areas shown as high and moderate "departure" on scoping maps.

We Object to the lack of Adequate Baseline Mapping – Clear Understandable Maps Must Be Re-Issued in A Supplemental NEPA Document

We Object to the very similar colors for different vegetation communities shown on many maps – so that PJ and other veg types are often not distinguishable from other vegetation types. The small scale of project area maps, lack of critical mapping of other existing disturbances, (treatments, wildfires, extent of exotic flammable species, actual occupied habitats of many sensitive species, illicit existing routes in IRAs, current upland and riparian health and ecological conditions - including as caused and impacted by ongoing and current USFS managed livestock grazing on project area lands, etc.), new and looming infrastructure and developments, and existing oil and gas leases and mining claims and activities in project area, and other information.

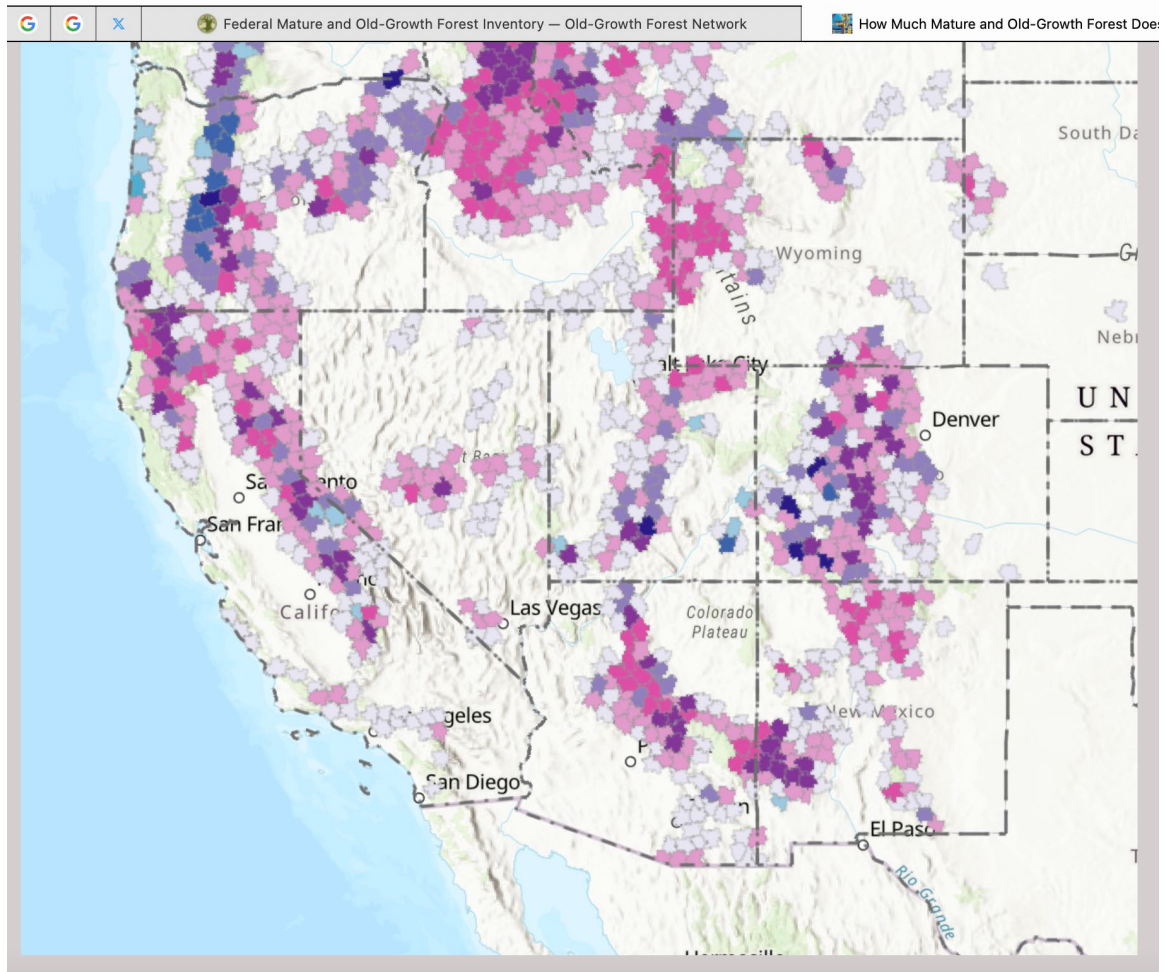
We Object to hard look analysis under NEPA and NFMA and the lack of mapping of all mature and all old growth forest and shrub stands and blocks of native vegetation of all types, lack of mapping of vegetation community structural diversity and complex existing interspersions of vegetation communities forming a natural “mosaic” of sorts, lack of mapping of often complexly intermixed species. The FS basically lumps communities together – disregarding wildlife habitat and ecological values and basic forest and shrub land ecology and watershed integrity. The FS also shows vast areas of sagebrush to be destroyed – including “dwarf” sage that may take more than several hundred years to recover. The analysis ignores elevational gradients between Pinyon and Juniper – Juniper lower elevations, mixed mid elevations, pinyon highest elevations – and note that species like Pinyon Jay use low, mid and higher elevation communities.

Mature and Old Growth Forest and Shrub Vegetation Community Uncertainty and Baseline Void

We Object that the FS has not provided mapping, data and analysis undertaken with the Biden administrations’ old growth Forest mapping and reports related to land areas in the Fire EA project landscape– including mapping that shows irreplaceable Pinyon-Juniper and other veg communities especially targeted under this EA. Please overlay these MOG maps on top of the “initial project” maps and clearly show how the Fire project categorizes these same areas. Do the black box models show them as “uncharacteristic” and/or “departed? How many MOG areas, and which ones, may be “treated” if they’re modeled “uncharacteristic” and departed/ Where they are located, and what forest species are impacted? Note this is new information, as this effort was announced on Earth Day 2022.

It appears that many of the FS-targeted mature and old growth forests modeled as “uncharacteristic” and essential for preservation of old and mature trees and forests.

See: <https://www.andykerr.net/kerr-public-lands-blog/2023/5/31/how-much-mature-and-old-growth-forest-does-the-us-have-left>



Forest Service Lands Mature and Old-Growth Forest Estimates (v 1.0)

Relationship

↑ Mature (bin)

→ Old-Growth (bin)

High Mature -
Low Old-Growth

High Mature -
High Old-Growth

Low Mature -
Low Old-Growth

Low Mature -
High Old-Growth



The above colors are from the FS MOG document.

It appears that the HTNF Fire EA is targeting for destruction critical remaining areas of mature and old growth forest in the Monitor-Toquima-Hot Creek, Spring Mountains, Mount Moriah/Northern Snake Range, Schell Creek Range, Carson City-Bridgeport and other areas and regions. We Object to the lack of detailed mapping and analysis of these essential carbon-sequestering watershed stabilizing MOG forests, and the failure to address the critical issue of how mature and old growth forest areas were dealt with in the HTNF Fire EA in identification of lands and areas for as “uncharacteristic” and in need of “treatment”. We Object to the failure to reveal the location, characteristics and amount of mature and old growth forests in the project area. We Object to the failure to take a hard look at potential impacts to mature and old growth forests, failure to ensure their sustainability under NFMA; and failure to ensure retention of the critical habitat elements they provide for the survival and persistence of viable populations of federal and state species of conservation concern, sensitive species, migratory birds, and the numerous ESA-listed species that inhabit the biodiverse HTNF.

FIA Forest Type Group	Younger Forest		Mature		Old Growth		Total Forest Land
	Acres	SE**	Acres	SE**	Acres	SE%	Acres
Alder/maple	261,505	10%	105,242	19%	29,974	29%	396,720
Aspen/birch	3,231,745	4%	3,391,596	4%	1,770,840	7%	8,394,181
California mixed conifer	1,207,106	7%	2,998,424	4%	952,582	8%	5,158,112
Douglas-fir	8,527,544	2%	9,832,292	2%	3,603,743	3%	21,963,579
Elm/ash/cottonwood	307,231	11%	342,658	9%	56,007	30%	705,896
Exotic softwoods	2,766	78%	461	99%	0	0%	3,227
Fir/spruce/mountain hemlock	7,891,108	2%	13,248,240	2%	7,291,903	3%	28,431,252
Hemlock/Sitka spruce	1,074,185	6%	1,138,310	6%	3,798,888	3%	6,011,383
Loblolly/shortleaf pine	1,393,124	5%	2,042,821	3%	38,211	32%	3,474,155
Lodgepole pine	3,633,316	3%	6,520,603	3%	1,147,142	7%	11,301,062
Longleaf/slash pine	532,953	7%	529,552	7%	138,918	15%	1,201,424
Maple/beech/birch	435,222	7%	2,903,074	2%	43,591	29%	3,381,888
oak/gum/cypress	198,062	11%	338,377	9%	10,959	47%	547,399
oak/hickory	1,795,135	4%	6,040,503	2%	890,287	6%	8,725,925
oak/pine	605,030	7%	1,279,550	5%	94,621	18%	1,979,201
other eastern softwoods	46,519	28%	15,630	56%	0	0%	62,149
other hardwoods	504,810	9%	183,747	15%	33,623	35%	722,180
other western softwoods	2,768,472	4%	1,758,217	5%	543,706	10%	5,070,396
pinyon/juniper	8,155,699	3%	14,863,446	2%	9,123,484	2%	32,142,628
ponderosa pine	4,632,835	3%	6,450,428	2%	1,388,256	5%	12,471,520
redwood	0	0%	11,819	65%	9,876	75%	21,695
spruce/fir	1,092,310	9%	2,052,148	9%	755,900	17%	3,900,358
tanoak/laurel	578,117	8%	210,910	16%	133,529	18%	922,556
tropical hardwoods group	12,131	61%	0	0%	5,628	105%	17,759
western larch group	809,060	8%	207,384	12%	152,832	17%	1,169,272
western oak group	2,315,411	4%	872,005	8%	17,197	56%	3,204,613
western white pine group	69,982	28%	81,530	25%	20,403	48%	171,915
white/red/jack pine	766,072	6%	572,568	7%	60,707	20%	1,399,347
woodland hardwoods	4,198,427	4%	2,120,600	5%	545,584	10%	6,864,611
nonstocked***	8,672,486	2%	0	0%	0	0%	8,672,486
TOTAL	65,718,364	1%	80,112,137		32,658,390		178,488,890
* Forest land includes areas meeting the FIA forest land definition, https://www.fia.fs.usda.gov/ . Sample area excludes 3.4 million acres of forested Forest Service land and 27.5 million acres of potentially forested BLM land in Alaska; permanent field plot monumentation is prohibited in Alaska. Forest Service wilderness areas and interior Alaska have not yet been inventoried by FIA but are in progress for inclusion in future inventories.							

What a contradiction and unresolved issue this is. The FS on one hand claims these mature and old growth (MOG) forests are vital for sequestering carbon, ecosystem “services”, critical for rare species and biodiversity, highly valued by public recreationists. Yet in this HTNF EA – the FS appears to use its flawed black box Landfire and other models to claim these forests are “uncharacteristic” and must be drastically fragmented/”mosaicked, disturbed, manipulated, and often destroyed. We Object to the failure of the FS to take an honest hard look at how deeply flawed and arbitrary its modeling and the basis for this expensive and drastic manipulation is.

The FS fails to resolve this highly significant uncertainty – including how many acres (and where) of mature and old growth forest will be impacted by the project. How does the FS define and delineate mature and old growth forests in the Biden MOG process? How does Landfire deal with this? How does the FS use the methodology applied in the Biden admin. effort? How was the Biden calculation of HTNF mature and old growth forest done?

The MOG effort and project outcomes are all new information since the early 2022 EA.

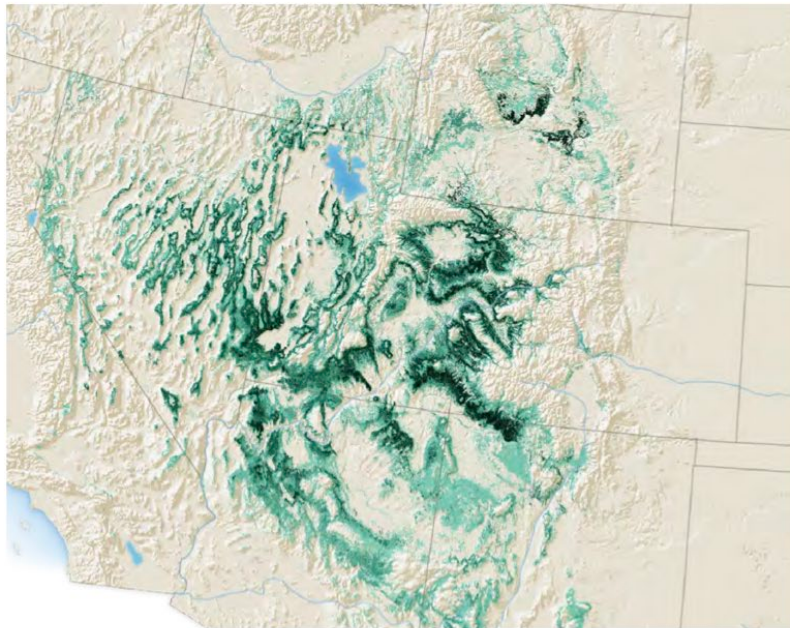
We Object to the failure of the EA and specialist reports to provide information and results including mapping of old growth and mature forests under the Biden administration's "old growth initiative" and EO. Where are all old growth and mature forest sites and groves across the project area?

See: <https://www.fs.usda.gov/sites/default/files/pinyon-juniper-fact-sheet.pdf>

Note that this USFS tree Forest Atlas document shows extent of Utah juniper, but inexplicably not delineate Pinyon Pine outside the Colorado Plateau. The FS provides no adequate mapping of the actual currently existing tree species vegetation on the land. We are very concerned the mapping in the EA is based on modeled vegetation- not the real world. An actual baseline of species presence must be provided.

https://www.fs.usda.gov/sites/default/files/fs_media/fs_document/Forest-Atlas-of-the-United-States.pdf

UTAH JUNIPER (*Juniperus osteosperma*) is native to the Southwestern United States. It thrives on very dry sites, with hot, dry summers and cold, wet winters. Utah juniper typically grows on alluvial fans and rocky hillsides with shallow, alkaline soils at elevations ranging from 4,000 to 8,500 feet. Juniper berries, which are actually cones, are used to flavor gin.



FOREST ATLAS OF THE UNITED STATES

Initial Treatment Areas Lack Hard Look

The new 2025 appearance in this process of “initial” treatment areas is all new information since the early 2022 draft EA, and there was no public comment on them, and the FS had considered no alternatives. This seems like the situation in a Nevada Sage-grouse case where ranchers and miners sued the BLM about including a mineral Withdrawal at the Final EIS stage, but had not allowed public comment on it, and the Mineral Withdrawal as part of the 2025 Sage-grouse plans was overturned.

It appears that the FS may have just applied the label “initial” on vast areas to create the illusion of having some specific projects. We Object that there is still no hard look at the environmental baseline and impacts of each “initial” or other project sites, and this loose uncertain programmatic type CBM “analysis”. As explained below, crucial baseline information and conflicts with habitat needs and population persistence and sustainability of sensitive species, migratory birds, Sage-grouse, Pinyon Jay, Pygmy Rabbit, aquatic species persistence are lacking. Even in these ITAs, the mapping provides only limited information, and no real NEPA analysis. The psychedelic colors are too similar to one another in maps to allow veg community types to be readily discerned, and the specific “treatment” amount and methods to be used in each ITA and veg community are not specified for each community and land area. There is no information on mature and old growth forest and shrub areas or unique vegetation or other features in these sites. The ITAs are also lacking in any environmental setting and context -some appear to be based on WUIs. Many appear to be in areas where the FS has conducted various past supposed “Fuels” projects telling the public fire risks were being addressed, Others are in the middle of nowhere, with no explanation for why they were specifically selected. For example, are there cow forage deficits in the lands selected in the Santa Rosas – so the FS wants to burn sagebrush – so that’s the reason for the Long Valley and other projects? And all the ITAs then lack an environmental setting and context analysis. For example, there is no information on the current presence (or lack) of sagebrush cover contiguous with ITAs and project areas, or the presence of previous BLM or FS treatments, or wildfire impacts, or amount of flammable annual grasses – cheat, medusahead, bulbous bluegrass- that already is present in the landscape including immediately adjacent to the targeted sites. Nor at the existing “treatments” in or adjacent to many of the ITAs. There is no hard look analysis at the project impacts to the local population of Sage-grouse, Flammulated Owls, Pinyon Jays, Northern Goshawks, and other rare and declining species. There is no information on the status and trends of populations of species of concern in the affected local and regional areas. There is no information on the often very significant adverse effects of livestock grazing and facilities on the sites, and grazing impacts on native biota, watersheds, land health, etc. There is not even any information on ecological conditions of the often very scarce and livestock grazing-degraded and stressed riparian areas and water flows in these sites.

The EA lacks adequate mapping and baseline analysis of:

- Vital terrestrial and riparian areas and areas and habitats. This includes springs in and surrounding the huge “initial” project areas; These include: Drainage networks. Perennial, Intermittent, Ephemeral reaches. Information on flows and any records of flow reductions or losses, Elevations, showing steep, rugged topography, aspect.

-Specific current stand and site vegetative species composition, age class, wildlife habitat values, and how much stand conversion of vegetation communities will take place.

The current extent of cheatgrass, bulbous bluegrass and other highly invasive flammable exotic species across HTNF lands and currently in each treatment area proposed and “uncharacteristic” areas modeled by Landfire.

The current extent of the battery of existing agency native forest and shrub killing manipulation treatments in the affected Ranger Districts, and no hard look at their current ecological condition and weeds. – For example, the cheatgrass- causing burns the FS has done in the Ely RD – including in Quinn Range Elkhorn country, in the White Pine Range, and the Schell Creek Range just west of the northern Snake Range.

The actual species composition of vegetation communities and sites chosen for project destruction and/or stand conversion.

Areas of past wildfire burns within the past 30 years including on adjacent BLM lands. For example, in the areas if Mountain City, Jarbidge, Santa Rosas, in the area of Austin, etc. A hard look must be taken at past wildfire locations and impacts across agency boundaries to determine the dire straits a species habitats and populations may already be in – within a local population area.

Areas of all past “treatments” on USFS lands, and adjacent BLM lands – such as the scorched earth large-scale Ely BLM deforestation projects in PJ and Pinyon Jay habitat loss. Also, BLM sagebrush rollerbeating, mowing, re-seeding with exotics, etc. in the wake of these “treatments” too. The host of existing Pinyon Jay habitat destroying projects in the Bridgeport region, the adverse impacts of the FS Indian Creek project in the Monitor region, etc.

Mapping of USFS and BLM projects already authorized, and areas where the full array of “treatments” in decision documents have not yet been carried out.

The Fire EA mapping does reveal that the FS plans to destroy even more irreplaceable habitat in the Jarbidge watershed – Bull Trout and RBT habitats – beyond the Deer Creek project, and also beyond the East Humboldt-South Ruby area – in fact it appears the FS plans to destroy the largest block of remaining less fragmented mature conifer forest.

This mapping highlights that FS plans to destroy vast areas (nearly the entire landscape) in the Monitor-Toquima- Hot Creek Range region – where a significant area of mature and old growth forests still remains. This is also where the recent HTNF ne livestock grazing sacrifice areas were authorized - in the old Hage allotments in the Monitor-Toquima project. Here the FS authorized “Forage Reserve” sacrifice areas to open vacant grazing allotments as “forage reserves, and also imposed permanent grazing, and even more livestock facilities on top of Sage-grouse and Pygmy Rabbit habitats at the very southern extent of their range. All this was authorized in a recent ROD. It certainly appears this Fire EA is a connected action –with it’s planned plethora of treatments, including numerous Fire EA ITAs right by the Monitor-Toquima grazing EA Hage allotments. The Monitor-Toqujma EA was undertaken so there is some place

to put cattle when the FS is burning up/masticating to 3 inch deep piles of chips – across the regions’ beautiful PJ forest Pinyon Jay habitats, along with sagebrush, mountain shrubs and even highest elevation native plant communities. The Monitor-Toquima-Hot Creek region is shown in the Biden MOG mapping as containing the largest remaining block of mature and old growth forests in Nevada.

We Object to the failure to consider all of these significant impacts of the ITAs and the other vast unrevealed Landfire modeled CBM projects that will take place under this EA’s umbrella--- to HTNF MIS/sensitive/ESA listed species and species proposed for listing, migratory birds, public uses, watersheds, water quality and quantity, wild natural unroaded lands, cultural sites and values,

New circumstances also include tghat the Greenlink projects are now finalized, the BLM Solar FEIS and ROD (allocated 31 million acres for industrial solar– with 1/3 of those acres in Nevada and often immediately adjacent to areas targeted for ITAs or found “uncharacteristic” under this Fire EA. Solar mapping shows lands allocated are touching ITA and “uncharacteristic” lands in the Monitor and many other region and such development will greatly impact species like sage-grouse, MIS big game species, native raptors who may nest on the HTNF through loss of essential prey habitat, etc.). This massive proposed industrial development of BLM lands in the region, new mining and mining legislation threats, ever-mounting scientific information on the grave threat of cheatgrass and exotic bromes caused by cattle grazing disturbance, the fact that climate change is exceeding predicted heating rates, threats of new wildlife diseases decimating sensitive and important species, new lithium, gold and other mining claims devouring lands in the region and threatening ground and surface water, petitions for ESA listing of species impacted by this project and inhabiting these lands, continued development and grazing blows to Sage-grouse habitats and populations, etc.

FS Casts Aside Necessary EIS and Uses Slanted Analysis and Circular Reasoning to Try to Claim No Significant Impacts

Preparation of an EIS is essential, and we Object to the failure to prepare an EIS. The Humboldt-Toiyabe Forest shirked informed public involvement by attempting to use a highly uncertain non-site specific Condition-based Management style EA across 5 million acres of NF lands. The FS never considered anything other than a single highly damaging large-scale disturbance alternative that is based on ever-changing black box Landfire and other models for a project extending over the next 15-20 years,.

Further, the FS promises all sorts of beneficial outcomes, preventing fires, making vast landscapes ‘resilient and resistant’, being beneficial to Sage-grouse and watersheds etc. From the FS point of view, the project seems quite significant, with major claimed “beneficial” impacts.

The No Action alternative suffers from an inadequate ecological condition and unbiased project threat analysis and baseline. The HTNF LRMPs (separate Humboldt and Toiyabe plans) were based on current conditions in 1986 - ignoring climate change stress and 40 years of new development, flammable weed expansion due to past “treatments/grazing/roading. The on the

ground current ecological conditions and extent of livestock, or other degradation, number and impacts of existing illicit routes and uses in Roadless areas, and actual current natural conditions in them are unknown across nearly all the Fire EA lands and values impacted

The Forest must take a hard look at the full environmental impacts of this Project. A court will enjoin a project where the agency has failed to demonstrate compliance with binding legal standards. *Native Ecosystems Council v. U.S. Forest Service*, 418 F.3d 953, 961 (9th Cir. 2005). A court will also enjoin a project if the agency fails to discuss an important issue. *Oregon Natural Desert Ass'n v. Bureau of Land Management*, 531 F.3d 1114, 1142 (9th Cir. 2008).

The USFS forsook consideration of a broad body of current ecological science, the great importance of mature and old growth forest habitats for a very large number of sensitive species and migratory birds, the need for maintenance of the current maturing forests in the highly variable 2025 drought and hot temperature-stressed conditions, and the role of forests in mitigating climate change stress, cooling sites moderating conditions, retaining moisture, etc. The EA glossed over serious harms to the outstanding native biota and biodiversity, climate moderating and wild lands values that will suffer irreparable harm and undue degradation if this massive scale risky highly uncertain CBM project goes forward.

Worsening heat with climate change, and more extreme weather events, and drought – all are exerting new levels of stresses on HTNF wild land vegetation communities - making them even more susceptible to irreversible flammable weeds, less able to recover from both agency “treatment” grazing disturbance, more at risk of spring and tiny stream flow water loss - including when combined with uncontrolled and unmonitored levels of cattle trampling impacts and out-dated excessive use standards, harmful periods of use, and many uncertain grazing elements. With elevated site heating and drying/desertification/aridification effects - lands and waters are increasingly stressed by climate change, unassessed grazing and other stresses and impacts acting synergistically to harm project-threatened values, climate change impacts, biodiversity loss – to sensitive and imperiled species viable populations. This and many other concerns raised in our comments on this project to date are simply not examined in a hard look NEPA analysis violating NEPA. We Object to the failure to take a science-based common sense rigorous and fair hard look at each of these significant issues.

We Object to the failure to take a hard look at the cumulative, additive and synergistic threats facing native biota (sensitive species, MIS species, migratory birds, ESA species and many others) in this arid landscape.

There are additional separate project proposed relentless Region 4 and Humboldt-Toiyabe Forest-wide “treatment” assaults on sensitive and rare species native vegetation habitats, on intact wild lands and many roadless areas, and important public recreational sites and cultural sites and values.

We Object that the FS will inflict long-term degrading effects and negative and adverse impacts on roadless areas and their integrity. Project reports describe “long-term” effects as over 10 years. When the FS destroys groves of 200 year old PJ, mature sage 75-100 year old communities, mountain mahogany, or higher elevation 100 year old subalpine fir forested areas,

impacts will certainly be long term. They will certainly be long-term, too when flammable exotic weeds come to dominate the post-Fire EA treatment disturbance. The lack of protective woody cover preventing off-road mechanized use and route development in roadless areas and IRAS will persist for far longer than 10 years., as will bulldozed firelines.

Fire EA Threatens Roadless Lands

We Object that the HTNF's vital roadless areas and their natural values and wildness are under particular assault with the HTNF Fire EA project's major manipulation and disturbance. The EA would allow cutting of trees and motorized use in the roadless areas, potential fireline bulldozing, as well as drastic manipulation of native vegetation communities -nearly all of which the FS models have found to be "uncharacteristic". These actions would make roadless areas much more vulnerable to motorized use, route expansion, use of routes "closed" on paper, and electric mountain bike intrusion ,as woody vegetation and mature forest and sage would be cleared away by the project. There is no current Travel plan information and no enforcement and route closure monitoring to show compliance with Travel Plans and/or unauthorized trail and route proliferation since plans were adopted. There is no information on the current adequacy and enforcement of travel plans. WLD's site visits to the Jarbidge RD, Mountain City RD, Santa Rosa RD, Ruby RD, Bridgeport RD, Ely RD have found routes proliferating all over the place in GRSG and other habitats., and livestock permittees increasingly drive cross-country breaking down sagebrush and other woody vegetation. Nearly all fencelines in open country have unplanned drive-in routes along them – many not on travel mapping. This denuding of mature and old growth woody veg cover will allow motorized use and human disturbance to greatly expand in Sage-grouse habitats, big game wintering habitats, Pygmy Rabbit habitats, and inflict serious new disturbances in sensitive and ESA-listed aquatic species watershed areas. In many areas where the FS a 15+ years ago or so adopted some version of travel plans, the plans allowed various route and trail intrusions in roadless areas – for example, in the Santa Rosa RD.

