WILDLANDS DEFENSE

Katie Fite

PII REDACTED

May 20, 2023

Objection Reviewing Officer,
Intermountain Region USFS, 324 25th Street, Ogden, UT 84401

By email to:

objections-intermtn-regional-office@usda.gov

Responsible Official for this project is Heather Perrine, Challis-Yankee Fork District Ranger, 311 N. U.S. Highway 93, Challis, ID 83226

Reviewing Officer: Salmon-Challis Forest Supervisor (Mark)

Here is an Objection from WildLands Defense (WLD) Lead Objector, Alliance for the Wild Rockies (AWR), Native Ecosystems Council (NEC) and Yellowstone to Uintas Connection (Y2U) on Bayhorse Project V2 and EA and draft FONSI and decision.

Objectors Organizational Interests:

Wildlands Defense (WLD) 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 monitoring and scientific research, and by supporting and empowering active public engagement. WLD has offices in Boise, Idaho and Hailey, Idaho.

Alliance for the Wild Rockies (AWR) 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. Alliance for the Wild Rockies is headquartered in Helena, Montana.

Native Ecosystems Council (NEC) 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.

Yellowstone to Uintas Connection (Y2U) is a 501c3 public interest organization whose staff and members have and will continue to work to protect the integrity of habitat for

fish and wildlife as well as recreate in this region. We are concerned about the loss of integrity of the Regionally Significant Wildlife Corridor (Corridor) that connects the Greater Yellowstone Ecosystem and Northern Rockies to the Uinta Wilderness and Southern Rockies. The Yellowstone to Uintas Connection organization was given this name to bring attention to this Corridor and we use this name in reference to both the organization and Corridor as it provides context and public awareness to the location and its importance. Yellowstone to Uintas Connection is headquartered in Mendon, Utah with a satellite office near Paris, Idaho.

Objector organization missions promote actions to preserve and protect wild native ecosystems and biodiversity will be significantly harmed by the logging, burning, roading and host of other disturbance activities in the fragile Wolverine, Bull Trout, migratory songbird and other rare and sensitive species watersheds and habitats of the Bayhorse project area and its surroundings. This project will degree, destroy and fragment habitats and make lands hotter, drier, windier and weedier and more fire prone – harming our interests in use and enjoyment of wildlife and wild lands in an unmanipulated state,

Relation of Objection to Comments, materials submitted, Objectors submitted comments on the SCNF "Batch letter" projects including Bayhorse, Salmon-Challis Fuels Reduction and North Zone Vegetation Improvements, Stormy projects, and raised ecological concerns regarding the direct, indirect and cumulative impacts. Then we submitted comments on the Bayhorse V 2 EA released. Our comments referenced the numerous ecological, species habitat, species population, watershed integrity and flow sustainability and other concerns we discuss below, yet the FS failed to address many of these concerns and issues. There has been a large amount of new scientific information about the ecological damage caused by federal agency manipulation projects, as well as many of new harmful agency projects proposed, fleshed out and/or finalized with significant environmental impacts, and this is new information. Below we use our comments as the basis for this objection.

We Object that the USFS did not take a hard look at the Bayhorse Project's harmful and adverse effects and indirect and cumulative impacts to sensitive and important species, to MIS species and Forest goals and objectives as well as viability of local and regional populations, migratory birds, big game, wild land values, watersheds and public lands recreational and other uses of a huge battery of

Region 4 of the Forest Service has released a huge battery of new projects nearly all are extremely nebulous highly uncertain "condition-based" schemes. That thwart effective integrated hard look analysis by minimizing site-specific project analysis, conducting in-front-of-the bulldozer surveys for sensitive species – thwarting any real look at habitat quality. quantity and occurrence pre-decisionally, including highly destructive fuels and supposed "restoration" actions in prescribed fire EA projects that may be bracketed on both sides – pre- and post-treatment - by foreseeable logging under segmented piecemeal NEPA analysis. These will release large amounts of carbon into the atmosphere and, like

the Bayhorse project, and that will greatly reduce carbon sequestration on Region 4 lands, just like the Bayhorse project.

The SCNF has finalized a sprawling highly uncertain and damaging "condition-based" radical fire, logging and/or mechanical treatment and deforestation and shrub killing "Prescribed fire" EA that impacts the same waters, watersheds, Wolverine habitat, migratory bird habitat, Northern Goshawk habitat, as the Bayhorse project.

There has also been the Moose Fire to the North, which resulted in large-scale losses of habitat for the same sensitive and MIS species impacted by Bayhorse, but there is no hard look and thorough review of its effects on sensitive terrestrial and aquatic species occurrence/habitat quality/habitat quantity/population status and population viability necessary to ensure the Bayhorse project does not jeopardize NFMA sustainability, viability and Forest plan goals. We Object to this uncertainty and analysis deficiency.

We Object to the failure to assess all the new and expanded roading and habitat loss and fragmentation from the plethora of mining authorizations - for gold, cobalt, and other minerals associated with a so-called "green energy boom" in the SCNF. Where are all current mining claims. Where is all exploration and development activity and mine-related roading, and what is the indirect and cumulative adverse effect on the sensitive and imperiled species habitats, populations and watersheds in the SCNF? Many of these mining authorizations were mere CXs, as the USFS rubber-stamped multi-year projects cause permanent disturbance and fragmentation with almost no NEPA review. What toll are these taking on Wolverine habitat? On migratory bird and MIS and sensitive species habitats? On ESA-listed fish watersheds?

This whole series of massive, highly uncertain and ill-defined "Condition Based Management" Fire EA and other Region 4 and SCNF projects will radically alter, simplify and destroy habitats for a host of declining and rare native terrestrial and aquatic species, including Forest MIS species, migratory birds, sensitive species and ESA-listed species. The Region 4 EAs contain minimal and deficient baseline data and analysis with no or greatly deficient alternatives considered, other than No Action, and where an extremely limited one-sided "analysis" takes place. Without a proper current baseline of biotic, watershed IRA condition and other data, locations of mature and old growth forested communities, and integrated watershed-level analysis and sensitive and rare species habitat condition, habitat threats and stresses and species population viability, no actual analysis of any alternatives can take place.

We raised many NEPA direct, indirect, and additive/synergistic cumulative effects concerns in previous comments, and regarding the expanding magnitude of threats that native species, watersheds and wild lands face on the SCNF, neighboring Sawtooth NF, and across the region. It is based on critiques of the FS analysis and ecological baseline information and other ecological and scientific concerns including climate change stress threatening species and watersheds and any positive outcomes of large-scale vegetation

manipulation disturbance (especially multiple actions like logging and burning and mechanical treatment); and loss of carbon sequestration; and loss of shading, cooling mature forest communities, as well on concerns raised in our previous comments about harms to wild lands integrity and values. We have already raised concerns about the project's use of severely flawed veg and fuels models and single-minded self-serving analyses; projects impacts to water quality and quantity and sustainability; project risk of flammable and other weed expansion risks; the very significant harms caused by livestock grazing in amplifying ecological harms to sensitive and MIS species and watersheds including habitat degradation and conflicts with sensitive biota and weeds: and the very significant harms caused by a host of other authorized, proposed and foreseeable additional fuels treatments, logging, motorized use conflicts to native fish and wildlife habitats, IRA and Wilderness values and other public values and uses of National Forest lands. The full adverse indirect and cumulative impacts and the magnitude and severity of habitat loss and population declines for sensitive, important and imperiled species have not been examined in a hard look analysis in the Bayhorse EA.

The FS must prepare an EIS for the Bayhorse project of this scale, large number of habitat disturbances, the full bore "treatment" assault across the region on forest habitats – see: https://www.counterpunch.org/2022/03/11/bad-fire/ is not subject to a hard look analysis. The severity of environmental risks and harms from the Bayhorse's large-scale disturbance and deforestation outcomes - including the project resulting in hotter, drier, windier, weedier and more fire prone lands and adverse soil erosion, water pollution, water flow reduction and other harms and highly adverse effects, and massive cumulative effects and threats. All of these significant effects and highly foreseeable outcomes have not been assessed for their cumulative effects on the same species habitats such as Wolverine and Bull Trout and salmon-steelhead habitats to be impacted by the SCNF Fire EA and this Bayhorse EA.

The FS has still failed to conduct detailed multi-year intensive baseline inventories in and surrounding Bayhorse for species presence and occupancy across this landscape, so that the current status of species populations and habitats can be understood. A current baseline analysis and mapping of areas of occupied vs., unoccupied habitat, and species needs for increased mature or old growth forest and/or native shrub cover must be provided. Only then can a reasonable range of alternatives be developed. In fact, after the FS conducts the necessary nesting/wintering/other seasonal habitat and use by sensitive species, migratory birds, native raptor surveys, native carnivore surveys, rare plant inventories, aquatic species surveys, and conducts current data-based risk and threats inventories and assessments, can the USFS determine the need for, and effects of, radical reduction in forest cover that will result. We Object to this continued failure to collect and assess in a hard look analysis this critical pre-decisional baseline information necessary to understand how severe and significant impacts to sensitive species, important species, ESA-listed species habitats and population viability.

If the FS were to conduct such reasonable science-based analysis, the agency is very likely to conclude that a significant increase in forested cover and/or increase in mature and old growth woody vegetation communities is what is actually needed to sustain forest and sensitive and MIS species values under NFMA, to cool and moderate the forest to help limit climate stress and moderate fire risk, to comply with the ESA, to comply with the Migratory Bird Treaty Act, to comply with the Clean Water Act, to comply with the NHPA, to comply with BGEPA and to comply with the APA and other environmental laws and regulations. We Object that the USFS has not critically examined the harmful effects of large-scale reduction of shade and cooling cover in these ESA-listed aquatic species watersheds.

We Object that the Bayhorse project elements remain uncertain actions, often heaped one on top of another, and lack of mandatory controls on the scale and magnitude of disturbance harms show the need for an EIS to take a hard look at all direct, indirect, cumulative, additive and synergistic impacts of imposing massive disturbance on a landscape increasingly stresses by the megadrought and climate change, and where large-scale livestock grazing and other disturbances pose serious threats to the health and integrity of native ecosystems, biodiversity, sensitive species, MIS species, water quality and quantity, carbon sequestration and a host of other values.

Many Forest values are at stake include - Wolverine and other rare native carnivore habitat, rare and declining resident and migratory bird habitat, and increased pollution of downstream ESA-listed Bull Trout habitat, Salmon and steelhead habitat, harms ot roadless values, and weed expansion and potential increased fire risk from the project (results in hot dry site and expanded ease of human off-road catalytic converter fires and other intrusions with fire risk into previously protected sites) - all show an EIS is needed to properly develop and assess alternatives and minimize harms.

<u>Climate Crisis - Project Makes Lands Hotter, Drier, Less Resilient, Less Resistant to Climate Stress and More Vulnerable to Weeds</u>

We Object that the USFS has not taken a systematic, thorough hard look at how climate change stress is currently affecting the project area lands, waters, biota; how it will limit and reduce the ability of the lands to recover from treatment impacts as well as the highly deleterious cattle grazing impacts that take place in these watersheds. The climate crisis heightens the risk of adverse outcomes of these large-scale Treatments and Fire use. It also makes the FS scheme to burn up mature and old growth woody vegetation communities and release large amounts of carbon into the atmosphere and loss of carbon sequestering forests even more alarming. Current science is showing rapid spread of fires in fragmented and grazed forests - hotter, drier, windier, weedier sites with changed local micro-climate conditions and less retention of snow melt so sites dry out more rapidly and fire season is longer. See Bradley et al. 2016, Hanson Op-Ed, Dellasalla et. al 2022. This only makes common sense – as cooling site-stabilizing cover is reduced, the site and vegetation become drier and more heat-stressed. It's as if the FS EA preparers have never

stopped outside in a radically thinned or burned forest on a hot August day. Further by removing forested vegetation, the local precipitation patterns may change, and alter the precipitation regime.

