

Ranger Steve Brown  
Stevensville Ranger District  
Bitterroot National Forest  
88 Main Street  
Stevensville, MT 59870

June 10, 2021

Re: Eastside Forest & Habitat Improvement Project

Dear Ranger Brown,

On behalf of the WildEarth Guardians, Center for Biological Diversity, Friends of the Bitterroot, Western Watersheds Project, the Montana Chapter of the Sierra Club, Alliance for the Wild Rockies, Friends of the Clearwater, Yellowstone to Uintas Connection, and the Flathead-Lolo-Bitterroot Citizen Task Force we respectfully provide the following comments regarding the scope of the Eastside Forest & Habitat Improvement Project. The May 11, 2021 two-page scoping letter (scoping) explains that the Forest Service is “proposing a mix of vegetation treatments including prescribed fire and non-commercial thinning which will cover the majority of the “east side” of the Bitterroot National Forest.” Scoping at 1. The project webpage further clarifies the treatments do not include commercial timber harvests, and precludes areas with mapped lynx habitat or areas where grizzly bears may be present as identified by the U.S. Fish & Wildlife Service (FWS).<sup>1</sup> The Forest Service proposes to categorically exclude (CE) the project from analysis and documentation in an EIS or EA under the authority provided by 36 C.F.R. 220.6(e)(6). *Id.*

Our comments focus on the fact that the Forest Service cannot, by law, approve a project of this size - over 470,000 acres, or 734+ square miles - and scope, this ill-defined, and impacting such critical resources (particularly 149,000+ acres of roadless forest) using its CE authority. The Forest Service proposal appears to be both a “black box” and a “blank check.” It is a black box because the agency does not disclose which treatments, or which combination of treatments, will occur where, nor does it disclose conditions on the ground across the vast area that could be treated. It is a blank check because the agency will not define the where, when, and how of the project until *after* the NEPA process is complete, and will apparently provide no opportunity for public involvement pursuant to NEPA when the agency develops site-specific actions. See, e.g., 40 C.F.R. § 1506.6(a) (2020) (“Agencies shall ... Make diligent efforts to involve the public in preparing and implementing their NEPA procedures”). Thus, the Forest Service’s proposal eliminates the requisite environmental analysis, the consideration of alternatives, and opportunities for meaningful public review and input.

The Forest Service could address concerns about the project’s impact, and potentially increase public support for its actions, by: involving the public in site-specific planning; better explaining the baseline conditions of the areas to be treated and the Forest Service’s goals in implementing the treatments; providing information about the specific timing and location of the proposed treatments; describing the impacts of individual proposals and considering alternatives thereto; and preparing an EA or EIS with an opportunity for the public to respond to the appropriateness of treatment in certain areas. We strongly urge the Forest Service to take these steps.

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<sup>1</sup> See <https://www.fs.usda.gov/project/?project=59985>

As we explain more fully later in our comments, the CEQ's adoption of new regulations implementing NEPA in July 2020, 85 Fed. Reg. 43304 (July 16, 2020) became effective for projects "begun" after September 14, 2020, yet those regulations have been challenged as illegal in numerous courts and are likely to be vacated. Therefore, these comments cite the 1978 regulations (and case law) as their basis, assuming that the agency will be required to comply with those regulations in the future.

Though the Forest Service provided only the most cursory of details in its scoping letter, it did provide the geospatial files the agency used to generate the three maps displaying the project area and potential treatment areas.<sup>2</sup> As such we were able to determine some basic information that should be included in future site-specific analysis should the Forest Service proceed with producing an environmental assessment as we strongly urge. Using the GIS data, we were able to determine the project area includes the following:

- 471,797 acres within the project boundary
- 84,163 acres of potential wildlife habitat improvement treatment areas
- 65,941 acres of potential timber stand improvement treatment areas
- 150,104 acres of total potential treatment areas
- All of the Sleeping Child, Tolan, Swift, and Needle Inventoried Roadless Areas (IRAs), and portions of the Allan, North Big Hole, Stony and Sapphire IRAs totaling 149,334 acres.
- Portions of the Sapphire Wilderness Study Area and the Sapphire Divide Research Natural Area
- Presence of bull trout critical habitat

#### **I. The Project Objectives Rely on Unsupported or Flawed Assumptions Contrary to Best Science.**

The Forest Service states that "[t]he main objectives of the project are to provide the Forest with the ability to address forest health and habitat improvements incrementally over the course of several years," and explains the treatments are meant to achieve the following:

- Improve resilience to insect & disease and catastrophic wildfire in timber stands by modifying forest structures and composition, and fuel;
- Reduce fuel loading in those stands, thereby setting stands up for future use of prescribed fire on a rotational basis;
- Increase the mosaic nature of vegetative regrowth in previously burned areas (2000 and later);
- Improve the natural forage quality and quantity in high potential elk habitat and elk winter range;
- Reduce conifer encroachment in meadows and grasslands to improve habitat.

Scoping at 1. It is unclear why the Forest Service only provided a cursory project description bereft of any actual treatment details such as the project's temporal scope, proposed treatment prescriptions, locations for prescribed burning and tree-cutting units, total miles of road necessary to access treatment sites, or even the project design features such as diameter limits for non-commercial activities. Rather, the agency provides only the most rudimentary information accompanied by maps displaying only where project activities may occur. For example, the Forest Service asserts that "[i]mproving these historic stand structure characteristics would make them more resilient to disturbances, such as insects, disease, and fire." Scoping at 1. The agency offers

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<sup>2</sup> See [http://www.fs.usda.gov/nfs/11558/www/nepa/FSPLT3\\_5637349.zip](http://www.fs.usda.gov/nfs/11558/www/nepa/FSPLT3_5637349.zip)

no supporting information or studies to support such an assertion, assuming no scientific articles or reports exist that contradict such an assumption or at the very least constitute a controversy regarding potential significant effects. Further, the NEPA regulations state that:

NEPA procedures must ensure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA.

40 C.F.R. § 1500.1(b) (1978). To ensure that the agency has taken the required “hard look,” courts hold that the agency must utilize “public comment and the best available scientific information.” *Biodiversity Cons. Alliance v. Jiron*, 762 F.3d 1036, 1086 (10th Cir. 2014) (internal citation omitted). Yet, the Forest Service provides no information, high quality or otherwise, that supports the widespread use of specific proposed treatments under the proposed actions. Rather, as we detail below, the Forest Service seems to rely on the most basic and unsupported assumption that the proposed treatments will effectively achieve the intended purposes and meet the stated needs. Further, as we also explain below in detail, it appears the Forest Service plans to determine actual treatment locations and prescriptions only after it signs a decision memo, meaning the agency will determine site-specific conditions at some undefined point in the future. Such condition-based management is arbitrary and a violation of NEPA.

#### **A. Climate Change & Historical References**

It appears from the limited project description that many of the underlying assumptions for the project relies on the departure from historic conditions: “Improving these historic stand structure characteristics would make them more resilient to disturbances, such as insects, disease, and fire.” Scoping at 1. Yet, when relying on such historic conditions to inform vegetative treatments the Forest Service must account for the fact that climate change is fundamentally altering the agency’s assumptions about the efficacy of the proposed actions. In other words, the Forest Service cannot rely solely on historic reference conditions to formulate its vegetation treatments. Rather, the agency must also include current reference conditions from areas that have a passive management emphasis, in addition to future reference conditions based on the best available climate models.

Recent science supports the need to look beyond historical references to inform proposed actions: “in a time of pervasive and intensifying change, the implicit assumption that the future will reflect the past is a questionable basis for land management (Falk 2017).” Coop et al., 2020. While it is useful to understand how vegetative conditions have departed from those in the past, (and the role mixed-severity fire played in Ponderosa pine dominated stands), the Forest Service cannot rely on them to define management actions, or reasonably expect the action alternatives will result in restoring ecological processes. Given changing climate conditions, the Forest Service should have emphasized reference conditions based on current and future ranges of variability, and less on historic departures. Further, the agency needs to shift its management approach to incorporate the likelihood that no matter what vegetation treatments it implements, there are going to be future forest wildfire-triggered conversions to other vegetation types. As such, the Forest Service cannot rely on the success of resistance strategies, as Coop 2020 demonstrates:

Contemporary forest management policies, mandates, and science generally fall within the paradigm of resisting conversion, through on-the-ground tactics such as fuel reduction or tree planting. Given anticipated disturbance trajectories and climate change, science syntheses and critical evaluations of such resistance approaches are needed because of their increasing relevance in mitigating future wildfire severity (Stephens et al. 2013, Prichard et al. 2017) and managing for carbon storage (Hurteau et al. 2019b). Managers seeking to wisely invest resources and strategically resist change need to understand the efficacy and durability of these resistance strategies in a changing climate. Managers also require new scientific knowledge to inform alternative approaches including accepting or directing conversion, developing a portfolio of new approaches and conducting experimental adaptation, and to even allow and learn from adaptation failures.