We Object to the lack of a science-based hard look on how Fire EA removal of woody vegetation will facilitate snowmobile penetration of previously inaccessible areas and habitats for native carnivores and species of concern – and displace, or harm them in various ways. We also Object that the FS does not address how travel plans address snowmobile use across the project area landscape.

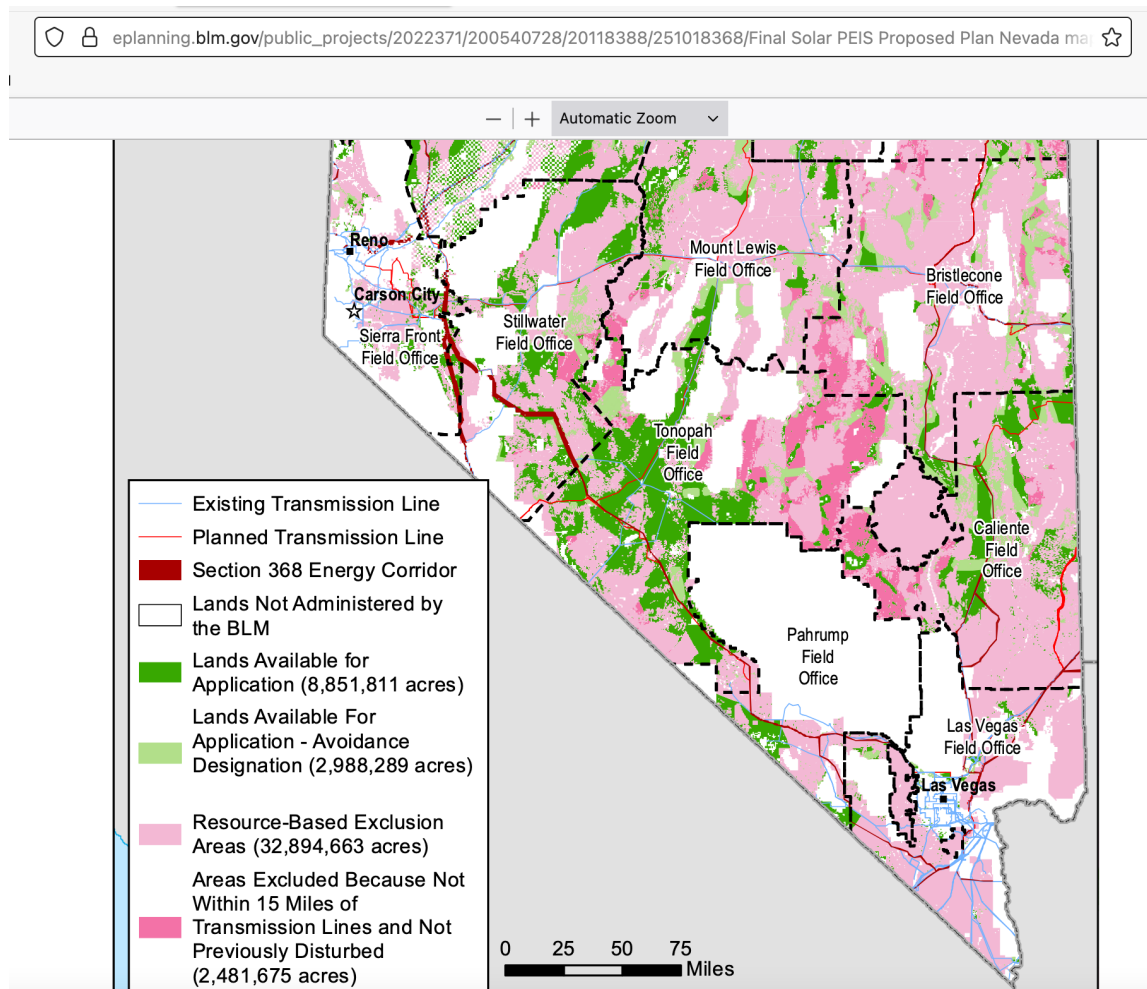
We Object to the HTNF's highly uncertain and controversial Condition-Based Management (CBM) Prescribed Fire EA, that combined with many other FS and BLM projects, will doom species like Pinyon Jay and also sagebrush species including Sage-grouse, migratory birds and many other rare animals and plants. The magnitude and cumulative effects of habitat disturbance and extreme weed expansion risk from large-scale use of fire and mechanical manipulation must be fully assessed in an EIS. This EA significantly harms the Forest land environmental values of biodiversity and persistence of of rare species that it is our groups missions to protect. This adversely impacts our group members recreational (hiking, camping, birdwatching, nature photography), and spiritual, aesthetic and other uses and enjoyment of National Forest lands.

There is also significant new information, and major new threats, since the early 2022 EA comment period significantly impacting this landscape's undeveloped lands, watersheds,

sensitive and MIS species and migratory bird habitats. There are significant environmental changes and new information and threats (rapidity of climate stress changes, ever-increasing cheatgrass/flammable weed risk with hotter temperatures and flammable annual weeds moving upward in elevation. In response to both a Pinyon Jay ESA listing petition, USFWS issued a positive 90-day finding. New wildlife diseases like very lethal and highly transmissible Rabbit Hemorrhagic Disease (RHD)- a quite deadly leporid disease that threatens all native rabbits. Jackrabbits are primary prey species for the Golden Eagle and many other native species, and their numbers have been depressed for years now, and very recently Avian Flu that kills many species of birds and also numerous mammals is now a very new and emerging threat.

The new specter of avian flu has the potential not only to impact bird populations and the disease also now has evolved to potentially impact many mammals. Transmission that foreseeably could significantly impact viability both bird and mammal populations also impacted deleteriously by the Fire EA. There are also major new development threats. As discussed in this Objection

Industrial Solar Development Threat. There is a major looming massive foreseeable habitat loss of migratory birds and other sensitive species in the Austin-Tonopah RD monitor region and other landscapes on BLM Lands under the Solar EA. The Fire EA mapping shows this area is targeted to suffer huge amounts of Fire EA treatments on USFS areas, while BLM lands may be massively development due to the major push for remote-sited industrial solar development as laid out in the BLM Solar EIS. The BLM EIS seeks to greatly expanding solar in the sagebrush and other arid lands biomes, and the ROD allocated 31 million acres as potential for industrial solar.



There are also brewing projects for gold, lithium and other mining activity including active mining projects and a very large number of hard rock mines depleting regional groundwaters and foreseeable loss of spring and stream flows. Yet the Fire EA lacks analysis and mapping of mine claims on BLM and USFS lands, active mining exploration projects, already developed mines, and pending mines in this region. There are now new 2025 large-scale efforts to rush critical minerals - now defined broadly enough to be almost anything through with minimal review.

There is also an expanding geothermal push on Nevada wild land habitats and waters, and existing geothermal expansion like at Ormat's Grass Valley plant has resulted in new powerlines on FS land and significantly impacted a crossroads area for several Sage-grouse populations. Research shows that Sage-grouse are highly sensitive noise and visual disturbance and industrial facilities like geothermal plants and mining can impact leks miles away from the actual site. See Coates et al. 2023 Nevada research (attached) is new information since the early 2022 Fire EA comment period. . Thus, to understand the status of populations and habitats used by the same population of Sage-grouse that uses FS land in an. areas targeted for Fire EA "treatment", the FS must look at what impacts the populations. Plus the Fire EA clearing protective cover will make adjacent land activities MORE visible and more disturbing to the birds.

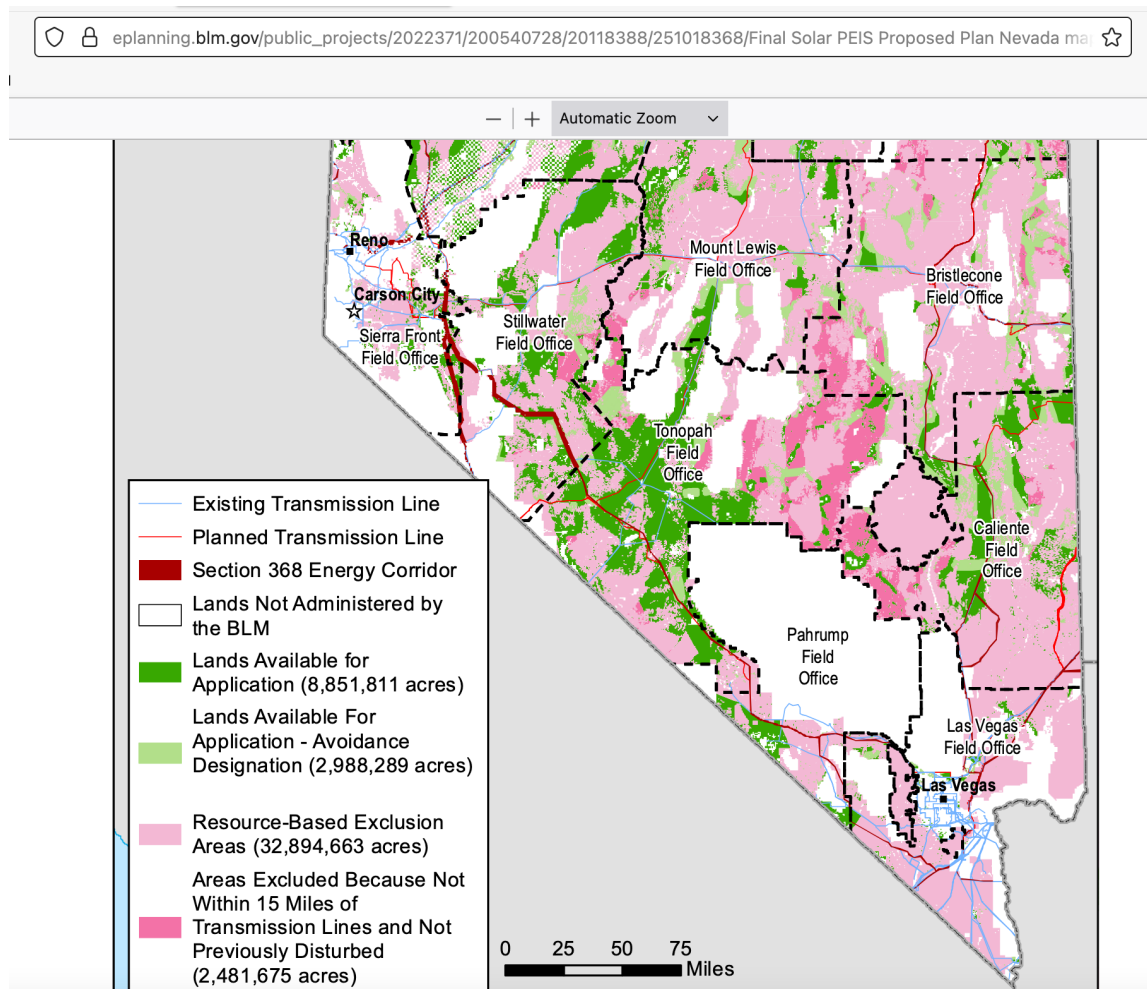
The Fire EA and the spurious “Landfire” models are used to claim that nearly any mature forest and shrub lands (especially the HTNF’s roadless areas that serve as less disturbed refugia for sensitive species and natural untrammelled landscapes) need massive leveling and reduction to dirt and grass and the sparsest of woody vegetation. At the same time,

As WLD and AWR described in our Monitor-Toquima Grazing EA Objection 9 (incorporated by reference into this Fire EA Objection), BLM has allocated adjacent lands for foreseeable solar project sprawl all along the Sage-grouse, Sagebrush Sparrow, Pygmy Rabbit, Pinyon Jay, sensitive migratory songbird, Pinyon Jay habitat on the west side of the Toquima Range and around the southern area of Monitor Range, major sprawl in the Austin area – including in association with the Greenlink transmission line.

On the BLM Solar EIS mapping, green and dark pink areas are identified for solar sprawl and green energy colonialism if the Greenlink transmission is built. There is currently a major push for even more mega-transmission line to turn remote areas of Nevada and the Interior West into energy colonies for distant areas, rather than focus on rooftop solar, distributed energy, conservation measures, etc. The Solar ROD allows:

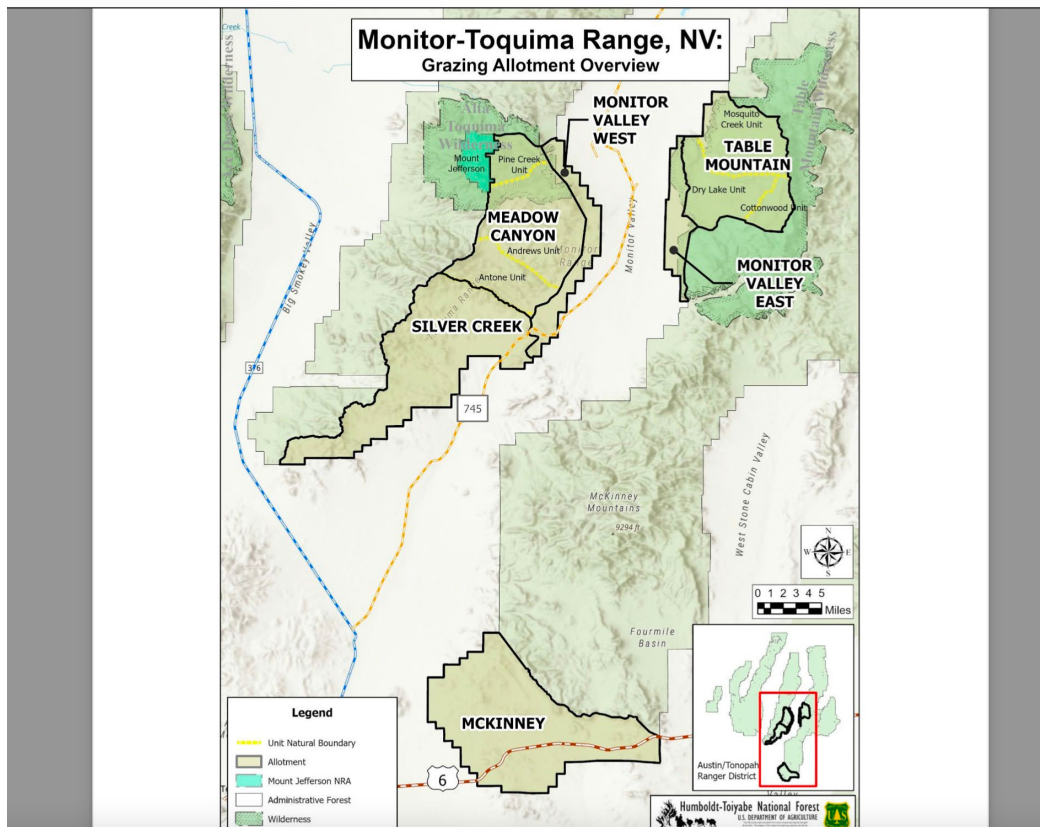
- Make more than 31 million acres of public land in 11 states available for application for solar development and eliminate variance lands as a category.
- Allow solar applications within 15 miles of existing or proposed transmission lines (69kv lines and larger), and beyond that distance on previously disturbed lands.
- Allow development on 10% slopes.

<https://eplanning.blm.gov/eplanning-ui/project/2022371/510>



Note that acreage increased dramatically with the ROD, and the BLM link to depict this no longer works. These projects may also harm and/or block big game migration routes and movement to vital seasonal habitats.

Comparing the BLM 2024 Solar DEIS maps to the M-T project mapping at <https://www.fs.usda.gov/project/?project=59389>, we see that the solar DEIS Alt 3 indicates lands “excluded because not within 10 miles of a transmission line” – but that could change with construction of additional transmission lines, being strongly pushed by industry at present. If that is the case, the Pine Valley,



Silver Creek and Monitor Valley West, and adjacent Meadow Canyon allotments in the Toquima Range are located right by BLM lands targeted for industrial solar under the BLM 2024 DEIS likely alternative action. So is McKinney Creek allotment in the southern Monitor Range [note that now the HTNF Fire EA ITA project mapping and EA tables shows major treatments right by these areas]— and if transmission lines were to be built, the dark pink BLM lands in the Solar EIS Alt. 3 map would be right by Table Mountain and Monitor Valley East allotments. Note that the sacrifice/reserve allotments under the M-T EA proposal are already very questionably grazable due to the lack of fencing between adjacent BLM land. Development of industrial solar in this region - besides having a drastic impact on many sensitive and MIS/important species habitats, could also hamper wild horse free roaming ability and displace horses from portions of HMA lands - resulting in intensified conflicts with any FS grazing cattle grazing schemes and the WHT lands. Industrial solar could be accompanied by new transmission lines to projects and new access routes and increased use and depletion of local area waters. Now the HTNF Fire EA seeks to burn up/masticate 117,352 acres of portions of McKinney Mountain and other USFS lands in this same area. See Fire EA ITA Tables

McKinney Mountains Treatment Area

Total acres are 117,352 for all McKinney Mountains treatment types.

Treatment Vegetation Type I	Pinyon juniper woodland
Project selection criteria	Wildlife habitat improvement, high value resource areas. Break up fuels continuity to encourage resilience.
Total Acres	45,193
Current condition	Even-aged stands, with ladder fuels. Past prescribed burn project in the Big Ten area.
Desired condition	Uneven-aged overstory, reduced crown continuity and reduction of understory fuels openings in crown cover to generate native grass, forbs, and brush growth
Objectives	No data
Treatment tools	Hand thin and pile, mastication, line production minimal, pile burn with a priority focus on understory burning
Entry sequence	Hand thin and pile or mastication, pile burn, line production, understory burn
Years to implement	Approximately 3 to 5 years
Maintenance cycle	Approximately 10 to 15 years

Marysville Treatment Area

Total acres are 18,144 for all McKinney Mountains treatment types.

Treatment Vegetation Type I	Pinyon juniper woodland
Project selection criteria	Wildlife habitat improvement, high value resource areas. Break up fuels continuity to encourage resilience. Stream management of watersheds for Lahontan cutthroat trout
Total acres	8,544
Current condition	Even-aged stand with ladder fuels
Desired condition	Uneven-aged overstory, reduced crown continuity and reduction of understory fuels openings in crown cover to generate native grass, forbs, and brush growth
Objectives	No data
Treatment tools	Hand thin and pile, mastication, line production minimal, pile burn, with a priority focus on understory burning

Weeks Treatment Area

Total acres are 8,927 for all McKinney Mountains treatment types.

Treatment Vegetation Type I	Pinyon juniper woodland
Project selection criteria	Wildlife habitat improvement, high value resource areas. Break up fuels continuity to encourage resilience.
Total acres	4,630
Current condition	Uneven-aged stand. Extension of prior treatments. Adjacent to the Cloverdale boundary, an area that has treatments already implemented.
Desired condition	Uneven-aged overstory, reduced crown continuity and reduction of understory fuels openings in crown cover to generate native grass, forbs, and brush growth
Objectives	No data
Treatment tools	Hand thin and pile, mastication, line production minimal, pile burn with a priority focus on understory burning
Entry sequence	Hand thin and pile or mastication, pile burn, line production, understory burn
Years to implement	Approximately 3 to 5 years
Maintenance cycle	Approximately 10 to 15 years

Elkhorn-McCann Treatment Area

Total acres are 39,167 for all McKinney Mountains treatment types.

Treatment Vegetation Type I	Pinyon juniper woodland
Project selection criteria	Wildlife habitat improvement, high value resource areas. Break up fuels continuity to encourage resilience.
Total acres	16,298
Current condition	Even-aged stands, with ladder fuels. Past prescribed fire projects in the Elkhorn area.
Desired condition	Uneven-aged overstory, reduced crown continuity and reduction of understory fuels openings in crown cover to generate native grass, forbs, and brush growth
Objectives	No data

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We note that the Fire EA acres for McKinney treatments don't add up – are there additional ITA or other projects not shown in the Fire EA Tables or mapping to total 117, 352 acres]?

How much of this is mature forest? What type? Have stand inventories been done? How much stand conversion will result – both here and in all the other ITAs under this EA? How much is old growth forest – and of which types? And now the FS has flung a significant McKinney Mountain area open to grazing in the fire EA. So grazing increases at the same time massive devastating treatments focused on killing PJ and destroying Pinyon Jay habitat are being finalized by the FS. We Object to the failure of the FS to provide sufficient suite-specific information and analysis needed to understand the Fire EA's added major threat to wildlife habitats and populations big game herds, migratory birds, wild horse herds, sensitive species, watersheds, wild lands, etc. that are also threatened in the very same land area by significant USFS grazing disturbance and other activities, as well as immediately adjacent new allocations for major industrial solar development.

No Hard Look at Significant Roadless Area Harm and Threats

We Object to the failure to conduct an EIS to address the colossal scale of adverse impacts to HTNF Roadless Areas that are treated as sacrifice zones for massive native vegetation community manipulation, fragmentation and destruction of natural, scenic, biological, cultural, unroaded, minimally trammled and other irreplaceable values under the battery of treatment disturbances proposed in this mere EA.

The FS states:

“There are 342 roadless areas totaling approximately 3 million acres across all ranger districts. This is about 60 percent of the National Forest System lands outside of designated wilderness (the project area). Landscape analysis using LANDFIRE shows that about 84 percent of this area is at moderate to very highly departed. Inventoried roadless areas on the Humboldt-Toiyabe National Forest range from rural-urban to primitive, but most areas provide a semi-primitive non- motorized experience.

Is ”very highly departed” synonymous with old growth? Or mature forest or shrubland?

Roadless lands are vital refugia for beleaguered native wildlife species, migratory birds and often experience much less human disturbance (displaces animals, stresses animals driving them into sub-optimal habitat, may increase predation risk, etc.). They are representative areas for understanding natural ecosystem processes. They are also the lands least likely to suffer human fire suppression. Yet the HTNFs severely flawed Landfire and other modeling and claims they are highly deviant, uncharacteristic, and have “strayed” from the modeled ideal – which is the modeled supposed pre-settlement fire intervals. But instead of considering if it’s modeling schemes are wrong, the FS Fire EA proceeds to target vast IRAs, including with expensive Pinyon Jay and Sage-grouse habitat destroying ITA treatments. How many ITA treatments are located in portions of IRAs? Where is mapping of all HTNF IRAs at a scale where the projects can be overlaid and understood?

There are 342 HTNF IRAS. Under the EA, nearly all these roadless acres supposedly needing massive expensive agency manipulation “treatments”. This makes no sense – but does further expose how flawed and deficient the FS modeling is, and that is appears designed to maximize expensive treatment modification of wild landscapes, not actually try to attain actual pre-settlement fire intervals.

The FS project is a massive treatment-industrial complex assault on wild unroaded landscapes and the refugia they provide for sensitive and MIS species, migratory birds and other biota of concern – in a landscape under siege from industrial solar, transmission line, and major hard rock mining, livestock grazing and hotter temperatures and other effects of climate change stress.

Roadless areas have an essential role in protecting watershed processes and maintenance of perennial surface water flows in the driest state in the Nation – all in the face of mounting climate stress and ever hotter temperatures. These hotter temperatures, where weeds have an advantage, also make it more difficult for lands to buffer climate stresses and harder to recover after disturbances - like the battery of Fire EA projects. This is made even worse since these areas also suffer livestock grazing impairment - promoting weeds, degrading upland and riparian sensitive, MIS, and ESA-listed species habitats. HTNF Roadless lands often lie in stream

headwaters areas and steeper and more rugged terrain. This heightens risk of fire escape and spread. This heightens risk of post-“treatment” erosion and soil loss in winds as runoff significant concerns. We Object to the failure of the EA to take a serious, honest, hard look at all of these major ecological concerns.

There is a shocking lack of baseline data and analysis of the current health and ecological condition of all the IRA and landscape-wide affected watersheds and drainage areas that may be targeted by this mammoth Fire EA project – from native riparian vegetation and aquatic biota present to demarcation of perennial vs. intermittent vs. ephemeral drainage networks, to effects on perennial spring and stream water flow rates and volumes of all riparian areas, to water quality data and analysis. We Object to the failure to provide the necessary riparian and aquatic habitat and uplands ecological conditions assessments for all impacted watersheds. This is needed to understand if these areas can withstand the major disruption and disturbances that this uncertain project may inflict – coupled with other additional USFS and BLM large-scale vegetation manipulation projects, and a rash of energy and mining development too- that may also foreseeably be inflicted in the same watersheds.

The FS claims re: IRAs: *“the effects of prescribed burning associated activities on roadless characteristics are minimal. Short-term effects to air resources, opportunities for solitude, and the undeveloped nature of the roadless expanse may be perceived by some forest visitors while implementation activities are taking place. Small stumps and slash piles will detract from the natural appearance of the landscape in local areas where slashing and non- commercial thinning occur but will not change the overall character of the roadless expanse. The diversity of plant and animal communities and their habitats will be improved over the long-term, and negative effects from potential disturbance and fragmentation will be limited and short-term. Landscape character and integrity and the capability of the area to support natural ecological processes will be improved over the long-term by re-introducing fire. Effects of the proposed action would occur at the burn area scale and of low intensity, as per the application of design elements during burn plan development, and the implementation plan prior to implementation. Effects to wilderness attributes are the same as described under “Wilderness Study Areas” below.*

As described in the implementation plan – if mechanical activities are needed to conduct prescribed burning in an inventoried roadless area an additional IRA-specific review would be conducted to ensure unique roadless characteristics or features of that location are considered and addressed. [What are these unique features in all IRAs?]

The proposed action meets all applicable forest plan standards and is compliant with the 2001 Roadless Area Conservation Rule (36 CFR Part 294, Subpart B (2001)). The proposed tree cutting, which is limited to pre-commercial thinning or hazard tree removal, in inventoried roadless areas is incidental to activities not otherwise prohibited (for example, prescribed burning) and falls into the following exception in the 2001 Roadless Rule: 36 CFR section 294.13(b)(1)(ii) (2001):

36 CFR section 294.13(b)(1) (2001) – The cutting, sale, or removal of generally small diameter timber is needed for one of the following purposes [ii below] and will maintain or improve one or more of the roadless area characteristics as defined in section 294.11.

(ii) To maintain or restore the characteristics of ecosystem composition and structure within the

range of variability that would be expected to occur under natural disturbance regimes of the current climatic period.