Recent California, Oregon and other mega-fires swept right through heavily logged, thinned lands and old burns. This highlights the controversy, risk and uncertainty re: the fuels and fire suppression claims of the Bayhorse EA, and demonstrates an EIS is needed to resolve this controversy. The FS fails to take a hard, science-based look (including consideration of competing scientific points of view - see for example, the paper by DellaSalla et al. 2022, at the serious risks posed by the same broken FS management paradigms of spending huge sums on massive "treatments" in wild lands, rather than focusing on actual interfaces with human habitation.

Further, new scientific information shows reduced fire risk from dead trees which this EA fearmongers over. And we stress that all the many and often overlapping tree cutting, skidding, burn preparation, etc. will wound and weaken remnant and "leave" trees ressulting in a much larger project forest tree mortality footprint. The logging and treatments will in reality worsen "forest health" insect and disease problems, but the USFS fails to address these risks. This also means the footprint of the project, and the sensitive and MIS species habitat loss and degradation impacts will be significantly greater than considered in the shallow EA and specialist documents. We Object to the failure to take a hard look at, and incorporate current wildfire science, using the work of Dr. Jack Cohen. We also Object to the failure to consider a reasonable range of alternatives such as focusing on actual habitat/structure interfaces for "treatments" – not roaming far and wide destroying fire-minimizing cooler, moister, denser forest types. That are important to important sensitive and MIS species, to watershed stability, and to public recreational uses in this much-visited project area.

We Object to the failure to adequately assess and take a hard look at the current degree of livestock degradation in these watersheds and habitats, and to properly minimize and mitigate grazing impacts that amplify and worsen environmental degradation and risks of irreversible flammable weed infestation and other factors with "treatments". Grazing chronically degrades watersheds making them more vulnerable to erosive runoff, sediment production loss of flows, etc. and highly susceptible to weeds, and well as causes many forms of habitat degradation for sensitive terrestrial and aquatic species. Fleischner 1994, Belsky et al. Riparian paper 1999, Belsky and Gelbard 2000, Beschta et al. 2012 and 2014, Reisner et al. 2013, Williamson et al. 2019/2020 -but a reader is not provided even the most rudimentary information on the existing levels and degradation in this watershed from public and private land grazing.

This further elevates the high degree of risk from this project as grazed lands are more vulnerable to weed infestation and dominance with "treatment" disturbance. Grazed and degraded watersheds are highly vulnerable to worsened erosion, loss of topsoil, water pollution (including sensitive species and ESA-listed species habitats), lethal fencing and

other harmful livestock facilities including stagnant polluted water troughs that promote mosquitoes that may harbor West Nile virus (kills Sage-grouse migratory birds, and sickens humans too). There is a failure to take a hard science-based look at these serious and synergistic grazing-caused threats. See Beschta et al. 2012 and 2014, Carter et al. 2014.

Climate change stress makes lands less resistant to cheatgrass and other weed infestations, increases loss of water flows, decreases resilience and the ability of arid lands and sensitive species habitats to recover or heal from grazing stress, increases risk of permanent desertification and aridification of remaining watered sites. Grazing also dries out upland and riparian areas – by removing vegetative cover resulting in hotter soil surfaces, hotter water temperatures, etc. at the same time, cattle grazing disturbance makes lands more susceptible to irreversible flammable cheatgrass expansion. Williamson et al. 2019/2020 study exposes how grazing following fire increases cheatgrass risk. "Study shows grazing encourages cheatgrass growth". https://www.boisestate.edu/news/2020/03/13/study-by-matthew-williamson-shows-grazingencourages-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 Reisner 2013, Reisner Dissertation 2010, and Belsky and Gelbard 2000, and the recent USGS 2021 Herren et al Remington et al. GRSG reports on continued habitat loss and population declines. Further, there is now growing scientific alarm that forested sites will often not recover trees following significant deforestation/tree loss disturbances, and are becoming increasingly vulnerable to becoming infested with cheatgrass. See Fusco et al. 2019, Kerns et al. 2020. The FS fails to take a hard science-based look at all of these concerns, and the serious risks of the proposed actions of deforestation and mechanical and fire use and disturbance (resulting in a hotter, drier, windier, weedier) watershed in a grazing-battered landscape undergoing significant climate change stress and drought. We Object to the failure to consider all of these inter-twined harm-amplifying environmental impacts of the EA treatments combined with the chronic high levels of grazing disturbance.

There is no EA baseline or hard look NEPA analysis of grazing use standards, compliance with grazing use standards what riparian and upland areas they apply to, the adequacy of FS monitoring, grazing compliance with standards, link between grazing and aquatic imperiled species. The EA never bothered to provide a baseline assessment of

existing levels of sedimentation in Bull Trout and Salmon-Steelhead habitat. Yet this EA project will increase erosion and runoff, elevate stream sedimentation, elevate water temperatures, etc. There has been no current pre-decisional analysis of critical activities and elements of the environment. The current ecological conditions in relation to grazing degradation are ignored, in violation of NEPA and NFMA – as understanding how degraded streams currently may be is critical to understanding the effects of heaping large-scale logging and "treatment" disturbance into the same watersheds.

The SCNF over the past 30 years has perennially claimed it is short on range and other staff for monitoring grazing over these large western forests (Fite pers. experience on SCNF field trips and in meetings with SCNF, Sawtooth and other Region 4 Forests), so it is not credible to believe that future monitoring will be sufficiently protective and make up for the EA deficiency – and besides, there is no adequately defined steam sedimentation, grazing standard, and flammable weed invasion and expansion monitoring and no adequate undue degradation prevention sideboards. We Object to these deficiencies.

The FS must provide data on, and take a hard look at cattle actual use stocking in these recent years of climate stress and mega-drought is necessary and what livestock riparian and upland use levels have resulted to ensure that livestock grazing following treatments does not shift use based merely on overall permitted numbers and not actual use levels – and thus cram unsustainable numbers of livestock into untreated areas. The minimal and insufficient project post-treatment "rest" the FS might impose must not result in shifting intensified harmful grazing use onto other areas. The FS failed to consider a reasonable range of actions to limit and prevent significant post-treatment livestock impacts. We Object to these deficiencies.

The FS fails to take a hard science-based look at all of these significant ecological concerns and interactions between treatments and livestock grazing effects, and potential loss of sustainability of Forest values, and associated foreseeable failure to ensure compliance with NFMA, the ESA, the MBTA in preparing this cursory self-serving EA.

We provided many scientific grazing, climate, forest, ecological, migratory bird and other wildlife articles accompanying scoping comments, and comments on the lack of info for comment and environmental baseline - yet these are absent from the EA discussion. We Object to these omission and failure to take a hard look at grazing and the potential for undue degradation, and 'take" of ESA-listed aquatic species.

We are concerned that the effects of the logging/deforestation treatments and burning, and/or the effects of the treatments plus grazing disturbance will result in the FS authorizing landscape-level aerial or other herbicide applications with high risk for drift and damage to non-target vegetation/species habitats/watershed areas, and authorizing severe grazing disturbance by livestock under the guise of "weed control" - ignoring the fact that watersheds already significantly infested with weeds are often very likely in this

condition at least in part because of livestock disturbance to soils/crusts/native veg communities and from grazing transporting weed seeds cross-country in mud on hoofs/seeds on hair, or in guts. Belsky and Gelbard 2000 (livestock weed transport in gut, hair, mud), Chuong et al. 2015 (livestock weed transport in mud on hoofs). The EA fails to take a hard, science-based look at these serious invasive species problems and the irreversible harms to sensitive and imperiled species habitats and watersheds and wild lands/IRAs that would result. We Object to the failure to adequately assess these significant concerns.

The SCNF has no current adequate NEPA analysis and no current chemical risk analysis for use of toxic chemical herbicides that may be used on project-spawned weeds, and that can contaminate soils and waters, drift and kill non-target species, and runoff or otherwise infiltrate ESA-listed species watersheds and waters, be ingested by native herbivores, as well as adversely impact the public and recreational uses and enjoyment. We Object to the USFS failure to take a hard look at the risks and adverse effects of EA project (and chronic continued cattle grazing disturbances on herbicide use and impacts in these watersheds.

There has also been increasing use of ATVs by the recreational public and the livestock industry and these transport weeds seeds and greatly disturb wildlife that will also suffer loss of habitat security from the deforestation actions. There are very high levels of recreational OHV use in the project watersheds. Fite, site visit observations 2022. Will there also be further proliferation of livestock facilities that concentrate disturbance and result in weeds or lethal impacts? See Belsky and Gelbard 2000, Freilich et al. 2003, Mcinturff et al 2021, and a host of other livestock-related activity that causes or transports weeds across FS lands. There are no requirements livestock be quarantined before moving from a weed-infested pasture into one without weeds, no weediness threshold that would preclude regular allotment grazing - or other basic precautionary measures to protect watersheds, sensitive species habitats and population, and public recreational use in wild lands. The FS fails to take a hard look and providing a proper ecological baseline of the immense Forest-wide weed problems and risks, and there is a lack of specific details on how the multiple types of disturbance of the project will generate expanded flammable and noxious weeds, and how it will effectively address weed infestations spawned by the project. The FS failure to provide current invasive species inventories and mapping and analysis, and address the great invasive species expansion risks, and develop an effective, certain science-based plan to address project and grazing-caused-caused weeds. The FS failed reveal the specific chemical herbicides that will be used, and potential risks and adverse effects, and use of inadequate invasive species responses. See for example, Belsky and Gelbard 2000, Reisner et al. 2013, Williamson et al. 2019/2020, new research on how livestock alter forest soils communities and ecological functions. Proesmans et al. 2022. See also Poessel et al. describing how removal of grazing results in ecological recovery. We Object to these EA flaws and omissions and the uncertainty and environmental risk they pose.

We Object that the EA lacks a hard look at current livestock grazing and facility harm/impacts to sensitive species habitats and populations and the additional risk and threat this poses to wildlife impacted by the massive project as well as how degraded conditions may predispose treated lands to weed infestation. Project site vulnerability to weed infestation and weed site dominance, and adverse effects of treatments, must be provided in an EIS. Livestock facilities and salt-supplement sites serve as prime sites for flammable weed infestation and spread Fleischner 1994, Belsky and Gelbard 2000, Braun 1998, Freilich et al. 2003, Connelly et al. 2004, McInturff et al 2020, including in any post-treatment actions. Fences, stock ponds, spring developments and pipelines and troughs extending into sagebrush and forest upland habitats generate areas of heavy to severe disturbance, may result in wildlife mortality (West Nile and other diseases, fence collisions, predation), and are epicenters of weed infestation and spread. Connelly et al. 2004, Van Lanen 2016, USGS Herren et al. 2021, Remington et al. 2021.

The project will greatly increase fragmentation of migratory bird and sensitive and MIS avian species nesting habitats. This favors nest predators and nest/nestling loss The more fragmented the habitat has become from FS past treatments or fires or roading or livestock facilities, the more vulnerable species will be to suffering serious adverse and irreparable harms from the radical treatment project disturbances. We Object to the failure to take a hard look at these serious adverse impacts to very significantly declining forest migratory birds. See Rosenberg et al. 2019 re: North America missing 3 billion birds.

Cows converge on salt/supplement on degraded range, and beat out and destroy the surrounding sagebrush/other shrubs. These impacts are not tracked or monitored by agencies. The intensively degraded soils/veg/crusts from livestock concentration damage succumb to cheatgrass and other weeds that then spread outward. We Object to the failure to take a hard look at these indirect, synergistic and cumulative weed expansion risks that prime project "treated" sites for becoming choked with weeds, and we request the minimal sideboards and controls and specific information on post-treatment/fire/linked logging "rest" or longer-term removal of livestock.

The EA fails to take a hard look at the effects of pre and post-fire livestock grazing and stocking rates, authorized use levels, monitoring results, and any temporary or permanent facilities including those linked to the "treatments" and of the any minimal rest and recovery criteria, and highly foreseeable shifted and intensified use into remnant better condition habitats when lands are being "rested". Has the FS conducted a current capability analysis? If so, what has it determined? Will project deforestation allow cows to access remnant previously less grazed areas that had provided crucial habitat? How might the project alter use of capable and incapable lands, and remnant less grazed areas? We Object that the USFS EA did not address these significant issues.