Coop et al., 2020. Equally important to acknowledging the limitations of resistance strategies is the fact that other pertinent scientific findings show warming and drying trends are having a major impact on forests, resulting in tree die-off even without wildfire or insect infestation. See, e.g., Parmesan, C. 2006; Breshears et al. 2005; Allen et al. 2010, 2015; Anderegg et al. 2012; Williams et al. 2013; Overpeck 2013; Funk et al. 2014; Millar and Stephenson 2015; Luo and Chen 2015 (“Our results suggest that the consequences of climate change on tree mortality are more profound than previously thought”); Gauthier et al. 2015; Ault et al. 2016 (“business-as-usual emissions of greenhouse gases will drive regional warming and drying, regardless of large precipitation uncertainties”); Vose et al. 2016 (“In essence, a survivable drought of the past can become an intolerable drought under a warming climate”).

Given the fallacies of using historic conditions as a reference for desired conditions coupled with the uncertainty of those treatments to maintain or restore ecological integrity in the context of climate change and likely forest conversion scenarios, the Forest Service must reevaluate its assumptions about its proposed vegetative treatments, especially in regards to restocking success and species composition. Significant controversy exists as to the need for such treatments given the improper use and reliance on historic conditions. In fact, there is a high likelihood based on the aforementioned studies that some areas will not regenerate and will instead result in conversion to different vegetative groups. NEPA mandates that the agency address this controversy and science that contradicts agency assumptions in an EIS.

In addition to the questionable success of the Forest Service’s pursuit of resistance strategies underlying its proposed actions, the agency must also reconsider numerous other assumptions in its scoping report documents. In fact, many of the agency’s assumptions run contrary to the most recent science regarding the impact of logging on wildfire behavior, resilience of the forest to large-scale disturbances, and ability to provide quality wildlife habitat. Many of the following scientific studies call into question the Forest Service’s assumption that its proposed actions will achieve the stated purpose and need.

## **B. Assumptions And Uncertainty About Vegetation Treatments And Wildfire**

The Forest Service suggests a history of fire suppression has led to forest conditions severely departed from historical ranges of variation and asserts that “[t]he area where most treatments would occur is comprised of warm and dry ponderosa pine/Douglas-fir type forests. These forest types were historically characterized by frequent low-intensity fire, fire resistant and shade intolerant species and lower stem densities.” Scoping at 1.



Ultimately, we question the agency's assumptions that reducing tree densities and fuel loadings will result in less intense fire behavior. Powell, H. 2019 ("what fire scientists call a forest's 'fuel load' is not the main cause of large, unstoppable fires; it's climate factors such as temperature, humidity, and especially wind. But the weather is ephemeral and invisible, while thick underbrush is easy to see and photograph"); (Ex. 1) *see also*, ProPublica, 2020 "Despite What the Logging Industry Says, Cutting Down Trees Isn't Stopping Catastrophic Wildfires," (Ex. 2); *see also*, Mountain Town News, 2020 "Colorado's Troublesome megafire," (Ex. 2).

Science shows that fuel treatments have a modest effect on fire behavior, and that fuel reduction does not necessarily suppress fire. Lydersen, et al., 2014 (explaining that reducing fuels does not consistently prevent large forest fires, and seldom significantly reduces the outcome of large fires). Studies from the Forest Service's own Rocky Mountain Research Station refute the Forest Service's assumptions that vegetation treatments will result in less intense fire behavior. Calkin, D.E., et al., 2014 (explaining, "[p]aradoxically, using wildfire suppression to eliminate large and damaging wildfires ensures the inevitable occurrence of these fires").

Large fires are driven by several conditions that completely overwhelm fuels. Meyer, G and Pierce, J. 2007. Because weather is often the greatest driving factor of a forest fire, and because the strength and direction of the wildfire is often determined by topography, fuels reduction projects cannot guarantee fires of less severity. Rhodes, J. 2007, Carey, H. and M. Schumann, 2003.

Vegetation treatments based on historical reference conditions to reduce high-intensity wildfire risk on a landscape scale are undermined by the fact that land managers have shown little ability to target treatments where fires later occur. Barnett, K. et al, 2016, Rhodes, J. and Baker, W. 2008 (finding that fuel treatments have a mean probability of 2-8% of encountering moderate-or high- severity fire during the assumed 20-year period of reduced fuels). Analysis of the likelihood of fire is central to estimating likely risks, costs and benefits incurred with the treatment or nontreatment of fuels. If fire does not affect treated areas while fuels are reduced, treatment impacts are not counterbalanced by benefits from reduction in fire impacts. Results from Rhodes and Baker 2008 indicate that "even if fuel treatments were very effective when encountering fire of any severity, treatments will rarely encounter fire, and thus are unlikely to substantially reduce effects of high-severity fire."

Fuel treatments could even make fire worse—exacerbating the problems the Forest Service is claiming to address. Fuel reduction may actually exacerbate fire severity in some cases as such projects leave behind combustible slash, open the forest canopy to create more ground-level biomass, and increase solar radiation which dries out the understory. Graham, R.T., et al, 2012, Martinson, E. J. and P. N. Omi, 2013 (finding that in about a third of cases reviewed mechanical fuel reductions increased fire spread).

We question the wisdom of attempting to control wildfire instead of learning to adapt to fire. See Powell 2019 (Ex. 1-noting that severe fires like the 2017 Rice Ridge fire on the Flathead National Forest are inevitable and unstoppable). See also Schoennagel, T., et al., 2017 (explaining, "[o]ur key message is that wildfire policy and management require a new paradigm that hinges on the critical need to adapt to inevitably more fire in the West in the coming decades"). The Forest Service recognizes that past logging and thinning practices may have actually increased risk of intense fire behavior on this landscape. But instead of learning from these past mistakes, here the Forest Service is committing to the same mistakes by proposing to continue to log the landscape.

We question the need to reduce wildfire, a natural forest process. While some may view wildfires as tragic and the aftermath as a destruction zone, natural ecology shows otherwise. See Powell 2019 (Ex. 1-explaining how a young burned forest is an essential natural process and “nature’s best-kept secret,” providing new habitat for a plethora of birds, abundant wildflowers, insects, mushrooms, etc.). Impacts from climate change, including changing weather patterns and drought, are the driving factors for wildfires. *Id.* Instead of focusing on thinning and prescribed burning to manage the forest, the Forest Service should focus on how it needs to change its practices to adapt to the changing climate.

At an absolute minimum, these studies demonstrate that the proposed treatments are controversial, ill-supported, and have the potential for significant impacts requiring preparation of an EIS.

### **C. Assumptions and Uncertainty About Vegetation Treatments and Forest Resilience**

The Forest Service states that “[b]ased on current conditions the area would greatly benefit from treatments to improve forest health and resilience as well improve wildlife habitat.” Scoping at 1. Yet, the best available science brings into question many of the Forest Service’s underlying assumptions about the efficacy of vegetation treatments in reducing the effects from what can be characterized as a natural response to changing climate conditions. *See* Hart, S.J., et al., 2015 (finding that although mountain pine beetle infestation and fire activity both independently increased with warming, the annual area burned in the western United States has not increased in direct response to bark beetle activity); *see also* Hart, S.J., and D.L. Preston. 2020 (finding “[t]he overriding influence of weather and pre-outbreak fuel conditions on daily fire activity . . . suggest that efforts to reduce the risk of extreme fire activity should focus on societal adaptation to future warming and extreme weather”); *see also* Black, S. H., et al., 2010 (finding, inter alia, that thinning is not likely to alleviate future large-scale epidemics of bark beetle); *see also* Six, D.L., et al., 2018 (study that found during mountain pine beetle outbreaks, beetle choice may result in strong selection for trees with greater resistance to attack, and therefore retaining survivors after outbreaks—as opposed to logging them—to act as primary seed sources could act to promote adaptation); *see also* Six, D.L. et al., 2014 (noting “[s]tudies conducted during outbreaks indicate that thinning can fail to protect stands”).