(ii) To maintain or restore the characteristics of ecosystem composition and structure within the range of variability that would be expected to occur under natural disturbance regimes of the current climatic period. [the “range of variability” is seriously at issue in this Objection, as the FS uses black box modeling to claim nearly all lands have “strayed” outside this, and deviant and “uncharacteristic”. EA p. 29.

The Fire EA actions certainly do not qualify as “incidental” – what specific limits will be placed on tree removal/age and size class of trees removed/chipped/burned up, removal of mature and old growth trees and shrubs and other project action\ns.? This highly generalized CBM EA does not provide site-specific info needed to determine the scale of mechanized vegetation removal that would foreseeably occur, access routes used, cross-country soil/veg/habitat disturbance activity areas in IRAs, and much else. It also does not assess the collateral damage this mechanized activity may cause – including injuring trees and/or injured tree sap drawing insects in to attack any “leave tree/don’t burn” sites – such as pockets of habitat around raptor nests, or possibly old growth groves – though is no mandatory protection of them in this multi-decade open-ended CBM treatment project.

Why is the FS worried about “hazard tree removal” in roadless areas – unless there are a lot of illicit and illegal routes in the roadless area and/or the FS has authorized all kinds of routes in the roadless areas – and thus is degrading their quality and attributes. This must be assessed, as large-scale burning and mechanized Fire EA project activity will take place in combination with all the other human mechanized activities that may be occurring in these areas. There is no detailed mapping of authorized vs. illicit routes and developments in roadless areas. For example, in areas of the Jarbidge and Santa Rosa RD, there are routes all over the place, including very minor routes along a host of fences and associated with livestock water projects and driven far along ridges for salt/supplement feeding that may not be authorized. Route signs are often downed or run over. We Object to all this lack of current baseline information.

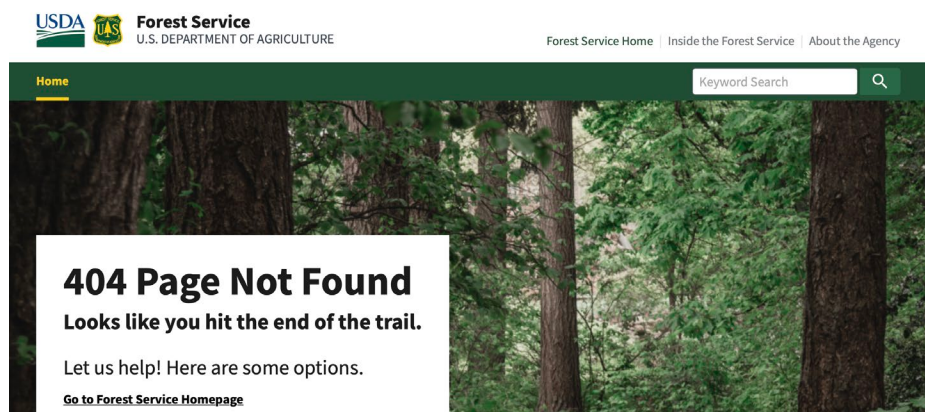
We Object to the lack of current information on travel planning and monitoring of compliance with existing plans across the Fire EA landscape; lack of hard look data and analysis of existing road and routes and trail densities in all Roadless areas foreseeably impacted by the project; mapping and analysis of illegal routes in all areas and especially Roadless areas; an analysis of how masticating, burning, chain-sawing will make existing routes in Roadless areas even more visible, more likely to displace wildlife further, and more likely to alter, degrade and diminish natural and other roadless land values., and mar and scar their visual qualities.

Current information on the route and mechanized use baseline and impacts of existing intrusions in IRAs must be fully assessed in a Supplemental NEPA analysis. We Object to the failure to conduct all of this essential hard look NEPA analysis. We also Object to the lack of current analysis of illicit routes since any travel plans were authorized, compliance (or violations) of route closures and other necessary information to understand if FS assurances with this project are just empty words. Please also provide detailed analysis of risk of increased routes and intrusions in the project aftermath in all of the project area IRAs – and this certainly necessitates an EIS.

We Object to the lack of analysis of foreseeable costs of this project – including costs of potentially escaped fires, costs to attempt (futilely) to deal with irreversible flammable annual grass infestations in the aftermath of this overlapping series of treatment disturbances - including in grazing-disturbed often impaired lands, habitats, and watersheds.

Various Project Concerns

We Object that the FS fails to take a hard look at the magnitude of threats to the same Sage-grouse, Pinyon Jay, Northern Goshawk, Dusky Grouse, aquatic species populations as the Fire EA targets. The EA links to a Forest page which links to the SOPAs, but when one clicks on the SOPA project link, one gets a 404 error. This persists months after the FS broke its old website links – existing project links have not been restored as of June 2.



We Object that no hard look is taken at how the project threatens waters and watersheds (including those home to ESA-listed species) with chemical and heavy metal pollution and chemical contamination - for example, pollution with fire retardants that may be used as a matter of routine to try to establish a fire line before EA burning begins, or applied in unanticipated areas if EA prescribed fires rage out of control. Note that a new lawsuit was just filed by FUSEE in 2025 over heavy metals and other toxics of concern in retardant that may infiltrate water supplies. <https://nationalforestadvocates.org/fsee-files-lawsuit-over-heavy-metals-in-fire-retardant/>

“The study reveals that more than 800,000 pounds of toxic metals have been dumped onto national forests during aerial fire retardant drops over the past decade, toxic contamination that will harm the natural ecosystem, especially endangered and threatened species as well as water quality”.

FUSEE has long questioned the effectiveness of retardant use. There is no hard look at potential toxic herbicide use caused directly as a result of weed proliferation after all this disturbance – what specific chemicals are to be applied, how much chemical, the chemicals and their carriers/adjuvants/breakdown products impacts on the environment/biota/clean water, impacts to native herbivores like Sage-grouse and Pronghorn, whether any of these substances contain Forever Chemicals/PFAS, etc.

We Object that the vegetation specialist reports don't reveal the types and amounts of chemical herbicides that have been used in the past in this landscape, and across the Forest in the aftermath of major "treatment" activities and also that are routinely used, or the potential threats they pose to native biota - aquatic biota, amphibians, birds, etc. Nor do the EA and reports reveal the amount and chemical types (and carrier and adjuvants and other associated chemicals) foreseeably to be applied. Have these chemicals been applied in the past? When, where and how has drift occurred? What state regulatory controls are there? What have the effects been on non-target species? How have these effects been monitored? When, where and how much of each chemical has been used in the past in relation to treatments? How have past treatments affected the need for herbicide use? How do livestock grazing disturbance, the road network, and recreational uses, contribute to the use of chemical herbicides? Note that the disturbance from this project is highly likely to result in new weed spread in IRAs and crucial watersheds and wildlife habitats – especially as grazing compounds the weed problems. See Belsky and Gelbard (2000), Chuong et al. 2015, Williamson et al, 2019, Kaufmann et al 2022 and 2023, Molvar et al. 2024. Also Belsky and Gelbard (2003) - all attached) describing livestock as weed vectors and causing degraded conditions that favor weeds. Roads are conduits for exotic species, and cows walking roads and then moving cross-country exacerbate this risk, as do livestock facilities, salt/mineral sites and other areas of livestock concentration. Further, roads and firelines act as weed conduits – and this project may involve bulldozing to "improve" access routes for fire equipment with very likely bulldozing and smoothing existing roads as a project is taking place. Also, equipment operating with this project will doubtless run through weed infestations and transport weed seeds across areas where off-route driving is taking place – from mastication machines to FS fire trucks and large expensive RAZR ATVs used by the agency. We are very concerned that although the Forest on paper claims to practice integrated weed/vegetation management, agency treatments rely overwhelmingly on herbicide applications without strong preventative actions.

Passive restoration practices such as reduced or curtailed grazing in disturbed areas susceptible to weed infestations to prevent infestations is not an agency practice. The grazing program that extends over, and disturbs, same lands as the Fire EA projects operates largely without precautionary controls on grazing that foster weed infestation and spread. This is a critical concern across the project area, because of the high levels of livestock grazing (unrevealed and unassessed) taking place with few mandatory actions and monitoring of actions to limit weed spread. The existing proliferation of roads and often high levels of recreational activities in many areas elevates weed risks and promotes herbicide use too. We note that these toxic chemicals are typically used in areas along routes and cleared site (ease of spraying), and roads serve as conduits for weed infestations, and cows loaf along roads and then transport weed seeds in guts, mud on hoofs, lodged in their pelage --- into the surrounding lands).

We have seen Forest herbicide use create mile after mile of ugly and stinking dead vegetation. Odors of Round Up, Tordon or other chemicals may persist for prolonged periods of time and be offensive to the public, or harmful to chemical-sensitive members of the recreational public.

We Object that the agency does not enforce effective integrated weed prevention or its current supposed use of EDDR, nor adequately assess and mitigate the adverse effects of what is largely a "Spray and Walk Away" approach. For example, livestock are herded routinely from weed infested areas onto public lands without preventative quarantining or other measures. Livestock

are routinely turned out on lands with known weed infestations. Now proposed vegetation “Treatments” may take place in areas with known infestations highly likely to expand and dominate with added Fire EA disturbances. We also Object to the Fire EA’s lack of hard look analysis of herbicide use, and contradictions - where one part of the project claims herbicide use isn’t part of this project, and another says it as.

We Object to the failure to provide current ecological terrestrial and aquatic/riparian ecological health condition information, applicable grazing use standards and monitoring shoeing compliance, and analysis of the current livestock degradation impact footprint to the project area landscape caused by the large amount of livestock grazing disturbance authorized across the Forest.

We Object to the FS failure to adequately address this basic comments. The FS states re: Response to Comment 36 – Wildlife”:

“The commenter(s) noted that wildlife analysis information for migratory birds, sensitive species, management indicator species, and species of conservation concern was not

provided for the public to review to determine whether conclusions provided in the preliminary environmental assessment are valid.

Response

The Humboldt-Toiyabe National Forest has not gone through a forest plan revision and as such, does not use the species of conservation concern classification. However, all regional forester's sensitive species are analyzed in respective biological evaluations. A list of those species can be found in the biological evaluation as well as the project record.

We Object to the FS using the deeply flawed Landfire and other information to launch major habitat destruction projects in migratory and resident declining avian species habitat – even California Spotted Owl habitat.

The FS states:

the California spotted owl and its habitat are analyzed in the project-level biological evaluation. Up to five percent of protected activity centers for California spotted owl and northern goshawk may be waived to allow use of early season prescribed fire to meet project objectives if not practicable outside of this timing restriction. A maximum of five percent of protected activity centers impacted in a given year would not have significant effects on populations of these species ...

Please determine why in the world - since this radical HTNF manipulation disturbance can be planned years in advance” - there is any “need” for spring burning in activity centers (which would inevitably result in burning up bird eggs, nests, chicks; subjecting them to lethal smoke inhalation; burning mammal young, etc.) anywhere. It will have a host of adverse impacts to many species – destroying the habitat the animals need and “Taking” birds and mammals thus further impacting populations.

Please also explain why there is any need at all for further destroying, disturbing and fragmenting Spotted Owl habitat. Please specifically describe, map and provide current site-specific inventories for all “protected activity centers”. What is the distribution of all these areas, and their importance to the population? Is Barred Owl shooting going on here, too or just in Northern Spotted Owl habitats? How much collateral killing of Spotted Owls may result? How much logging (including salvage logging) - and other vegetation manipulation - is going on and/or already authorized. What is the total population of California Spotted Owls on the HTNF? In total? What is the population trend? We understand that California is currently preparing a similar Fire EA to this HTNF one – for much of the central and southern areas of the state- and it is likely to result in even more additive loss for rare species.

Will this burning be allowed in critical habitat? Please provide detailed mapping and analysis. How much forest tree cover is present in each “activity center”? What are all the existing disturbances and planned disturbances in each “activity center”. How connected are they currently?

We Object to the FS relying on nearly 40-year old Forest Plans for this massive land area and extensive disturbance EA. An immense number of current habitat and forest value threats were never considered in the ancient and out-dated Forest Plan allocations. But instead of updating its Forest Plans taking into account climates tress, the reality of hotter temperatures, drought risk

and yo-yo-ing weather, weather extremes, and even “heat domes”, and the unprecedented stress this exerts on terrestrial and aquatic systems and species (more rapid water evaporation, conditions favoring weeds over native veg, etc.) - and especially taking into account the growing number of imperiled species and the degree of their habitat loss and population declines – for example, 85% population loss for Pinyon Jays, 80% for Sage-grouse, and the nose-diving migratory bird losses (see Rosenberg et al. 2019 and other more recent papers showing the decline continues) - the FS continues with old extractive and commodity use allocations. The 2019 Rosenberg et al paper describes the great declines in the North American avifauna, including in forest and grassland birds. Billions of birds have been lost - and there are widespread declines in bird populations in North America. The HTNF Fire EA will worsen the plight of many already declining migratory birds.

What is the actual chance of a fire starting in forest areas to be treated? Isn't it very low? The FS can't predict where fires will start. Further, as papers by Baker et al. 2023, Hanson et al. describe, chain-sawing trees down, masticating “mosaics” and openings, and the huge battery of scorched earth burning types the Fire EA employs will make the HTNF forest and shrub lands more at risk to fires, including human-caused fires due to ease of off-road access once woody vegetation is reduced to ashes. The EA reality is that the actions will result in hotter, drier, windier, weedier sites that dry out earlier in the year and have longer fire seasons. Fires will flash through these areas, as has happened in a large number of wildfires in recent years that burned in heavily “treated” areas of both USF and private lands. By removing areas of moister dense vegetation cover, bulldozing fire breaks, etc. the FS also makes FS lands more likely to suffer off-road mechanized disturbance by humans, catalytic converter fires, recreational activities like target-shooting caused fires, new weed expansion zones, etc. We Object to the FS failure to take a common sense, science-based hard look at these significant ecological concerns.

The FS ignores mounting threats to USFS and adjacent BLM lands. These often expand fire risks, and wildfires that are more likely as a result of all the “treatments” being conducted in carelessly discarding No Action, and in not addressing all the flammable weed, increased human off-road activities, and cumulative and added impacts of grazing use disturbance expansion in the wake of these projects, and states:

“Consideration of No Action. Under the no-action alternative, current trends described above would be anticipated to continue. Limited prescribed fire operations (3,000 acres or less per year) would continue through other past or future planning efforts. Disturbance agents will continue to occur, and wildfire will likely continue to be out of its historical frequency or size for an extended period of time. It is anticipated that the increasing length and severity of wildland fire seasons in the United States will continue. The no-action alternative would take much longer to change existing stand structure or provide opportunities to reduce or alter current fuel conditions that would favor less severe wildfire intensity and effects – particularly in priority areas (see Proposed Action section).

Fuels would continue to increase, except where a stand replacement type of fire may occur. Without more widespread application of prescribed fire, increased forest floor fuels, trees with an abundance of lower limbs, and an understory of younger age classes will continue to develop. The increasing understory creates a ladder of available fuels that can carry ground fire into crowns of the overstory trees. Wildfires in this type of stand would likely burn with high intensity and result in a stand replacement fire where the overstory trees are consumed. These increased

fuel profiles will continue to result in ever increasingly difficult suppression efforts to control a wildfire if ignition occurred. The process of succession occurring within these ecosystems would contribute to larger and more intense wildfires.

Because the current pace of prescribed burning would affect only a very small portion of the forest on an annual basis, the potential effects of no action would likely be amplified over time. Increasing hazardous fuels that propagate larger, more intense wildfires would have a cascading negative effect on air quality, wildlife habitat, and public health. In addition, the potential to adversely affect federally listed or sensitive species, watershed quality, and cultural resources would continue to increase”.

We Object to the failure to provide a proper baseline and apply current science and real world information including stark evidence from how recent large fires have actually burned. in this USFS self-serving discarding of No Action, and claims that only one single course of action will work. The FS completely fails to provide information and analysis on how much hotter soil and air conditions will be with loss of shading woody cover, how much windier at the microsite and landscape level conditions will be, how much more likely sites will become overrun with flammable weeds through which fires flash, how much more quickly sites will dry out, etc. This needs to be revealed in a hard look analysis and EIS. Further, the FS wrings its hands over stand-replacing fires – but don’t these “naturally” occur in many HTNF veg communities?

We Object to the FS casting aside the No Action alternative without a hard look at the current baseline, current science, and the great loss of habitat, wild lands and vital importance of Roadless areas with mature and old growth vegetation in landscape increasingly developed and “treated”/disturbed by agency vegetation killing actions, biodiversity, and watershed cover that will result.

The mapping with this version of the project shows vast “initial” treatment areas. Was this part of the preceding NEPA “action” alternative document? The public did not have an opportunity to comment on these sites, and we Object to that. We also Object to this highly uncertain CBM project - after “initial” treatments – everything is wide open for largescale destruction up to 20 years out without any hard site specific NEPA analysis and public process.

We Object to the enormous scale of the proposed CBM project disturbance – and to the FS heaping multiple disturbance projects on top of one another, and/or right next to a preceding Fire EA “treatment” site – especially as we discuss re: wildlife – the FS claims animals can just move away and there’s available habitat. But that claimed habitat is not identified and . The FS states: *“This project would provide for a range of prescribed fire related activities that include hand thinning, piling, mastication, chipping, and prescribed burning which can be prioritized and scheduled as necessary. This project would authorize a number of these activities across multiple areas each year. During any given year, prescribed fire and the related activities described above may range from 1,000 to 30,000 acres of treatment. The size of individual burn units would be limited by the sideboards identified in Appendix C – Design Elements, specifically design elements 29 and 30”* The aim of this project is to increase the amount of annual prescribed burning each year during the next 15 to 20 years. So 30,000 acres x 20 years =600,000 acres. How long does it take for mature forests of all species types found on the Forest to develop? Don’t many - and arid forest and shrub communities have extremely long fire return

intervals – based on current science - and not the flawed LandFire modeling schemes that rely on extremely short fire return/disturbance intervals to justify dooming complex native forest and may itself subsequently be destroyed under the Fire EA actions. shrublands to massive and expensive disturbances? Basically -doesn't it take 100 years+ to develop a mature functional Forest? 200 years? 300 years? How is climate change stress and hotter temperatures likely to make post-major manipulation action "recovery" even more uncertain? And isn't there now increasingly abundant research showing that under climate duress, "historic" vegetation communities and stands may never recover, and be replaced by weed lands and/or different vegetation types? Basically -stand conversion to weeds.

We Object to the failure to discuss the grave threats of large-scale regional additional "treatment", logging, thinning and expanded grazing from a series of legislative efforts currently in Congress or by Executive Order - such as Rep. Westerman's "Fix" Our Forests Act and other legislation that will foreseeably result in large-scale additional habitat and population losses and watershed disruption, as well as so-called "targeted grazing" and grazing increases to supposedly stop fires.

We Object to the failure to take a hard look at a host of foreseeable large-scale habitat loss and fragmentation, watershed disruption, highly foreseeable flammable weed expansion, habitat loss and fragmentation - due to innumerable changes being made that undercut NEPA, and fast-track projects to the degree that an informed analysis can't take place.

We Object to the failure to assess the uncertainty and lack of oversight and compliance monitoring that the major reductions in USFS personnel will foreseeably have on project implementation, staff for oversight and monitoring pre and post massive native forest and shrub community disturbance/simplification/fragmentation – and to be able to detect and deal with significant harms that develop (irreversible flammable and other weeds, erosion gullying from accelerated runoff, off-road driving and mountain biking all over burned lands, livestock degradation of "treated" watersheds and upland and terrestrial habitats including the EA's projects that are crazily planned to be carried out over the next 15-20 years without any further public process and NEPA review, etc. etc.

The EA states that the current wildfire scenario across the HTNF is a 10-year average of T40,000 acres burned per year. It seems like No Action is working! We Object that now, during the crucial near-term period of the ever-worsening climate crisis, when it is most imperative that greenhouse gas emissions be reduced, the HTNF itself proposes to burn 30,000 acres more per year - and release large amounts of additional carbon into the atmosphere on purpose! Moreover, elements of this "prescribed burning" are highly damaging – such as cutting down trees in roadless areas and conducting massive burns - including scorched earth type infernos - in roadless areas opening them up to weed expansion and dominance, and to greater intrusion from motorized/mechanized disturbance and high levels of recreational disturbance – across sensitive wildlife habitats and watershed areas (increased snowmobile use, ATV use, expanded roading, and mountain bike cross-country use). Many of these activities will punch in new trails and routes, and drive out wildlife into sub-optimal habitats, and disturb species – including nesting raptors - during sensitive periods of the year. The FS will create tens of thousands of scorched earth sites by pile burning, and focusing burning/treatments on denser moister and mature

vegetation communities which the Forest models claim are “departed” or “uncharacteristic” is highly unnatural, and will destroy the areas that are LEAST likely to burn when lightning strikes. We Object to the lack of a hard look analysis at all of these threats.

The EA also uses mastication (uses large machines driving cross-country tearing soils, destroying and/or smothering protective carbon sequestering biotic crusts, crushing nests and eggs and young animals, and displacing rocks and harming -including breaking and dislodging – cultural materials. *“Under the proposed action, treatments within pinyon-juniper could include hand thinning, slashing, piling, and pile burning, or limited mechanical chipping and mastication to create mosaics, break up continuous canopies and create prescribed fire holding areas ... outcomes. Design elements have been developed to moderate short-term effects of proposed activities, for example, when conducting mastication, chip depth would be a maximum of 3 inches (design element 40) ... The effects from reduced stand densities, from either juniper hand thinning, burning or mastication to create large groups, would facilitate movement towards more varied vegetation structure in which grass-dominated openings and a mix of tree age classes exists.”*

So this HTNF Fire EA is in reality a mechanical treatment EA too and very often will impose multiple and overlapping forms of “treatment” disturbance and veg community destruction across the same land areas– with chainsawing and mastication too. Also, there is foreseeable bulldozing of firebreaks including in IRAs. The EA allows these “treatments” within roadless areas, and they will greatly alter the natural character, wild lands values and species habitats within roadless areas, and will significantly diminish wilderness characteristics. The EA contains no baseline data and analysis of the degree to which the FS has already allowed all roadless areas to be compromised by routes, treatments and other disturbances. Further the EA contains no information on Travel plans including travel plans that control winter motorized use cross-country. Native carnivores and other wildlife present in winter may be seriously impacted by larger forest burns opening up country to high intensity off-road motorized use.

There is also project-related weed control and reference to herbicide - weeds will dramatically increase in many of the project-disturbed sites. The FS states, for example, use of herbicides is “restoration”, and *“Ongoing mechanical and herbicide treatments in sagebrush ecosystems have been planned and implemented to restore these areas and important habitat features on the Forest, as well as adjacent Bureau of Land Management lands”*. Please map and delineate and analyze the success of all of these “restoration” treatments across the project landscape. By success, we mean the weeds are no longer present - not just that they’ve been killed back for a year or two.e Object to the lack of a hard look.

For all the many “treatment” methods, the site-specific details of what specific actions will occur in the landscape and in what species habitats in each site are absent. The EA really doesn’t analyze any concrete project – it’s all nebulous, vague lists of species with minimal info and lists of uncertain loose actions that may or may not take place with projects. – all wrapped up with FS claims of “departed” conditions and unsupported benefits of destruction of hat really are irreplaceable mature and old growth communities.

The HTNF uses black box Landfire models to justify what appears, first and foremost, to be a giant livestock forage grass expansion scheme on overstocked and often highly degraded HTNF allotments.

This EA's major burning and thinning would be a waste of federal funds that will accelerate the climate crisis right now in the immediate future. The short-term is the most critical time where we must REDUCE emissions, not concoct ways like this fire EA to significantly increase near-term emissions, and simultaneously reduce carbon sequestration of our National Forests.

Prescribed burns, just like wildfires, release both CO₂ and black carbon. See:

<https://www.newscientist.com/article/2245038-huge-amounts-of-carbon-from-forest-fires-ends-up-in-the-ocean/>

<https://www.pnas.org/content/115/50/E11595>

“Wildfires inject large amounts of black carbon (BC) particles into the atmosphere, which can reach the lowermost stratosphere (LMS) and cause strong radiative forcing. During a 14-month period of observations on board a passenger aircraft flying between Europe and North America, we found frequent and widespread biomass burning (BB) plumes, influencing 16 of 160 flight hours in the LMS. The average BC mass concentrations in these plumes ($\sim 140 \text{ ng}\cdot\text{m}^{-3}$, standard temperature and pressure) were over 20 times higher than the background concentration ($\sim 6 \text{ ng}\cdot\text{m}^{-3}$) with more than 100-fold enhanced peak values (up to $\sim 720 \text{ ng}\cdot\text{m}^{-3}$) ... The observed high concentrations and thick coatings of BC particles demonstrate that wildfires can induce strong local heating in the LMS and may have a significant influence on the regional radiative forcing of climate”.

We Object the failure to take a hard look at these very significant concerns, and failure to reveal how much carbon will be released. Prescribed burning which would dramatically increase acres burned acres per decade across the arid HTNF landscape. (using the FS estimates of wildfire acres). 40,000 acres X 20 = 800,000 acres. And of course, wildfire locations and acres are very unpredictable. We note that clearing woody vegetation impediments to motorized us, is likely to result in more human-caused fires because of increased ease of motorized access. The majority of fires on public lands are human-caused.

The project will release copious and unrevealed amounts of carbon into the atmosphere, increase nutrient loss to a degree completely unassessed, increase soil erosion in wind and water runoff, and at the same time reduce carbon sequestration. The actions will destroy the very vegetation communities – mature and old growth woody vegetation– that are sequestering higher amounts of carbon. A paper by Mildrexler et al. shows the tremendous value of older trees for carbon sequestration (besides the critical wildlife habitat protections they provide). See:

<https://www.frontiersin.org/articles/10.3389/ffgc.2020.594274/full>

“Large Trees Dominate Carbon Storage in Forests East of the Cascade Crest in the United States Pacific Northwest”. “Large trees accounted for 2.0 to 3.7% of all stems (DBH ≥ 1 ” or 2.54 cm) among five tree species; but held 33 to 46% of the total AGC stored by each species. Pooled across the five dominant species, large trees accounted for 3% of the 636,520 trees occurring on the inventory plots but stored 42% of the total AGC”.

The massive amounts of prescribed fire, pile burning and other disturbances associated with the HTNF Fire EA and other HTNF mega-“treatment” projects will destroy old trees across this landscape. Mature trees will be injured or killed as logging and thinning takes place, even if not specifically targeted in the project area. Roads will be bladed wider and trees injured and killed. Skid trails will injure trees. Sap from cut, thinned, or logged trees will lure in insects that then weaken or kill remaining “leave” trees.