The EA also failed to require that only locally collected native ecotypes be seeded if seeding occurs – as often grasses seeded as "native" – like Secar "bluebunch"– are not

even the same species as the native grasses, and/or have been bred for livestock forage and are coarse and tough– with much-reduced value for native wildlife species. The USFS has a very poor record of seeding aggressive exotics like intermediate wheatgrass and smooth brome and these species prevent native shrub an, tree and wildlife recovery. Solid and complete baseline data and analysis of livestock grazing and facility impacts, adequacy of riparian and upland standards that are applied, compilation of monitoring data and compliance with any standards, in grazed landscapes are critical to understanding the threat posed by grazing to /treated lands, and the need for specific required actions following treatments, including to ensure any semblance of recovery and to allow soils, and protective microbiotic crusts that are a frontline defense against weeds and that sequester carbon native vegetation including shrubs and/or trees to recover sufficiently so the site does not succumb to weeds and so habitat is not lost for a significant time period. We Object to the lack of a hard look at these effects, and the lack of certainty about the project aftermath.

How much carbon and other greenhouse gas pollutants will be released by this project? How much will live forest carbon sequestration be reduced by the treatments? How much will carbon sequestration be altered or reduced permanently if cheatgrass/bulbous bluegrass/noxious weeds, etc. result and come to dominate in "treated" sites? The EA fails to take a critical and hard look at the loss of carbon sequestration and the additional climate change pollution burden from this project and the cumul;tive impacts of all the other Region 4 as well as USFS Salmon-Challis veg projects, and various BLM "treatments" as well. We Object to the lack of a critical hard look analysis.

The FS failed to critically examine the full range of adverse environmental effects of the battery of burning methods (including highly unnatural methods like use of accelerants in burning or other treatment of fire-resistant sites, and multiple and overlapping types of treatment disturbances which may be conducted within the same watershed even) - such as severe scorched earth "jackpot" burning and pile burning along with logging – causing extensive collateral damage by destroying mature and old growth trees and shrubs. We Object to the wastefulness, loss of habitats for soil organisms, small animals and biodiversity from polluting the atmosphere with greenhouse gases by burning up carbon sequestering weed and "tidying up" the forest.

Prescribed burning, aerial ignition./helicopter napalming, pile burning, will also cause serious collateral damage and serious adverse impacts to remaining forest and shrub stands, soils/crusts, sensitive watersheds, surrounding veg, rocks and forest migratory bird, big game and sensitive species habitats. This represents severe, often permanent and highly significant environmental harm The FS fails to minimize the serious adverse environmental harms and risks of the massive disturbance the EA actions would impose. We Object to the failure to take a hard look at these significant ecological concerns.

Logging, thinning and Fire use including the manic pile or jackpot burning and repeated clearing of vegetation opens up lands to greatly expanded motorized use, mountain bike, winter recreation and other use – resulting in a greatly expanded human disturbance footprint and conflicts with sensitive wildlife habitats, ESA-listed species, native carnivores like Wolverine/Gray Wolf/Canada Lynx and others, and big game seasonal and security habitats. This will cause harmful impacts not just within burned areas but also intruding on and extending into surrounding unburned lands and species habitats and into watershed areas and IRA lands that would now able to be accessed because forests and "brush" have been cleared or burned. No adequate baseline of the existing use levels is provided, and no adequate information on the FS Travel Plan, and compliance with the Travel Plan is provided – and that includes winter use. Further, there is a great lack of critical baseline data and analysis of current road densities, and protective screening vegetation types near and surrounding routes which may currently provide critical screening cover for big game, rare native carnivores, sensitive species, MIS species, and other wildlife., This screening and security cover may be destroyed by the "treatments" - and all surrounding lands could suffer massive Fire and linked logging treatments under the huge SCNF Prescribed Fire EA which may also be bracketed by foreseeable segmented piecemeal logging. We Object to the failure to take a hard look under NEPA at all of these very significant ecological concerns.

This area receives very high levels of motorized OHV use. There is no Travel plan provided, the current travel plan is extremely out-dated and woefully violated with a very large number of unauthorized routes proliferating across the SCNF. The USFS has failed to provide a current route inventory and updated analysis provided of all the new legal and illegal routes including mountain bike and other trails – since the already outdated travel plan was prepared. The FS also does not provide current detailed mapping and analysis of illicit routes in IRAs, and of the impacts of these projects in increasing off-road motorized and mountain bike and snowmobile use and de facto route and trail expansion in IRA areas. What is the current condition for these factors? All this treatment disturbance coupled with the veg clearing creating new inroads for all manner of motorized disturbance into previously inaccessible wildlife habitats – for Wolverine, Gray Wolf, Canada Lynx nesting forest birds including MIS and sensitive species, and many other species (including over the snow) and bike trail use, as well as greater penetration of noise into habitats, and also increased mortality of wildlife from poaching and displacement to inferior quality habitat. We Object to the failure to take a hard look at the cumulative and indirect effects of the large amounts of OHV and motorized use in these watersheds, and failure to take a hard look at how this extensive vegetation clearing will remove impediments to OHV use proliferation. We also Object to the failure of the USFS to identify all routes (legal or illegal) in these watersheds that are the result of past logging activities and the failure to detail past logging activities and treatments in these watersheds.

Significance factors must be critically examined, and the FS cannot use claims of a mitigated FONSI as the USFS does not have a solid baseline and comprehensive hard look NEPA analysis so it can understand the amount and type of mitigation required – or if the only possibility is mitigation by avoidance of conducting an action- including no hard look at climate change stresses combined with grazing, and a whole range of other current treatment threats and threats of potential mining exploration and other disturbances. There have been no pre-decisional baseline inventories for sensitive and MIS species, and the EA exhibits a huge lack of analysis of adverse impacts to native aquatic and terrestrial species. We Object to this. A hard look must be taken to understand at the scale of harm that will be caused and all the forms of mitigation that may be required.

We are also concerned that all this project disturbance may result in release of old mining caused pollutants into waters and also in soil as dust erosion and contaminating vegetation that is eaten by native herbivores. What studies have been conducted on pollutant levels and contamination here – as this area includes a major historic mining site? The EA is devoid of these necessary studies – is there mercury, arsenic, radioactive rare earth minerals? Will the Bayhorse project forest disturbances and logging activity trigger release of toxic metals or other contaminants into air and water? We Object to th lack of critical data and analysis. The MBTA, ESA, NEPA, NFMA, APA, BGEPA, NHPA, TMDLs, the Clean Water Act, Clean Air Act, all may be potentially violated.

Right now, there is a massive treatment binge underway on the Salmon-Challis Forest (see Fite "Bad Fire" Counterpunch summary, the Caribou-Targhee massive burning EA, a Humboldt-Toiyabe massive burning EA (and also a separate 40,000 acre Deer Creek Jarbidge deforestation EA certain to cause an explosion of cheatgrass), a Manti Forest EA, a fish Lake Forest EA, a recently scoped Ashley Forest EA, a Dixie Forest EA, that appear to be cookie cutter schemes following the same highly uncertain tens of thousands of acres per year burned up template as the SCNF Fire EA. See also information on BLM "Fuelbreak" and "Restoration" EIS, and other agency woody veg destruction projects. The EA fails to objectively consider the impacts of this region-wide loss of forest and mature woody shrub vegetation essential for sensitive species – and the severe harms to migratory birds, big game and other wildlife - and on loss of climate-change combatting carbon sequestering forests through being burned and/or logged by the FS, and the grave risk of undertaking these activities during the unprecedented western megadrought.

The Forest Service Intermountain Region 4 barrage of cookie cutter NEPA documents would impose a tremendous increase in Forest-wide prescribed burning across the Salmon-Challis 1,722,000, Sawtooth 950,000 acres , Caribou-Targhee 216,178 acres , Humboldt-Toiyabe 4,000,000 acres , Manti-La Sal 475,000 acres, Fishlake, Dixie and Ashley Forests.

The Region 4 projects span millions of acres of rugged, dramatically beautiful arid forests and shrublands. It turns out these fire projects may be used as justification for pre-burn and post-burn logging under separate piecemeal NEPA decisions. Roadless Areas are primary targets. The FS claims vast swaths of Roadless Areas and irreplaceable sensitive species habitats are greatly "departed" from their modeled ideal, have "missed fires", haven't burned nearly enough, or plants are dense so there's too much fuel. Being branded "departed" is the kiss of death. All this claimed Roadless Area "departure" highlights the highly questionable use of spurious USFS-BLM-Nature Conservancy LANDFIRE black box models with their purported pre-settlement fire intervals and broad brush fuel estimates. Roadless Areas are some of the least likely places for fire suppression to have occurred or been effective. These models are being universally applied by agencies in support of the official narrative that fire suppression causes big western wildfires. We object to the failure to assess the immense adverse footprint to species that rely on maturing, mature and old growth forests from these and a host of other large-scale habitat destruction and fragmentation projects. alarmingly, migratory birds may suffer manor losses of habitat on nesting, migration and wintering habitats, from the extreme amount of vegetation manipulation underway and/or planned.

FOREST	PROJECT ACRES	DEPARTED ACRES	ROADLESS ACRES	TREATMENT ACRES/YEAR	SAGEBRUSH SHRUB ACRES
Humboldt-Toiyabe	5,100,000	4,000,000	3,000,000 342 IRAs	100,000	1,833,000 sage 56,000 Departed but 1,370,000 "conifer encroachment"?*
Sawtooth	1,740,000	950,000	1,040,000 26 IRAs	40,000	780,000 shrub, 32% Departed
Salmon-Challis	2,735,000	1,722,600	1,976,000 55 IRAs	10,000	549,900 Departed
Caribou-Targhee	266,000 in Caribou burn units	223,535 81% Departed	216,178 20 IRAs	6000	84,794
Manti-La Sal	1,100,000	1,100,000	475,450? 349,445? 48 IRAs?	31,248	100,000 approx.

Fishlake	1,000,000+	?	No EA info	40,000	?
Dixie	1,800,000	1,546,000	?	52,000	?

* It's unclear how much Humboldt-Toiyabe sage is targeted– the description of sage disturbance includes breaking up canopies, broadcast burning, jackpot burning, etc.

Roadless Areas across the Salmon-Challis, Sawtooth and Caribou-Targhee Forests have long been proposed for wilderness designation in the Northern Rockies Ecosystem Protection Act (NREPA), and the EA fails to consider the harms to IRAs and proposed Wilderness from these massive disturbances and the weakness and ineffectiveness of the supposed mitigation measures of the Fire EAs - the "Design Elements" similar to the NMP{s with this Bayhorse project. The same questions must be asked about prescribed fire as any other agency habitat manipulation project. And the Region 4 Fire EA actions include far more than many types of burning including aerial napalming – and also includes clearcutting and other forms of chainsawing, mastication and other heavy equipment destroying vegetation, seeding including foreseeably with exotic species, and use of heavy equipment mastication machines driving cross-country turning trees and sage to wood chips smothering the ground surface and carbon sequestering understory vegetation and destroying protective carbon-sequestering cheatgrass-preventing microbiotic crusts. What species habitats and wild areas will be harmed? Who profits? How bad will it turn out? These R4 EAs admit that pre-burn linked logging may take place under separate NEPA, and now we learned from a recent Salmon-Challis NF public info Zoom call that the FS envisions and clearly contemplates linked post-burn treatment logging under segmented piecemeal NEPA too. The FS plans woeful for violations of NEPA by segmenting NEPA into foreseeably three or more segmented parts in order to try to avoid doing the work of an EIS, and violation of NEPA in failing to critically assess the indirect, cumulative/additive/synergistic threats and adverse environmental impacts of heaping all these disturbances across huge areas of irreplaceable aquatic and terrestrial species habitat, wild lands and roadless areas including those proposed for wilderness designation under NREPA. We object to the USFS failure to provide sufficient data and analysis to take a hard look at these significant ecological concerns.