Ultimately, science provides only weak support for vegetative treatments as a way to improve forest resilience to large-scale disturbances such as high severity crown fire and insects, and numerous studies question this approach or have found it to be ineffective. In addition, all mechanized treatments guarantee damage to ecosystem components, including soils, mycorrhizal networks, aquatics, and vegetation; they also have the potential to spread exotic plants and pathogens. As such, the Forest Service must prepare a NEPA document to carefully consider these impacts and determine the efficacy of specific treatments.

### **D. Assumptions and Uncertainty About Vegetation Treatments and Wildlife Habitat**

The Forest Service asserts that “[c]reating a patchy mosaic of vegetation, including trees, shrubs, and grasses, would improve big game and other wildlife habitat quality.” Scoping at 1. As such, the agency proposes to authorize the project under 36 C.F.R. § 220.6(e)(6) meant to improve timber stands and wildlife habitat. The agency seems to assert without evidence or analysis that it can mimic the natural conditions that would have existed in the project area absent fire suppression or other damaging active management schemes. Yet, with the emphasis on vegetation treatments, while ignoring the benefits of natural disturbance, (even those that

may be “uncharacteristic”), the Forest Service may be continuing a management regime that will actually degrade wildlife habitats.

Recent ecological research has shown that fire is an integral component to the function and biodiversity of many plant and animal communities, and that the organisms within those communities have adapted to withstand, and even benefit from, both low and high severity fire. Bond, et. al, 2012. Ecologists now conclude that fire-mediated age-class diversity is essential to the full complement of native biodiversity and fosters ecological resilience and integrity. Hanson, C. et.al, 2015. In conifer forests of North America, higher-severity fire patches create a type of habitat known as complex early seral forest that supports levels of native biodiversity, species richness, and wildlife abundance that are generally comparable to, or even higher than, those in unburned old forest. *Id.* In regards to grizzly bears, studies have shown that survival was best in areas with low road densities and adequate hiding cover, which would be reduced under the proposed actions. *See, e.g.,* Joint Statement of Undisputed Facts in Support of Plaintiffs’ Joint Motion for Summary Judgment, *WildEarth Guardians v. Steele*, Case 9:19-cv-00056-DWM (D. Mont, Aug. 5, 2020) (Ex. 3) pages 10-13 (summarizing studies documenting negative impacts to grizzly bears from roads and high road densities).

At bottom, we question the Forest Service’s over-reliance on vegetation management – as opposed to other forms of restoration, including road decommissioning– to improve the diversity and resilience of the forest and wildlife habitat. Science shows that natural processes like fire are vital for recruitment of down wood into the ecosystem, create a diversity of wildlife habitat, and naturally thin forests. Hanson, C., 2010. The Forest Service’s attempts to mimic natural processes have failed in the past, and as we have seen in recent decades, are likely to continue to fail. Instead of proposing intensive management actions for the next 15 - 20 years, the Forest Service should let natural processes take their course wherever possible. What’s more, fires, including large fires, are a natural and ecologically necessary part of forests. M.A. Moritz, et al., 2014. Fires restore and rejuvenate forests by stimulating vegetation regeneration, promoting landscape diversity in terms of vegetation type, and providing habitat and food for fire-dependent insects and wildlife. *Id.* Given that fire activity is increasing, and in light of effects from climate change, the Forest Service should consider approaches for managing insects, disease, and fire that do not include active management, such as thinning, and consider a more sustainable coexistence approach.

#### **E. Assumptions and Uncertainty About Removal of Conifers Encroaching Into Meadow & Grassland Habitat**

The Forest Service explains that the proposed treatments are meant to “[r]educe conifer encroachment in meadows and grasslands to improve habitat.” Scoping at 1. Significant controversy exists as to the efficacy of vegetation treatments purported to improve such habitats, in particular in sagebrush habitats, which demonstrates the kind of concerns we have for meadow and grassland treatments under this project.

Although millions of acres of public land have been treated over the decades, few studies have synthesized the effects of these projects to determine their rate of success. Miller et al. 2019 and Jones 2019 (Ex. 4) are two studies that aggregated hundreds of vegetation treatment articles in an attempt to find overall patterns. Both of these syntheses have concluded that treatments vary widely in the degree to which they achieved their goals. Success depends on a complex interaction of multiple variables, and the outcome of treatments is very difficult to predict. Jones 2019 reports that:

As McIver et al. (2014) concluded, “substantial among-site variation in key ecological attributes will likely always cloud our ability to predict specific outcomes for many sites. Interannual variation, especially in the availability of water in spring, blurs predictive ability further.” Archer and Predick (2014) agree, stating that “our ability to predict ecosystem responses to treatments is limited for many attributes, (e.g., primary production, land surface-atmosphere interactions, biodiversity conservation) and inconsistent for others (e.g., forage production, herbaceous diversity, water quality/quantity, soil erosion, and carbon sequestration).” The ecological legacies of past and current management make prediction of outcomes even more difficult (Monaco et al. 2018; Morris et al. 2011; Morris and Rowe 2014; Morris et al. 2014).

Jones 2019 analyzed data from mechanical treatments as a group to determine efficacy of this method on multiple land management objectives such as increases in understory grasses and forbs, decreased fuels, improved wildlife habitat, increased water availability, soil stability, and carbon sequestration. Over half of the treatments in pinyon-juniper communities showed no significant effect on perennial grasses and forbs. The other treatments did show marked increase in cover in grasses and modest increases in forbs. However, non-native annuals also showed troubling increases. In fact, treatments in sagebrush habitat often facilitate a transition to non-native annual grasses. Sagebrush are slow to regenerate, so invasive annual grasses can quickly start to dominate the ecosystem, feeding the annual grass-wildfire loop and thus destroying wildlife habitat (Dudley et al. 2021).

Of particular concern is the effect of treatments on sagebrush communities where research indicates that they are not as effective as the Forest Service assumes. Treatments in fact show mixed results in achieving objectives. When they do increase forbs and grasses, those same conditions also increase exotics. Further, the increases in the desirable species are often short term (Svejcar et al. 2017; Wilder et al. 2018) or short-lived (Knutson et al. 2014; Pyke et al. 2013; Pyke et al. 2014). Degraded sites in warm, dry areas with low resistance to exotics are particularly vulnerable (Chambers et al. 2014; Chambers et al. 2017), as are those where management perpetuates poor conditions (Bestelmeyer et al. 2015; Morris and Rowe 2014). Thus, without careful project design, including monitoring and reporting outcomes, implementing treatments like these risks destroying or degrading sagebrush and other grassland habitats.

Further, significant controversy and uncertainty exist specific to conifer removal that the agency must address in an EA or EIS:

There is considerable evidence that climate has influenced the expansion and contraction of woodlands for millennia (Miller et al., 2011). However, the effects of climate on woodland dynamics and distribution since Eurasian settlement cannot be separated from anthropogenic factors such as altered fire regimes and grazing (Briggs et al., 2005; Miller et al., 2011). Regardless, strategic removal of expanding woodlands may be necessary to bolster the movement ability of extant populations of at risk species to adapt to changing climate.

Miller et al., 2017. Yet, what the Forest Service proposes is hardly a “strategic removal” given the lack of specific treatment areas illustrated in the scoping report and the failure to disclose where the agency proposes mechanical treatments versus manual. Overall, the agency needs to provide much more specificity for its proposed actions and account for the inherent uncertainty of the proposed treatments as Miller 2017 notes: “[p]revious studies on ecological effects of woodland removal provide important insights into potential

outcomes for desired ecosystem services, especially when conducted for fuel-reduction purposes (McIver et al., 2014), but much more remains to be learned about the efficacy of treatments conducted under the banner of grouse conservation.”