Basically, the many and often overlapping types of disturbances from this battery of “treatments” will make both fuels and insect/disease “problems” that the FS uses as justification for these scorched earth treatments worse. Note that the mechanical treatments will injure trees and cause copious sap that lures in insects causing significant surrounding “unteated” trees to die. See WLD PJ Reports about these impacts to Pinyon Pine in the Bodie Hills and Bridgeport region. This will increase ecological stresses associated with global heating and climate change. Note that livestock grazing also amplifies, and feeds into, climate change stress. See Beschta et al. 2012, 2014, Carter et al. 2014, Kaufmann et al. 2022 and 2023.

Massive use of fire, tree cutting, linked motorized use and other associated project disturbances will intentionally release a huge amount of carbon into the atmosphere in the near term. Yet this is the time period that is deemed most critical for averting global temperature increases. The HTNF Landfire models target as “undesirable” the vegetation communities currently sequestering large amounts of carbon, as described by Mildrexler and others. The FS wants them to go up in smoke.

We Object to the lack of a hard look at all these preceding significant impacts and ecological harms the project will cause.

The vintage Humboldt and Toiyabe Forest Plans never contemplated the climate crisis. Nor did they contemplate the FS using “Condition-Based Management” - which is what this shallow and minimal EA actually is putting in place. Future closed-door decisions to determine the fate of millions of acres – without any mandatory actual integrated pre-decisional hard look under NEPA at what actual current baseline conditions exist.

The Forest must abandon these massive projects or embark on an EIS process that is based on acquiring site-specific current ecological baseline data across the HTNF and surrounding BLM lands in affected watersheds that are home to often shared very important native wildlife populations, and other biota of great ecological concern including numerous ESA-listed species. If the FS pursues this madness, it will also need to conduct a series of Forest Plan amendments, as this scheme also violates many elements of the existing Forest plans. Immense purposeful fire destruction of woody veg communities at this scale - and because they don’t fit Landfire models - was never contemplated under the forest plans - especially enormous burns based on out-dated, flawed and opaque Landfire models, use of Miller 2008 and Tausch “range” science to radically clear mature and old growth native vegetation communities of all types – from sagebrush to mountain mahogany PJ to aspen to subalpine fir to limber pine to whitebark pine.

The project greatly threatens remote wild and roadless lands and in the process will destroy the very habitat types - mature and old growth woody vegetation communities and mature mixed

species communities – that are required by so many sensitive species, and that provide aesthetically pleasing recreational uses as.

The public certainly may not benefit from this project, as the Forest values that are cherished by the public – sustainable fish and wildlife, clean and abundant water, an aesthetically pleasing environment to recreate in – will all be significantly harmed by this project – when cheatgrass chokes Jeffrey pine, PJ, mahogany and sage communities torched by the FS – and invades irreversibly. In others – if recovery does occur, it may take several centuries to attain the mature forested conditions the FS seeks to destroy at an unprecedented level. Or forests may be “converted” to shrublands - permanently. How long does it take to develop a mature limber pine community? A mature or stable mountain mahogany community? A mature Jeffrey pine community? Mature sagebrush communities of each type? We Object that there is no fair, balanced look at project harms vs. FS claimed benefits.

The party that will benefit from intentional conflagrations at such a massive scale is the public lands livestock industry (which enjoys near-free grazing with minimal controls on the large-scale watershed and habitat damage it inflicts across the HTNF), and potentially energy and mineral developers whose cross-country exploration activities will be facilitated by the FS burning off all the woody vegetation that would impede exploration. Herbicide companies will benefit, too, as the FS will create ideal conditions for weeds of all types to proliferate. There is mounting evidence every day of the profound harm to ecosystems and animals that these chemicals cause – harms to humans to hummingbirds to native pollinators to rare aquatic species to herbivores like Sage-grouse and Pronghorn that may ingest plants containing them.

These massive “treatments” may increase rather than prevent future fires. In fact, the FS actions will result in hotter, drier, windier, weedier sites with longer fire seasons and where fires flash at breakneck speed across the landscape.

Destroying, Degradation Fragmenting Old Growth – and Elevating Fire, Insect and Disease Risk

The FS models deem 80% of the National Forest System lands outside of wilderness, (4 million acres), and vast roadless area lands, to be in need of radical disturbance treatment. The vegetation communities that will be “treated” because the flawed models and the arbitrary FS inputs to the models find they are “departed” are nearly always late stage maturing, mature and old growth woody vegetation. This intentional burning and other associated vegetation killing activity will differentially destroy vegetation communities currently sequestering and containing the most carbon. This is different from more “natural” wildfires – as the wildfires do not “target” the forest sites with more carbon. In fact, the mature dense unfragmented forest areas are often the least likely to burn or carry fires – except under the most extreme weather events when anything will burn – and fire “control” is largely in the hands of wind and weather.

Clearing and burning up mature and old growth woody vegetation makes lands hotter, drier, weedier, windier and more fire prone. See Bradley et al. 2016. See also Wuerthner 2021:

“The non-partisan Congressional Research Service, in a review of thinning and fuel reduction effectiveness, came to the very same findings: “ From a quantitative perspective, the CRS study indicates a very weak relationship between acres logged and the extent and severity of forest fires. ... the data indicate that fewer acres burned in areas where logging activity was limited.” [iv] That same finding was reached by another review of 1500 blazes in pine and mixed conifer forests. They discovered that the places with the most significant fuels like parks and wilderness had the least severe burns. “We found forests with higher levels of protection had lower severity values even though they are generally identified as having the highest overall levels of biomass and fuel.

Another counterintuitive finding is that forests that had presumably missed fires due to fire suppression or other factors burned at lower fire severity. Van Wagtendonk looking at Yosemite’s fire patterns, reported: The most long-unburned, fire-suppressed forests—those that had missed 4 or more fire return intervals (in most cases, areas that had not burned since at least 1930)—had only about 10% high-severity fire.[viii]{

<https://www.counterpunch.org/2021/03/18/the-active-forest-management-scam/>

See also: “Forests are our only means for removing atmospheric carbon dioxide and storing the carbon long term at the needed scale. Burning wood in place of coal is accelerating global warming and decreasing the capacity of forests to counter the buildup of heat trapping carbon dioxide,” said Dr. William Moomaw of Tufts University. Dr. Chad Hanson, a forest ecologist with the John Muir Project, observed, “The dangerous excess CO2 that we’ve put into the atmosphere with fossil fuel consumption and logging will stay there for far too long if we don’t take serious steps to bring it down, and forest protection is our best and most effective way to do that.” Dr. Dominick DellaSala, Chief Scientist with the Geos Institute, added, “The vast majority of scientists warn that in order to avoid catastrophic climate impacts in the decades ahead, including new pandemics potentially linked to deforestation, we need to keep dinosaur-carbon in the ground and store atmospheric carbon in forests.”

<https://forestlegacies.org/featured-projects/scientist-network/>

Research and common-sense observations of the recent mega-fires in CA, OR and elsewhere are revealing this is the case. Large climate-driven wildfires have not been stopped by past treatments and/or heavy grazing. These actions have been ineffective in stopping such fires, as the recent mega-blazes have shown. Just look at the recent Idaho fires in grazed areas of the Boise Forest (like the much-grazed Sagehen) and Payette forests.

See, Video with Dr. Chad Hanson describing Paradise Fire situation and GF claim that logging and tree thinning would protect them from fire, and that it was a “fuelbreak” Start at Video Minute 35. Yet the Paradise Fire that killed 85 people whipped right through the fuelbreaks which had given the Paradise residents a false sense of security. Minute 40. Beyond 100 ft. from structures, “treatments” make little difference. Defensible space is what matters. Minute 42. Emerging scientific evidence that thinned areas burn more intensely and fires move faster. Minute 47. Bond describes need for woody debris on the forest floor. It holds some water helping reduce fires and fire effects, is an important part of forest health, and downed logs are

important wildlife habitat. Yet the HTNF Fire EA seeks to burn this up and destroy it. Minute 49. Chad Hanson describes the importance of downed wood and wildlife habitat, and increased erosion in thinned areas. Winds whip through thinned areas and drive flames more rapidly there because there are fewer trees to act as windbreak. Denser stands of forests act as a wind break against winds that drive the fire. There is a cooler, moister, micro-microclimate because higher canopy cover in non-thinned forests – emphasizes the value of intact forest canopy. Information from Wild Earth Webinar Fire and Forest Ecology in the American West: <https://wildearthguardians.org/brave-new-wild/news/wildearth-webinar-fire-and-forest-ecology-in-the-american-west/>

See also:

<https://grist.org/fix/forest-thinning-logging-makes-wildfires-worse/>

Logging in disguise: How forest thinning is making wildfires worse

The U.S. Forest Service clears trees from public lands in the name of fire prevention, but it doesn't work. There are better strategies to protect communities, but don't expect to hear about them from the logging industry

"Wildfires can always turn tragic, but the greater tragedy in Greenville and Paradise, which was largely destroyed during the 2018 Camp Fire, and other towns is that they put their faith in logging operations miles away rather than proven, community-based fire prevention measures".

... The idea of felling trees and hauling them to lumber mills in the name of fire prevention has many deceptive names: fuel reduction, forest health, ecological restoration, thinning, and even reforestation. As I detail in my book, [Smokescreen](#), the Forest Service began using these terms in the mid-1990s as the public became more aware of the horrific realities of widespread clearcutting of mature and old forests on public lands in the Pacific Northwest, and the northern spotted owl became a household name'.

AND: "Proponents of thinning often cite specific locations that burned lightly, but these selective examples do not reflect the broad base of scientific evidence. For example, following the Bootleg Fire in south-central Oregon earlier this year, a representative of The Nature Conservancy [claimed](#) that a combination of thinning of "small" trees and prescribed burning effectively curbed the fire. But the Conservancy also has a conflict of interest: For years, it has conducted extensive commercial logging operations in the Sycan Marsh "Preserve," north of Beatty, Oregon, [under the banner of thinning](#). Thousands of mature trees have been removed under an expansive definition of "small": up to 21 inches in diameter. Weather is always the biggest factor in fire spread, and the Bootleg Fire began in particularly hot, dry, windy conditions. Even so, according to the Forest Service's daily rate-of-spread maps, the Bootleg fire [spread fastest](#) through Conservancy lands with extensive recent forest management, mostly thinning.

Last week, the Caldor Fire swept through a large area that had been recently logged in Eldorado National Forest in the central Sierra Nevada, under the rubric of commercial thinning. It [destroyed](#) the town of Grizzly Flats.

The forests with the most logging, of both live and dead trees, typically burn in the hottest fires, especially when [extreme fire weather](#) interacts with heavily logged landscapes. Yes, there are exceptions, but when we look at the data on a larger scale, the pattern holds: the more trees pulled out of a forest, the more quickly and intensely a fire burns. My colleagues and I published the largest [scientific study](#) yet on this topic, analyzing three decades of data representing more than 1,500 fires that burned 23 million acres. We found that while weather and climate were the primary factors in fire intensity and spread, forest management was a significant secondary factor. As we noted in a [letter](#) to Congress, signed by 200 other scientists, “Reduced forest protections and increased logging tend to make wildland fires burn more intensely ...”.

The HTNF Fire EA wants the public to believe that creating myriad hotter, drier, windier weedier sites through destroying beautiful complex mature and old growth forest and shrublands - through fire and other methods (mastication, cutting trees down in firebreaks, using herbicides to futilely try to deal with treatment-caused weeds, and which prevent seedlings of both weeds and native tree and shrub species, etc.,) will stop fires. This is being shown by western wildfires in recent years to simply not be the case.

“Prescribed fire” use in mature and old growth juniper forest in the Owyhee region of Idaho illustrate the severity of prescribed burning by agencies seeking a “type conversion”. The photos illustrate what often happens with prescribed fire given the vagaries of sudden wind shifts and unpredictable weather events in steep, rugged mountainous terrain, and where napalm coated ping pong balls land. Here is how use of prescribed fire in “departed” mature and old growth PJ typically happens.

This describes scalded soils, severe fire intensity mature and old growth forested Juniper, mountain mahogany and sagebrush burned to a crisp, at times no wood on ancient trees remains at all - just ash and scalded soils.

<https://www.counterpunch.org/2019/10/08/owyhee-ecocide-anatomy-of-blms-ancient-juniper-forest-destruction/>















Beautiful ancient forests were purposefully destroyed, and very harmful jackpot and extensive broadcast burning was used. This also had been great migratory bird habitat including vital nesting cavities, that were destroyed. and Elk fawning and security habitat was destroyed – and now big game are much more susceptible to human intrusion, poaching, displacement and disturbance in previously secure intact habitats. Soils were severely burned and scalded in this prescribed fire. Trees in what should be fire refugia – rocky, cliffy areas were torched – as “prescribed” fire and helicopter napalming targeted even what has been described as “fire-safe” sites.

We carry forward all burning images from our preceding comments and incorporate all our federal agency “treatment” images and text in the “PJ Reports” documents submitted with these comments. These PJ reports include both BLM and also USFS HTNF projects.

The HTNF Fire EA claims:

“The most departed vegetation types are in the conifer, shrubland, and hardwood vegetation communities. For wildlife this translates to the eastern Sierra mixed conifer/pine, yellow pine, Great Basin pinyon-juniper, chaparral, aspen, woodland, and some sagebrush habitat types.”

This is nearly all communities! Thus, the FS plans a gigantic “type-conversion” and “stand conversion” of native vegetation communities –based on Landfire modeling and also assumptions –which means converting mature and old growth woody vegetation in a “baptism by fire” like in the Owyhee example above, into scalded soil and after a while – some grass for livestock forage with minimal to no residual woody native veg. community remaining.

“Prescribed burning will be planned to meet management objectives, including fuels reduction and habitat type conversion, in a safe and efficient manner” (Toiyabe LRMP, Page IV-4), Fire EA p. 15, “Goals” – of a woefully out-dated 40-year old Forest Plan.

Just what new “type” will each treated site be converted to? How long will it persist in this “converted” form? Please detail this information for all areas and vegetation types. Detailed site-specific analysis must take place. Which sensitive species will have their essential seasonal or year-round habitats converted to a new uninhabitable state? Which species will be the losers here? This type of “conversion” language has long been used by agency range staff when they promote livestock forage projects that remove or reduce woody vegetation so that cattle food grass can take its place on overstocked ranges.

The FS aim for “type conversion” over hundreds of thousands of acres clearly shows an EIS must be prepared for the Fire EA, and that there will be extremely significant impacts to IRAs, watersheds, and to persistence and viability of a host of native species, migratory birds and biodiversity in general. This also appears to violate NFMA which requires sustainability of forest resources – and not obliteration. It also ignores natural plant successional processes. We Object that the FS has not identified the types that the objects will convert vegetation to in all ITAs and across the project landscape.

Sadly, the “type conversion” the FS is most likely to achieve across sagebrush, PJ, mountain mahogany, desert shrubs lands too, is cheatgrass, medusahead, bulbous bluegrass, red brome and other weeds. We are aware of no areas where the BLM and/or FS has successfully “treated” and stopped such flammable annual grass invasions in the West over any significant acreage – no matter how much toxic herbicide is applied. This interjects even worse uncertainty into this project.

At the same time, arid forests across the West, and the species that inhabit them, are under grave threat from increased temperatures, and climate change. This has worsened with the extreme heat and mega-drought of the past several years. But this HTNF Fire EA is firmly rooted in past - using old highly flawed Miller (range), Tausch (range) and Landfire information as the backbone of massive planned deforestation and conflagration projects that will dramatically impact this landscape for centuries. We Object to the lack of a hard look at all of these significant ecological concerns and assessment of a full range of current scientific information.

No Hard Look at Huge HTNF Grazing Disturbance Footprint

We Object to a hard look at current riparian and terrestrial habitat health and the adverse impacts of livestock grazing use, allocations, standards, stocking, capability, and levels.

A 2017 FS report stated that across the 6.3 million acre HTNF expanse, there were 164 grazing permits, 259 active allotments, and a total of 247,511 AUM. Also, it stated that grazing occurred across 4,653,189 acres. Unfortunately, that acreage may now be increased in areas as the FS has opened Vacant allotments to grazing (in GRSG habitat in the Jarbidge RD for example. The HTNF has now finalized NEPA analysis of opening grazing in the Monitor-Toquima region old Wayne Hage allotments, and is promoting heavy intensified “targeted grazing” disturbance as a panacea for fire and weeds – although it is only likely to beget MORE flammable weed in the end and further degrade watersheds and habitats of sensitive species, The HTNF is also accommodating the public lands livestock industry in seeking to expand “targeted” grazing - in the Santa Rosa range, and potentially in the “Marine Warfare” EA project on the Bridgeport RD. See WLD Marine War Comments previously submitted, see Monitor-Toquima allotments Object (attached). See Scientist Fuelbreaks letter describing how harmful such “targeted” and “fuels” grazing would be. This is also highly likely to result in even worse weed infestations including by more types of weeds. See also our previously submitted comments on the HTNF Deer Mountain EA, and now our comments on the East Humboldt-South Ruby major deforestation and shrub killing project.

There is no current ecological land health-type grazing analysis for the great majority of the Forest Service allotments. Thus, the FS has no current baseline information about the current health of the land and species habitats, how damaged by grazing and other disturbances watersheds currently are, the current actual use level of grazing that is causing the damage, monitoring data that shows compliance with or violations of grazing standards, the specific grazing standards that are applied and their adequacy for species habitat protection – such as GRSG brood rearing and nesting habitats, or adequacy for rare amphibian and trout habitats, and the overall baseline ability of watersheds and species habitats to withstand fire disturbance heaped on top of the heavy grazing and livestock facility disturbance burden, plus roading and

other impacts. In the allotments where there has been some HTNF grazing analysis (largely a decade or more ago), there was no accounting in the NEPA analysis for the stress that climate change and the droughts had/have on the Great Basin landscape, waters, watersheds, native biotic communities, and species survival. There appears not to be a current capability and suitability analysis nor any hard look at how this massive removal of woody vegetation

We Object to the EA's lack of this above-referenced thorough baseline site-specific data and analysis for all "initial" and other targeted project sites, for all livestock grazing allotments cross the HTNF RDs. Please also detail where grazing impacts, facilities, salt/supplement use, etc., are currently causing cheatgrass/invasive flammable grass disturbances within allotments, and address in detail how the FS will control both grazing and flammable grass infestation and site dominance in the wake of the project disturbances. What is the current fence density? Will the project add to it – see Van Lanen 2016 describing harmful impacts of fences in Sage-grouse, and Braun 1998 and Connelly et al. 2004 describing livestock facility harms to sagebrush habitats.

The FS must fully consider how limited and threatened the HTNF's springs and small stream water flows are across the Forest. Nevada is the driest state in the nation and has already lost sustainable perennial water flows in innumerable watershed areas (due to historic and current grazing, historic and current mining including aquifer drawdown effects and other impacts – now all of this is exacerbated by ever warmer temperatures under climate change stress). Grazing and livestock facilities also have an immense impact on FS water quality and quantity. By greatly disturbing watersheds, including even purposefully burning them by letting broadcast burning and all the other disturbances up sideslopes, the FS will facilitate opening up erosion and damage-vulnerable upland and riparian sites to even more intensive grazing impacts, plus will be removing cooling protective shade. We Object to the EA failure to take a hard look at how this all will magnify adverse impacts of climate change, hotter water temperatures, increased evaporative water loss, flow reduction, algae and other water quality and quantity problems. See various Don Sada references (attached)

A hard look must be taken at every element of the environment impacted by this project. A Supplemental EIS-level NEPA analysis is essential. This includes impacts to water quality and quantity, climate change stress and vulnerability to climate change, loss of carbon sequestration from mature and old growth forest and shrub communities; release of carbon into the atmosphere through all manner of burning; loss of nutrients from the site through all manner of burning and increased and accelerated erosional processes due to project and livestock grazing soil disturbance and fire and grazing damage and destruction of protective microbiotic crusts that protect soils and prevent erosion, and act as a frontline defense against flammable invasive species; loss of site ability to buffer adverse effects of climate change stress, as burns make sites hot, dry, windy and less able to retain snow and moisture; loss of habitats for native biota including species of concern, fragmentation of habitats for native biota including species of special concern; reduction and/or loss of populations and genetic diversity of native biota including species of special concern, damage/destruction/alteration of cultural materials and sites through direct and indirect impacts of the host of treatments breaking and destroying material and the integrity of artifact and sites - including scorched earth pile burn and other ways the USFS aggressively burns vegetation, through mastication cross-country travel by heavy equipment tearing up biocrusts, dislodging soil and rocks and causing erosion, and all of this

facilitating more widespread weed spread/trampling/grazing/defecation and fouling by livestock grazing disturbance. In many areas, large grazing operations run roughshod over landscapes. The FS has not ensured that it can effectively control livestock impacts at its treatments. For example, as

WLD described in our HTNF Marine Warfare treatment project comments and Objection, the HTNF permittee FIM ran herds of domestic sheep all over recent pile burn sites -tearing up soils that were attempting to heal, spreading weeds, and devouring and trampling banks of small spring-0stream areas and fouling waters,

This massive Fire EA also threatens damage to, or loss of, unique vegetation communities and areas including those that the FS has long failed to recognize as RNAs, Zoological Areas or other protected sites, but that are worthy of such protection. We Object to the extremely inadequate livestock grazing actions and impacts to these expensive ‘treatments’. We have observed firsthand how the HTNF does not effectively control livestock in “treated” areas, greatly elevating weed risks.

We Object the failure to address all of these significant issues raised above.

Foreseeable Biodiversity Consequences of Massive Burns and Mechanical Disturbance on Ecosystems and Species Under Unprecedented Stress – Direct, Indirect, Synergistic, Additive, Foreseeable – A Hard Look Is Required at Sustainability Impacts Under NEPA

Because of the dire conditions western forests face with climate stress, drought, hotter temperatures – how much have temperatures increased in the past decade? In the past 20 years? and weeds, the HTNF prescribed fire and major “treatment” disturbance may have irreversible consequences.

<https://www.theguardian.com/environment/2021/mar/10/is-this-the-end-of-forests-as-weve-known-them?fbclid=IwAR0GddxejNlrHA1WBgdP7ygU-H4D62W2gvYzAv3iZZyItV0kvsut1voWxJY>

“We have largely operated under the assumption that forests are going to come back after fires,” Stevens-Rumann said.

But starting in about 2013, she noticed something unsettling. In certain places, the trees were not returning. For an [analysis](#) she performed of sites across the Rocky Mountains, she found that almost one-third of places that had burned since 2000 had no trees regrowing whatsoever. Instead of tree seedlings, there were shrubs and flowers”.

Also:

“Abstract. Forest resilience to climate change is a global concern given the potential effects of increased disturbance activity, warming temperatures and increased moisture stress on plants. We used a multi-regional dataset of 1485 sites across 52 wildfires from the US Rocky Mountains to ask if and how changing climate over the last several decades impacted post-fire tree regeneration, a key indicator of forest resilience. Results highlight significant decreases in

tree regeneration in the 21st century. Annual moisture deficits were significantly greater from 2000 to 2015 as compared to 1985–1999, suggesting increasingly unfavourable post-fire growing conditions, corresponding to significantly lower seedling densities and increased regeneration failure. Dry forests that already occur at the edge of their climatic tolerance are most prone to conversion to non-forests after wildfires. Major climate-induced reduction in forest density and extent has important consequences for a myriad of ecosystem services now and in the future”.

See additionally papers by Fusco et al. 2019, Kerns et al. 2020. The risks of the HTNF Fire EA burning and other treatment projects resulting in permanent habitat loss for sensitive, rare, declining and endangered species must be assessed in a hard look in an EIS. How much hotter have temperatures been in the past decade than the long-term average? We Object to the failure of the FS to take a hard look at these highly significant issues that cut to the core of sustainability, viability and recovery – including the recovery of treatment-disturbed IRAs.

Further purposeful destruction of forests, as the HTNF is proposing, will only make matters worse. The Forest must re-focus the analysis (which needs to be an EIS) on alternatives of passive reforestation and sagebrush replanting – instead of sagebrush manipulation, addressing restoration on areas with cheatgrass/bulbous bluegrass/medusahead and other serious invasive weed problems on the Forest – instead of making them worse. We Object to the failure to do so.

Boone et al. 2021 paper on Pinyon Jays – stated the species that undergone an 85% population reduction, and finds that Pinyon Jays use forests over a wide range of elevations.

See: https://www.allaboutbirds.org/guide/Pinyon_Jay/lifehistory

Pinyon Jay populations declined by 85% between 1970 and 2014, according to [Partners in Flight](#). They are a [Yellow Watch List](#) species, and have a [Continental Concern Score](#) of 14 out of 20. As discussed below, the Pinyon Jay has not been petitioned for ESA listing, USFWS has issued a positive 90-day finding, and then proceeded to drag its feet, and USFWS inaction is now being litigated.

Often when BLM or the FS proposed killing more PJ that is claimed to be “invading” especially at lower elevations, the agency is destroying forests in areas where PJ naturally occurs and where it was historically present. This again points to the need to retain forest areas currently lacking PJ because of fires, and especially due to past agency deforestation “treatments”. This project should focus on enhance Pinyon Jay and migratory bird habitat, and balancing them with Sage-grouse needs, instead of reducing both species habitats, and making them highly vulnerable to irreversible flammable weeds. See Romme et al 2009, Lanner and Frazier 2012 on the Historical Stability of Nevada Pinyon-Juniper communities. See Ronald Lanner *The Pinyon Pine*, and attached Pinyon Jay information.

The FS does not reveal the specific model inputs for each vegetation community and for wildlife habitats that it used. Full and detailed information about every part of the modeling must be provided in a supplement NEPA document for public comment, as it appears the FS used long-disproven extremely short fire return and disturbance intervals in range papers by Miller 2008

and Tausch 2009, and Landfire info and modeling to arrive at its major forest destruction targets. The EA now states:

“LANDFIRE provides national geo-spatial data sets and ecological models that can be used to evaluate vegetation, fuel, fire regimes, and more at the landscape or sub-regional scales. LANDFIRE datasets were used to evaluate vegetation condition class data1 and to identify major departures from the natural (pre- settlement or historical) fire regime within the Humboldt-Toiyabe National Forest (LANDFIRE 2022, National Interagency Fuels Fire and Technology Transfer System 2010). Based on this analysis, we found that there are over four million acres on the Humboldt-Toiyabe National Forest that can be characterized as being moderately to very highly departed from their natural (historic) regime of vegetation characteristics; fuel composition; and fire frequency, severity and pattern where there is an appreciable risk of loss of key ecosystem components (appendix B)”.