The SCNF appears hellbent on tragically altering and simplifying the forest and wiping out vast areas of untrammeled public wild lands in this and other veg manipulation, using "fuels" fearmongering to justify logging, and clearing vegetation increasingly to facilitate mining exploration projects. The FS must conduct a series of Forest Plan amendments – as the Fire EA, Bayhorse and other projects will greatly change the baseline and management activity focus of the Forest plan by radically altering, reducing and destroying vast areas of mature and old growth forests and sagebrush/shrub communities – including prior to completion of a new Forest plan. The FS has already recognized that it's Plan is outdated and has spent years in not making much progress – and now these

massive treatments will seriously alter the baseline for that Plan revision, and foreclose on management options. We Object to the USFS relying on long-outdated allocations for significant habitat disturbance and deforestation projects like Bayhorse. Climate change stress was never considered in the 198os Forest plan, as an example.

The FS is planning wholesale assaults on numerous intact native woody vegetation community sensitive species habitats – without providing crucial baseline information on the amount of available habitat for sensitive species, MIS species, migratory birds of concern and ESA species both within the project area as well as across the affected landscape and region.. This greatly threatens habitats (which will be lost potentially for hundreds of years – or irreplaceably lost forever if cheatgrass dominates or the battery of treatment disturbances destroy soils that support particular veg communities or results in such hot bleak sites that forests can not regrow. See Kerns et al. 2020, Fusco et al. 2020.) and the population viability of sensitive and MIS species under the guise of "fuels reduction". The entire thrust of this manipulation is purging the FS of the complex forest and shrub structure - which is precisely the veg type required by nearly all sensitive and important species – as well as radically altering the natural and primitive values of IRAs and other wild lands and watersheds, and disturbing and often destroying cultural materials – or exposing materials to surface erosion, looting and damage/breakage/loss due to livestock trampling. We Object to the failure of the EA to take a hard look at the irreversibility of project-spawned flammable weed infestation and spread.

At the same time, there is increased huge rare earth minerals and gold mining exploration in adjacent SCNF watersheds tearing apart watersheds and wildlands and irreplaceable habitat for rare, sensitive and important terrestrial and aquatic species. See SCNF late 2021 "Batch" letter Projects and WLD comments. See SCNF BTAC mining exploration project with 24 miles of "temporary" roads in roadless areas. This is highly foreseeable to extend and expand much more in a cobalt/gold/copper/rare earth boom – greatly threatening ESA-listed aquatic species habitats, Wolverine, Canada Lynx and other native carnivores. This also exposes the extreme biological negligence of the neighboring Sawtooth claims that species like migratory birds whose habitat will be destroyed are "agile" and can move elsewhere, and the Bayhorse failure to properly consider serious project impacts. The EA fails to take a hard look at habitat and population impacts, and loss of sustainability and capability for sensitive and MIS species and other biota of concern.

Several Region 4 Forests have drawn up giant WUIs to facilitate logging, like Salmon-Challis with its whopping 1.1 million acre "wildfire protection zone". The EA fails to provide critical info and analysis necessary to understand how there could be such large WUIs or "protection zones", and to specify how this corresponds to County, BLM or other WUI/wildfire zones, and ignores the work of Cohen and others on the pressing need to focus fuels treatments on areas near habitations in interfaces. See also Dellsalla et al. 2022.

The EA fails to provide clear and detailed analysis of the air, soil and potential water pollution and greenhouse generation footprint of all these forms of mechanical and burning treatments– including multiple types of burning in the same land area.

Imagine the impacts of "treating" nearly a million acres here to migrating birds whose food sources are greatly diminished by past FS and BLM treatments and/or livestock grazing, and by wildfires (which will continue and will not be stopped by agency projects such as this), drought and the climate crisis. See Rosenberg et al. 2019 describing the serious declines of the North American Avifauna, and to already crashing GRSG populations, where habitat and population triggers established in the ARMPAs have been tripped. The project's high level of burning plus other deforestation and woody vegetation destruction treatments are planned/taking place all along migration routes. The combined and cumulative R4 effects Fire EAs bracketed by logging or other "mechanical" manipulation, will lead to drastic declines in mature and old growth woody shrubs and forest types that produce insects/fruits/seeds needed in fall migration have been burned up under these huge EA and also various CX treatment schemes- such as the massive projects of the contiguous SCNF. See for example, a *Smithsonian* article describing starvation as a cause of the massive migratory bird die-off last fall. Birds are already facing immense threats from habitat loss, megadrought, climate stress and extreme weather, insecticides and herbicides impacting food sources on nesting, wintering and migration habitats.

https://www.smithsonianmag.com/smart-news/southwest-bird-die-caused-long-term-starvation-180976643/

"Desmond tells Audubon that the birds may have arrived in the southwestern U.S. already starving in part because of severe drought afflicting the region.

"It's been extremely dry here this year, so seed production is low and insect numbers are low," says Desmond, who helped organize research efforts to study the die-off. With less food, the birds would have lacked the stores of energy needed to complete their grueling migrations".

Despite the unprecedented array of threats migratory birds face, and the serious declines taking place, here's how the Region 4 FS in the SNF and the Manti-LaSal Forest views migratory birds:

Both the Manti Terrestrial Wildlife BE p. 27 and SNF EA p. 31 both state:

"Migratory birds are agile species and are generally able to move away from disturbances and find adjacent habitat areas when displaced".

This exposes the R4 and SNF Forest attitude toward “inconvenient” wildlife species like migratory songbirds - the birds who aren’t burned up (as many nestlings will be given the lack of any spring-early summer mandatory burning and treatment avoidance periods in the EA) are claimed to be “agile” and will move away. Somewhere across the rainbow – to a promised land of unburned mature forest? There is no spring early summer nesting prohibition on burning. Region 4 is working over-time to drastically alter and simply habitat everywhere, and as described in these comments, so is BLM. Only some TES species get mentioned as receiving (hollow) protections that can be waived anyway. See EA “Design Elements” The list of “Design Elements” is full of loopholes. Nest sites and prime nesting habitat for any species can be burned up when birds are not nesting. The EA fails to take a hard look at the amount of species “take” and habitat loss that will occur for wildlife species and of migratory birds, and no credible current baseline has been provided.

The Region 4 FS’s attitude toward migratory birds (and in reality all other wildlife here) violates NFMA’s sustainability and population viability mandates the Forest Plans, and the MBTA . Nearly all migratory birds have nesting territories that they defend from other birds of the same species, and they nest in specific complex habitats that contain the species-specific essential elements of food, cover and space they require are present. It is also very difficult to detect nests. The FS can’t just cram more birds into an area of habitat. This shows the lengths the Region 4 FS will go to in covering up the very significant impacts of its massive prescribed burns and other treatments on declining migratory birds of high conservation concern. See Rosenberg et al. 2019, See all the species in Tables that rely on the specific habitat types – like Douglas fir or subalpine fir – that the EA targets and will also harm, fragment or destroy as collateral damage.

The FS’s attitude in self-serving circular reasoning treatment projects illistrates why so many wildlife species are in such sharp decline. Agencies will make any excuses necessary to justify continuing to destroy habitat.

Region 4 FS is planning to burn and otherwise drastically disturb and/or destroy 7 million or more acres (in just current Fire EA projects!), Federal agency prescribed fire and treatment zealots across the Intermountain region will create conditions for massive migratory bird die-offs during continued drought and harsh weather conditions during migration. For localized resident species. Forest-inhabiting native carnivores and aquatic species struggling in the region’s streams will face grave imperilment as watersheds are converted to hotter, drier, winder, weedier bleak burn-or logging-scapes - that also continue to be grazed by over-stocked cattle which cause cheatgrass expansion. Post-treatment, livestock would have even more ready access to areas previously less protected by woody vegetation.

The proposed SCNF Fire EA project --- plus SCNF Big Creek, South Lost, Wino Basin, Bayhorse V2, North Fork, Stormy (logging/fire), Darlington, Lemhi Fire, etc.,)would

authorize multiple prescribed burns and also like in Bayhorse, Stormy. North Fork and various Batch letter projects logging across the Forest at an precedented rate and scale.

All manner of often overlapping and/or consecutive and cumulative disturbance is planned across this fragile landscape. Yet critical baseline information on soil condition , erosion susceptibility, watershed health, water quality and quantity, microbiotic crust condition, health and integrity of grazed native plant communities, areas actually occupied by sensitive species (see Dobkin and Sauder 2004) – describing how sagebrush species may be much more limited in actual occurrence than gross habitat-typing mapping would indicate), whether migratory bird and TES species populations can withstand drastic FS-imposed loss of maturing, mature and old growth veg communities, the myriad harms to cultural sites, and myriad harms and losses recreational uses and enjoyment of these lands.

The FS claims this massive scorched earth series of treatments will reduce fires. It is unpredictable where fires start. Recent large-scale fires have shown that fires sweep through intensively "treated" Forest and shrub lands. Bradley et al. 2016, Dellasalla et al. 2022.

In fact, this project is more likely to significantly add to and increase the wildfire acreage burned annually – with unpredictable wildfire ignitions continuing, and after a few years following these projects -due to hot/dry/windy sites, expanded weed infestation and intensified and expanded human disturbance. All these treatment consequences increase fire risk, leading to even more frequent fires sweeping Forest lands, and also burning into adjacent lands not previously burned or treated – including remnant old growth and mature stands, nesting cavity sites, sensitive and ESA-listed species watersheds, Wolverine/fisher/Pine marten/Lynx/Fisher habitat, etc. are all threatened – as are rare forest Owls and other raptors, and Bull Trout, other native Trout, Salmon/Steelhead, and native amphibian habitats in impacted watersheds. There is no systematic science-based analysis and no estimates provided of the likelihood of burned/treated sites being a source of fire ignition and spread. We object to the failure of the EA analysis to take a hard look at all of these foreseeable project outcomes - How much windier? How much drier? How much weedier will the project lands become?

The EA is not using current science and the preponderance of evidence from recent fires in the West– i.e. that wildfires rip through hotter, drier, windier weedier thinned/logged/treated and/or burned grassy areas – including lands "treated", and/or burned. Often, new fires rip rapidly through previously logged and/or burned areas, and insites where fires or treatments have led to cheatgrass take over. Dellasalla et al. 2022. Cheatgrass (a weed that thrives in hotter fire-disturbed sites does not differentiate between post-fire invasion of agency -set "prescribed" fire vs. wildfire and may dominate in the aftermath of fires.

Agencies have often made this situation even worse with post-fire by seeding aggressive unpalatable-to-native-wildlife cow forage grasses that are used to perpetuate grazing high numbers of livestock.

The FS fails to review, map and assess impacts and frequencies of past wild and prescribed fires, logging projects and other "treatments" all across this landscape and determine where repeat burns have taken place, where and when logging and/or treatments have occurred, and/or where there have been burns of heavily logged or otherwise disturbed areas. Profligate use of fire and logging "treatments" is the dead opposite direction the Forest should be going. We Object to this lack of a hard look at the amount of disturbance that has already taken place.

The FS has not revealed where and how much old growth (of ALL veg types) is present and the specific old growth stand characteristics. Similarly, the FS has not revealed where and how much mature forest/shrub communities (of ALL veg types) is present and the specific mature stand characteristics. The FS should be striving to conserve existing maturing, mature and old growth forests, sagebrush, mahogany and mountain shrub habitat – rather than purposefully destroying what remains and fast-forwarding cheatgrass invasion and site dominance through use of fire - and a whole host of mastication, chain-sawing, motorized cross-country use, all bracketed by potential logging, and significant logging EAs like Bayhorse and Stormy projects. Past tree cutting/logging/treatments and weed-causing grazing have contributed to fire across the landscape.

The FS is basing this scheme in part on its now out-dated Forest land use Plan and out-dated info used in the highly uncertain and often arbitrary LANDFIRE site veg and fuels modeling and its various categorization schemes that are used to doom native wildlands. See also re: use of uncertain Landfire models and other "voodoo vegetation" modeling. See for example:
https://www.counterpunch.org/2019/12/20/voodoo-vegetation-modeling-dooms-native-forestsand-wildlife-habitat/ .

A recent scientific paper (Baker et al. 2023) exposed the flaws and inaccuracies in the fire return and disturbance intervals federal agencies are applying as justification to conduct large-scale deforestation.

Countering Omitted Evidence of Variable Historical Forests and Fire Regime in Western USA Dry Forests:
The Low-Severity-Fire Model Rejected
William L. Baker 1,* , Chad T. Hanson 2, Mark A. Williams 3 and Dominick A. DellaSala.