While conifer removal may improve sagebrush habitats, the vegetative benefit is not uniform and removal of trees, especially with no diameter limits, suggests the agency considers treatments in well-established stands the same as those in earlier phases. In looking at pinyon-juniper areas researchers found that “[t]o maximize sage-grouse population benefits, they recommend reducing actual pinyon-juniper cover as low as 1.5% and prioritizing thorough treatment of early-phase woodlands (e.g., Phase I), particularly in productive areas, over thinning denser woodland stands.” Miller et al., 2017. This suggests that the Forest Service should focus potential treatments in early-phase woodlands and must demonstrate the efficacy of treatments in later successional stages. Yet, the agency fails to provide any details of its proposed actions let alone distinguish different successional stages, the agency must address such omissions in any subsequent NEPA documents.

## **II. The Forest Service Proposal to Authorize the Eastside Project under a CE Violates NEPA.**

### **A. Background: Levels of NEPA Review**

NEPA is “our basic national charter for protection of the environment.” *Center for Biological Diversity v. United States Forest Serv.*, 349 F.3d 1157, 1166 (9th Cir. 2003) (quoting 40 C.F.R. § 1500.1 (2019)). In enacting NEPA, Congress recognized the “profound impact” of human activities, including “resource exploitation,” on the environment and declared a national policy “to create and maintain conditions under which man and nature can exist in productive harmony.” 42 U.S.C. § 4331(a).

The statute has two fundamental two goals: “(1) to ensure that the agency will have detailed information on significant environmental impacts when it makes decisions; and (2) to guarantee that this information will be available to a larger audience.” *Envtl. Prot. Info. Ctr. v. Blackwell*, 389 F. Supp. 2d 1174, 1184 (N.D. Cal. 2004) (quoting *Neighbors of Cuddy Mt. v. Alexander* 303 F.3d 1059, 1063 (9th Cir. 2002)); *see also Earth Island v. United States Forest Serv.*, 351 F.3d 1291, 1300 (9th Cir. 2003) (“NEPA requires that a federal agency ‘consider every significant aspect of the environmental impact of a proposed action . . . [and] inform the public that it has indeed considered environmental concerns in its decision-making process.’”). “NEPA promotes its sweeping commitment to ‘prevent or eliminate damage to the environment and biosphere’ by focusing Government and public attention on the environmental effects of proposed agency action.” *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 371 (1989) (quoting 42 U.S.C. § 4321). Stated more directly, NEPA’s “‘action-forcing’ procedures . . . require the [Forest Service] to take a ‘hard look’ at environmental consequences” before the agency approves an action. *Metcalf v. Daley* 214 F.3d 1135, 1141 (9th Cir. 2000) (quoting *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 348 (1989)). “By so focusing agency attention, NEPA ensures that the agency will not act on incomplete information, only to regret its decision after it is too late to correct.” *Marsh*, 490 U.S. at 371 (citation omitted). To ensure that the agency has taken the required “hard look,” courts hold that the agency must utilize “public comment and the best available scientific information.” *Biodiversity Cons. Alliance v. Jiron*, 762 F.3d at 1086 (internal citation omitted).

NEPA’s review obligations are more stringent and detailed at the project level, or “implementation stage,” given the nature of “individual site specific projects.” *Ecology Ctr., Inc. v. United States Forest Serv.*, 192 F.3d 922, 923 n.2 (9th Cir. 1999); *see also Friends of Yosemite Valley v. Norton*, 348 F.3d 789, 800-01 (9th Cir. 2003); *New*

*Mexico ex rel. Richardson v. Bureau of Land Management*, 565 F.3d 683, 718-19 (10th Cir. 2009) (requiring site-specific NEPA analysis when no future NEPA process would occur); *Colo. Envtl. Coal. v. Ofc. of Legacy Mgmt.*, 819 F. Supp. 2d 1193, 1209-10 (D. Colo. 2011) (requiring site-specific NEPA analysis even when future NEPA would occur because “environmental impacts were reasonably foreseeable”). “[G]eneral statements about possible effects and some risk do not constitute a hard look, absent a justification regarding why more definitive information could not be provided.” *Or. Natural Res. Council Fund v. Brong*, 492 F.3d 1120, 1134 (9th Cir. 2007) (citation omitted); *see also Or. Natural Res. Council Fund v. Goodman*, 505 F.3d 884, 892 (9th Cir. 2007) (holding the Forest Service’s failure to discuss the importance of maintaining a biological corridor violated NEPA, explaining that “[m]erely disclosing the existence of a biological corridor is inadequate” and that the agency must “meaningfully substantiate [its] finding”).

NEPA requires site-specificity to fulfill two basic purposes: 1) to ensure agencies are making informed decisions prior to acting and 2) to ensure the public is given a meaningful opportunity to participate in those decision-making processes. *Stein v. Barton*, 740 F. Supp. 743, 749 (D. Alaska 1990). Federal courts apply these touchstone criteria when evaluating whether a NEPA document is adequately site-specific. *See WildEarth Guardians*, 790 F.3d at 921-25 (holding EIS inadequate for failure to disclose the location of moose range); *Or. Nat. Desert Ass’n v. Rose*, 2019 WL 1855419 (9th Cir. 2019) (holding environmental analysis violated NEPA by failing to establish “the physical condition of [roads and trails] and authorizing activity without assessing the actual baseline conditions”).

Analyzing and disclosing site-specific impacts is critical because where (and when and how) activities occur on a landscape strongly determines the nature of the impact. As the Tenth Circuit Court of Appeals has explained, the actual “location of development greatly influences the likelihood and extent of habitat preservation. Disturbances on the same total surface area may produce wildly different impacts on plants and wildlife depending on the amount of contiguous habitat between them.” *New Mexico ex rel. Richardson*, 565 F.3d at 706. The Court used the example of “building a dirt road along the edge of an ecosystem” and “building a four-lane highway straight down the middle” to explain how those activities may have similar types of impacts, but the extent of those impacts— in particular on habitat disturbance – is different. *Id.* at 707. Indeed, “location, not merely total surface disturbance, affects habitat fragmentation,” *id.* and therefore location data is critical to the site-specific analysis NEPA requires. Merely disclosing the existence of particular geographic or biological features is inadequate – agencies must discuss their importance and substantiate their findings as to the impacts. *Or. Natural Res. Council Fund v. Goodman*, 505 F.3d 884, 892 (9th Cir. 2007).

## **B. The Forest Service Reliance on a Condition Based Approach is in Violation of NEPA.**

Fundamentally, projects of this size and scope are inappropriate for project-level analysis and authorization under an EA or EIS, let alone under a categorical exclusion. In fact, what the agency proposes is more akin to what one would expect in a programmatic EIS followed by site-specific EAs for specific treatments. For example, the Forest Service states that “[t]o meet multiple resource objectives, implementation would incrementally take place over the course of several years with coordination from other resource areas such as hydrology, fisheries, botany, wildlife, and culture in areas selected for treatment.” Scoping at 1. Here, the Forest Service fails to provide any project details or analysis that would satisfy the requirements under NEPA. In fact, the agency omits the number of acres proposed for timber stand or wildlife habitat improvement treatments, the location and status of existing roads to access treatment areas, the miles of fish occupied

streams that could be potentially affected, or the overall cost of the project to taxpayers. In addition, the agency states the "project will be done entirely within a designated priority landscape." Scoping at 1. Yet, the Forest Service fails to explain the specific criteria or provide supporting analysis used to define the project area as priority landscapes. As we state above, this approach is both a "black box" and a "blank check," and one that fundamentally undermines the purpose of NEPA to take a hard look at potential environmental consequences. In order to meet its obligations under NEPA the Forest Service must collect, disclose and properly analyze resource conditions and potential environmental impacts of any proposed actions before it makes a decision. Simply listing vague sideboards on the project webpage (details omitted from the scoping letter) that the agency intends to follow once it determines site-specific conditions at some point over the unspecified life of the project is a fundamental violation of both the law and spirit of NEPA's look-before-you-leap mandate. Such an approach is insufficient for an EA, an EIS and most certainly for a CE.