The FS previously said:

“LANDFIRE data were also used to compare historic range mean fire return interval as well as approximate acres burned for each vegetation type (LANDFIRE 2014). This information provides an approximation of how many acres should be targeted for burning on an annual basis to move towards and then maintain the historic fire return interval to restore a more resilient stand composition and structure. Based on the natural fire regime, the analysis supports an annual prescribed fire objective of up to 80,000 to 100,000 acres per year on the Humboldt-Toiyabe National Forest. This is calculated based on the decades of fire exclusion and projected vegetation growth over the next 20 years, such that these burn objectives, if achieved, would allow the forest to begin to address the backlog and work towards maintaining and improving the overall condition on the forest. This LANDFIRE analysis does not factor in management logistics, resources, or other management constraints which would reduce the overall amount of prescribed burning that is feasible each year. Still, compared to current annual prescribed burning, which has averaged 500 to 3,000 acres per year, this demonstrates a substantial need for increased prescribed burning”. The FS then claims a “need “to reintroduce fire to improve the health and resiliency of vegetation communities and habitats in moderately to very highly departed fire-dependent ecosystems”. What ecosystems are not fire dependent under this modeling world view? Scree, cliff, bedrock?

How has the FS defined, and what science is used to determine, “fire-dependent ecosystems”? What site-specific info was used to determine mean fire return intervals? What inputs into the Landfire modeling was used for every step of the modeling process? Please provide detailed and specific information – not just a black reference to the site.

It appears the inputs and modeling for the 2022 draft EA and now this one in 2025 are very similar, so what specific scientific information on historical fire and disturbance intervals, and other model inputs, was used in each modeling process? What is the scientific basis for all inputs used? Is the reduction in acreage in this current EA due to the major Deer Creek, East Humboldt-Ruby Mountains 247,000 acre project and potentially others in the hopper that will destroy native forests and shrubs in parallel with this Fire EA project? How many acres remain to be

burned or treated under already authorized projects, too? We Object to the failure to explain this and if changes in Landfire info were involved?

This project will make the HTNF lands far more uniform and full of early successional and weedy vegetation, with hotter, drier, weedier, windier mountains covered in grass with a much longer fire season and greatly reduced biodiversity. The HTNF will lack mature woody plant complex woody vegetation structure required by so many rare and declining species, and that protects and cools the ground surface and promotes slower snow melt and moisture retention on site.

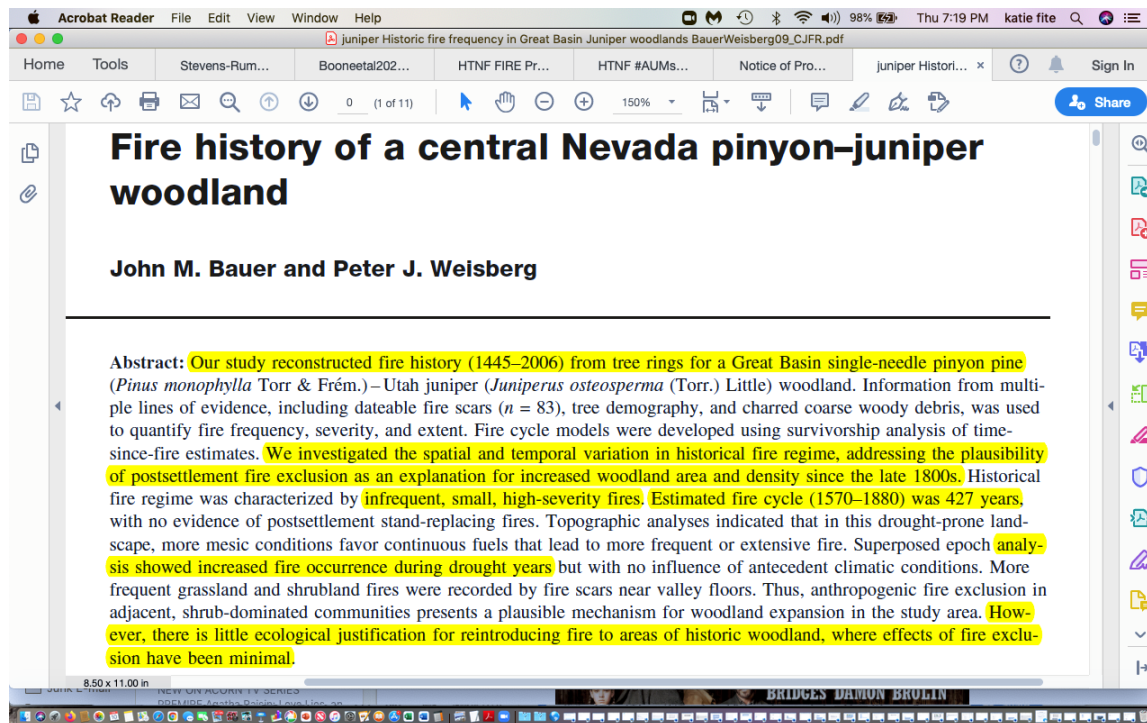
Further, the FS claims it will alter how forests burn. But isn't this "unnatural"? Don't many forest communities like PJ and shrubs like sagebrush historically burn in stand replacing fires – as one discovers when one consults the ecological literature, and not the grass-centered "range" papers that talk about light understory burns.

PJ certainly does, as Ron Lanner and others have described. Fire kills sagebrush of all types. Bauer and Weisberg describe several hundred year PJ fire rotations. The great majority plant of communities targeted by the EA are not "fire-dependent". From sage brush to limber pine, this is a mischaracterization.

The FS claim it will •Reduce the risk of uncharacteristic wildfire to key ecosystem components which includes various species habitats and connectivity corridors by modifying and reducing natural fuel accumulation. Again, please detail the sources and specific information and model inputs used by the FS to determine what is characteristic vs. uncharacteristic wildfire? Please also provide these "connectivity corridors", and how these projects will impact escape cover, thermal cocer and habitat security for big game, as well as alter vital seasonal ranges.

We incorporate by reference into the HTNF Fire EA comments the WLD and other groups comments on the BLM Restoration PEIS, Fuelbreaks PEIS and Pinyon Juniper Categorical Exclusion This was attached with past comments on cd.

Bauer and Weisberg's, "Fire History of a central Nevada Woodland" illuminates how the FS modeling that claims communities are "uncharacteristic" is severely flawed – as fire return and disturbance intervals in PJ are extremely long:



We Object to the lack of a hard look at all the preceding significant ecological concerns concerns.

Fire Environment

We Object that the HTNF has not clearly defined the fire environment here, describe the actual characteristics of all sites— including natural successional stages, climax vegetation communities, topography, terrain, wind, length of fire season. The USFS references “uncharacteristic” and undesirable vegetation and fire. Won’t the Forest’s proposed drastic manipulation and fragmentation of wild lands and watersheds result in the most uncharacteristic and undesirable fires of all – i.e. very frequent cheatgrass fires? What are the scientific studies (fire return and disturbance intervals, FRCC, or other models) the Forest uses to define and assess these terms? What are the various fire categories, fire return intervals, and other information used in drafting the Forest Plan and methods used in the models and methods used in developing this proposal? What are the scientific and site-specific studies these are based on? How has the Forest determined that an individual site is to be treated

The HTNF claims to:

- Increase resiliency of existing vegetation groups to future stressors like wildfire, climate change, and invasive species by improving plant vigor and stand structure, diversity/age classes, and composition.* Resiliency is a ubiquitous agency buzz word used to justify what in the past had been openly stated as projects by federal agencies to increase livestock forage grass. By eliminating cooling shade and woody plant structure protection, the FS EA will make lands hotter, drier, and windier they will be more weed prone and less able to recover from hotter temperature stresses

•*Improve the proper ecological function of vegetative communities and wildlife habitats.* We Object that the FS has not provided detailed information and analysis including all sources used and all inputs used in any models to determine “proper ecological function” of each type of veg community and each type of wildlife habitat that will be impacted by this project – including in combination with the very large amount of domestic livestock grazing the HTNF often authorizes on the project area lands, and especially impacting all sites/areas the FS models find to be “uncharacteristic”? What are stocking rates for all pastures and units across all targeted sites, both the “initial” sites and the whole project? When were grazing impacts on native vegetation community health, on watershed processes, on soils and biocrust, on aquatic and terrestrial species habitats on these lands assessed at the site-specific level?

The FS states:

“The most departed vegetation types are in the conifer, shrubland, and hardwood vegetation communities. For wildlife this translates to the eastern Sierra mixed conifer/pine, yellow pine, Great Basin pinyon-juniper, chaparral, aspen, riparian woodland, and some sagebrush habitat types.” Isn’t this nearly all vegetation types – except the increasing cheatgrass and medusahead lands, on the HTNF?

What roles has livestock grazing, and past treatments, played in this “departure”?

LANDFIRE data were also used to compare historic range mean fire return interval. So how does Landfire data factor in the very high levels of cattle/sheep grazing across much of the HTNF into all of these claims – of resiliency, of the ability to recover from treatments, on “departed” veg cause, on characteristic vs, uncharacteristic veg cause, on causing weeds that cause frequent fires etc.? What are the disturbance and fire return intervals used by the FS for each veg community type and each wildlife habitat type and each sensitive species?

Additionally, introduction of fire in fire-dependent ecosystems would also help to manage fuel loading.

How does the FS address the local climate change -hotter, drier, windier, weedier conditions and longer fire seasons resulting from such treatments on fire frequency and risk?

In addition, the design elements address the more fine scale areas where the proposed burning would be very limited or excluded, including: utility corridors, fire sensitive rare plant or cultural resource sites, Webber’s ivesia (federally listed plant species) habitat, areas of high probability of invasive annual grasses, areas of low resistance or resilience to invasives, sage grouse within 4 miles of active leks during breeding [but not other times so the rest of the year Sage-grouse nesting habitat, and sagebrush escape cover in brood rearing habitats can be burned to a crisp!], and within and near riparian vegetation and streams. Prescribed fire may be used as a beneficial tool but would be limited in size/scope in the habitats for federally listed species ...

There is serious risk with the FS conducting prescribed burning in Sage-grouse and ESA-listed species habitats and adjacent PJ and other communities - as the risk of error or excessive burning removing far too much sagebrush, accidental burning of rare plant sites linked cheatgrass invasions, watershed degradation, etc., are too high.

Innumerable EA Biological Flaws

We Object that the FS even plans to burn up the very limited Bull Trout habitat on the HTNF and claims:

With the proper implementation of design elements, there is a low risk that bull trout critical habitat would be substantially affected. Design elements would prohibit direct ignition in riparian habitat, but fire would be allowed to back into riparian habitat. This could cause mortality of some riparian vegetation but based on prescribed fire studies effects would be minimal and short-term.

How has the FS scientifically determined “low risk”? What is the current population of Jarbidge Bull Trout, and all ESA-listed and sensitive species on the Forest lands?

We Object that the FS plans significant burning across Sage-grouse habitats. This is highly likely to fast-forward weed invasion into higher elevation lands, dealing another serious blow to sage-grouse populations which are already in serious decline as weak agency plans and agency failure to live up to promises to conserve, enhance and restore GRSF have failed.:

The Fire EA “design elements” are greatly inadequate to protect sagebrush habitats and Sage-grouse BSUs from the agency use of risky fire in wild landscapes.

The FS Specialist Reports cover up the significance and impacts of spring and early summer burning actions and the certainty of killing and injury of nesting birds and chicks, and small mammals, and animal deaths from both burning and smoke inhalation, as well as displacement into sub-optimal habitat lacking habitat elements necessary for survival and also increasing predation loss as animals are forced to survive in sub-optimal habitats.

The FS claims – without specifying what it means by “protection” under the project’sd the weak, non-mandatory and waive-able design elements/BMPs:

Design elements would provide protection to sagebrush habitat

- *Most individuals are likely to escape harm* [This is the classic Nevada BLM and FS mindset – “the animals can just flee to some unknown and unidentified other place, and find habitat somewhere over the rainbow” mentality. And what happens if they do survive, and the next place burned up/masticated is where the animals fled to? We Object to the failure to define – for all local populations of all species of concern and migratory birds– WHERE there is excess unoccupied habitat for animals to move to – especially for species dependent on complex mature and old growth woody veg cover].

- *A small number of individuals may be adversely impacted, but population levels would not change.* EA pp. 22, 24. [It appears that no species of concern would benefit from this scorched earth manipulation, as it is detrimental to nearly all species that are already on decline in the HTNF and Region 4 landscape. Plus the= FS must scrutinize the scale and extent of existing and planned habitat destruction on adjacent BLM lands. How many millions of acres of PJ forest destruction has BLM authorized in Nevada and Eastern California, and where? How many acres of sagebrush manipulation? Where are BLM projects authorized but not yet carried out – for example, in Ely BLM lands adjacent to the HTNF were BLM has issued dozens of “watershed”

project documents to be implemented over a decade or longer. The habitat the FS specialist report so blithely predicts will be available for animals to flee to may be slated to go up in smoke or be chained or masticated by BLM].

We Object to the EA's arbitrary reliance on wildlife management based on the myth that there is "empty" habitat and animals can flee to a promised land (never specifically identified) and have their critical habitat needs met, and that NFMA sustainability and sensitive and rare species requirements will be met.

We Object that the FS fails to provide current site-specific detailed information and analysis of "population levels" used to support this claim, and how "a small number of individuals" is defined and how this has been determined by the FS. Which ESA-listed and sensitive species populations are right now comprised of a "small number of individuals" in each HTNF Ranger District? The USFS has still never revealed whether it is meeting the specific Sage-grouse number goals laid out in the Humboldt Forest Plan, or if the FS is meeting Northern Goshawk, Flammulated Owl and MIS goals and a host of other requirements. The scale of this project vastly exceeds any "treatment" acreage for woody veg communities in the old Forest Plans. It appears the FS needs to conduct Forest Plan amendments if it is to proceed with this project – and the project must be re-scoped. The FS has not conducted inventories and surveys across the Forest (including initial sites and the vast acreages of other "uncharacteristic" sites across the project landscape) to determine the relative impacts of this huge manipulation scheme that will destroy irreplaceable mature and old growth forest and shrub habitats. We Object to the lack of all this critical hard look baseline information and analysis.

We are attaching summaries of the Sage-grouse experts *Studies in Avian Biology* Monograph, from biologist David Dobkin's Declaration on livestock grazing and project impacts – which describes the critical importance of large areas of intact Sage-grouse habitats, and details adverse impacts of livestock grazing and facilities within those habitats:

"... new information about sage-grouse populations, sagebrush habitats, and the relationships among sage-grouse, sagebrush habitats, and land use that has been published in the peer-reviewed scientific literature, particularly since 2005. Much of this information is the result of new analyses and comprehensive syntheses of information that appeared in the scientific monograph "Ecology and Conservation of Greater Sage-Grouse: A Landscape Species and Its Habitats" (Knick and Connelly 2009; hereafter the "Monograph"), released under the auspices of the U.S. Geological Survey (USGS) and posted on the USGS SAGEMAP web site on November 4, 2009. The 25 chapters that comprise the Monograph were produced specifically to provide a state-of-the-art scientific understanding of Greater Sage-Grouse for the U.S. Fish and Wildlife Service (FWS) in their status review to determine whether Greater Sage-Grouse warranted protection under the Federal Endangered Species Act (ESA). Several chapters in the Monograph provide unprecedented new insights into critical aspects of sage-grouse population biology and conservation needs that either had not been addressed successfully or at all in previous research.

To fulfill their seasonally shifting habitat needs can require movements of several miles between required habitats. Thus, a significant challenge in managing and conserving sage-grouse populations is the fact that they depend upon different types of habitat for each stage of their annual cycle (Connelly et al. 2009b). Each seasonal habitat must provide the necessary

protection from predators, required food resources, and thermal needs for the specific stage of the annual cycle.

[We Object the FS specialist report and linked EA provide no hard look baseline information and analysis of the seasonal importance of the habitats the FS seeks to destroy that are comprised of mature and old growth sagebrush.]

Males gather in early to mid-March (but sometimes as early as late February) until late April (but sometimes well into May) on traditional display grounds (“leks”), to which females are drawn for mating. Females remain only briefly on the lek and then depart to select a nest site. Nesting occurs from early April through the end of May (but sometimes begins as early as late March, and can continue into the first or second week of June). Incubation typically lasts 25-27 days. The hatching and early brood-rearing period occurs in May and June; the late brood-rearing period extends from mid-July through mid-August (but can extend into early September).

At the end of the late-brood rearing period, sage-grouse begin moving to winter habitat, which they utilize from November through February.

“ Leks occur in relatively open areas within large expanses of sagebrush. Lek persistence through time is positively associated with proportion of sagebrush land cover within 3.1 and 11.2 mile radii (5 km and 18 km, respectively) of the lek location (Johnson et al. 2009). As stated by Johnson et al. (2009), “Clearly sagebrush at both local and landscape scales is a necessary, [but] not sufficient, requirement for viable sage-grouse populations.”

[We Object that the FS has not conducted an assessment and provided qualitative and quantitative current baseline information on the current amount, location, age class and proportion of actual on the ground (and NOT a modeled estimate) sagebrush and sagebrush type (big sagebrush sub-species or short-statured sagebrush) in the landscapes it seeks to burn, masticate/mow crush sagebrush]..

During nesting, females consistently select areas with more sagebrush canopy cover than is generally available in the surrounding landscape (Holloran et al. 2005, Hagen et al. 2007), and continue to use relatively dense stands of sagebrush for earliest brood-rearing habitat if native forbs [i.e., herbaceous flowering plants] and insects are available; following desiccation of herbaceous vegetation in sagebrush uplands, females and their broods move to wetter areas in search of the native forbs and insects required by the chicks. Late brood-rearing habitat is focused on wetter areas, especially riparian and spring-associated meadows that are closely associated with nearby sagebrush. The primary requirement of winter habitat is sagebrush exposure above the snow, and is generally characterized by large expanses of dense sagebrush, often including areas of wind-swept ridges.

[This highlights the importance of mature and old growth dense big sagebrush cover that the FS seeks to destroy].

Analyses presented in the Monograph and elsewhere provide clear results demonstrating that sage-grouse respond to and are affected by habitat characteristics at large spatial scales that

greatly exceed the distances previously thought to affect habitat selection, lek persistence, nest-site selection, nest success, and population viability (Aldridge and Boyce 2007, Walker et al. 2007, Aldridge et al. 2008, Doherty et al. 2008, 2009, Connelly et al. 2009b, Knick and Hanser 2009, Leu and Hanser 2009, Johnson et al. 2009). As succinctly noted by Leu and Hanser (2009), it is now clear that “sage-grouse respond to environmental factors at larger spatial scales than those currently applied in management.”

[We Object that the FS has not addressed the scale of existing sage habitat loss in landscape, (including of seasonal habitats) and has not determined how much the project sagebrush destruction and fragmentation will add to this].

*The results of several recent analyses provide new insights that highlight populations at risk based on past patterns of extirpation (Aldridge et al. 2008, Knick and Hanser 2009, Wisdom et al. 2009). As stated by Aldridge et al. (2008), one of the most critical points to emerge from these studies of population extinction risk in sage-grouse is that “future range loss may relate less to historical mechanisms and more to recent changes in land use and habitat condition, including energy developments, **non-native species invasions, and spread of new invasive disease such as West Nile virus**” (emphasis added).*

[We Object that the FS has not taken a hard look at the risk of its battery of proposed treatments resulting in irreversible flammable weeds or other undue degradation?]

The connectivity analyses of Knick and Hanser (2009) are especially noteworthy. They provide for the first time a quantitative basis to estimate distance thresholds that potentially isolate populations (i.e., habitat connectivity must be sufficient to enable birds to disperse up to 11.2 miles), and an understanding of how landscape pattern, environmental disturbance, and location within a spatial network influence persistence and extirpation of leks. Their analysis of connectivity and lek persistence was based on more than 5,000 leks, and analysis of landscape patterns at distances of 3.1 miles, 11.2 miles, and 33.5 miles (5, 18, and 54 km, respectively) from leks. **They found that the most significant spatial scales for environmental predictors of lek persistence or abandonment were proportion of sagebrush cover within 33.5 miles of the lek, proportion of burned area within 33.5 miles of the lek, and level of human footprint within 3.1 miles of the lek. The best predictors that a lek active in 1965-1974 would be abandoned by 1998-2007 included proportion of burned area within 33.5 miles of the lek; with each unit increase in fire within 33.5 miles of a lek, the probability of lek abandonment increased by an astounding 800% (Knick and Hanser 2009).** In other words, even a small increase in the amount of burned area within 33.5 miles of a lek had a huge influence on the probability of lek abandonment.

We Protest that the FS has not taken a hard look at large-scale sage habitat loss on BLM lands- and on USFS lands too – affecting all of the PMUs/BSUs and lek persistence in the areas where this EA authorizes massive treatments over 15 years or longer. Why would the FS seek to kill any sage in the Jarbidge, Mountain City and Santa Rosa RDs – where wildfire has already resulted in large-scale sagebrush losses? Or in the Ely RD where BLM aggressive “treatments” include mature sagebrush? Or in the areas inhabited by the Bi-state birds, where there’s been large-scale sagebrush loss? There is risk of the FS burning much more sage (and all woody veg species) than the EA claims, especially with collateral damage and escaped FS burns. We remind you of the Schell Range fire escape under Jose Noriega as Ely District Ranger. It was ignited by

the FS in late June – and burned from the West side of the range up and over down to the valley floor in Spring Valley. It burned PJ, sage, and higher elevation conifers, with much unplanned acreage. The FS has learned nothing from that - as this 2025 project allows burning at any time of the year].

There are significant risks with this project and its extensive use of fire at any time of year with no adequate site-specific NEPA analysis. Please consider this: *“The Calf Canyon Fire Review: An Indictment of the Forest Service Land Management Strategy*
In April of 2022, three wildfires were ignited in the Santa Fe National Forest by three separate US Forest Service escaped prescribed burns. 378,000 acres of the Santa Fe National Forest, Carson National Forest and private lands were burned. As a result of the two larger of these fires, the Calf Canyon Fire and the Hermits Peak Fire, entire communities were catastrophically impacted – 900 structures including 340 homes were burned down, thousands of people were displaced, and a traditional way of life was forever altered. Three people died in the aftermath of the fire from post-fire flooding. The cost of recovery efforts will be well over \$5 billion. It is unknown how much conifer regeneration will occur on the approximately 82,000 acres that burned at high severity”.

This highlights the need to focus “fire prevention” on hardening structures, and “defensible space” on lands within close proximity to structures, as Dr. Jack Cohen’s work has long laid out. And to not go roaming all over IRAs and sites distant from any real world interfaces - creating hot, dry, weed expansion conduits.

We Object that the FS has not taken a hard look at fire escape and potential large-scale damage and irreversible losses.

Baker and Bevington <https://rewilding.org/myths-of-prescribed-fire-the-watering-can-that-pretends-to-be-a-river/> describe problems with prescribed fire including smoke and risk of escape. These project, lands could even suffer multiple bouts of fire depleting vegetative cover, exposing soils to erosion, adding carbon to the atmosphere, depleting nutrients. This a real concern for many soil types, and weed-vulnerable and grazing-disturbed soils. The scheme fails to provide adequate site-specific information and analysis, making any accurate science-based analysis impossible. This adds to the serious ecological risk of the project and increases uncertainty over its harms to plant communities and biodiversity including many sensitive species habitats and populations. We Object the FS has not taken a hard look and has not ensured the sustainability of soils – and totally ignores the essential role of protective nutrient and carbon fixing biocrusts, too.

Instead of something like this gargantuan highly uncertain, non-site specific CBM project that is supposed to take place over 15-20 years without any further NEPA review and public comment opportunity, Lindenmayer et al 2024 urge caution in large-scale invasive “treatments” like the HTNF Fire EA. *“When Active Management of high conservation value forests may erode biodiversity and damage ecosystems”*. David Lindenmayer,, Philip Zylstra, Chad T. Hanson,

Diana Six, Dominick A. DellaSala. 2020 in Biological Conservation.
<https://www.sciencedirect.com/science/article/pii/S0006320725001089>

“Increase in extent and severity of disturbances such as wildfires and insect outbreaks in forests globally has led to calls for greater levels of “Active Management” (AM), including in High Conservation Value Forests (HCVF) such as old growth stands. AM includes such activities as thinning, selective logging of large trees (that are sometimes fire resistant), post-disturbance (salvage) logging, recurrent prescribed burning, and road building; singularly or in combinations. We urge caution when implementing these aspects of AM, especially in HCVF such as old growth stands, intact areas, and complex early seral forests. This is because AM may have substantial impacts on ecosystem conditions and biodiversity, and could amplify subsequent natural disturbances”

See for example Lindenmayer et al. 2024, Table 1.

This is germane to the hundreds to IRAs the Fire EA may severely alter and make more vulnerable to mechanized uses, expanded de facto roading, and erosion of natural and wild lands values. Instead of being barometers of natural processes, the FS appears to particularly target IRAs, claiming they are greatly “uncharacteristic” and departed. Which makes no sense -since they are the areas least likely to have experienced fire suppression and human interference with pre-settlement-like natural fire regimes. The fact they have expanses of relatively intact maturing, mature and old growth native trees and shrubs seems to be something the FS, using its flawed modeling schemes, just won’t tolerate.

We Object to the lack of a hard look at these serious ecological concerns.

Also re: agency “prescribed fire:

“Another myth repeated by some prescribed fire advocates is the erroneous notion that forests that previously experienced more suppression will now “burn up” in all or mainly high-intensity fire when a wildfire occurs, unless those forests first get prescribed fire or other “fuel treatments.” But multiple studies have shown that areas that experience wildfire following long periods of fire suppression still burn mainly at low and moderate intensity, along with some high-intensity patches that provide the benefits described above (Odion and Hanson 2008, Miller et al. 2012). In fact, research has found that forests with the longest fire exclusion actually burn at somewhat lower intensity (Odion et al. 2010). This is exciting news for efforts at ecological restoration because it means that large-scale prescribed fire or other “treatments” are not needed as a precondition to allowing mixed-intensity wildfire back into forests”.

Furthjer, Downing et al. 2022 demonstrates the need to focus fuels efforts on private lands interfaces see: <https://www.nature.com/articles/s41598-022-06002-3>.

The FS here fails to provide an adequate baseline of fuels situations, hardening of homes, etc. on private lands within 100 ft. that form the basis of any WUI, and fails to consider a range of alternatives focused on treatments in close proximity to those areas and interfaces. We Object to the dead opposite approach of this sprawling Fire EA.