"The structure and fire regime of pre-industrial (historical) dry forests over ~26 million ha of the western USA is of growing importance because wildfires are increasing and spilling over into communities. Management is guided by current conditions relative to

the historical range of variability (HRV). Two models of HRV, with different implications, have been debated since the 1990s in a complex series of papers, replies, and rebuttals. The "low-severity" model is that dry forests were relatively uniform, low in tree density, and dominated by low- to moderate-severity fires; the "mixed-severity" model is that dry forests were heterogeneous, with both low and high tree densities and a mixture of fire severities. Here, we simply rebut evidence in the low-severity model's latest review, including its 37 critiques of the mixed-severity model. A central finding of high-severity fire recently exceeding its historical rates was not supported by evidence in the review itself. A large body of published evidence supporting the mixed-severity model was omitted. These included numerous direct observations by early scientists, early forest atlases, early newspaper accounts, early oblique and aerial photographs, seven paleo-charcoal reconstructions, _18 tree-ring reconstructions, 15 land survey reconstructions, and analysis of forest inventory data. Our rebuttal shows that evidence omitted in the review left a falsification of the scientific record, with significant land management implications. The low-severity model is rejected and mixed-severity model is supported by the corrected body of scientific evidence. We Object to the USFS basing a significant part of this project on flawed disturbance and HRV claims.

How much carbon is stored in the forests targeted for large-scale disturbance now, and how much will remain? Birdsey et al. described forest carbon stocks "Mature and old-growth forests (collectively "mature") and larger trees are important carbon sinks that are declining worldwide. *Information on the carbon value of mature forests and larger trees in the United States has policy relevance for complying with President Joe Biden's Executive Order 14072 directing federal agencies to define and conduct an inventory of them for conservation purposes. Specific metrics related to maturity can help land managers define and maintain present and future carbon stocks at the tree and forest stand level …*". We Object to the failure to provide current mapping and analysis of old growth and mature forests and stands of all forest types, in the SCNF, in the RD, and across this project area and surrounding lands.

What were the scientific studies vegetation community attributes in the Forest plan were based on, and what new scientific studies on vegetation communities, weeds, grazing, and fire, have been done since the plan was finalized in the 1980s? What are the assumptions in the Landfire and other models used to underlie FRCC and "need" for treatment claims here?

The FS fails to reveal if studies used to determine fire return intervals and HRV or PNV or uncharacteristic or "departed" or "unhealthy" vegetation or fire return intervals for vegetation communities were based on fire scar studies, and if so, failure to consider the inherent biases to these studies. Which specific studies were based on this?

The EA fails to take a science-based hard look at whether the veg communities (for

example low elevation Aspen and Douglas fir in these highly drought-stressed ranges) will be able to recover from fires? See Aspen Shinneman et al 2014 describing the long-term stability of some aspen communities.

The FS fails to consider Charles Kay Aspen exclosure studies/surveys of aspen regeneration that show luxuriant Aspen regeneration without fire when aspen are protected from livestock.

See also:
Fire scientists fight over what Western forests should look like
https://www.hcn.org/issues/44.16/fire-scientists-fight-over-what-western-forests-should-looklike
"*If that sounds counterintuitive, it is. Conventional wildfire wisdom is generally the opposite. Many scientists say that dry Western forests were once open and park-like, with large, widely spaced trees and little undergrowth. Now, however, due to fire suppression and logging practices, they've become overgrown with small trees and shrubs. The result is that frequent low-severity fires have been replaced by a new era of megafires that are hotter and more severe than ever before.*
That's true in some parts of the West, say Baker and Williams, a recent Ph.D. student, but not everywhere; many dry forests throughout the region historically were more dense and prone to severe fires. They also disagree with the idea that thinning and prescribed burns can prevent such fires. That kind of treatment, applied in the wrong places, is not only misguided, they say, but could do more harm than good".
AND: "*A set of laws, policies and initiatives that aim to uniformly reduce fuels and fire severity is likely to (have) adverse effects on biological diversity," wrote Baker and Williams in their recent paper in Global Ecology and Biogeography"*. The
EA disregarded public scoping comment and input, and the failure to take a hard look at a broad range of current science and alternatives including actual habitat restioration by removing grazing and other stresses.
Also from *HCN*: "*It's important to tailor treatment work to local conditions, says Hutto, the Montana biologist, because the federal government is spending money thinning forests that actually have a long history of dense stands and severe fires. "If they knew severe is natural, there's less justification for that kind of behavior," he says. "I think it's very important to taxpayers to be worried about whether we're going about things in a way that's kind of a waste*."
Reference is: Spatially extensive reconstructions show variable-severity fire and heterogeneous
structure in historical western United States dry forests
Mark A. Williams and William L. Baker
https://lpfw.org/wp-content/uploads/2020/06/2012_Williams-and-Baker_Variable-severity-fireand-
heterogeneous-structure-in-western-forests.pdf .

See: Smokescreen: "*Debunking Wildfire Myths to Save Our Forests and Our Climate"*

By Chad T. Hanson.

See: new paper by Dellasalla et al 2022 critiquing claims made about fire suppression and effects of logging, thinning, fire and other treatments on arid forests.
There is an alarming dearth of baseline and site-specific information on ESA-listed Aquatic Species.

How will the FS ensure that habitats are not fragmented to the point where species are isolated
and population viability is lost? There is no way to unless current inventories and science-based
analysis of climate stress, magnitude of grazing degradation and harm to aquatic habitats, sustainability of perennial flows, watershed connectivity, and all the multi-dimensional needs of
aquatic species are taken into account.

The FS fails to consider the importance of Ground Water Dependent (GDES) ecosystems, and springs/seeps/wet meadows – and fails to take a hard look at the current chronic degradation of these sites taking place across this grazed landscape, as well as at the effects of treatments, deforestation and grazing on small headwater ephemeral intermittent and perennial streams. See Belsky et al. riparian paper, Rhodes 2016 Report, Sada BLM Tech. Report 2001 and Sada and Lutz 2016 on the declines of spring flows, and of livestock grazing and livestock development damage – causing spring flow reduction/loss, degradation and stress. Assessing types of springs too (for example – snowmelt dependent springs in an era of decreasing snowpack) is also critical to assessing how stressed, degraded and at risk of flow reductions or loss many of these systems This baseline analysis (and baseline data on water quality and quantity including year-round spring and stream flows and current and former lengths of perennial reaches) is crucial to understanding on the ground effects of agency treatments that will result in hotter, drier, windier sites often with less snow retention – and that will remove forested cover and denser woody vegetation. This will also make livestock access to headwater and other springs easier -compounding woes. Yet the minimal and highly uncertain EA fails to establish a baseline of spring and stream condition and flows and threats; EA "analysis" fails to take a hard look at condition and ongoing stresses; and the extremely deficient project design elements/BMPs (loophole-riddled) that fail to provide protections. We Object to the failure of the EA to identify delineate and assess current and predicted ecological conditions of springs, seeps, meadows across the project area. When, where and how will treatments increase livestock access to previously less used sites? Where and how will project roading, deforestation, etc. impact these fragile areas?
.
Unfortunately, the FS is managing lands in the era of unprecedented climate change stress and the western mega-drought based on management paradigms that claim woody vegetation communities have not suffered enough disturbance. Instead, vast areas of this

landscape have suffered repeated and high levels of disturbance. The “natural” vegetation communities are exposed to the combined settlement- era threats of commodity production livestock grazing, large-scale exotic weed risk, human intrusion and habitat loss and fragmentation and watershed disruption and fragmentation from roads and increasingly bike trails, and a host of highly unnatural disturbances. What is “scarce” in this landscape is areas of relatively intact mature and old growth native woody vegetation communities. These scarce habitat areas must be inventoried, assessed, mapped and delineated as part of a sound sensitive species/watershed/ecological baseline -and a hard science-based look taken at how much this project will increase fragmentation of essential habitat types for all species of concern (sensitive species, ESA-listed species, declining migratory birds). How much will the EA actions increase human disruption and intrusion in sensitive seasonal habitats for native biota? Big game winter ranges? Other species nesting and wintering habitats? Elk calving and Mule Deer fawning habitats? The EA fails to compile and take a hard look at the actual adverse impacts
to essential seasonal habitats impacted that are crucial wildlife survival. Such analysis is critical for NEPA and for NFMA sustainability analysis and capability. We Object to the failure to conduct adequate hard look analysis.

The EA also fails to provide critical baseline data and analysis of climate change stress, and predicted effects that will impact fires, weeds, sustainability, water flows, etc. – and the level of harm the project will cause as well as the alternatives analysis and breadth and type of mitigation actions – including strict sideboards for mitigation by avoidance. We previously include on CD an example of NOAA climate concerns in a recent SCNF Lemhi diversion consultation that illustrates serious risks. In this region:
Climate Change: The primary effects of climate change on Pacific Northwest salmon and steelhead include:● Direct effects of increased water temperatures on fish physiology; ● Temperature-induced changes to streamflow patterns;● Alterations to freshwater, estuarine, and marine food webs. These concerns - increased water temperatures, hotter temperature effects to streamflow patterns alternations to freshwater food webs - also apply to the SCNF where anadromous fish are almost wiped out, and are threatened by watershed-level impacts and water flow loss of sustainability and sediment and potential old toxic mine substance other pollution from this project, as well as elevated water temperatures from the deforested and radically disturbed watershed. Native fish perilously close to being wiped out right now. There is no freeboard for FS fire mistakes or the FS causing water pollution, flow reduction or excessive water temperatures from watershed-level loss of shade – especially following on all the lodgepole pine “red tree and other logging mania that has taken place in and surrounding the Salmon River watersheds. We Object to the failure of the EA to take a hard look at these significant ecological concerns and their effects on threatened biota and aquatic system sustainability.
.
There is also a lack of current baseline data and analysis of the road network and road densities across the project area landscape. What is compliance with route closures in sensitive habitats and watersheds? How many unauthorized routes and trails currently

existing in the project area? In the Yankee Fork RD watersheds? We Object that the FS has not addressed significant road density, wildlife disturbance and displacement, and watershed condition concerns and stream sedimentation concerns associated with authorized and unauthorized routes here, as well as old mine tailings and historical mining disturbance in project-area watersheds.

We Object to the failure of the EA to address the significant biodiversity impacts and sustainability concerns raised in our comments. These include

-Recent reports on the world-wide biodiversity crisis and huge declines in avian species across North America, global declines in biodiversity, the imperilment of large numbers of species, declines in even "common" species and other dire ecological information highlight the need for great changes in management of these very important public lands - not logging and torching them with a massive series of "treatments". The FS fails to take a serious and hard look scientific analysis look at the project impacts on accelerating biodiversity loss, as well as the project increasing carbon pollution in the atmosphere and reducing carbon sequestration ability– a double blow to the climate. The great importance of old growth and mature forests and trees in ameliorating climate change and sequestering carbon has gained new scientific prominence. These are the exact veg community types the spurious LANDFIRE models used by the FS in its series of projects seeks to destroy.

Despite the profound threat of biodiversity loss, it is climate change that has long been considered the most pressing environmental concern. That changed this week in Paris, when representatives from 130 nations approved the most comprehensive assessment of global biodiversity ever undertaken. The report, spearheaded by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), found that nature is being eroded at rates unprecedented in human history.
One million species are currently threatened with extinction and we are undermining the entire natural infrastructure on which our modern world depends.
https://www.ipbes.net/global-assessment-report-biodiversity-ecosystem-services
https://www.ipbes.net/system/tdf/ipbes_7_10_add.1_en_1.pdf?file=1&type=node&id=35329
See: Report of the Plenary of the Intergovernmental Science-Policy Platform on Biodiversity and
Ecosystem Services on the work of its seventh session
https://cornellsun.com/2019/09/26/ornithologists-birdwatchers-uncoverstaggeringmagnitude-of-bird-population-decline/
2.9 billion birds gone in 50 years.
"*Seeing this net loss of three Billion [BILLION] birds was shocking," Rosenberg said".*
https://www.audubon.org/news/north-america-has-lost-more-1-4-birds-last-50-years-new-studysays

North America is home to nearly three billion fewer birds today compared to 1970—that's more
than 1 in 4 birds that have disappeared from the landscape in a mere half a century. "This was an astounding result, even to us," says lead author and Cornell Lab of Ornithology
conservation scientist Ken Rosenberg.
https://science.sciencemag.org/content/early/2019/09/25/science.aaw1313
Decline of the North American avifauna, Rosenberg et al. 2019. Abstract:
Species extinctions have defined the global biodiversity crisis, but extinction begins with loss in abundance of individuals that can result in compositional and functional changes of ecosystems.
Using multiple and independent monitoring networks, we report population losses across much of the North American avifauna over 48 years, including once common species and from most biomes. Integration of range-wide population trajectories and size estimates indicates a net loss approaching 3 billion birds, or 29% of 1970 abundance. A continent-wide weather radar network also reveals a similarly steep decline in biomass passage of migrating birds over a recent 10-year period. This loss of bird abundance signals an urgent need to address threats to avert future avifaunal collapse and associated loss of ecosystem integrity, function and services.