In March of 2020, the U.S. District Court for the District of Alaska rejected a similar attempt by the Forest Service to use a broad, vague EIS to approve logging 42,000 acres across a project area of 1.8 million acres on the Tongass National Forest. *Southeast Alaska Conservation Council, et al. v. U.S. Forest Service*, 443 F. Supp. 3d 995 (D. Alaska 2020). The 2019 Prince of Wales Landscape Level Analysis Project would have authorized various management activities for 15 years, without defining cutting units or road alignments. *Id.* at 1000. Relying on binding precedent from *City of Tenakee Springs v. Block*, 778 F.2d 1402 (9th Cir. 1985), the District Court concluded "NEPA requires that environmental analysis be specific enough to ensure informed decision-making and meaningful public participation," and the "EIS's omission of the actual location of proposed timber harvest and road construction within the Project Area falls short of that mandate." *Id.* at 1009.

The Eastside Project suffers from the same legal flaws under NEPA that the court found in the Prince of Wales Landscape Level Analysis. The Prince of Wales Project EIS "provide[d] that 'site-specific locations and methods' for activities such as timber harvest 'w[ould] be determined during implementation' over the 15-year lifespan of the Project." *Id.* at 1011. Similarly, the Forest Service here provided maps of potential timber stand and wildlife habitat treatment areas, but then failed to specify where treatments would occur or what specific treatments it would implement within these areas. Further, the Forest Service states that project activities will set up the area for "future rotational burns." Scoping at 1. This begs numerous questions. Will these burns occur as part of this project or those forthcoming? What frequency and in what locations will these rotational burns happen and how will they affect plant and animal life, old growth, IRAs, WSAs, lynx, wolverine, and the future of grizzly occupation in the area? It seems counterintuitive to spend an unspecified number of years setting up future prescribed burns without demonstrating compliance with NEPA. If the future rotational burns would occur through separate project decisions, then the Forest Service must consider the potential effects as part of its cumulative effects analysis. Without the requisite NEPA analysis, the agency will fail to demonstrate that no extraordinary circumstances exist.

### **C. The Forest Service Fails To Demonstrate That It May Utilize A Categorical Exclusion For These Projects.**

Categorical exclusions are those categories of actions "which do not individually or cumulatively have a significant effect on the human environment." 40 C.F.R. § 1508.4 (1978). Categorical exclusions do not involve the consideration of alternatives; consequently, where unresolved conflicts exist, a CE is the wrong

tool. Forest Service regulations state that “[i]f the responsible official determines, based on scoping, that it is uncertain whether the proposed action may have a significant effect on the environment, prepare an EA. If the responsible official determines, based on scoping, that the proposed action may have a significant environmental effect, prepare an EIS.” 36 C.F.R. § 220.6(c). As noted, the Forest Service states that it will use its categorical exclusion authority at 36 C.F.R. § 220.6(e)(6) to approve the Eastside Project, and we explain in our comments above there is a significant amount of uncertainty related to the need and efficacy of the proposed actions.

Further, the rules provide a list of resource conditions that “that should be considered in determining whether extraordinary circumstances related to a proposed action warrant further analysis and documentation in an EA or an EIS.” 36 C.F.R. § 220.6(b)(1). Within the Eastside Project area those conditions include the following:

- (i) Federally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species;
- (ii) Flood plains, wetlands, or municipal watersheds;
- (iii) Congressionally designated areas, such as wilderness, wilderness study areas, or national recreation areas;
- (iv) Inventoried roadless area or potential wilderness area;
- (v) Research natural areas;
- (vi) American Indians and Alaska Native religious or cultural sites; and

Most, if not all, of these resource conditions exist in the project area. Specifically, the area contains bull trout critical habitat, potential grizzly bear denning habitat and areas of demographic connectivity, and Canada lynx habitat. Given the presence of bull trout critical habitat, along with areas of low elevation, there is a high likelihood of wetlands and floodplains in proposed treatment areas. The Forest Service also proposes treatments across 9,782 acres within the Sapphire Wilderness Study Area as part of its wildlife habitat improvement treatments, including 187 acres within the 641.5 acres of the BNF’s portion of the Sapphire Divide Research Natural Area. Further, the project area contains numerous Inventoried Roadless Areas, as we note above, and proposes 38,189 acres of wildlife habitat improvement treatments and 81 acres of timber stand improvement treatments. Finally, given the Forest Service’s reference to tribal engagement with the Confederated Salish & Kootenai Tribes (CSKT) in proposing this project, it is reasonable to assume the presence of tribal religious or cultural sites.

We recognize that the mere presence of one or more of these resource conditions does not, by themselves, preclude the use of the CE authority, rather it is the “is the existence of a cause-effect relationship between a proposed action and the potential effect on these resource conditions, and if such a relationship exists, the degree of the potential effect of a proposed action on these resource conditions that determines whether extraordinary circumstances exist.” 36 C.F.R. § 220.6(b)(2). Given the complete lack of any rudimentary analysis, coupled with few project details available, the Forest Service precludes the public from meaningful engagement in determining the degree of potential effects of the proposed action on these resource conditions. Yet, given the immense size of the project area, the lack of any timeframe for completion and all the other flaws with the agency’s condition based approach that we explain above, it is reasonable to conclude that extraordinary circumstances do exist that preclude the use of a CE. Further, our own GIS analysis



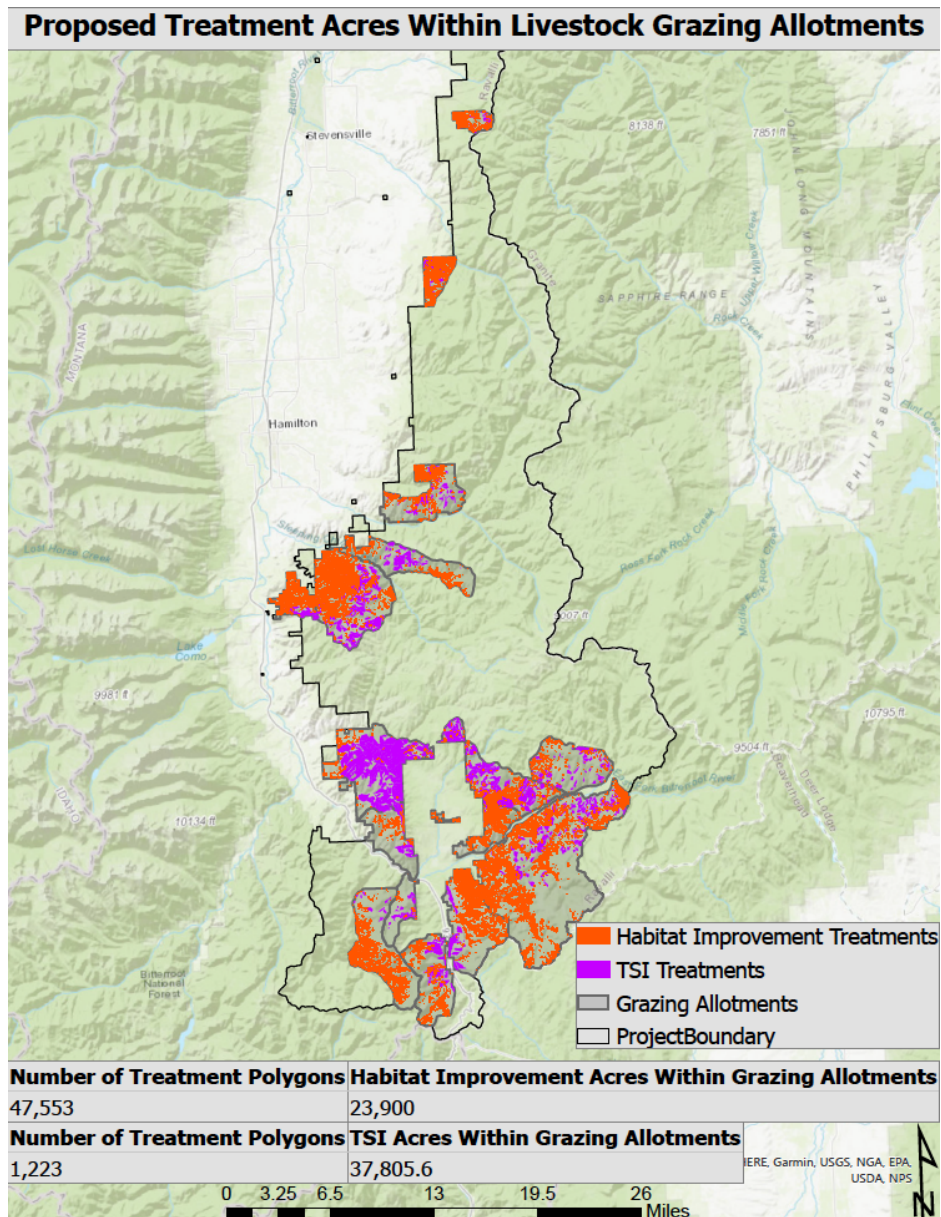
demonstrates numerous flaws with the agency's proposed use of the CE authority, and our findings provided throughout these comments support the fact that extraordinary circumstances do indeed exist.