An OSU news article describes the flawed paradigm that the FS embraces with this project: *“In the old framing, public agencies bear the primary responsibility for managing and mitigating cross-boundary risk and protecting our communities, with their efforts focused on prevention, fuel reduction and suppression,” Dunn said. “This has been the dominant management approach of years past, which is failing us.” The Findings, published today in Nature Scientific Reports, follow by a few weeks the Forest Service’s release of a new 10-year Year strategy, Confronting the Wildfire Crisis. The strategy aims for a change in paradigm within the agency, Dunn said. “We are long overdue for policies and actions that support a paradigm shift,” he said.*

See also Chad Hanson (2021): Logging in disguise: How forest thinning is making wildfires worse. <https://grist.org/fix/opinion/forest-thinning-logging-makes-wildfires-worse/>

“The idea of felling trees and hauling them to lumber mills in the name of fire prevention has many deceptive names: fuel reduction, forest health, ecological restoration, thinning, and even reforestation. As I detail in my book, Smokescreen, the Forest Service began using these terms in the mid-1990s as the public became more aware of the horrific realities of widespread clearcutting of mature and old forests on public lands in the Pacific Northwest, and the northern spotted owl became a household name”. See also information on Bootleg and other fires discussed in the Hanson article.

In the Bradley et al. 2016 report: *“We investigated the relationship between protected status and fire severity using the Random Forests algorithm applied to 1500 fires affecting 9.5 million hectares between 1984 and 2014 in pine (Pinus ponderosa, Pinus jeffreyi) and mixed-conifer forests of western United States, accounting for key topographic and climate variables. We found forests with higher levels of protection had lower severity values even though they are generally identified as having the highest overall levels of biomass and fuel loading. Our results suggest a need to reconsider current overly simplistic assumptions about the relationship between forest protection and fire severity in fire management and policy ... ”.*

We Object to the failure of the FS take a hard look at the adverse impacts of burning, thinning and manicuring the forest and clearing any scrap of wood/biomass in making lands more fire-prone.

Note that the Salmon-Challis NF Iron Creek mining exploration EA includes description of a 2011 Idaho forest fire having harmful effects on Boreal Owl, Great Gray Owl, Flammulated Owl, Northern Goshawk, and Wolverine. Yet here logging/veg clearing “thinning”/fire, or a combination of fire and mechanical manipulation, will be unleashed across a significant landscape of high value to the public and that is home to a host of rare species. Further, in the regional context, a very large number of Region 4 Intermountain Forest wildfires in recent decades have burned right through heavily logged, thinned and grazed forest site and shrub sites, resulting in large-scale habitat loss for many migratory birds and sensitive species. We Object to the failure of ther FS to consider and assess alternative points of scientific ad observational views, and to assess alternatiuves under NEPA.

The Dobkin Declaration also references: “as noted by Connelly et al. (2009a) it is clear that “the effects of livestock grazing management have significant influences on landscape patterns and processes (Knick et al. 2009, Miller et al. 2009).[including] habitat manipulations, water developments, and fencing [that] are still widely implemented to manage livestock grazing. Fences provide perches for raptors, and modify access and movements by humans and livestock, thus exerting a new mosaic of disturbance and use on the landscape. An increase in raven numbers equivalent to one additional raven per 6 linear miles was found to be associated with a 7.4% increase in the odds of sage-grouse nest failure (Coates and Delehanty 2010)” There have been more recent studies that show raven abundance increases with cattle upland water sources, and the presence of cattle grazing in Sage-grouse habitats in spring.

We Object that the FS has not provided any analysis of the threats posed to each IOTA and across the project landscape to sensitive species like Sage-grouse from the gamut of activities the FS authorizes - like high levels of livestock use in spring-early summer.

Based on “the scientific monograph “Ecology and Conservation of Greater Sage-Grouse: A Landscape Species and Its Habitats” (Knick and Connelly 2009”.

The FS claims that:- *Prescribed fire could reduce hazardous fuels and therefore would reduce the likelihood of habitat ... loss from wildfire.*

And it could increase fire risk, too – as it creates hotter, drier, windier, weedier sites – but the FS is blind to conducting a fair and balanced analysis. Knick and Connelly 2009 extensively discuss the perils of cheatgrass for western ecosystems. What are the chances of a “treated” area burning in a wildfire? It could result in permanent site dominance of flashy hazardous weed fuels where fires are very frequent and native woody species cannot recover. Thus, it significantly increases fire risk, result in increased off-road use, etc. but the FS fails to conduct a balanced analysis, We Object to the constant slanted analysis and the lack of any hard look. For example, PJ is less likely to burn than sage, and sage less likely to burn than grass. The latter is the post-FS burn/treatment environment -which is most likely to ignite from lightning and/or human-caused fires. Rosy promises and biased assertions are made in the EA - with no hard look and no integrated science-based look at the USFS impacts claims made or at the highly vulnerable status of each declining population and current ecological conditions especially adding in chronic livestock grazing habitat disturbance and degradation impacts to upland and riparian habitats.

The 2022 Fire EA P. 28 stated:

The sagebrush ecological systems (big sagebrush shrubland and steppe and low sagebrush shrubland and steppe) occur on approximately 1,833,000 acres within the Humboldt-Toiyabe National Forest, outside of designated wilderness (LANDFIRE 2014) - about 35 percent of the analysis area ...

What are the specific differences between Landfire 2014 and the more recent version now used? In 2025 We Object to the lack of details on the modeling the FS uses to doom terrestrial and aquatic species habitats.

We Object that FS throughout its reports and EA arbitrarily ignore consideration of grazing disturbance threats to project-targeted lands - which significantly increases which flammable weed invasion and site dominance risk especially in “treatment” aftermath, – and that causes more frequent fires to flash across the landscape. See Belsky and Gelbard 2000, Molvar et al. 2024, *Cheatgrass invasions: History, causes, consequences, and solutions*. by Erik M. Molvar, Roger Rosentreter, Don Mansfield, and Greta M. Anderson.

The HTNF lands are increasingly suffering not just cheatgrass, but also medusahead dominance in the wake of both treatments and intensive livestock grazing. Once these weeds gain a foothold, and they are unstoppable, no matter how much toxic herbicide that is applied – and medusahead is even worse than cheatgrass – yet there is no documentation of where it is already present. The EA and reports lack any current hard look mapping and analysis of these species in understories, their percent cover, areas that have become largely annual grass expanses, lands that are “at risk” of becoming annual grass expanses with EA project disturbances – as these weeds thrive in the aftermath of fires in grazed landscapes.

Ground disturbing land uses in the sagebrush ecosystem have led to encroachment by invasive plants, of particular concern are invasive annual grasses such as cheatgrass and medusahead (USDA Forest Service 2016). “Resistance and resilience” is a management concept used to address invasive grass and altered fire regimes in sagebrush ecosystems defined by Chambers et al. (2014). Resilience to disturbance is the capacity of an ecosystem to regain its characteristic structure and processes after disturbances like wildfire. Resistance to invasive annual grasses is based on the capacity of an ecosystem to prevent increases in invasive annual grasses.

We Object that the HTNF his EA needs to provide extensive detailed baseline data on ecological conditions related to livestock grazing, including current grazing monitoring information, actual use vs. permitted use, grazing use periods and use level conflicts with sensitive species and health of native herbaceous vegetation, and inadequacy of upland and riparian standards at present to fulfill Sage-grouse seasonal habitat needs. There appears to be no current livestock grazing capability and suitability analysis. The last suitability analyses were likely at the time of the 40 year old Forest Plans. The FS must take a full complete and hard look at how grazing domestic livestock in this arid and often very rugged landscape profoundly alters native vegetation communities and their ability to withstand climate change stress and ability to recover from prescribed fire and other treatments.

Basic on-the-ground ecological observations across sagebrush landscapes show that sites more intensively grazed by livestock and more intensively disturbed sites are not even evaluated in nearly all agency and health assessments. We Object to the failure to provide this basic hard look information, as well as detailed mapping of livestock facilities and facility impacts to ecological conditions, wildlife, and facilitation of flammable weeds – as well as diseases.

The USGS Williamson et al 2019 cheatgrass research exposes how grazing (including following fire) increases fire-causing cheatgrass risk. See for example, “Study shows grazing encourages cheatgrass growth”.

<https://www.boisestate.edu/news/2020/03/13/study-by-matthew-williamson-shows-grazing-encourages-cheatgrass-growth/> .

“A group of scientists led by Matthew Williamson, an assistant professor in Human-Environment Systems at Boise State University, has found that grazing plays a major role in determining the prevalence of cheatgrass; even in places that have not burned. Their results suggest that grazing increases the potential for cheatgrass occurrence by 10-20 percent and that more frequent grazing can almost double cheatgrass prevalence when controlling for variation in climate, topography, fire history and site variation. These results highlight the challenges associated with using grazing as a land management tool for reducing fire and cheatgrass spread”.

See also Belsky and Gelbard 2000, Beschta et al. 2012 and 2014, Reisner et al. 2013, Williamson et al. 2019/2020. We Object that the FS has not addressed how continued grazing disturbance following minimal “rest” in burned lands increases cheatgrass risk.

The FS Terrestrial report claims:

Design elements would modify activities in sage-grouse habitats within the sagebrush ecosystems. This includes: - avoiding active leks during breeding season –

But incinerating the sagebrush at any other time of the year will be just fine? The FS sagebrush habitats are increasingly critical as climate change bears down and low elevations choked with cheatgrass are unrecoverable. So what does the HTNF do? Develop a plan to burn its sagebrush and prime sites for weeds all over the landscape with pile burning and broadcast burning, and other activities often also causing collateral damage. We stress that in areas with understories chronically depleted by livestock - like the Bridgeport, Mountain City, Jarbidge, Snata Rosa, Ely and other RDs – dense sagebrush and sage/bitterbrush mixes are vital for nesting - and use of artificial ceilings for sage cover are severely flawed. Plus by burning sage at 15% and over canopy cover – the FS is certain to destroy the best remaining pockets of remnant Pygmy Rabbit habitat on the forest, and dense sagebrush critical to Sagebrush Sparrow, Brewer’s Sparrows and Sage Thrashers that have lost huge areas of sagebrush habitat on lower elevation lands, and are losing more habitat daily at all elevations as BLM and the FS conduct sagebrush thinning, juniper pile burning (weed expansion collateral damage) and a host of other assaults on mature sage communities. See for example:

<https://www.federalregister.gov/documents/2013/10/28/2013-24307/endangered-and-threatened-wildlife-and-plants-threatened-status-for-the-bi-state-distinct-population>

See also:

2023 Proposed Rule: <https://www.federalregister.gov/documents/2023/04/27/2023-08848/endangered-and-threatened-wildlife-and-plants-threatened-status-for-the-bi-state-distinct-population>

Endangered and Threatened Wildlife and Plants; Threatened Status for the Bi-State Distinct Population Segment of Greater Sage-Grouse With Special Rule

A Proposed Rule by the [Fish and Wildlife Service](#) on [10/28/2013](#)

.. domestic livestock, grazing and management of feral horses have the potential to negatively affect sage-grouse habitats by decreasing grass cover, fragmenting shrub canopies, altering soil characteristics, decreasing plant diversity, and increasing the abundance of invasive cheatgrass (Factor A). FR 64367.

... the impacts from different ungulate taxa may have an additive negative influence on sage-grouse habitats (Beever and Aldridge 2011, p. 286). Cattle, horses, mule deer, and pronghorn antelope each use the sagebrush ecosystem somewhat differently, and the combination of multiple ungulate species may produce a different result than a single species. FR 64368.

... Restoration of altered sagebrush communities following fire is difficult, requires many years, and may be ineffective in the presence of nonnative, invasive grass species. Additionally, sage-grouse are slow to recolonize burned areas even if structural features of the shrub community have recovered (Knick et al. 2011, p. 233). FR 64366.

... Grazing can adversely impact nesting and brood-rearing habitat by decreasing vegetation used for concealment from predators (Factors A and C). Grazing also compacts soils; decreases herbaceous abundance; increases soil erosion; and increases the probability of invasion of nonnative, invasive plant species (Factor A). Livestock management and associated infrastructure (such as water developments and fencing) can degrade important nesting and brood rearing habitat, reduce nesting success, and facilitate the spread of WNV (Factors A, C, and E). FR 64368.

Climate change projections in the Great Basin suggest a hotter and stable-to-declining level of precipitation and a shift in precipitation events to the summer months; fire frequency is expected to accelerate, fires may become larger and more severe, and fire seasons will be longer (Brown et al. 2004, pp. 382-383; Neilson et al. 2005, p. 150; Chambers and Pellant 2008, p. 31; Global Climate Change Impacts in the United States 2009, p. 83). With these projections, drought (which is a natural part of the sagebrush ecosystem) is likely to be exacerbated. Drought reduces vegetation cover (Milton et al. 1994, p. 75; Connelly et al. 2004, p. 7-18), potentially resulting in increased soil erosion and subsequent reduced soil depths, decreased water infiltration, and reduced water storage capacity (Factor A). Drought can also exacerbate other natural events such as defoliation of sagebrush by insects (Factor A). These habitat component losses can result in declining sage-grouse populations due to increased nest predation and early brood mortality (Factor E) associated with decreased nest cover and food availability (Braun 1998, p. 149; Moynahan et al. 2007, p. 1781). Climate change will potentially act synergistically with other impacts to the Bi-State DPS, further diminishing habitat (Factor A) and increasing isolation of populations (Factor E), making them more susceptible to demographic and genetic challenges or disease. FR 64371.

We Object to the failure to take a hard, current science-based look at all these significant preceding ecological concerns.

It is hard to understand how the HTNF, knowing all the serious ecological problems and grazing, mining, energy and other threats these landscapes and face, could develop a highly generalized EA containing almost no actual ecological baseline information that would create major ne disturbances in fragile sagebrush landscapes. This massive and very expensive treatment scheme - is based on

deeply flawed black box models, and would result in massive purposeful weed-causing disturbances across BSSG, GRSG, and many other species of concern including ESA-listed species. Each individual burn area will have specific features and ecological attributes and soil health and erodibility, slope, aspect, elevation, precipitation levels, past level of disturbance, intensity of current grazing and current impairment, etc. that makes it unique – and may contribute to burning risk. A hard NEPA look must be taken at the site-specific level in order to integrate and balance all the conflicts on a site and at all the risks. We again Object to this programmatic CBM analysis for inflicting often major and irreversible harms to habitats, watersheds, IRAs and other forest values.

FS Claims Almost All Extant Sagebrush Habitat is “Uncharacteristic”

We Object that this Fire EA analysis and vegetation manipulation backslides to the 1950s-1970s heyday of USFS and BLM purposeful destruction of sagebrush and PJ habitats for livestock forage – with all kinds of burning and using mechanical methods and potential re-seeding -and these methods often overlap in the same land area.

The 2025 EA’s deeply flawed models find that nearly all sagebrush is moderately or highly departed from the Landfire ideal of bare dirt, a bit of grass and a few scattered young sage plants. Despite biotic crusts being fundamental components of sagebrush, PJ and other mature veg. communities in arid lands– there is zero data on crusts in the EA and zero consideration of biocrusts in the flawed and biased models, and fire and heavy equipment, cattle trampling- all destroy crusts.

The 2025 EA includes: “Current Conditions: The Humboldt-Toiyabe National Forest has 597,421 acres identified as Wyoming and basin big sagebrush, 1.4 percent of which are highly departed from historical conditions, 76.1 percent moderately departed, and 22.0 percent with little departure (table 4). The historical fire regime supported a patchy mosaic of different age and density of shrubs (NatureServe 2018). Following a stand-replacing disturbance, stands are in an early development stage, dominated by a combination of native and non-native grasses with shrubs scattered (NatureServe 2018). Succession to open shrub and herbaceous vegetation co-dominated stands occurs after 20 years with an additional 40 years to transition to closed shrub-dominated stands with pinyon-juniper seedlings scattered (NatureServe 2018). With adequate disturbance, such as natural drought, insects and diseases, or mixed-severity fires, proper grazing, pinyon-juniper encroachment, non-native annual grass invasions are decreased, and basin big and Wyoming sagebrush cover is maintained (NatureServe 2018)”

The Sage-grouse Conservation Assessment (2004), the Knick and Connelly, eds. Studies in Avian Biology Baker Chapter “PRE-EUROAMERICAN AND RECENT FIRE IN SAGEBRUSH ECOSYSTEMS WILLIAM L. BAKER” 2011, Remington et al 2021, and a host of other Sage-grouse literature – lay out the needs of all sagebrush-dependent sensitive species, migratory birds.

We Object that the FS is setting the stage for major new burning loss of sagebrush – both intentionally as well as from collateral damage due to burning Pinyon-Juniper and other forest and shrub lands where sage is also present. At the same time, the FS fails to provide any specifics on how much of each type of fire will be used, and how it tallies acres. There will be huge damage from pile and other burning in PJ areas with low sage – which BLM claims and maps as dwarf sage. The BLM

fails to reveal how many burn piles - hundreds of thousands??? - may result from this project – and each one may become an epicenter of flammable weed expansion as the burning destroys biocrusts and soil structure -and cheatgrass/medusahead and other weeds have a prime site to invade, and then move outward from.

Regarding the FS claim that Wyoming big sagebrush is 76% “moderately departed. If the FS “treated” all these “highly departed sites” – how major would declines in affected sagebrush migratory breeding birds and Sage-grouse, Pygmy Rabbits, Sagebrush Sparrow, Sage Thrasher, Brewer’s Sparrow, Common Poor-Will, Loggerhead Shrike be? In each RD and across the Forest? These species are in trouble and are experiencing population declines because there already is not enough mature and old growth sagebrush to meet their habitat needs. How will inevitable treatment-caused weed infestations make any of these major HTNF major new disturbance “treatment” impacts even worse? The Terrestrial wildlife report describes: “The sagebrush sparrow is a sagebrush obligate and is dependent on high sagebrush cover and density (Scherr and Chalfoun 2022) ... Habitat loss has led to a decline in the sagebrush sparrow’s population and the species is considered a vulnerable species in Nevada (NatureServe 2024)”. Yet this Fire EA seeks to thin, create “mosaics” = cause serious habitat fragmentation, and cause easier cow use and access to these habitats altering and degrading the structural complexity of mature and old growth sagebrush this species needs - across the HTNF’s remaining sagebrush Sparrow habitats.

Mountain big sagebrush – 90.7 % highly departed. If the FS “treated” all these “highly departed sites” how large would declines in affected sagebrush breeding birds and sage-grouse be in EA targeted sites? In landscapes? In RDs? Across the Forest? How will inevitable treatment-caused weed infestations make any of these major HTNF disturbance “treatment” impacts even worse? How major would declines in affected sagebrush migratory breeding birds and Sage-grouse, Pygmy Rabbits, Sagebrush Sparrow, Sage Thrasher, Brewer’s Sparrow, Common Poor-Will, Loggerhead Shrike be from this project – both in the local area and potentially regionally? These species are in trouble, and are experiencing population because there already is not enough mature and old growth sagebrush to meet their habitat needs

Dwarf sagebrush – 98.3% departed. And along with dwarf sage the also FS references PJ. This draws back the curtain on the deeply flawed models and assumptions the FS uses. It also exposes how the FS and BLM models list and often map vast areas of persistent (see Romme et al. 2009, Intermountain Forester’s Position paper) and late successional Pinyon-Juniper sites as “low or dwarf sagebrush”. This mapping sleight of hand is used to justify major PJ deforestation killing of sagebrush as “collateral damage”, and “thinning” of sage in scorched earth “treatments” -all harmful to a suite of sensitive and declining species -whose main purpose appears to actually be to get more livestock forage grass.

We Object that the FS estimates of “recovery” are far too over-optimistic – 20 years is absurd, and this definitely does not reflect the rate of big sagebrush low sagebrush recovery as it actually occurs in the real world. And in many areas, low sagebrush is no longer recovering – with a great dearth of any seedlings over a decade after fires. The FS appears to have mixed up rabbitbrush presence with the presence of sage in “recovery” of sites in Fire EA claims. How long does it take to recover

sagebrush to the density and canopy cover that currently exists across all the potential project area lands? We Object the lack of hard look information and analysis.

The FS also states: *The Humboldt-Toiyabe National Forest has 991,892 acres identified as mountain big sagebrush, 90.7 percent of which are highly departed from historical conditions, 8.3 percent moderately departed, and 0.4 percent with little departure (table 4). As fire frequency increases, perennial grasses and shrubs are eliminated and non- native annual graminoids dominate, further altering fire regimes (NatureServe 2018). After long periods without fire, this vegetation type can sometimes become invaded by conifer woodlands (see Pinyon-Juniper woodlands section for explanation of this) (Innes 2019, NatureServe 2018). Conifer encroachment and changes in fire frequency in these high elevation montane ecosystems can greatly alter shrub cover and species composition (Bradley 2010). Insects or diseases outbreaks and stand-replacing fires are key disturbance agents (NatureServe 2018). These disturbances thin invading conifer species and transition the ecosystem back to a more shrub dominated composition with adequate herbaceous cover (LANDFIRE 2007, NatureServe 2018”).*

The FS fails to reveal that “dwarf sage” fire return intervals may be 1000 years, Pinyon-Juniper over 400 years and that stand replacing fires are the way many of these sites actually burned pre-settlement.

We Object that the FS cherry-picks information, ignores Sage-grouse biologists and experts, and applies Landfire and other information that siongel-mindedly supports massive manipulation, uses changing versions of modeling and inputs, and employs self-serving information on vegetation communities that discounts their ecological values to declining and imperiled species and biodiversity – while ignoring an ever-growing body of info to counter the modeling assumptions.

We Object that the wildlife and sensitive species specialist reports and EA fails to accurately assess the long historical fire disturbance intervals in sage, PJ and other communities, and larger blocks of sagebrush – not heavily fragmented mosaics.

USGS Remington et al. 2021 describe: *“Most sagebrush taxa are slow to recover after fire because of limited seed dispersal, low frequency of resprouting, and poor seed viability (Young and Evans, 1989; Miller and others, 2011). Several studies have documented that sagebrush recovery to near preburn cover after fire can take from several decades to more than a century (for example, Welch and Criddle, 2003; Lesica and others, 2007; Shinneman and McIlroy, 2016). Sagebrush landscapes were characterized by large patches of both dense and scattered sagebrush, as well as large, grass-dominated areas based on historical General Land Office Survey data from the late 1800s to the early 1900s (Bukowski and Baker, 2013). Prior to Euro-American settlement, small fires likely occurred more often, and large fires were more infrequent within sagebrush stands. This resulted in dynamic sagebrush landscapes with a fine-scaled small patch mosaic that alternated between periods of ecosystem recovery and more extensive maturity (Bukowski and Baker, 2013”).*

A key issue is whether modern fire intervals for sagebrush communities are different from historical intervals and whether differences between the two suggest fire regimes have departed from their historical ranges of variability thus limiting or prohibiting sagebrush recovery after fire. Modern fire

intervals among floristic regions and sagebrush community types have been more accurately assessed using contemporary fire perimeter data. Contemporary fire intervals are likely shorter than historical intervals in many but not all sagebrush ecosystem types and regions (Baker, 2013; Brooks and others, 2015). Modern fire intervals for some big sagebrush (A. tridentata) communities in the western part of the sagebrush biome represented a substantial reduction compared to historical fire intervals based on land-survey data, particularly for Wyoming big sagebrush, with historical fire rotations that likely exceeded 200 years in most regions (Bukowski and Baker, 2013). In addition, contemporary rotations for some xeric low sagebrush (A. arbuscula) and black sagebrush (A. nova) communities are also generally substantially shorter than historical rotations, which were estimated to have exceeded 1,000 years (Baker, 2013; Bukowski and Baker, 2013). Remington et al. 2021, pp. 83-84.

As changing fuels, ignition rates, and climate conditions promote greater annual and cumulative area burned and shorter fire intervals, the probability of specific parts of the landscape burning repeatedly also increases. As fire recurrence over a given time period increases, conditions become more suitable for the persistence of annual plants, such as cheatgrass, and less suitable for the persistence of woody perennials, such as sagebrush, resulting in a high probability of transitioning to a grass-fire cycle (D'Antonio and Vitousek, 1992). An influential study documented this dynamic in big sagebrush on the Snake River Plain (Whisenant, 1990), in which mean fire return intervals declined from an estimated 60 to 110 years historically to as short as 5 years or less during the 1960s through the 1980s. Consequently, many areas burned repeatedly and transitioned to cheatgrass-dominated systems with decreased native plant abundance and diversity (Whisenant 1990). Remington et al. P. 85.

Human-caused ignitions account for thousands of wildfires each year across the western United States and well over half of all wildfires annually. Approximately 90 percent of wildland fires in the United States are caused by humans and, on average, humans ignite 61,375 wildfires per year (National Interagency. Remington et al. p. 85.

We also Object that the FS has failed to address the significant avian species decline, and other species and weed issues we have raised about fire manipulation of very weed-vulnerable sage, PJ and other shrub communities.

The FS states: The HTNF “has 1,363,417 acres identified as dwarf sagebrush, 98.3 percent of which are highly departed from historical conditions, 1.0 percent moderately departed, and 0.4 percent with little departure (table 4). Since the late 2000s, these sites typically have fires returning every 100 to 200 years, with black sagebrush generally supporting more fire than other dwarf sagebrush species (NatureServe 2018). Many of these mixed-low sagebrush stands are susceptible to pinyon (*Pinus monophylla* Torr. and Frém.) or juniper (*Juniperus osteosperma* (Torr.) Little) establishment (NatureServe 2018)”.

We Object that the HTNF is laying the groundwork for crazily burning up low/dwarf sagebrush that takes centuries to recover – if recovery even happens at all. This underscores the bogus and flawed modeling assumptions used in the Fire EA. See William Baker Chapter in Knick and Connelly et al. 2009/2011 *Studies in Avian Biology*]

Knick and Connelly 2009/2011, eds., Baker paper states; “Sagebrush (*Artemisia* spp.) ecosystems are under threat from a variety of land uses, disturbance, invasive species, and are also thought by some to have been affected by fire exclusion and require burning as a part of restoration. To better understand the historical range of variation (HRV) sagebrush ecosystems and whether sagebrush fire regimes today have too much or too little fire, I estimate fire rotation (expected time to burn the area of a landscape) in sagebrush ecosystems under the HRV. Estimates derived from five sources are >200 yr in little sagebrush (*Artemisia arbuscula*), 200–350 yr in Wyoming big sagebrush (*A. tridentata* ssp. *wyomingensis*), 150–300 yr in mountain big sagebrush (*A. tridentata* ssp. *vaseyana*), and 40–230 yr in mountain grasslands containing patches of mountain big sagebrush with longer rotations in areas where sagebrush intermixes with forests. Landscape dynamics under the HRV were likely dominated in all sagebrush areas by infrequent episodes of large, high-severity fires followed by long interludes with smaller, patchier fires, allowing mature sagebrush to dominate for extended periods. Fire rotation, estimated from recent fire records, suggests fire exclusion had little effect on fire in sagebrush ecosystems. Instead, cheatgrass (*Bromus tectorum*), human-set fires, and global warming may have led to too much fire relative to the HRV in four floristic provinces within the range of sagebrush in the western US. Sagebrush ecosystems would generally benefit from rest from disturbance. Global warming is likely to increase fire, and widespread prescribed burning of sagebrush is unnecessary”. Abstract.