This project and a host of other SCNF projects and the massive 'treatment" and fire assault across region 4 forests will result in immense new destruction of habitat -through project development and linked livestock use and ever-expanding zones of depletion depleting soils, crusts, vegetation and crucial sensitive species habitat elements - for many bird and animal species that are already suffering precipitous declines. We Object that the FS has violated NEPA and NFMA - and cares so little about these species that it has developed this EA without conducting the essential multi-year site-specific habitat occupancy and habitat condition inventories to determine the relative importance of the habitat to species persistence. Instead, the FS plans to use old and very limited data. That will under-estimate species occurrence and presence, and does not provide an adequate environmental baseline including for the agency's vaunted adaptive management, if the FS doesn't really know how bad things are for species or how extensive livestock degradation is, at the beginning of a habitat destruction and fragmentation project? The FS relies on arbitrary NEPA and NFMA "biological ignorance is bliss" management paradigms displayed in this EA process, and fails ensure habitat and population sustainability and persistence, and biodiversity protection.

This project will exacerbate the climate crisis by increasing soil and area temperatures through removal of cooling shade, decreasing soil stability, removing important carbon sinks, increasing the spread of invasive species, and producing bare soil and resultant dust that accelerates snowmelt, harming sustainable perennial water flows and water supplies.
We Object to the failure EA fails to address these significant concerns in any substantial way.

How much hotter will soils be in each targeted type of vegetation community as sites are logged or burned, and what will be the ecological consequences of this increase in soil temperature? How much hotter will stream waters become, and how much will this project increase heat-caused water evaporation? See also new paper on grazing impacts to forest soils (Proesmans et al. 2022), and the massive removal of woody veg, will result in new and intensified harmful concentrations of livestock impacts. The FS fails to provide clear info and analysis of competing scientific points of view, and failure to address significant public concerns.

Fire, chainsaws, bulldozers and other activities associated with this project will destroy protective mosses, lichens and biologicals soil crusts. Undisturbed, late-successional biocrusts have significantly higher rates of carbon sequestration, directly contributing to long-term storage of inorganic carbon beneath the soil surface. Protecting the integrity of biocrusts protects the ability of systems to sequester and store carbon. A synergistic effect is created when surface disturbance occurs on invaded landscapes during drought years, and soil erosion may take place. Increasing temperatures and decreasing precipitation also decrease soil, native vegetation and ecosystem resilience to fire, grazing and other disturbances, exacerbating erosion. The FS fails to conduct hard look scientific NEPA analysis needed to develop proper minimization
and mitigation strategies, and the minimal/inadequate/loophole-riddled design measures/BMPs and other BMPs/SOPS – clear and consistent certain actions are needed to understand if treatment actions can be sufficiently mitigated or if they need to be dropped – for example, the burning and other forms of destruction (including as collateral damage) of sagebrush, or the large-scale burning of mature vegetation communities. The EA lacks a hard look NEPA analysis of the severely flawed design elements, and their failure to protect Forest values and failure to ensure compliance with the FS MIS and other forest Plan requirements. We Object to these analysis flaws.

We are greatly concerned about, and Object to the loose, uncertain and greatly inadequate minimal provisions for wildlife, migratory birds and aquatic species, and these exemplify the highly uncertain deficient "design element" laundry list of hollow EA promises. Our concerns are amplified by the EAs vapid self-serving unsubstantated claims:

The Bayhorse project will have minor impacts to migratory birds. The determination is based on the following rationale: Project activities may kill individual birds. Prolonged noise during project activities may disturb nesting birds. The dangers of disturbance include the potential of egg breakage due to startling the adults off the nest, death due to exposure during bad weather conditions, and nest abandonment pre-fledging.
All impacts would be limited to local populations of migratory birds and would likely be limited to only individuals.
In general, forested stands will improve resiliency with lower density, more resources for fewer trees, and less susceptibility to insects, disease, and catastrophic fire.

Any effects to migratory birds are restricted to the project area and would not extend to the Forest scale.
Through project planning and design features incorporated into the project will further mitigate impacts to migratory birds.

We Object to the minimal highly uncertain and highly destructive MBTA and NFMA-violating design elements that will result in significant harm and/or "take" to threatned biota:

2.3.9. Wildlife
35. If practical, disturbance to cutting of whitebark pine will be minimized. ["if practical renders this toothless]
36. For all harvest units whitebark pine greater than 3 inch in diameter at breast height will be marked for retention. [Why isn't this done as part of the EA?]
37. Within harvest units, locations of landings and skid trails will be approved in advance of operations to avoid whitebark pine. [WHY aren't they identified here in the EA?]
38. If active boreal owl, flammulated owl, great gray owl, or goshawk nest sites are identified near or in the project area, restrictions would be put in place to prevent nest abandonment
39. To the extent possible, prolonged noise during project implementation should be avoided during the nesting season (April 15 through July 15). ["to the extent possible" renders this meaningless]
40. During the elk calving period (May 1 through June 30), project activities in units adjacent to riparian areas will be limited if elk are present. [Where are all currently known sites? -this information should be provided in the EA].
41. Treated aspen stands will be evaluated for protection fencing from grazing on a case-by-case basis.

These minimal toothless measures allows all forms of outright destruction of habitats and nests, eggs and nestlings throughout the nesting period, in violation of the MBTA, sensitive species policy and NFMA sustainability mandates. We Object to this, and to the "determinations" made by the FS based on such toothless measures.

Similarly, the "Determinations" made by the FS in the various EA sensitive wildlife, plant and aquatic species tables are completely divorced from science and reason, and are solely designed to avoid any hard look at the severity of harms to habitats and population losses and declines, and levels of "take" that will result. What levels of "take" will actually occur, and how has this been estimated? We Object that the FS has not provided responsive information and analysis.

We strongly oppose ANY burning or ground disturbing activities during avian breeding and nesting periods, and reproductive periods for native mammals between February 15

and August, as this will result in high levels of "take" of migratory birds and as well as many other species of wildlife.

Migratory and resident bird and raptor surveys – including for owls and sensitive Flammulated, Great Gray, Boreal and other owls - are needed, as they are for all species of concern, MIS species, sensitive species, ESA-listed species, and migratory birds! And these must be required now pre-decisionally to have a proper project baseline. Such surveys must also be conducted in surroundings in order to assess the population levels and relative importance of targeted habitats. Given that so many species are currently declining, and the FS duty under NFMA is to ensure sustainability of forest values and habitats and viable populations, a reasonable person would only expect that species will be in even more serious trouble, and will have undergone even worse declines and will have become more threatened and endangered as these radical disturbance treatments (and other damaging FS activities take place. This represents negligence and violations of NFMA, and we Object to this negligence.

Here is information for Western Tanagers - just ONE of many migratory bird species that may inhabit a project area targeted for "treatment" linked to this project.
https://www.fs.fed.us/database/feis/animals/bird/pilu/all.html

Western tanagers occurred at an average density of 53.2 birds/100 ha in sawtimber Douglas-fir stands (>80-150 years old), 37.0/100 ha in mature Douglas-fir stands (>100 years old), and 3.1/100 ha in sapling Douglas-fir stands (<20 years old) in northern California [99]. Although western tanagers occurred at higher densities in young Douglas-fir forest in Oregon, the stands were 40 to 72 years old. Mature forest was from 80 to 120 years old, and old-growth forest was 200 to 525 years old.

What is the size of the nesting territory and estimated population densities for each of the sensitive, MIS, and other avian species of conservation concern including important migratory songbirds that inhabits each of the targeted vegetation types (and mixed species veg communities which are often critically important to many species) where habitat will be fragmented, altered, destroyed under the EA? What is the current population of each of these species in each area of the forest? How has the FS monitored and tracked populations over time? How does the Forest monitor and track landbird habitat and population density and trends over time? For example, the Boise NF has a specific landbird monitoring strategy – does the SCNF? How does habitat fragmentation increase predation and nest loss? How does it increase brood parasitism by Brown-headed Cowbirds? At what level of habitat fragmentation and patch size will species no longer persist in a forest or shrub site? There are a host of uncertainties that must be addressed with such severe treatment disturbances authorized by, or linked to, this project. The EA greatly lacks information necessary for a hard look under NEPA, and that is necessary to ensure compliance with NFMA, the MBTA and BGEPA. We Object to this analysis deficiency.

Further, it appears there are not even defined nest area avoidance buffers and also that nesting sites including for sensitive raptors can be wantonly destroyed. We Object to this EA analysis deficiency.

Where are all remaining old growth forests and other old and mature vegetation communities for all vegetation community categories across the Yankee Fork and this project landscape? How does the FS define old growth? How much carbon is stored in these areas? Where are all the mature forest stands across the Forest? How does the FS define mature
forest? How much carbon is stored in these stands? How many scores of years (or hundreds of years) will it take for burned old growth and/or burned mature forests of each type to recover the stand structure and carbon sequestration ability of the current existing forest types if the FS burns these areas up? How will this affect forest-dependent sensitive species like Goshawk, Flammulated Owl, Boreal owl, Wolverine, Fisher Etc. We Object to this EA analysis deficiency.

Rare Native Carnivores Threatened by Removal of Forest Cover Thus Reducing Snow Persistence, Increasing Human Recreational Motorized and Non-Motorized Disturbance, and Likely Increasing Trapping, and Many Other Disturbances Year-Round and Causing Alteration of the Prey Base

Given the welter of deforestation and other massive treatment projects being proposed by Region 4 forests like the SCNF and Sawtooth in strongholds for native carnivores, we have serious concerns about the continued population trends and viability of Wolverine, Fisher, Pine Marten, Canada Lynx, Gray Wolf and other rare native carnivores. These species also now are suffering heightened mortality and disturbance threats form the barbaric Wolf Trapping/Snaring and other anti-predator measures legalized by the IDFG in recent years. All of these treatment disturbances, plus now the new mining boom,

We stress that the SCNF has been failed to control expanded unauthorized roading (Fite has repeatedly communicated with the FS about Pahsimeroi road proliferation – example Upper Pahsimeroi rancher ATV use driving new routes into crucial wildlife habitats, for example. The current out-dated Travel Plan is not being effectively enforced, and is woefully outdated all across the Pahsimeroi, Lemhi, Salmon River slopes and other areas of central Idaho. The situation in many areas truly is out of control – so it is absurd to believe that once the FS clears away woody veg impediments to driving, or ‘improves” roads – including even unauthorized routes as is proposed in some projects, human recreational, shooting./killing and trapping, snaring habitat disturbance won’t be significantly expanded to the great detriment of rare native forest carnivores that are also facing unprecedented threats from climate change stress. Clearing woody vegetation expands livestock grazing, and this is likely to expand livestock predation conflicts (or

permittee perception of problems) and lead to more trapping, snaring, etc., by Wildlife Services - and thus more potential for "take" of non-target native carnivores.