In addition, the Forest Service fails to demonstrate how the project will "improve" timber stands and/or wildlife habitat. In fact, other than elk mentioned in the scoping letter, the agency fails to list any other specific wildlife species habitat that would improve under the proposed action. Instead the Forest Service asserts that "[c]reating a patchy mosaic of vegetation, including trees, shrubs, and grasses, would improve big game and other wildlife habitat quality." Scoping at 1. However, the Forest Service fails to provide any supporting information that demonstrates the efficacy of the proposed treatments toward achieving the desired outcomes, and fails to acknowledge the fact that creating such patchiness will cause erosion, compact soils and harm the mycorrhizal network, increase sedimentation to fish occupied streams, reduce habitat necessary to support the recovery of Canada lynx and degrade habitat ideal for grizzly bear denning and connectivity. In addition, the degree of uncertainty and flawed assumption we explain in these comments makes it clear that more detailed analysis is necessary to support the agency's conclusory statements that the proposed actions will in fact improve wildlife habitat. For example, given that conifer removal in sagebrush habitat increases the risk that invasive species will expand, (Miller et al. 2017), it is unclear what successful mitigation measures the agency will implement that does not utilize herbicides given the cited CE authority precludes its use.

Further, to the extent that the proposed treatments to reduce conifer encroachment would fall within active and vacant livestock grazing allotments, the Forest Service must disclose this information and demonstrate how such treatments qualify for authorization under 36 C.F.R. § 220.6(e)(6). Given the cited authority is specific to improving timber stands or wildlife habitat, it is unclear how conifer removal within grazing allotments fits within this category. It is more likely that such treatments are meant to benefit livestock owners rather than wildlife based on our GIS analysis that shows approximately 28 percent of wildlife habitat and 58 percent of timber stand improvement treatments fall within grazing allotments. See Figure 1. The increased forage that is likely to result from these treatments will mean more cows in more places. However, this is not even considered in conjunction with the wildlife that are supposedly benefiting. The Forest Service must consider whether the potential for livestock to use new and different areas as a result of this project will impact bull trout, Canada lynx and potential grizzly bear denning habitat.

[Continued on next page]

Figure 1. Eastside Project Treatments within Active & Vacant Grazing Allotments



Because the Forest Service fails to specify when, where, or why each management action may occur, it cannot rationally conclude that its actions cannot have significant impacts or that there are no extraordinary circumstances present. In fact, given there are 149,334 acres of Inventoried Roadless Area acres within the analysis area, the agency must demonstrate how its proposed actions do not constitute an extraordinary circumstance. Likewise, the Forest Service must also disclose the cause-effect relationship between each proposed action and the potential effects on bull trout, Canada lynx and their associated critical habitats, as well as potential grizzly bear habitat and areas of connectivity. Such disclosure is necessary to demonstrate the cause-effect relationship does constitute extraordinary circumstances.

In addition, the proposed actions including prescribed burning, mechanical treatments, and road reopening will promote the spread of invasive weeds. At the May Bitterroot Forest Collaborative meeting, District

Ranger Steve Brown said that herbicides would be used in the project area using a 2013 forest-wide herbicide EIS. Yet, the CE authority cited by the Forest Service to approve the Eastside Project precludes the use of herbicides. 36 C.F.R. 220.6(e)(6). The statements by Ranger Brown seem to indicate the Forest Service plans to apply herbicides as part of implementing the Eastside Project, but rely on an 8-yr old programmatic record of decision for authorization. Such an approach is a violation of the cited CE rule given the agency would not need to apply the toxic chemicals if not for the Eastside Project activities. The Forest Service cannot rely on the 2013 decision without demonstrating in an EIS how the herbicide use would affect resource conditions today and within the context of the Eastside Project proposed actions. We ask that the Forest Service conduct the proper and requisite analysis, which would include the mapping of invasive species from that 2013 EIS as it overlaps the project area and explain how herbicides will be used to prevent weeds from spreading in the project area.

As it stands, it appears the Forest Service will postpone gathering information about values present at specific sites, and proposing components of site-specific project design, until after the NEPA process is complete. This upends NEPA's central purpose that agencies analyze and disclose such information before they leap, as the Court concluded in *Southeast Alaska Conservation Council*. If the Forest Service believes that a CE applies, it must demonstrate that its action meets the definition of a particular CE, which it fails to do here. Otherwise it must prepare an EA.

#### **D. The Forest Service Proposed Use of Roads is Inappropriate, Especially Under a CE**

The best available science shows that roads cause significant adverse impacts to National Forest resources.<sup>3</sup> WildEarth Guardians issued a 2020 report (Ex. 5) that provides a scientific literature review — including the Forest Service's General Technical Report synthesizing the scientific information on forest roads (Gucinski 2001) — on a wide range of road-related impacts to ecosystem processes and integrity on National Forest lands. Erosion, compaction, and other alterations in forest geomorphology and hydrology associated with roads seriously impair water quality and aquatic species viability. Roads disturb and fragment wildlife habitat, altering species distribution, interfering with critical life functions such as feeding, breeding, and nesting, and resulting in loss of biodiversity. Roads facilitate increased human intrusion into sensitive areas, resulting in poaching of rare plants and animals, human-ignited wildfires, introduction of exotic species, and damage to archaeological resources. Here, the Forest Service must consider how the proposed actions may cause direct, indirect and further exacerbate cumulative impacts within the planning area as it relates to road maintenance, reconstruction and use, particularly in regards to unauthorized and closed roads.

Because the CE authority allows the use of existing roads, and fails to define those as Forest Service System roads, the agency may erroneously believe that it can use any road template that it finds in the project area, such as those created through unauthorized use, previously decommissioned and partially treated roads, or even temporary roads that may persist from past projects. Use of such roads requires robust environmental analysis, as does reconstructing stored system roads or opening those currently closed. Moreso, where the agency finds unauthorized roads and trails, it should completely remove them from the ground rather than leave them in place for the indefinite future.

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<sup>3</sup> See, e.g., 66 Fed. Reg. at 3208 (“Scientific evidence compiled to date [2001] suggests that roads are a significant source of erosion and sedimentation and are, in part, responsible for a decline in the quality of fish and wildlife habitat.”).

In sum, because the Forest Service has failed to define the nature and scope of the project, and fails to include crucial details regarding road maintenance, reconstruction and use, it cannot avail itself of a specific CE or ensure that the project has no potential for significant impacts or make a determination that no extraordinary circumstances exist.

### **E. A Special Note On Grizzly Bears**

The Forest Service must demonstrate how the cause-effect relationship does not constitute extraordinary circumstances in relation to “[f]ederally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species, 36 C.F.R. 220.6(b)(1)(i). Given the agency seeks to authorize thinning and burning over an unspecified period of time that could stretch 10-15 years or more, it is crucial to carefully consider how the proposed actions will affect grizzly bear recovery. On January 21, 2020, USFWS sent a letter to the four national forests that manage parts of the Bitterroot Ecosystem confirming that Section 10(j) does not apply to grizzly bears that have dispersed into the Bitterroot on their own, and that in fact such dispersal is occurring. Accompanying this letter was a map displaying where grizzly bears may be present (see Ex. 6). Given the ongoing natural recolonization, the Forest Service must consider how it is going to facilitate connectivity, establishment and recovery of this essential, non-experimental natural population of grizzly bears. The return of grizzly bears to the Bitterroot Ecosystem must be considered at the project-level, especially where a proposed action has the potential to affect habitat security and the ability of grizzly bears to utilize areas of connectivity that are crucial for their recovery.