The *Studies in Avian Biology* Baker chapter also contains this critique of fire interval estimates long used by BLM and the USFS to justify large-scale logging and “treatment”, and that it certainly appears the LandFire and NatureServe models and inputs rely upon. Baker exposes how flawed they are for trees:

“Mean CFI nearly always underestimates the length of the actual mean fire interval at a point (Baker and Ehle 2001; Baker 2006b; Kou and Baker 2006a,b). These studies explain the reasons: (1) fires are commonly included in the composite list that did not actually burn the point because sampling areas are too large, (2) most fires are small and do not burn the whole study area, but CFI does not adjust for fire size, (3) mean CFI declines as sample size increases, an undesirable property that means its value may be more related to sample size than a property of a fire regime, (4) intentional targeting of particular sample areas and particular sample trees has been common and biases CFI estimates toward shorter intervals, (5) the longest fire intervals, which are often incomplete, are commonly omitted, biasing CFI toward shorter intervals.

The estimated sagebrush fire return intervals from Baker Table 1:

TABLE 1. ESTIMATES IN YEARS OF PRE-EUROAMERICAN FIRE ROTATION AND MEAN FIRE INTERVAL IN SAGEBRUSH. SOURCES ARE FIRE SCARS AND FIRE ROTATION IN ADJOINING FORESTS, FIRE FREQUENCY IN PALEO-CHARCOAL RECORDS, AND TIME FOR SAGEBRUSH TO RECOVER FULLY AFTER FIRE.

Original sources					Corrected estimates			
Taxon	Source	Setting	Est.	After	After	Small	Large	
				3.6	16.0	sagebrush	sagebrush	
				mult.	mult.	areas after	0.57 adj. corr.,	
				corr.	corr	no adj. corr.	if needed	
Little								
sagebrush	Young and Evans							
	(1981)	Scars	Adjacent	95	342	1,520	-	195–866
	Miller and Rose							
	(1999)	Scars	Intermix	138	497	2,208	497–2,208	-
	Bauer (2006) ^a	Rotation	Intermix	427	-	-	427	-
	<i>Summary</i>					>425	>200	
Wyoming big								

sagebrush	Young and Evans						
	(1981)	Scars	Adjacent	95	342	1,520	- 195–866
	Floyd et al. (2004) ^b	Rotation	Intermix	~400	-	-	~400 -
	Bauer (2006) ^a	Rotation	Both	427	-	-	427 243
	Shinneman (2006)	Rotation	Both	400–600	-	-	400–600 228–342

	Shinneman (2006)	Rotation	Both	400–600	-	-	400–600	228–342
	Mensing et al.							
	(2006)	Charcoal	Expanses	200–500c	-	-	-	200–500
	This paper	Recovery	Expanses	Uncertain	-	-	Uncertain	Uncertain
	<i>Summary</i>						400–600	200–350
Mountain big								
sagebrush								
Fast Track	This paper	Recovery	Expanses	>50–70	-	-	>50–70	>50–70
Slow Track	This paper	Recovery	Expanses	>150–200	-	-	>150–200	>150–200
Near piñon-								
juniper	Burkhardt and							
	Tisdale (1976)	Scars	Adjacent	>30–40	>108–144	>480–2,304	-	>62–1,313

	Wangler and							
	Minnich (1996) ^a	Rotation	Intermix	480	-	-	480	-
	Floyd et al. (2008) ^b	Rotation	Intermix	400–600	-	-	400–600	-
	Bauer (2006) ^a	Rotation	Both	427	-	-	427	243
	Shinneman (2006)	Rotation	Both	400–600	-	-	400–600	228–342
Near								
Douglas-fir	Heyerdahl et al.							
	(2006)	Scars	Rotation	Intermix	160 ^d	-	-	160 -
	<i>Summary</i>						160, 400–600	150–300
Mountain								
grasslands/								
patchy								

sagebrush	Houston (1973) ^b	Scars	Both	20–25	72–90	320–400	72–400	41–228
	Arno and Gruell							
	(1983)	Scars	Both	<35–40	<126–144	<560–2304	<126–2,304	<72–1,313
	Miller and Rose							

(1999)	Scars	Intermix	12–15	43–54	192–864	43–864	-
Summary						Uncertain	40–230

^a Bauer lists little sagebrush and Wyoming big sagebrush, but the correct taxa are mountain big sagebrush and Wyoming big sagebrush in the valley bottom, mountain big sagebrush higher in the watershed, and little sagebrush on ridgetops (P. J. Weisberg, pers. comm.)

^b Authors do not identify the sagebrush taxon nearby; I assigned this tentatively based on elevation or other aspects of the environmental setting.

^c This estimate is related to fire frequency, and may require correction to estimate fire rotation and mean fire interval, but the needed correction is unknown.

^d Estimated from data in Heyerdahl et al. (2006).

The FS states: “Because low and black sagebrush are limited in post-fire sprouting, significant increase in sagebrush canopy cover does not occur until the mid-seral state, between 20 to 59 years post-disturbance (NatureServe 2018). In absence of adequate disturbance during the mid seral stage, sagebrush cover decreases as dispersed conifer seedlings and saplings establish into a closed canopy conifer system (NatureServe 2018). Severe drought, mixed-severity fire, or insect attacks are needed to reduce pinyon and juniper composition and maintain black and low sagebrush communities (NatureServe 2018). This community is also highly susceptible to cheatgrass invasion due to the high percentage of bare soil cover”. We Object to the FS basically claiming (based on flawed NatureServe models) claiming that unless burned sites are re-burned at the “mid-seral state”, conifers may occupy sites. Does the FS expect us to believe that mature and old growth sage communities need constant human meddling? Has the FS considered that sites its models map as “sagebrush”, are PJ and other conifer sites under natural plant successional processes?

So suddenly we learn that the FS, who routinely kills vast areas because of native mistletoe presence or insect or other “problems, and the agency bemoans drought as a problem in other situations, applauds insect attacks in PJ. We Object the FS “manages” PJ, and sensitive Pinyon Jay, habitats (as well as Juniper Titmouse, Black-throated Gray Warbler, Ash-throated Flycatcher, Gray Vireo, Ferruginous Hawk and other declining species habitats as a sacrifice community. This scheme is to prevent late successional and old growth or dense sage community development. We also Object that the FS never takes a hard look at how livestock trampling disturbance to protective biocrust and depletion and degradation of herbaceous communities creates bare soil areas which may aid in conifer establishment. We Object that the FS never estimates the nutrient depletion that occurs with the frequent disturbance the EA models are based on. Not only is there chronic nutrient loss and export -

as cattle and sheep ultimately go to slaughterhouses. So nutrients are not returned to the site. The major burning and disturbance projects will result in accelerated and unnatural rates of nutrient loss to already nutrient-stressed systems, along with adding to carbon pollution and global heating.

The HTNF Fire EA claims it will:

- *retain at least 15 percent sagebrush canopy cover*; Where will this be – within the burned sites or surrounding them, or an average over all? Will it be burning of taller sage critical for nesting sensitive species nest cover (and sage-grouse winter food?), surrounded by very fire-resistant low sagebrush cover of 6-inch tall windswept low sage unsuitable for nesting? Fire kills big sage and it does not resprout – so it is impossible to understand how the FS is going to burn this critical cover and only kill “some” plants. How much of the land area will actually have this amount of cover vs. how much had this cover pre-treatment/? It is very easy to draw project boundaries so as to exclude large areas of surrounding depauperate cover all over the surroundings – thus the impacts of targeting the remnant denser sage are amplified. What we typically see is agencies in treatments focus on intact mature communities and destroy the heart of them (see for example the Marine War project), where forest or the sagebrush cover is the best and where there is habitat for numerous species of conservation concern – Northern Goshawk, Flammulated Owl, Brewer’s Sparrow, etc.

The FS cannot “surgically” thin sage with fire. But it can effectively prime sites for weeds to take over and choke out native understories, and fragment habitat. Many species of wildlife that inhabit sagebrush are sensitive to fragmentation which may also increase risk of predation by mammalian and avian predators, and/or nest parasitism by Brown-headed cowbirds.

Please provide forest-wide and also project-specific mapping of all sites where sagebrush cover canopy cover is over 15%, and where it is over 25%. Please provide systematic baseline inventories across the Forest to determine occupancy by Pygmy Rabbit, Brewer’s Sparrow, Sage Thrasher, Green-tailed Towhee and other sagebrush-associated biota of increasing and significant conservation concern. 15% cover is much too low to support Pygmy Rabbits.

For species like Pygmy Rabbits, the terrestrial report uses absurdly generalized mapping – apparently trying to portray that there are many sites with Pygmy Rabbits, which is not the case. The FS Terrestrial Report states there are 2 million acres of Pygmy Rabbit habitat. We Object that the FS has not provided mapping of all known Pygmy Rabbit occurrences – so the public could see how little habitat remains that is known to be occupied by Rabbits. This species has been petitioned for EDSA listing because of now-documented declines and habitat loss. that in places like Long Valley in the Santa Rosa range, the FS plans to destroy some of the last remaining Pygmy Rabbit habitat in the RD.

This Rabbit is far more rare than the FS lets on – and grazing, livestock facilities, vegetation” treatments” just like these, wildfires, and a host of developments including highly foreseeable industrial solar sprawl and mining all around the Monitor, Austin, and other regions, and intensified grazing – as with the FS opening the vacant Pine Valley old Hage allotment with known Pygmy Rabbit occurrences. The Fire EA’s manic focus on destroying and fragmenting sagebrush communities will destroy some of the little habitat that remains. Of high quality Pygmy Rabbit habitat – i.e. by knowingly fragmenting and destroying it outright. Despite public comment and

documentation with the FS by K. Fite of occupied Pygmy Rabbit habitat (burrows and scat) in some areas of the Santa Rosa range, the FS proceeded to mow and brushbeat nearly all the sagebrush around the burrows that are highly inadequate to ensure Pygmy Rabbits would persist in the site. The FS had flagged little circles of “leave” areas around burrows were flagged with blue flagging the sage killing contractor was supposed to avoid. The contractor ignored the flagging and destroyed the sage all around the burrows – mowing and crushing it. THIS is the sad reality of how HTNF “treatments” play out on the land. There are vast areas of the HTNF and BLM Lands that are mapped as potential Pygmy Rabbit habitat, but that are unoccupied because of sagebrush loss, structural simplification – very much caused by livestock breaking down sagebrush by rubbing on and loafing under the the tallest densest sage in an area, livestock-caused irreversible flammable weed infestations of understories, and fragmentation.

We Object to the lack of a fair science-based hard look at the array of threats to HTNF Pygmy Rabbits combined with the Fire EA project effects to Pygmy Rabbits (also discussed in more detail in Part 2 of this Objection).

We Object to the finding that there are no species in the “will impact” category in the terrestrial report: **Will impact** individuals or habitat with a consequence that the action may contribute to a trend toward federal listing or cause a loss of viability to the population or species. And again, the FS has not assembled necessary baseline information on species habitat characteristics required by each species and to quality and quantity and the threats to each species persistence .

The FS states:

- in wintering, breeding, and nesting habitat, sagebrush removal or manipulation should be restricted unless necessary to facilitate restoration of habitat. This leaves the door wide open to burn whatever the FS wants. WHAT specific “habitat” would be “restored”? It sure seems that it’s cattle and domestic sheep “forage” that this burning/treatment is aimed at. How is destroying and fragmenting wintering, breeding and nesting habitat already in all areas across the HTNF? Does Sage-grouse habitat trump Pinyon Jay habitat? Does Mule Deer habitat trump Pinyon Jay habitat?

The FS claims this project – and its burning immense areas of the HTNF - will restore habitat, ergo any kind of manipulation of sagebrush can be justified by use of this arbitrary claim.

Regarding big game - we Object that the FS has failed to map and identify Mule Deer/Pronghorn/Elk seasonal habitats – fawning/kidding/calving habitats, wintering areas, transitional ranges, and migration corridors. The FS has failed to identify and map these vital areas, and the current vegetation on the land, and failed to conduct a hard look integrated analysis of foreseeable impacts to big game. What happens to winter range when the “too dense” sage or PJ-sage mix that the FS has burned up goes to cheatgrass, and there’s no winter food for big game? The FS openly admits it hasn’t assembled info, stating in the BE: *“During the implementation planning phase, important habitat for native ungulates within the treatment area will be identified and analyzed (that is, migratory corridors, wintering habitat, fawning and calving areas, and so forth).*

We Object that there is no effective mandatory prohibition on burning/masticating/chain-sawing/bulldozing firebreaks, low level helicopter overflights and driving ATVs igniting fires, driving cross-country potentially crushing eggs and chicks - throughout the nesting period for migratory birds, nesting raptors, and of course Sage-grouse. How much “take” of sensitive and other migratory birds will accompany burning vast areas of habitat annually? Thorough baseline studies must be conducted across this landscape to determine relative number and species of migratory birds present in habitats targeted for massive manipulation.

How much “take” of Sage-grouse, Sage Thrasher, Sagebrush Sparrow and Mountain Quail will result as well? This project is likely to be disastrous for Mountain Quail, as they require dense cover that the models target for destruction across all vegetation types. What is the current population of these species on the Forest?

- in the 12-inch or less precipitation zone, no prescribed fire, except for pile burning; unless necessary to facilitate restoration of habitat; Again – this is a waiver that leaves the door wide open to burn whatever is present. Further, pile burning is a form of extreme and highly wasteful and polluting manicuring of wild lands. Any burning in 12 inch and less precip lands (which are highly susceptible to cheat/medusahead) is ecological madness. Over the time period of this project, how many pile burn scorched earth cheatgrass colonization sites in previously intact sage communities will it create? – as well as scorches and kills surrounding sagebrush. The FS pile burning mania is truly ecological insanity – removing nutrients from sites, removing habitat for small mammals and wood that helps retain moisture, slow down runoff, and stabilize soils and provides safe sites for native plants to germinate, an especially important role in grazed lands.

The FS also plans: *“after prescribed burns, evaluate to determine need for re-seeding with native species”*. We Object that there are no specific criteria to trigger seeding, specific recovery criteria, and the time period needed to recover established shrub canopy cover needed by sensitive sagebrush and other species. How will this be done? Will tractor-pulled drill seeders rip across and flatten the landscape – further destroying essential habitat complexity that may take centuries or millenia to develop? Will the FS use local native ecotypes – since the FS has time to plan in advance here? Only local native ecotypes should be used, and no drill seeding and no herbicides – as herbicides kill native seeds in the seed bank - and often the “desirable” newly seeded plants are prevented from germinating and/or seedlings are killed by herbicides. The FS must detail its post-treatment actions, including any use of fencing that may concentrate livestock and intensify damage in unburned sites, as well as specific recovery criteria and time periods before livestock grazing disturbance can take place, and if any targeted grazing may be planned or likely. The FS must assess the lengths, type and amounts of fencing it anticipates using, and take a hard look at the existing maze of fencing in areas like the Santa Rosa RD, Mountain City RD, Jarbidge RD which in many areas have very a high fence density. Connelly et al. 2004 Sage-grouse Conservation Assessment describe the many problems fences cause for wildlife.

The FS basically admits that fire use is a problem, and appears to plan herbiciding and other treatments, too to try to stop weeds it will cause. We Object that there is not detailed information and analysis of all planned herbicide use and all foreseeable linked and/or additional herbicide, roller-beating, mastication, etc. that the FS has authorized and/or contemplates. The FS states:

“It should be noted that it is recognized that, while sagebrush community succession can lead to wildlife habitat degradation, so too does fire of most any kind, except in the narrowest of circumstances. Prescribed fire may be useful for achieving biological objectives; however, reintroducing fire is a complex task (Agee 1996). Consequently, any habitat alterations using prescribed fire should be well justified and carefully planned. Herbicide (for example, Johnson et al. 1996) or mechanical treatments to enhance vegetative features may be more appropriate than prescribed fire because they provide faster recovery of sagebrush (Watts & Wambolt 1996). Therefore, the proposed action does not indicate that prescribed fire would be our primary tool in restoring these ecosystems, it would be used where it is an appropriate compliment or alternative to other restoration tools”.

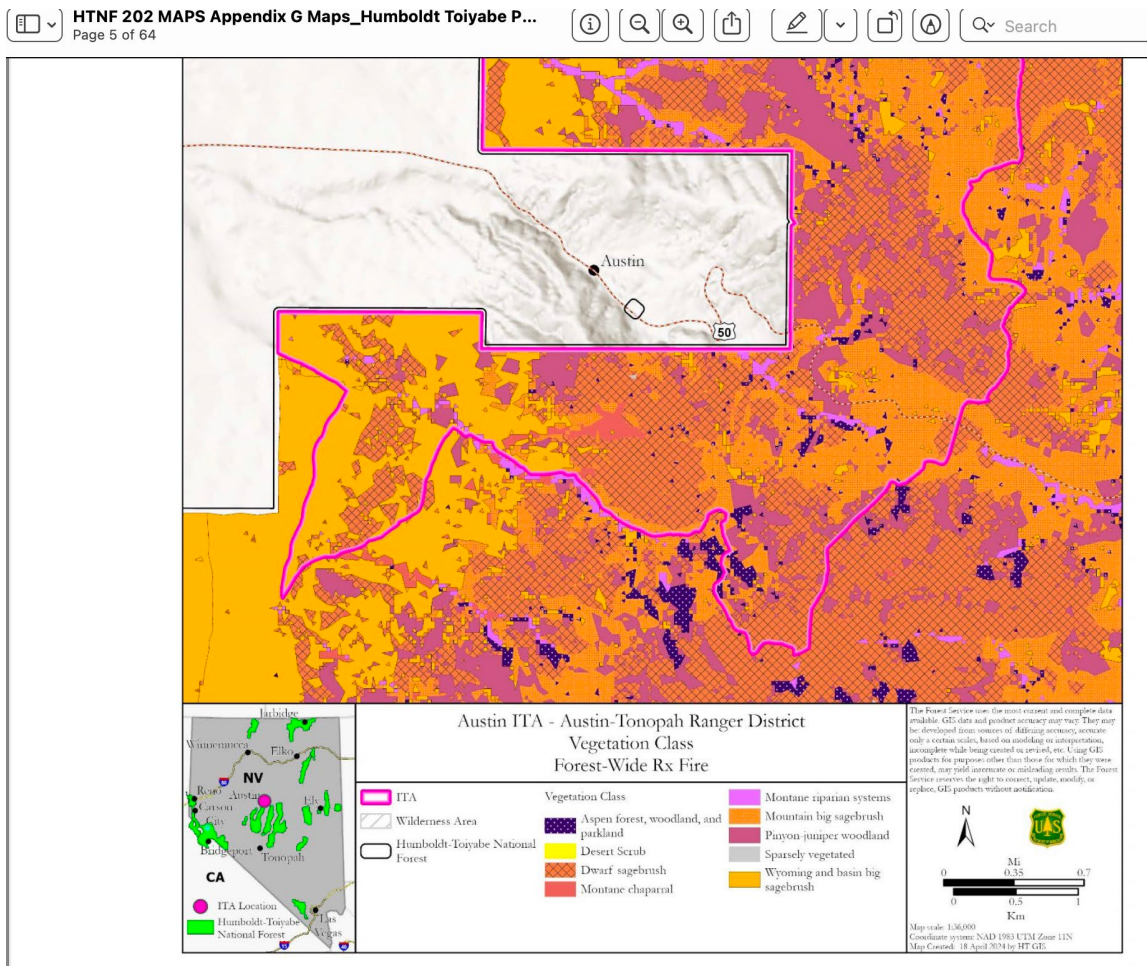
So where is fire appropriate? Please provide site-specific mapping and analysis necessary to justify fire use in all “initial sites” and across all foreseeably targeted lands under this EA, and also specify what specific type of fire will be used.

Prior to all treatments, each unit would be field reviewed to determine site potential, existing structure and composition, the disposition of existing fuels, and the spatial relationship on the landscape with other vegetation ... ”. [This all needs to be laid out now, before massive fire disturbance is green-lighted and there is no longer accountability to the public].

These FS statements are arbitrary, are not backed by evidence, and illustrate the lack of an integrated current look at the magnitude and severity of impacts to listed species, to GRSG, Pinyon Jay, Brewer’s Sparrow, Pygmy Rabbit, Clarks’ Nutcracker and to all the species in EA Tables 1 and 2.

Further, it is unclear what the actual vegetation community and species composition is on the ground. Do the maps in Appendix G show the vegetation that is currently present on the FS land areas? We Object that this is not made clear – is the FS mapping what is on the land, or what its modeling predicts? We are concerned that the maps instead may be depicting what are labeled as “vegetation classes” – that may be the result of modeling inputs, and what the FS, Landfire, and other models claim should be present – i.e. almost no mature and old growth native woody veg communities.

For Example, what is shown in this Austin area map?



We also Object that the colors and cross-hatching used in project mapping make it very difficult to distinguish just what “vegetation class” is supposed to be represented. Is “dwarf sagebrush” really sagebrush – or is there substantial Pinyon-Juniper present? Or a mix? It is a common deception for agencies to not map what is actually on the land, but to map modeled “characteristic” or “desired” communities – and use that mapping to claim the need to conduct radical deforestation or other manipulation of the dominant vegetation type present on the land.

Additional Terrestrial Report and Wildlife BA and BE Specialist Reports Highlight Analysis Flaws

Various Fire EA various Specialist Reports weren’t available to the public for comment before the Objection period, so they represent new information for the public.

Different sagebrush avian species have different sagebrush habitat structural needs – based on height, canopy cover, structural complexity. The same applies to nearly all forest and shrub land inhabiting avian and other species. We Object to the FS discarding some sensitive species from analysis, and oftenumping species together for “analysis”. We Object to lumping species into categories like “bats” for analysis.

The Fire EA Terrestrial Wildlife Report uses very simplified vegetation categories that are basically meaningless for “analysis”. We object to such broad categories, and the lack of any site-specific analysis, the lack of any habitat quality and quantity analysis for each sensitive and ESA species, the lack of current population information, threats to these species, etc.

Table 2. Summary of available wildlife habitat in the project area

Vegetation Type	Acres
Open canopy forest	2,494,982
Closed canopy forest (conifer)	54,145
Shrubland	2,030,692
Grassland	231,520
Sparsely vegetated	93,296
Non-vegetated	14,159
Developed	7,047
Total Acres	4,925,841

The documents refer to “forage”. What does “forage” mean? Forage for what? Livestock? Are non-sensitive species like Mule Deer being given precedence over Goshawks and migratory birds? “Areas of moderate to very high departure (environmental assessment –Appendix G- Maps), especially, wildlife habitat dependent on fire for regeneration or forage, promoting age class diversity, regeneration of shade intolerant species (ponderosa pine, Jeffrey pine, sugar pine, aspen). This isn’t biological analysis, Instead it is self-serving statements made with the purpose of ramming this project through.

The reports refer to WUIs. Please detail how each WUI areas has been defined, who identified and defined the WUI and its boundaries, the number and type of structures and developments in it and how far away from homes or other infrastructure the “WUI” may extend. Please also identify all vegetation treatments conducted in all the HTNF WUIs over the past 30 years. We have seen WUIs in Nevada extend over vast distances surrounding single ranches. For example, Battle Mountain BLM used the supposed “fire threat” to a couple ranches to burn and/or cut down much of the Antelope Range south of Eureka – with, as in this CBM HTNF Fire EA, no consideration of alternatives based on focusing on effectiveness within the actual interface, as Dr. Jack Cohen has been describing for decades. We Object to the lack of hard look analysis of the WUI situation.

What are the specific “expected losses” of concern with each area targeted under the EA? This is not clear. The FS states: “*areas with moderate to high expected losses from wildfire and areas where wildfire is expected to benefit resources but may not be acceptable for other reasons (environmental assessment - appendix G)*”.

What determines “acceptability” and how was this determined for all Fire EA-targeted sites? How much non-USFS acreage is foreseeable for burning with “partners”, and what terrestrial wildlife habitat and population viability impacts would this burning have? Please provide site-specific mapping and hard look analysis. Wildlife Report at 2 through 5 just how murky and uncertain the fire EA analysis and manipulation scheme is – and exposes the need for actual site-specific hard look baselines and analysis for specific project areas.

The FS describes: “*Natural features or other existing features (such as existing roads) would be the primary fire control lines. In some cases, constructed control line (handline or mechanical) may be needed to augment existing features. Constructed control lines would be used to protect high value resources and assets and would be constructed (and rehabilitated post-burn) according to Forest Service best management practices*”. This is an example of allowing bulldozing and permanent scarring all over the place without any site-specific hard look analysis under NEPA. Plus if the fire goes out of control. – even more “emergency” bulldozing would take place. How much of this activity does the FS predict will; take place in roadless areas? This further shows the need for site-specific planning and analysis..

The EA regurgitates the same cookie cutter use of any and all means of burning – including severely destructive jackpot and pile burning – as has appeared in all the other cookie cutter Region 4 Fire EAs. These both alone and combined will have huge adverse impacts to sensitive species, watersheds, sustainability, IRAs and public uses of USFS lands, etc.. See Fite *Bad Fire* and other articles.

We Object to the failure take a hard look at all of these significant WUI and other concerns, and how this all meshes with. Habitat and other requirements under NFMA.

Prescribed Fire Application

Prescribed fire in this decision includes the following types of fire:

- Underburning - low intensity prescribed fire used to reduce ladder fuels in order to remove surface fuels but not all of the overstory vegetation. It is used as both a first entry and maintenance burning primarily in conifer forests.
- Broadcast burning - mixed intensity prescribed fire that uses surface fire on a broad area of a burn unit, often when no overstory trees are present, to increase structure, age, and species diversity (such as sagebrush, pinyon-juniper vegetation communities). In some instances, broadcast burning is used to remove overstory vegetation to create openings and optimal conditions for regenerating vegetation, such as in subalpine conifer or aspen vegetation communities.
- Jackpot burning—a modified type of underburn or broadcast burn, where there are concentrations (or “jackpots”) of vegetative fuel that create pockets of higher intensity burning (most often in pinyon-juniper or other conifer vegetation communities). The result would be a mosaic burn pattern. It can also be used in lieu of broadcast burning to burn smaller pockets of surface fuels to meet key objectives (when used in sagebrush vegetation communities).
- Pile burning—prescribed fire that burns discrete piles of fuels with some surface fire allowed to spread between them. This is used primarily in conifer and pinyon-juniper vegetation communities. It is used near control line construction, near values at risk such as the wildland urban interface, or during initial burning where fuels reduction is needed to achieve the objectives of a future underburn.