The Canadian Journal of Zoology found: "*Wolverines were less likely to occur at sites with oil and gas exploration, forest harvest, or burned areas, even after accounting for the effect of topography. The relative paucity of wolverines in human-impacted portions of this range edge suggests that effective conservation requires managing landscape development, and research on the proximal mechanisms behind this relationship." Fisher et al. 2013. Wolverines (Gulo gulo luscus) on the Rocky Mountain slopes: natural heterogeneity and landscape alteration as predictors of distribution. Can. J. Zool. 91: 706-716 (2013).*

https://onlinelibrary.wiley.com/doi/pdf/10.1002/ece3.3337

https://www.researchgate.net/profile/Jason-Fisher-2/publication/263725137_Wolverines_Gulo_gulo_luscus_on_the_Rocky_Mountain_slopes_Natural_heterogeneity_and_landscape_alteration_as_predictors_of_distribution/links/56674d1808ae8905db8ba609/Wolverines-Gulo-gulo-luscus-on-the-Rocky-Mountain-slopes-Natural-heterogeneity-and-landscape-alteration-as-predictors-of-distribution.pdf

https://onlinelibrary.wiley.com/doi/pdf/10.1002/ece3.192

The U.S. Fish & Wildlife Service has found that "Sources of human disturbance to wolverines include . . . road corridors, and extractive industry such as logging . . .." 75 Fed. Reg.78030 (Dec. 14, 2010.

The Ninth Circuit Court of Appeals ruled that the Forest Service "must both describe the quantity and quality of habitat that is necessary to sustain the viability of the species in question and explain its methodology for measuring this habitat." (*Lands Council v. McNair*). Assuring viability of most wildlife species is a forest-wide or landscape issue. The cumulative effects of carrying out multiple projects simultaneously across a national forest makes it imperative that population viability be assessed at least at the forest-wide scale (Marcot and Murphy, 1992; also see Ruggiero et al., 1994a).

The PNF Forest Plan Standards are not based upon scientific research regarding the forest-wide amount and distribution of habitat needed to ensure viability of old-growth associated wildlife.

McKelvey (2011) concluded that they expect, "the geographic extent and connective of suitable wolverine habitat in western North America to decline with continued global warming" and that "conservation efforts should focus on maintaining wolverine populations in the largest remaining areas of contiguous habitat and, to the extent

possible, facilitating connectivity among habitat patches." These treatment disturbances do just the opposite – expanding fragmentation of habitat and exacerbating loss of persisting snow cover through loss of shade – as climate stress bears down.

Robert Inman, PhD, a biologist and Director of the Greater Yellowstone Wolverine Program at the Hornocker Institute/Wildlife Society in his Review of the United States Fish and Wildlife Service's Proposed Rule to List Wolverines as a Threatened Species in the Contiguous United States, May 2013 noted that the FWS singled out a particular activity, fur trapping, that can cause mortality, while ignoring the full range of human activities such as road kill, infrastructure, transportation that can affect mortality. He also pointed out the extensive trapping that occurred in the US prior to records of wolverine and that they may well have been eliminated before records were kept. So delineating habitat based on these records can understate actual range for wolverines. He also provides evidence that wolverines can den in areas lacking the presumed snow cover and that conditions suitable for competing for food is also a limiting factor. He further argues that road density was found to be a factor in an earlier telemetry based habitat analysis, particularly at higher elevations. Wolverines were observed to avoid or alter their travel when encountering housing developments and traffic.

We Object that the Forest has not adequately consider edthe role of the welter of planned and already authorized treatment and other disturbance, and its effects on habitat connectivity and genetic exchange in maintaining meta-populations and genetic diversity, vital to maintenance and recovery of the Wolverine and other native carnivores of concern. This is a concern across the region.

See for example, the contiguous mammoth Sawtooth Forest Prescribed Fire project – where the project includes all the SBF trap sites for Wolverines in the landmark Copeland Wolverine study in central Idaho, and also the colossal SCNF Fire EA and the many other recent SCNF "treatment" projects.

Copeland's Wolverine MS. The Trap locations on the Sawtooth south (and a few north) of Stanley outside the Wilderness Area are all in the Burn Zone, as well as sites in the SCNF in or in close proximity to, the Bayhorse area.

https://www.researchgate.net/profile/Jeffrey-Copeland/publication/34538098_Biology_of_the_wolverine_in_Central_Idaho/links/00463529a13d401802000000/Biology-of-the-wolverine-in-Central-Idaho.pdf

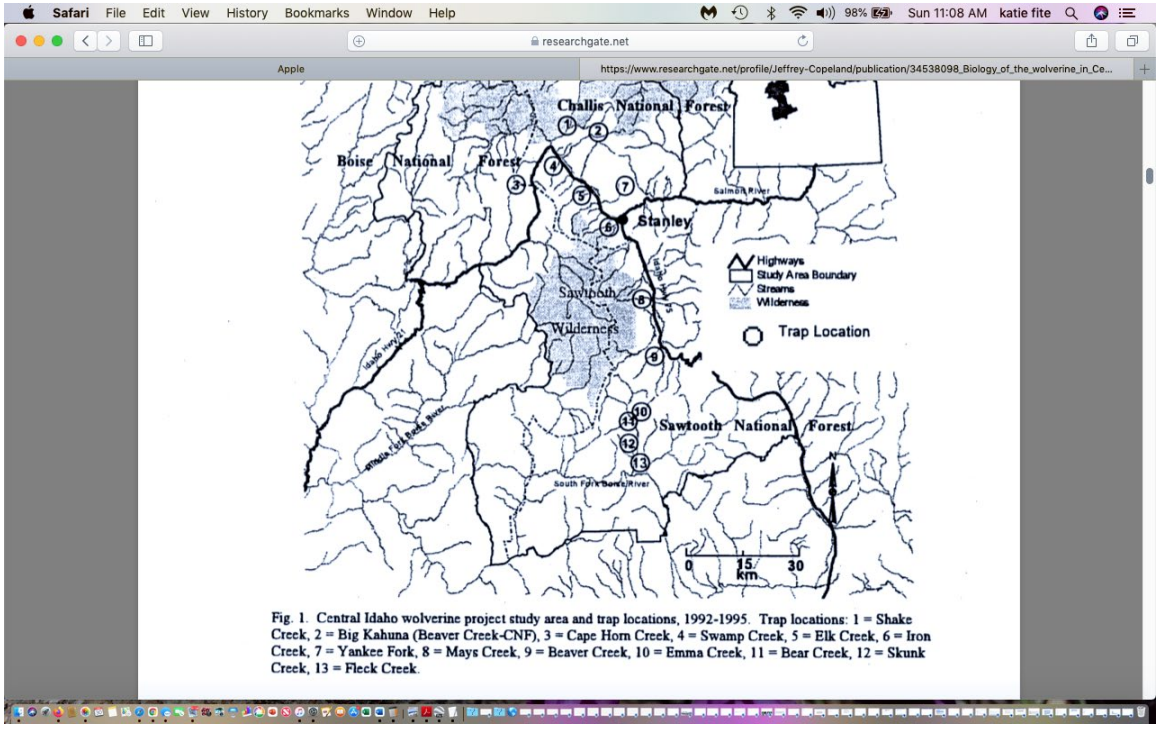
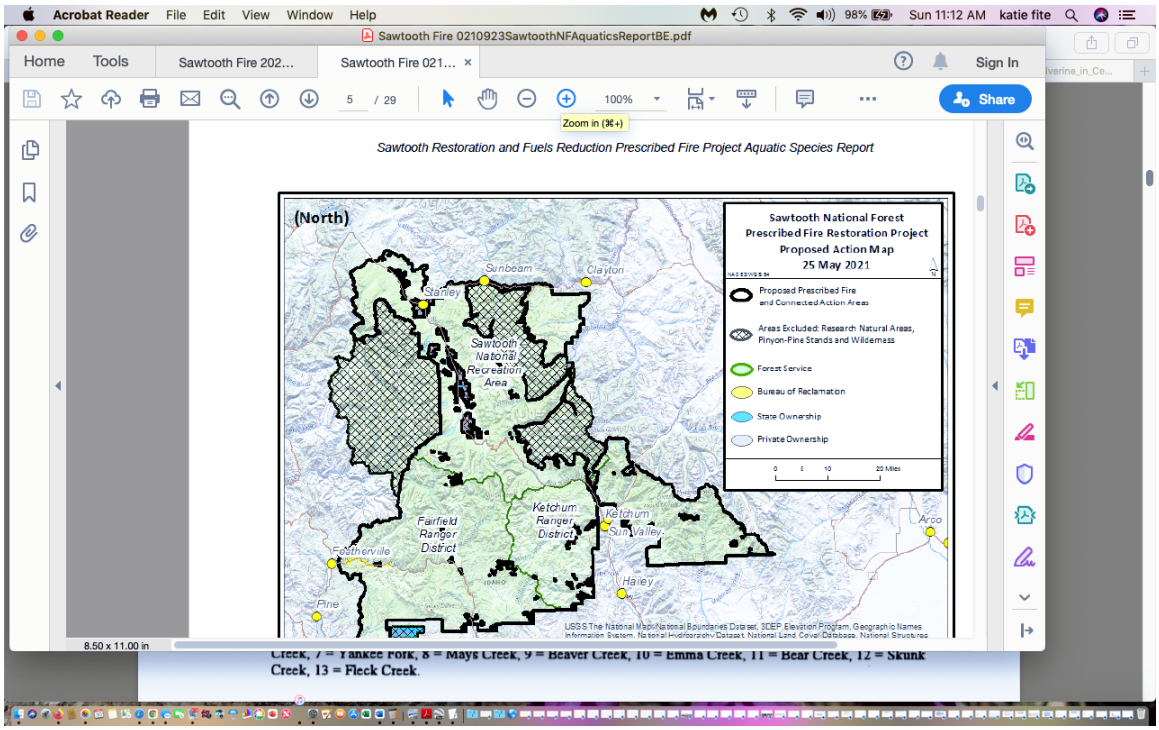


Fig. 1. Central Idaho wolverine project study area and trap locations, 1992-1995. Trap locations: 1 = Shake Creek, 2 = Big Kahuna (Beaver Creek-CNF), 3 = Cape Horn Creek, 4 = Swamp Creek, 5 = Elk Creek, 6 = Iron Creek, 7 = Yankee Fork, 8 = Mays Creek, 9 = Beaver Creek, 10 = Emma Creek, 11 = Bear Creek, 12 = Skunk Creek, 13 = Fleck Creek.

Wolverine trap Sites.



Creek, 7 = Yankee Fork, 8 = Mays Creek, 9 = Beaver Creek, 10 = Emma Creek, 11 = Bear Creek, 12 = Skunk Creek, 13 = Fleck Creek.

Sawtooth million Acre Burn EA burnable areas in green without cross hatch.

Removal of woody forested vegetation will expand potential for recreational activity conflicts during all seasons, and certainly increase human conflicts with Wolverines and other native carnivores.

Also, for all species, the Forest must Assess vulnerability of species and ecosystems to climate change, and strive to Connect habitats, restore important corridors for fish and wildlife, decrease fragmentation and remove impediments to species migration. We Object this has not occurred.

Example:
https://digitalcommons.du.edu/cgi/viewcontent.cgi?article=1024&context=geog_ms_capstone

Quigley, Paul, "Potential Wolverine Habitat vs. Winter Recreation. Conflict in Colorado!" (2012). Geography and the Environment: Graduate Student Capstones. 25.

https://esajournals.onlinelibrary.wiley.com/doi/full/10.1002/ecs2.2611

Wolverines in winter: indirect habitat loss and functional responses to backcountry recreation.

Heinemeyer, K., J. Squires, M. Hebblewhite, J. J. O'Keefe, J. D. Holbrook, and J. Copeland. 2019. Wolverines i nwinter: indirect habitat loss and functional responses to backcountry recreation. Ecosphere 10(2):e02611. 10.1002/ecs2. " *... We assessed the potential for indirect habitat loss from winter recreation and tested for functional responses of wolverines to differing levels and types of recreation. Motorized recreation occurred at higher intensity across a larger footprint than non-motorized recreation in most wolverine home ranges. Wolverines avoided areas of both motorized and non-motorized winter recreation with off-road recreation eliciting a stronger response than road-based recreation. Female wolverines exhibited stronger avoidance of off-road motorized recreation and experienced higher indirect habitat loss than male wolverines .Wolverines showed negative functional responses to the level of recreation exposure within the home range, with female wolverines showing the strongest functional response to motorized winter recreation. We suggest indirect habitat loss, particularly to females, could be of concern in areas with higher recreation levels. We speculate that the potential for backcountry winter recreation to affect wolverines may increase under climate change if reduced snow pack concentrates winter recreationists and wolverines in the remaining areas of persistent snow cover"*. (Study sites included Idaho).