The Forest Service appears to acknowledge the significance of grizzly bears returning to the Bitterroot Ecosystem in the following statement from the project webpage:

No treatments would occur within the grizzly bear May Be Present Area as identified by the latest U.S. Fish and Wildlife Service map, unless treatments in the May Be Present Area are consistent with the screens for the R1 programmatic grizzly bear BA. Examples of treatments consistent with the programmatic screens include activities such as prescribed fire unit prep, ignition and mop-up using hand ignition, hand tools and chainsaws, and off-road equipment operation within 300? of an open road.<sup>4</sup>

The Forest Service must demonstrate within a robust environmental analysis how the potential project treatments adhere to the aforementioned screens, and how such adherence will not hinder grizzly bear recovery or result in a take as defined by the Endangered Species Act. It is reasonable to expect use of off-road equipment along with use of roads, in particular closed, stored or unauthorized roads will increase disturbance affecting the ability of grizzly bears to use areas where they may be present. The Forest Service suggestions that such treatments would adhere to the screens for the R1 programmatic grizzly bear BA are insufficient to comply with NEPA’s hard look mandate. Rather, the agency must demonstrate in an environmental analysis how treatments that are consistent with those screens actually provide for grizzly bear recovery, especially given the indefinite increase in motorized disturbance that will result from those treatments. Further, we question the sufficiency of the Forest Service’s R1 programmatic grizzly bear biological assessment as it fails to provide the necessary direction to provide for secure habitat conditions within areas of connectivity in the project area. The need to conduct proper environmental analysis and

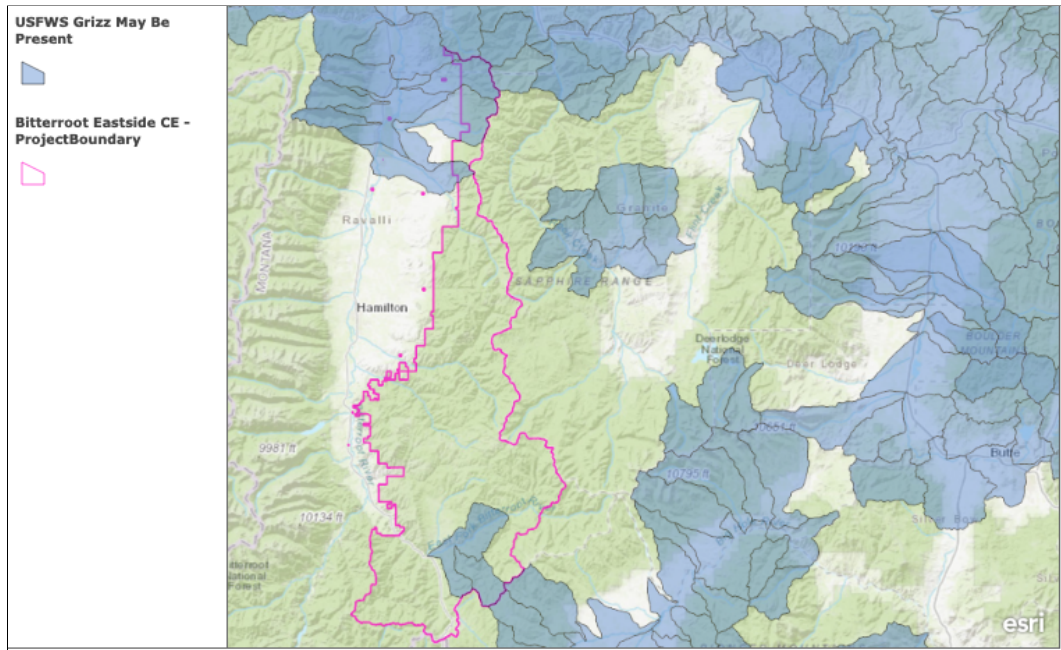
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<sup>4</sup> See <https://www.fs.usda.gov/project/?project=59985>

demonstrate the sufficiency of the programmatic grizzly bear BA in the project area is evident when looking at the potential for significant impacts to grizzly bears.

When overlaying the FWS May Be Present Area map, (the GIS files of which are publicly available)<sup>5</sup> with the project's geospatial data we produced the map in Figure 2 and determined all or portions of four watersheds overlap, including portions of Eightmile Creek and Threemile Creek, and all of the Jennings Camp Creek and Tolan Creek watersheds.

Figure 2. FWS Grizzly Bear May Be Present Area Map within the Eastside Project.



Within these areas of overlap, we calculated 11,845 acres of wildlife habitat improvement areas that could occur within the FWS May Be Present Areas. See Table 1. Similarly, we found 6,281 acres of timber stand improvement areas that overlap with the FWS May Be Present Areas. See Table 2. These maps and resulting calculations demonstrate a significant overlap of potential project treatments within areas where the FWS identify grizzly bears may occur.

[Continued on next page]

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[https://www.fws.gov/mountain-prairie/es/species/mammals/grizzly/usfws\\_A001\\_V01\\_Ursus\\_arctos\\_horribilis\\_area\\_of\\_influence.zip](https://www.fws.gov/mountain-prairie/es/species/mammals/grizzly/usfws_A001_V01_Ursus_arctos_horribilis_area_of_influence.zip)



Table 1. Eastside Wildlife Habitat Improvement Acres within the FWS May Be Present Area Map

BNF Eastside IRA WHI (Features: 26, Selected: 0)				
Summarized Area in Acres	Count of Polygons	FOREST	NAME	CATEGORY
755.3136	1,488	Bitterroot	Allan Mountain (01946)	1C
5,687.8345	10,445	Bitterroot	Allan Mountain (01946)	1B
2.4293	9	Bitterroot	Allan Mountain (01946)	1C
331.2621	540	Bitterroot	Allan Mountain (01946)	1C
4.0222	12	Bitterroot	Continental Divide National Scenic Trail	1B
21.5188	62	Bitterroot	Continental Divide National Scenic Trail	1C
274.7228	659	Bitterroot	Needle Creek (01066)	1C
1.7333	7	Bitterroot	North Big Hole	1C
15.6590	37	Bitterroot	North Big Hole	1B
2,339.1737	4,996	Bitterroot	Sapphire	1C
7,405.1838	17,153	Bitterroot	Sapphire	1B
15.0198	52	Bitterroot	Sapphire	1C
1,356.1986	3,234	Bitterroot	Sapphire	1C
151.3910	375	Bitterroot	Sapphire	1C
144.4178	362	Bitterroot	Sleeping Child (x1074)	1C
1,478.3232	3,538	Bitterroot	Sleeping Child (x1074)	1B
918.2334	2,484	Bitterroot	Sleeping Child (x1074)	1C
12.7787	45	Bitterroot	Stony Mountain	1C
270.1279	658	Bitterroot	Stony Mountain	1C
203.9466	554	Bitterroot	Stony Mountain	1C
1,572.6647	2,739	Bitterroot	Stony Mountain	1C
9,667.1700	20,734	Bitterroot	Stony Mountain	1B
2,498.3459	3,961	Bitterroot	Stony Mountain	1C
473.3387	1,062	Bitterroot	Stony Mountain	1C
163.3447	315	Bitterroot	Swift Creek (01065)	1C
2,424.3593	4,247	Bitterroot	Tolan Creek (x1070)	1C

Table 2. Eastside Timber Stand Improvement Acres within the FWS May Be Present Area Map

BNF Eastside CE IRA TSI Acres (Features: 10, Selected: 0)				
Summarized Area in Acres	Count of Polygons	FOREST	NAME	CATEGORY
0.0082	1	Bitterroot	Allan Mountain (01946)	1C
0.1034	2	Bitterroot	Allan Mountain (01946)	1C
7.9629	2	Bitterroot	Needle Creek (01066)	1C
8.4095	3	Bitterroot	Sapphire	1C
0.8711	1	Bitterroot	Sapphire	1C
1.5575	1	Bitterroot	Sleeping Child (x1074)	1C
58.2024	11	Bitterroot	Sleeping Child (x1074)	1C
0.7564	5	Bitterroot	Stony Mountain	1C
1.3594	2	Bitterroot	Swift Creek (01065)	1C
1.7880	2	Bitterroot	Tolan Creek (x1070)	1C