The “post-treatment” actions show the FS may inflict multiple fire and mechanized disturbance bouts on the same land and watershed area. There is also reference to existing projects being ‘Maintained’. Please provide detailed mapping and analysis of ALL existing vegetation manipulation projects for which the HTNF has records across the project area. We Object to the lack of this critical information. For example, the FS killed large areas of mountain big sagebrush in areas in the vicinity of Pole Creek Ranger District in the Jarbidge RD decades ago. In some areas, there has been minimal sage recovery despite decades passing. Will the FS now go back in, and kill any sage in areas that have recovered? We Object to the lack of detailed mapping and analysis of effects of past projects in this landscape.

The design elements include numerous laundry lists of loose, uncertain, non-mandatory and able to be waived wildlife measures that will result in significant “take” of wildlife. They will also cause loss of essential habitat elements necessary to support viable populations. The FS claims to: *“Minimize adverse impacts to nesting migratory birds by using prescriptions that ensure a mosaic burn pattern, practices that retain small unburned pockets within burn areas, and the retention of snags greater than 15 inches diameter at breast height not posing a hazard to fire operations, from February 15 to July 30.* [So after July 30 – it’s open season? Creating a mosaic is just another phrase describing purposeful serious habitat fragmentation for nesting migratory birds and many other species. Breaking up vital blocks and areas of habitats, increases nest and young predation and also adult vulnerability, and has a host of negative impacts – it also opens up habitats and makes them hotter, drier and windier and thus more fire-prone with a longer fire season.

The FS says it will *“flag any known migratory bird nests with a 300-foot no treatment buffer, generally February 15 to July 30”*. Keen-eyed and smart avian predators like ravens will soon learn

what the flagging means. Mammalian predators will soon learn to follow human scent trails to find nests.

We Object to spring burning/cutting/mastication – and there is no need for it. As projects can be planned years in advance. We are extremely skeptical that the FS will have the ability to effectively detect bird nests. This is very hard even for skilled field ornithologists - since many species seek dense vegetation to effectively conceal their nests, or nests are dozens of feet in the air. There is also the real-world situation that most BLM personnel and biologists are focused on big game species and are minimally skilled in detecting avian songbird and other nests; surveys must be done basically in front of the napalm ping-pong ball drop, not weeks in advance. This is just a fantasyland claim. Further, major FS budget cuts for staff are taking place right now. We What is the detection distance and estimated rate of detection for bird nests in all vegetation communities of concern? How much time will this take? Will this be done the day before the veg destruction project is undertaken. Any burning, mastication, etc. in spring will be taking place in areas with avian nests. It can take hours just to find one nest. How will the nest detector find nests high in trees? Or in dense vegetation? Won't this require multiple repeats of searches for each area to be "cleared"? What happens if chicks have fledged, but can not fly well, and a fire is lit? What analysis has the FS done on effects of fire smoke inhalation on avian species?

The FS is basically asking for no accountability for migratory bird and other wildlife project-caused injury, death, displacement to sub-optimal habitat where animals are preyed upon or do not find enough food - for the 15-20 year length of this project - across vast areas of "treatments".

What is the purpose of going through the motions of conducting a NEPA, NFMA, or any other type of analysis - when the FS ends up with rampant uncertainty and no solid guarantees of anything – like the "Incomplete and Unavailable Information" on species that BE at page 9 admits to?

The FS states: *"The specific areas of activity (fire lines, ignition, burning) are not known at this time. However, as described in the design elements and implementation checklist, prior to implementation the ranger district or forest biologist will review existing information about sensitive species and habitat, and whether surveys are necessary in the specific areas planned for activity. Appropriate avoidance, timing restrictions, or other design elements will be recommended at that time"*. We Object that there's no guarantee that site-specific surveys will even take place, and with scattershot surveys over a decade +, it would be absurd to claim that a hard look integrated analysis of project harms has taken place.

This means that surveys may not even be conducted. With any burning in spring, birds will be present. We Object that the EA, Terrestrial Wildlife Report, and BE all brush aside any hard look at the no action alternative, for example with the BE stating: *"Under a no-action alternative, no disturbance, displacement, injury, death, or habitat alteration would occur due to the project. Vegetation would remain in the current state and continue along its current trajectory (most highly divergent from normal range of variation)"*. This entire analysis is divorced from ecological reality that a very large number of native species require the very forest and shrub community types that the FS seeks to destroy, and terms highly divergent"

We Object that this project significantly threatens Bighorn Sheep herds - as it reduces habitat security and makes domestic sheep movement into Bighorn habitat areas easier, as well as Bighorn movement towards sites with domestic sheep easier. Where are all domestic sheep allotments and trailing routes on the USFS and BLM lands in this landscape located – in relation to all foreseeable project areas? Please run the Payette Forest model of disease transmission risk on these populations – and take into account the foreseeable loss of protective forest habitat within 40 miles of each population. We Object that current disease transmission risk modeling is not provided for all potentially affected Bighorn populations across the forest. The FS must identify bighorn sheep core herd home ranges and foray characteristics, including frequency, distance traveled, and habitat selection. What is the potential ram foray distance in fall? We Object that the FS does not provide a hard look at the project's potential deadly adverse impacts to bighorn sheep.

The analysis of Pygmy Rabbit habitat destruction from this project is empty self-serving claims. HUCs don't have anything to do with Pygmy Rabbit habitat needs. Nowadays, most Pygmy Rabbit habitat is already highly fragmented and limited. So "burning 15% of a HUC" may burn the best rabbit habitat left -especially since this Fire EA explicitly targets what it pejoratively calls "decadent" sagebrush dense sagebrush which rabbits absolutely need. In fact, the EA targets the very characteristics of sage communities that sagebrush-species are dependent on, evolved with, and are adapted to.

This is ridiculous – as that 15 percent could include the best remaining ideal rabbit habitat - too-thick-to-walk through big sagebrush. The FS claims: *"Only 15 percent or 3,000 acres (whichever is greater) of a HUC 12 watershed would be treated each year"*.

The FS then makes sweeping blithe project "impacts" assertions – after the BE just said all the FS did was consult stale databases and never set foot on the land to conduct integrated pre-decisional analysis, or to understand the quality and quantity and extent of habitat in an area.

"Determination of Impact and Effect of Proposed Action with Rationale

*For pygmy rabbits, the ... Fire Project **may impact individuals but is not likely to result in a trend toward federal listing or loss of viability in the planning area.***

- *Most individuals are likely to escape harm.*
- *Nearby habitat will be available for dispersal.* [WHAT – the FS has provide no adequate pre-decisional surveys to demonstrate that there will be "available habitat". As laid out in the Pygmy rabbit petition, this species is in sharp decline including IN NEVADA].
- *A small number of individuals may be adversely impacted, but population levels would not change.* [The local population may only a "small number of individuals". Heavy equipment crashing through, crushing, roller-beating, masticating discing sagebrush and burning sagebrush and potential "re-seeding" with huge tractor-pulled Amazon seed drills homogenizes and destroys habitats. It may destroy "regular" burrows and kill young in

shallow natal burrows – as this manic “treatment” EA activity could occur year-round. In addition to outright habitat loss and simplification, habitat fragmentation will occur and predation risk will increase. The FS biologists repeatedly base their claims that animals can move away into some unknown empty unoccupied habitat is a pie-in-the sky fantasy, as the EA “effects” determination. This is not hard look, fair, science-based analysis, it’s biased claims made in support of sagebrush and Pygmy Rabbit habitat destruction].

- *Only 15 percent or 3,000 acres (whichever is greater) of a HUC 12 watershed would be treated each year.* [Again, this may very well be the best Pygmy Rabbit habitat, and the FS provides no evidence that habitat is evenly dispersed in its HUCs – and again, use of HUCs is useless for terrestrial species with complex habitat needs. And another 15%. – like the areas the mythical unoccupied habitat “promised land” the Rabbits are claimed to be able to move to – may be treated the next year, and 15% more the next year, and so on].
- *There are expected long-term beneficial impacts on habitat.*
- *There is a reduced risk of catastrophic wildfire”.*

We stress that since the last Fire EA comment period, a listing petition with substantial information about population declines (including in Nevada) was filed, the FWS found Pygmy Rabbits may warrant ESA listing, and Rabbit Hemorrhagic Disease has been confirmed in Nevada Pygmy Rabbit populations. This represents a grave threat to native leporids, and the disease may be spread all around by humans (mud on vehicle tires, boots, etc.). We Object that the FS is pursuing purposeful; destruction of the very sagebrush habitat types that these rabbits need, despite a large number of development, grazing, climate stress, and unpredictable wild card disease threats like RHD.

The analysis of Pygmy Rabbits and other rare species habitat destruction from this project and the use of HUCs is deeply flawed. HUCs don’t have anything to do with Pygmy Rabbit habitat needs. This is ridiculous – as the sage to be destroyed because it’s greater than 15% canopy cover under the CBM EA could include the best remaining Rabbit habitat – dense too-thick-to-walk through big sagebrush. The FS claims: “Only 15 percent or 3,000 acres (whichever is greater) of a HUC 12 watershed would be treated each year”. This divorced from the reality of what comprises a species habitat. Also, this language enables the FS to return year after year in some watersheds and burn up vast areas by the time this project is over. We Object to the EA ignoring these serious ecological concerns.

The FS then makes sweeping assertions – after the BE just said all the FS did for the EA baseline was consult stale databases and never set foot on the land to conduct integrated pre-decisional hard look NEPA analysis, or to understand the quality and quantity and extent of habitat in any treatment area, in “uncharacteristic” sage, in any RD, or across the project landscape and footprint. This is a major concern in the vast acreages this project landscape encompasses. Very often the primary time any thorough species inventories occur is when a gold mine, solar energy project, or other major development is planned to destroy and fragment a particular habitat. Most grazing analyses do not

conduct baseline species surveys – and like the HTNF Fire EA, and they just consult databases. So in vast regions like Nevada, species may not have been detected and not be in databases.

*“Determination of Impact and Effect of Proposed Action with Rationale ... For pygmy rabbits, the ... Prescribed Fire Project **may impact individuals but is not likely to result in a trend toward federal listing or loss of viability in the planning area.***

- *Most individuals are likely to escape harm. Nearby habitat will be available for dispersal. A small number of individuals may be adversely impacted, but population levels would not change. Only 15 percent or 3,000 acres (whichever is greater) of a HUC 12 watershed would be treated each year. There are expected long-term beneficial impacts on habitat. There is a reduced risk of catastrophic wildfire”.*

The FS has provided no data and analysis to show that “nearby habitat will be available” nor provide concrete information on where the mythical “promised land” full of milk and honey and large blocks of 35-50% nice too-thick-to-walkj through Pygmy Rabbit sagebrush is actually located. This is an arbitrary excuse -to try to avoid finding significant impacts-- that the animals can just move away and have their habitat needs met. WE have read far too many Nevada BLM EAs that make this claim. Please see Dobkin and Sauder 2004 on the absence of many sensitive sage species from habitats that superficially appear suitable. cannot conduct any NEPA-compliant analysis until it actually surveys the landscape and the subset of areas targeted for sagebrush habitat destruction to determine where a species currently occupies habitat, and the importance and quality of that habitat. We Object to this arbitrary analysis and cover up of project significance.

Since this Fire EA was scoped in 2022, Rabbit Hemorrhagic Disease (RHD) has been confirmed in Nevada Pygmy Rabbit populations. This exotic represents a grave threat to native leporids, and the disease may be spread all around by humans (mud on vehicle tires, boots, etc.). We Object that the FS is pursuing purposeful destruction of the very sagebrush habitat types that these rabbits need, and has conducted woefully deficient biological and “effects” analysis with the single-minded purpose of trying to minimize finding impacts. despite a huge number of development, grazing, and unpredictable wild fire, sage die-off, grazing and hotter temperatures and climate stresses.

WLD’s Fite has observed previous HTNF “treatment” destruction of occupied Pygmy Rabbit habitat in HTNF sagebrush killing projects in the Santa Rosa RD. The sites were flagged with very obvious blue flagging, and the contractor ignored the flags. After photos and documentation of this was provided to the Santa Rosa RD, the FS excuse was “the contractor made a mistake”. Instead of avoiding blocks of habitat, the FS was trying to flag relatively small areas, and then destroy all the other sage – which of course was terrible for the rabbit habitat. We fear this is how these non-site-specific loose laundry list of “design features” will play out in the real world.

We Object that the FS has not taken a hard look at the very significant Pygmy Rabbit threats and documented population declines laid out in the Pygmy Rabbit listing petition, for which USFWS has issued a positive 90-day finding. This is all significant new information since the Fire EA project was scoped

See: <https://westernwatersheds.org/wp-content/uploads/2023/03/FINAL-030623-Pygmy-Rabbit-ESA-listing-petition-WWP-v2.pdf>

In rejecting listing of the Pygmy Rabbit in response to the 2003 petition effort (Fite and Criddle 2003), USFWS considered that Sage-grouse “conservation” would protect Pygmy Rabbit populations. This has not been the case, as evidenced by the significant declines range-wide, the fact that the sagebrush densities claimed ideal for Sage-grouse nesting are used to justify widespread sagebrush thinning and killing of dense sagebrush- in direct conflict with Pygmy rabbit habitat needs, and continued BLM, USFS and USFWS actions that degrade, alter and destroy habitats. Projects that federal agencies have termed Sage-grouse “restoration” have mowed, roller-beat, and/or herbicided sagebrush to destroy cover deemed “too dense”. These treatments continue, despite ever-mounting evidence of Sage-grouse seeking dense nesting cover, the great reliance of sagebrush migratory birds on relatively dense mature and old growth structurally complex big sagebrush, and on the ground evidence that “treatments” or “fuels projects” often result in new and expanded cheatgrass/or other weed infestations in the hotter, drier, windier “treated” sites.

In response to continued loss of habitat and newly documented Pygmy Rabbit population declines across much of the rabbit’s range, a new Pygmy Rabbit petition was filed in 2023. It describes numerous threats to the Pygmy Rabbit that are directly relevant to its Caldera habitat:

“Future habitat degradation and loss is predicted, primarily due to an increase in fire frequency in sagebrush habitat in the western portion of the species’ range, which is both driven and compounded by climate change and increases in cheatgrass (Bromus tectorum). Added to this is the recent evidence of Rabbit Hemorrhagic Disease Virus Serotype 2 (RHDV2) within the range of the pygmy rabbit, which we fear is now affecting populations that are already starting to lose habitat connectivity due to habitat loss, degradation and fragmentation, thus diminishing the chances of “rescue effects” from adjacent populations if one population winks out due to RHDV2. In addition to these threats, livestock grazing is nearly ubiquitously influential throughout the range of the species and also compounds and worsens the currently out-of- balance fire and cheatgrass cycle. Climate change, warming and increased drought are also acting synergistically with all the above threats to pygmy rabbits across the range”. PR petition p. 3.

“As described in the original pygmy rabbit listing petition in 2003, populations of pygmy rabbit occupy a geographic range estimated at 10% of the species’ known historic range, which spanned over 100 million acres of the American West. Existing larger populations are often isolated from one another. Stochastic events, disease, and continued disturbance will further fragment its range and limit post-disturbance recovery from satellite populations”. PR petition p. 4.

“The pygmy rabbit is at risk of extinction (e.g. endangered) or at risk of becoming endangered (e.g. threatened) in all or a significant portion of its range. There is evidence that shows pygmy rabbit populations are in decline, that its habitat is disappearing, that it is threatened with emergent diseases, and there are no adequate regulatory mechanisms in place to ensure its long- term survival”. PR petition p. 5.

“Numerous modeling studies indicate that the combined effect of climate change, increased exotic annuals, and the increase in fire that result from that interaction, will lead to further decreases in sagebrush cover across the sagebrush sea”, Remington et al. 2021. PR petition p. 5 This also references Doherty et al. 2021, and the specter of potential sagebrush habitat “biome-wide collapse”.

“... pygmy rabbits prefer sagebrush sites with relatively higher cover, structural diversity, density and height of shrubs (Larrucea and Brussard 2008a, Camp et al. 2012, McMahon et al. 2017). ... Pygmy rabbit winter habitat use focuses on dense, tall sagebrush stands with high structural diversity that tend to concentrate more snow”.

“Summer habitat selection by pygmy rabbits tend to incorporate sandy soils; structurally diverse stands of shrubs; relatively higher (compared to non-occupied summer sites) cover, height and density of total live shrubs, including big sagebrush; and relatively greater abundance of forbs” (Heady et al. 2001)”.

Pygmy Rabbit petition pp. 15-16 describes sagebrush “treatment” threats. There have been recent “*alarming declines*” in intensively studied Pygmy Rabbit populations - in Elko and Austin populations, and a portion of the Sheldon-Hart population to the west. PR petition p. 23.

PR petition p. 23 states: *“Fire has severely impacted Nevada’s sagebrush communities. In the last 20 years, Nevada has lost fully 25% of its Greater sage-grouse habitat to fire (personal communication, Shawn Espinosa, Nevada Department of Wildlife, July 21 2022). Over 9,292,750 acres of pygmy rabbit habitat in Nevada has burned in the last 40 years. (Figure 6) This loss alone represents nearly 5.5% of all presumably occupied pygmy rabbit range in North America”.*

PR petition p. 23 again references Rabbit Hemorrhagic Disease (RHD). This calcivirus disease is extremely contagious and a grave new threat to all North American leporids and the Pika. It can be spread on mud on vehicles, clothes, shoes, hair/fur etc. - by humans, livestock, vehicles, equipment and persists for long periods of time.

PR petition p. 25 states: *“over 5,830,600 acres of pygmy rabbit habitat in Oregon has burned in the last 40 years”, and “26,105,642 acres within the current range of the species has burned, which comprises over 15% of the range of predicted occupied habitat”.*

“Figure 7 ... highlights the growing invasive annual grass challenge in the tri-State area of Oregon, Idaho, and Nevada. The areas of the map in Figure 7 from yellow to red represent 43,851,242 acres dominated by annual invasive herbaceous cover (principally cheatgrass). This represents over 25% of the current range of the pygmy rabbit in North America. In the Nevada stronghold in the past few decades 3,776,695.1 acres of primary and suitable habitat (as defined by Smith et al. 2019) has transitioned to nonnative annual grass, which equates to 18.8% of all predicted pygmy rabbit in the Nevada stronghold”. PR Petition Figure 6, p. 35, shows wildfires (and repeated fires in the same land area) over the past 40 years.

“Figure 8 illustrates that across the range of the pygmy rabbit, non-native annual grasses have increased from 5,545,983 acres in 1991 to 22,806,586 acres in 2021, which is a troubling 421% increase. Figure 8 shows that much of this increase is occurring in the pygmy rabbit strongholds in Oregon and Nevada”. PR petition pps. 37 and 38.

Cheatgrass is anathema to the rabbit:

“Weiss and Verts (1984) found that only 2 of 51 occupied pygmy rabbit sites in Oregon had cheatgrass in the understory. Annual grasses may restrict movements or visibility by pygmy rabbits and be avoided to increase chances of escaping from predation (Weiss and Verts 1984). The likelihood of pygmy rabbit presence decreases with increased occurrence of cheatgrass (Larrucea and Brussard 2008a). Cheatgrass is only palatable early in the spring when it is still green, so it does not offer a long-term food source and the roots can form dense mats that may make burrowing difficult for pygmy rabbits (Larrucea and Brussard 2008a). Furthermore, as cheatgrass-dominated areas increase (e.g., post-fire monocultures), a potential barrier to dispersal is created as the physical structure providing protection from predation is lost (Larrucea and Brussard 2008b)”. PR petition pp. 40-41.

Areas the HTNF seeks to treat are often surrounded by significant cheatgrass in lower valley margin and adjacent burned areas, and cheatgrass also now occurs in mid to higher elevation lands that suffer significant grazing disturbance (see Molvar et al. 2024, Williamson et al. 2019). Or extensive shrub loss from wildfire, as well as some areas infested from past agency livestock forage projects, or “fuels” projects that reduced native shrub cover.

Pygmy Rabbit petition p. 34 describes the perils of habitat fragmentation – which the HTNF Fire Eat treatments will certainly cause:

“Habitat fragmentation is deleterious for pygmy rabbits. Pierce et al. (2011) looked into the effects of increased edge habitat on pygmy rabbits in Utah, through their efforts to quantify pygmy rabbit activity in edge habitat and non-edge habitat, and to also understand predator and competitor activity within edge and non-edge habitat. Pierce and others observed fewer camera trap images of pygmy rabbits near edge habitat, while images of predators and competitors in edge habitat increased.”

Fragmentation necessarily creates more of these edge habitats, increasing the risk of predation and competition for the remaining potentially suitable areas. This is effectively an inverse buffer zone for the species. Indeed, Pierce and others (2011) found that pygmy rabbit fecal pellets decreased near edge habitat, while fecal pellets from cottontails and jackrabbits were more abundant ...”.

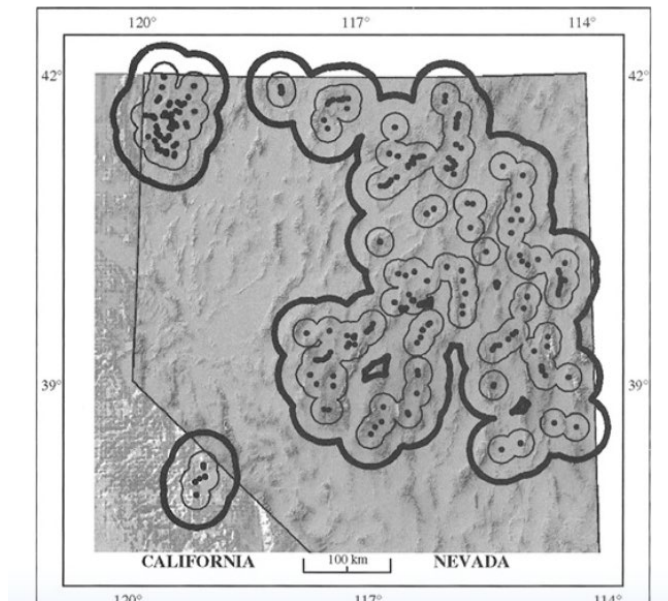
“If a population becomes isolated from other populations through habitat fragmentation and human caused barriers to movement and dispersal, genetic repercussions are possible ... inbreeding, low genetic diversity, genetic drift and even extirpation as small and shrinking populations “blink out” over time (Noss 1983, Wilcove 1987). Small, isolated populations are also more at risk of being wiped out by catastrophic events such as huge fires (Noss 1983, Wilcove 1987) or disease. Pygmy

rabbit researchers over time have stressed the importance of preserving connecting sagebrush corridors between isolated patches of sagebrush; for example Rauscher (1997), who stated that without these connecting corridors, isolated populations of pygmy rabbits can become subject to principles of island biogeography and stochastic events”.

Pygmy Rabbits in Nevada have suffered significant loss of critical dense mature sagebrush cover habitat in a battery of past agency treatments to generate cattle forage, in recent so-called “restoration projects like those of the Ely “Watershed Restoration” plans, and HTNF purposeful mowing and other destruction of sagebrush, as well as wild fires, and loss and fragmentation from BLM “fuels” and other “treatments”, past crested wheatgrass seeding sagebrush destruction, livestock water pipelines and troughs in uplands, and structural simplification of sagebrush cover from cattle breakage and other grazing impacts. Habitats are vulnerable to cheatgrass and other flammable grass expansion when soils are intensively disturbed. We Object that the FS ignores a hard look at and contextual analysis of the magnitude of existing habitat loss in this landscape.

The Fire EA will result insignificant levels of additional habitat fragmentation and loss, propel flammable weed infestations, increase cattle use and concentration in previously dense sagebrush patches = increase sagebrush structural damage and cover loss and simplification, potential trampling damage and collapse of Pygmy Rabbit burrows including shallow natal burrows, increase predator travel corridors, and increase rabbit mortality from a host of human activities. See Gelbard and Belnap 2003, Gelbard and Harrison 2003. All with no occupied habitat and population viability information provided in the EA for the areas targeted for sage “treatment”. Note that use of fire in PJ kills sage and promotes cheatgrass, so claims that killing PJ in the Fire EA are spurious.

The Larrucea PhD Dissertation mapped Pygmy Rabbit habitat identified 20 years ago (in NV and E CA. Many sites were re-surveyed more recently and rabbits were absent or numbers lower, as described in the attached Pygmy Rabbit petition the FWS arbitrarily ignored in its zeal to burn and “treat” dense sagebrush. Note the prevalence of rabbits in the sage in the Monitor and surrounding areas – that appear especially targeted in this EA. Rabbits (and also PJ communities) persist here in significant amounts because the FS and BLM have not (yet) conducted as many “treatments”.

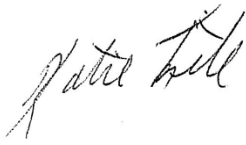


As the petition stated; *“Mechanical and chemical treatments to reduce sagebrush and other woody species to try to improve cattle forage can result in considerable increases in non-native grasses and forbs, usually drastically reducing habitat for sagebrush-obligate species (Beck et al. 2012, Rottler et al. 2015, and summarized by Jones 2019). Indeed, studies have shown the deleterious effects mechanical sagebrush treatments have had on pygmy rabbits, including home range movements farther from treatments than expected, and observed reluctance of rabbits to enter treated patches (e.g., Wilson 2010, Wilson et al. 2011). Going forward, much more attention needs to be paid to the effects of the near ubiquitous practice of livestock grazing in pygmy rabbit habitat, and how this interacts with and is compounded with climate change and vegetation treatments, even when the aim of such treatments is habitat restoration. Additionally, construction of new livestock infrastructure (primarily water sources) continues to extend livestock use into remnants of less-grazed sagebrush habitats (Catlin et al. 2011, and references therein).”* Pygmy Petition at 42.

Also – Nevada monitoring – showed significant declines: “The team also conducted pygmy rabbit surveys from 2016-2019 at the Hart-Sheldon National Wildlife Refuge on both sides of the Oregon-Nevada border. On the Nevada side of the Refuge, the team determined 17 of 32 sites in areas of known or previously known pygmy rabbit habitat were occupied, a 53% occupancy rate. This is the highest occupancy rate of any surveys reviewed in this petition, and it seems noteworthy that the refuge has not been grazed by livestock in over 30 years, unlike most pygmy rabbit habitat in the West”. Pygmy petition at 22.

Note that other mapping used in the petition is dated 20i9, and may not reflect the full effects of recent sage habitat fire loss and/or agency manipulation.

Sincerely,



Katie Fite
Public Lands Director
WildLands Defense
PO Box 125
Boise, ID 83701
208-871-5738
katie@wildlandsdefense.org

/MG
Mike Garrity
Alliance for the Wild Rockies
PO Box 505
Helena, MT 59624

/SJ
Sara Johnson
Native Ecosystem Council
PO Box 125
Willow Creek, MT 59760

Steve Kelly, Pres.
Council on Wildlife and Fish
P.O. Box 4641
Bozeman, Montana 59772
406-920-1381
troutchecks@gmail.com