Perilous Status of Sawtooh Salmon

A recent news article shows how extremely low Sockeye Salmon populations are on the Sawtooth upstream of the Bayhorse watershed area:

Each year, Fish and Game follows closely the migration of the endangered salmon that is essentially on biological life support after declining from an estimated 30,000 to only a handful in recent decades. Sockeye normally start showing up at Redfish Lake the third week in July and continue returning into late September and early October.

Phillips said the lone sockeye was trapped Aug. 7 at the outlet of Redfish Lake after returning 900 miles from the Pacific Ocean.

Poor migration conditions this year prompted Fish and Game to make an end-run on the migration and trap 201 sockeye at the Lower Granite Dam — the last dam on the migration journey up the Snake River — then transport them to the Eagle Fish Hatchery. Biologists were worried that low water levels and high temperatures in the Snake and Salmon rivers would prevent the fish from arriving at their spawning waters in the Sawtooth Basin of central Idaho.

https://www.postregister.com/news/local/first-sockeye-of-2021-finally-arrives-to-redfish-lake/article_f84799da-7854-5a85-9639-516e8e363ab2.html

Additional Fisheries Report Concerns

We Object that the FS has not taken a hard look at the ecological impacts and impacts aquatic biota of the following concerns that Objectors raised in project comments.

Project Design Elements lack certainty, with almost no "shall" language so they can be waived and not followed.
The FS fails to protect RCAs – Even allowing tree removal in RCAs While no direct ignitions – there may be serious impacts of indirect ignitions, and 'mistakes".

FS "analysis" pretends trees shading streams won't be killed by fire. The FS ignores side-slope tree removal impacts in these very often steep Sawtooth drainages removing water colling shade– where standing trees cast shade on streams below. There is np assurance that fire set near streams will stay out of streamside vegetation – given the rapid changes and vagaries of winds and weather in rugged mountainous terrain, or that other adverse modifications to crucial habitats will not occur.

The EA ignores analysis, mapping and delineation across the project area of all riparian and wetland areas that the FS considers to have RCA protection, and those that don't. How is this defined? We Object to the failure to actually provide site-specific information and details here and throughout this Bayhorse process.

Given the lack of even the most basic baseline information, the FS cannot credibly claim to minimize control impacts to species viability uncles it has current systematic baseline data based on current up to date had look public participation NEPA analysis.

Management for sensitive species, and delegation of sensitive species designation

The FS failed to collect necessary baseline data to determine the extent of sensitive and imperiled species losses in viability and how the massive burns will accelerate and/or cause a trend toward listing.

2672.1 - Sensitive Species Management. Sensitive species of native plant and animal species must receive special management emphasis to ensure their viability and to preclude trends toward endangerment that would result in the need for Federal listing. There must be no impacts to sensitive species without an analysis of the significance of adverse effects on the populations, its habitat, and on the viability of the species as a whole. It is essential to establish population viability objectives when making decisions that would significantly reduce sensitive species numbers.

We Object to the FS failing to provide site-specific systematic surveys and inventories and baseline data and analysis to actually determine the significance of impacts. This is necessary so that the agency can honestly sign a FONSI.

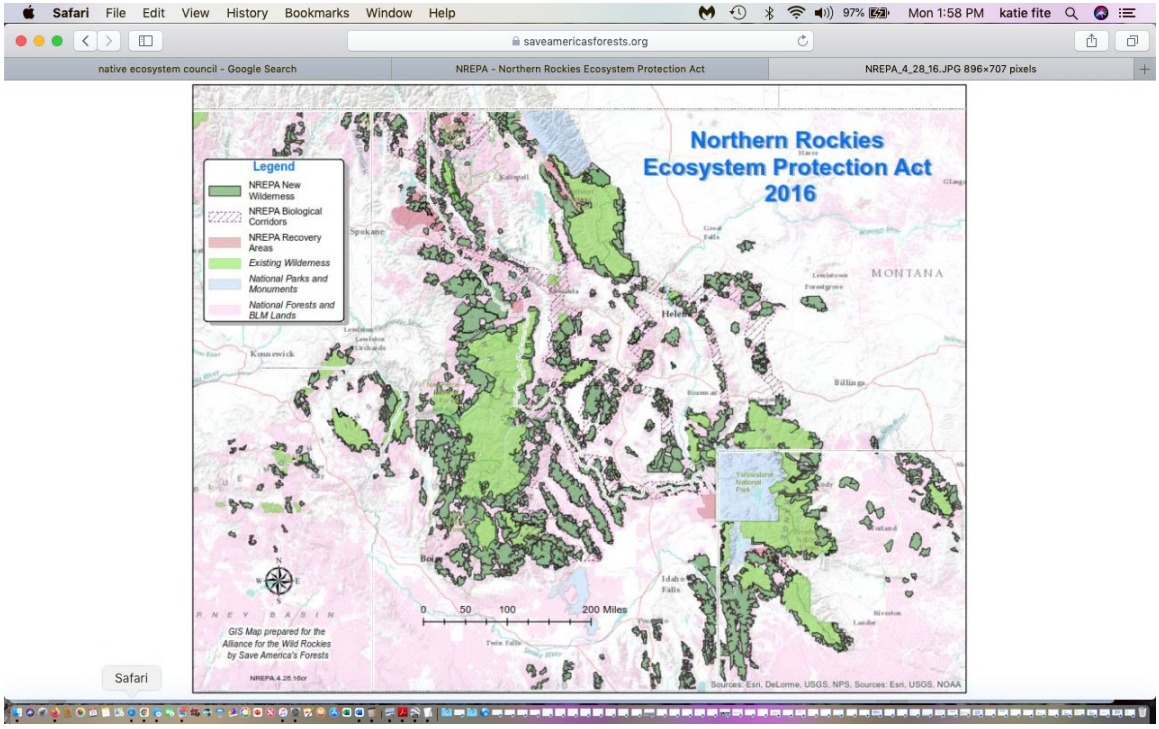
Wildlife Habitat Connectivity and Corridors Threatened by Region 4 EAs

We Object that the FS failed to conduct and assess results of systematic baseline inventories of wildlife corridors and protection of important habitat elements – such as dense forested cover or suitable forest prey species - in these corridors.

Forest corridors provide connectivity of habitat or potential habitat and that facilitate the ability of terrestrial, estuarine, and freshwater fish, or wildlife to move within a landscape as needed for migration, gene flow, or dispersal, or in response to the impacts of climate change or other impacts.

See NREPA Maps:

https://www.saveamericasforests.org/NREPA/S.3022-2016-maps/JPGs/NREPA_4_28_16.JPG



https://www.saveamericasforests.org/NREPA/2019-NREPA%20Maps/NREPA_Biological_Corridors_4_12_19.pdf XXX

We Object that the USFS has failed to address the very significant role that historical mining era deforestation played in imposing large-scale human disturbances on forests. There are charcoal kilns at the Bayhorse historical site. It appears the forests in this area have suffered both extensive past mining era deforestation as well as a whole series of subsequent logging projects. The rate of forest disturbance certainly exceeds any "natural" or presettlement rate. Thus, the treatments will result in conditions becoming even more out of the range of variability.


Charcoal Kilns
A Hive of Activity...
Ingenuity is a miner's best friend. Improvements and new developments to mining equipment and processes make for a better product and an easier day. The construction of nine charcoal kilns in 1882 saved transportation costs and created jobs.
Bayhorse was becoming self-supporting and people rushed to the area. The conical, "beehive" kiln required no bracing and was built of native stone. These were easy and cheap to build and strong enough to resist the low heat of operation. More men were employed to cut and supply wood for the kilns than to actually operate them. In total 48 men supplied the wood and 80,000 bushels of charcoal to keep the smelter operating. The kilns were abandoned by 1895 and coke was shipped in from Ketchum to operate the smelter.

Old mine roading/hill gashing has also disturbed these watersheds:

Extensive cattle impacts occur below the project area surrounding the historical site. Note cheatgrass:

Bald Eagle observed in project area by K. Fite in July 2022:

Project area has already suffered extensive logging:

Extensive existing OHV and roading impacts to watersheds causing erosion and downstream sedimentation:

Meadow and headwater stream-spring system with extensive grazing-caused erosional downcutting – showing significant evidence of cattle trampling bank damage:

A severely trampled and eroded spring area where large-scale site drying has taken place due to livestock trampling severity. Extreme erosional hummocks caused by cattle trampling:

Highly degraded area of watershed suffering large-scale gullying – the highly condition of many watershed areas was not considered in a hard look site-specific NEPA analysis - despite extensive historical mining impacts combined with chronic and ongoing cattle degradation and disturbance impacts:

We Object that the FS failed to prepare an EIS. We believe an EIS is essential given the scale and magnitude of the impacts and high degree of uncertainty and use of highly uncertain Condition-Based Management (CBM) where the FS pretends it has a crystal ball, can see many years into the future, and can base a project on this narrow self-serving EA that greatly lacks even the most rudimentary crucial baseline environmental information on actual on the ground ecological conditions and the quality and quantity of habitats and viability status of populations of native species, and the same deficiency applies to many other Forest values). This is a complex highly damaging project that will radically alter, disturb, destroy and fragment habitats for many ESA-listed species, sensitive species, migratory birds, historical, cultural and other values – and jeopardize these values and their sustainability on the SCNF and surrounding landscape.

The FS has still failed to conduct detailed multi-year intensive baseline inventories for species presence and occupancy across this landscape, so that the current status of species populations and habitats can be understood. A current baseline analysis and mapping of areas of occupied vs., unoccupied habitat, and species needs for increased mature or old growth forest and/or native shrub cover must be provided. Only then can a reasonable range of alternatives be developed. In fact, after the FS conducts the necessary

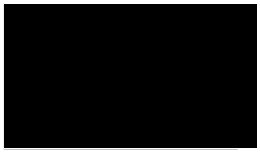
nesting/wintering/other seasonal habitat and use by sensitive species, migratory birds, native raptor surveys, native carnivore surveys, rare plant inventories, aquatic species surveys, and conducts current data-based risk and threats inventories and assessments, can the USFS determine the need for, and effects of, radical reduction in forest cover that will result.

In fact, if the FS were to conduct such reasonable science-based analysis, the agency is very likely to conclude that a drastic increase in forested cover and/or increase in mature and old growth woody vegetation communities is what is actually needed to sustain forest and sensitive and MIS species values under NFMA, to comply with the ESA, to comply with the Migratory Bird Treaty Act, to comply with the Clean Water Act, to comply with the NHPA, to comply with BGEPA and to comply with the APA and other environmental laws and regulations.

The nebulous and highly uncertain actions, often heaped one on top of another, and lack of mandatory controls on the scale and magnitude of disturbance harms show the need for an EIS to take a hard look at all direct, indirect, cumulative, additive and synergistic impacts of imposing massive disturbance on a landscape increasingly stresses by the megadrought and climate change, and where large-scale livestock grazing and other disturbances pose serious threats to the health and integrity of native ecosystems, biodiversity, sensitive species, MIS species, water quality and quantity, carbon sequestration and a host of other values.

Many Forest values are at stake include - Wolverine and other rare native carnivore habitat, rare and declining resident and migratory bird habitat, and increased pollution of downstream ESA-listed Bull Trout habitat, Salmon and steelhead habitat, harms ot roadless values, and weed expansion and potential increased fire risk from the project (results in hot dry site and expanded ease of human off-road catalytic converter fires and other intrusions with fire risk into previously protected sites) - all show an EIS is needed to properly develop and assess alternatives and minimize harms. We request that the EA be withdrawn to resolve this Objection and a full range of alternatives that protect and restore sensitive species habitats be assessed in an EIS.

Sincerely,



/kf

Katie Fite
WildLands Defense


/mg
Mike Garrity
Alliance for the Wild Rockies


/sj
Sara Johnson
Native Ecosystem Council


/JC
Jason Christensen
Yellowstone to Uintas Connection