The Forest Service cannot rely on the screens for the R1 programmatic grizzly bear BA as a rationale to forego proper environmental analysis and implement these treatments without demonstrating they will not harm grizzly bears or grizzly bear recovery. In addition, the agency cannot rely solely on the FWS May be Present Map to determine the potential impacts to grizzly bears in the project area as the location dates the FWS used to generate the maps do not reflect recent grizzly bear sightings within or near the project area. Specifically, the location date for the Threemile Creek watershed is 1/17/2013 and for the Town of Stevensville-Burnt Fork Bitterroot River watershed it is 2/12/2017. Yet, in 2018 a male grizzly bear was captured on the Whitetail Golf Course north of Stevensville, and Montana FWP bear specialist Jamie Jonkel was quoted in a Missoulian article saying:

“I’m guessing he came out of the Blackfoot drainage,” Jonkel said ahead of lab results on the DNA samples he took from the Stevensville grizzly. “He probably came south through the Garnet Range, got across the Clark Fork (River) and I-90. There are a handful of spots that allow for passage around

Rock Creek and Clinton and Drummond. If they find those — bang — they're south of I-90 and into the Sapphires.”

Ex. 7. Such sightings reflect the need for the Forest Service to consider much of the Sapphire Mountain range as areas suitable for grizzly bear connectivity. In fact, a new report titled, *Grizzly Bear Denning Habitat and Demographic Connectivity in Northern Idaho and Western Montana*, authored by independent wildlife consultants Mike Bader and Paul Sieracki, geospatial analyst and wildlife biologist identify areas where female grizzly bears can reside year-round between the Northern Continental Divide, Cabinet-Yaak, and Bitterroot Grizzly Bear Recovery Areas. Ex. 8. Such areas also serve as ideal habitat for grizzly bear demographic connectivity and the report illustrates the importance of what the authors label the Sapphire Complex. Figure 3 below displays suitable denning habitat within the project area and Table 3 provides a summary of overlapping acres. Our GIS analysis shows 301,669 acres of suitable denning habitat occurs within the project area. Further, areas the Forest Service identified for potential wildlife habitat improvement treatments total 63,966 acres within suitable denning habitat with 59,215 acres identified as medium and high quality habitat. See Figure 4 and Table 3. In addition there are another 14,911 acres of timber stand improvement areas that also overlap with suitable denning habitat, with 573 acres identified as medium and high quality habitat. See Table 3.

Table 3. Eastside Project & Treatment Areas within Suitable Grizzly Bear Denning Habitat.

<b>Acres of Denning Habitat, Griz Albers Projection</b>				
	<b>Habitat Classification</b>	<b>Number</b>	<b>Acres</b>	<b>Percent</b>
<b>Project Area</b>	<b>Total Area</b>		<b>471,512</b>	
	Not Denning Habitat	1	169,791	36.0
	Low	2	166,109	35.2
	Medium	3	108,226	23.0
	High	4	27,334	5.8
	Total/Checksums		471,460	100.0
<b>Potential TSI Treatment Areas</b>	<b>Total Area including overlaps</b>		<b>65899</b>	
	<b>Actual Area, not including overlaps</b>	<b>47,316</b>	<b>47,315.79*</b>	
	Not Denning Habitat	1	32,403.6	68.5
	Low	2	14,338.9	30.3
	Medium	3	559.8	1.2
	High	4	12.9	0.0
	Total/Checksums		47,315.2	100.0
<b>Potential Habitat Treatment Areas</b>	<b>Total Area</b>		<b>84110.6</b>	
	Not Denning Habitat	1	20,131.2	23.9
	Low	2	35,745.8	42.5
	Medium	3	23,469.2	27.9
	High	4	4,751.1	5.6
	Total/Checksums		84,097.4	100.0

In sum, 74,126 acres of medium and high quality suitable grizzly bear denning habitat would be available for treatments under the project's proposed action, which means these areas could experience significant increases in motorized disturbance from road use and mechanical treatments that would decrease the area's grizzly bear habitat security and increase the bear's avoidance behavior. The harmful effects to grizzly bear recovery and survival from motorized disturbance and high road densities are well documented in numerous studies, strategies and plans. We provide a sample of select studies in Ex. 9, in addition to the relevant

citations found in Bader & Sieracki, 2021, and in another report titled the *Grizzly Bear Promised Land* written by Dr. David Mattson. Ex. 10. Together these studies and reports demonstrate the potential harm of the project's proposed action is not only significant, but rises to the level of extraordinary circumstances that precludes the Forest Service from using the CE authority to approve the Eastside Project.

In addition, given the Forest Service seeks to treat areas to reduce conifer encroachment under the proposed action, and that such treatments likely will benefit active and vacant grazing allotments, the Forest Service must consider how improving range conditions may increase grizzly bear conflicts and the rise in bear mortality that would likely result. Figure 5 below shows the significant overlap between grazing allotments and suitable grizzly bear denning habitat as Bader & Sieracki, 2021 identifies.

Finally, the aforementioned studies and reports also demonstrate the urgent need to not only protect suitable grizzly bear denning habitat and areas of connectivity, but to also restore areas that can facilitate the species's recovery. Here those lands within the project area identified as low quality grizzly bear denning habitat by Bader & Sieracki, 2021 should be prioritized for improving current levels of habitat security.

Figure 3. Map of Suitable Grizzly Bear Denning Habitat within the Eastside Project.

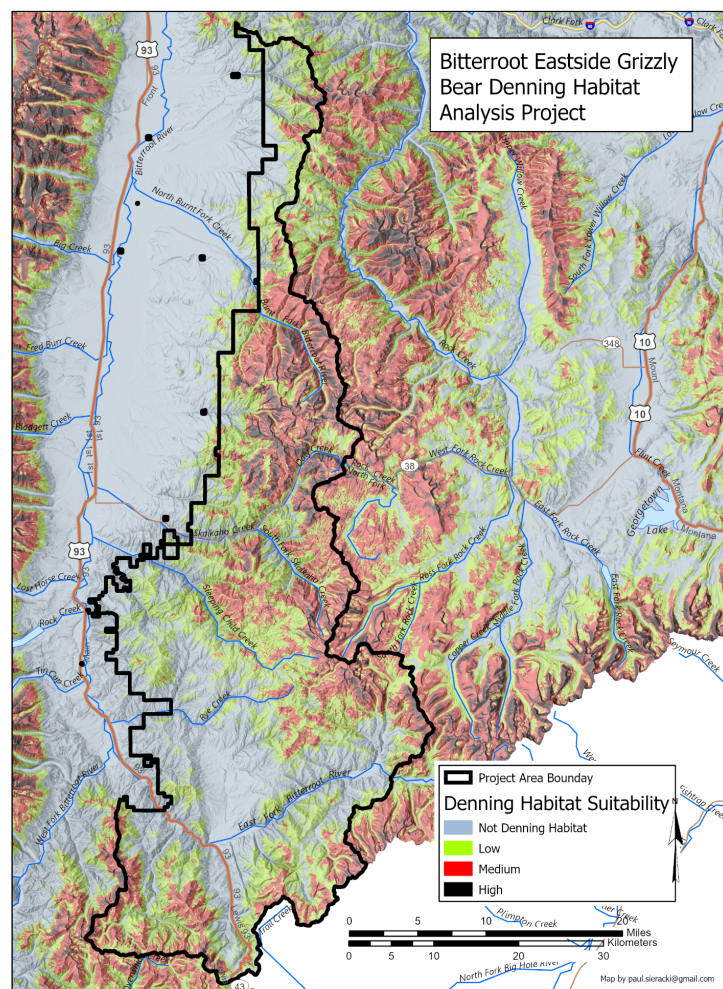




Figure 4. Map of Suitable Grizzly Bear Denning Habitat within Wildlife Habitat Improvement Areas of the Eastside Project.

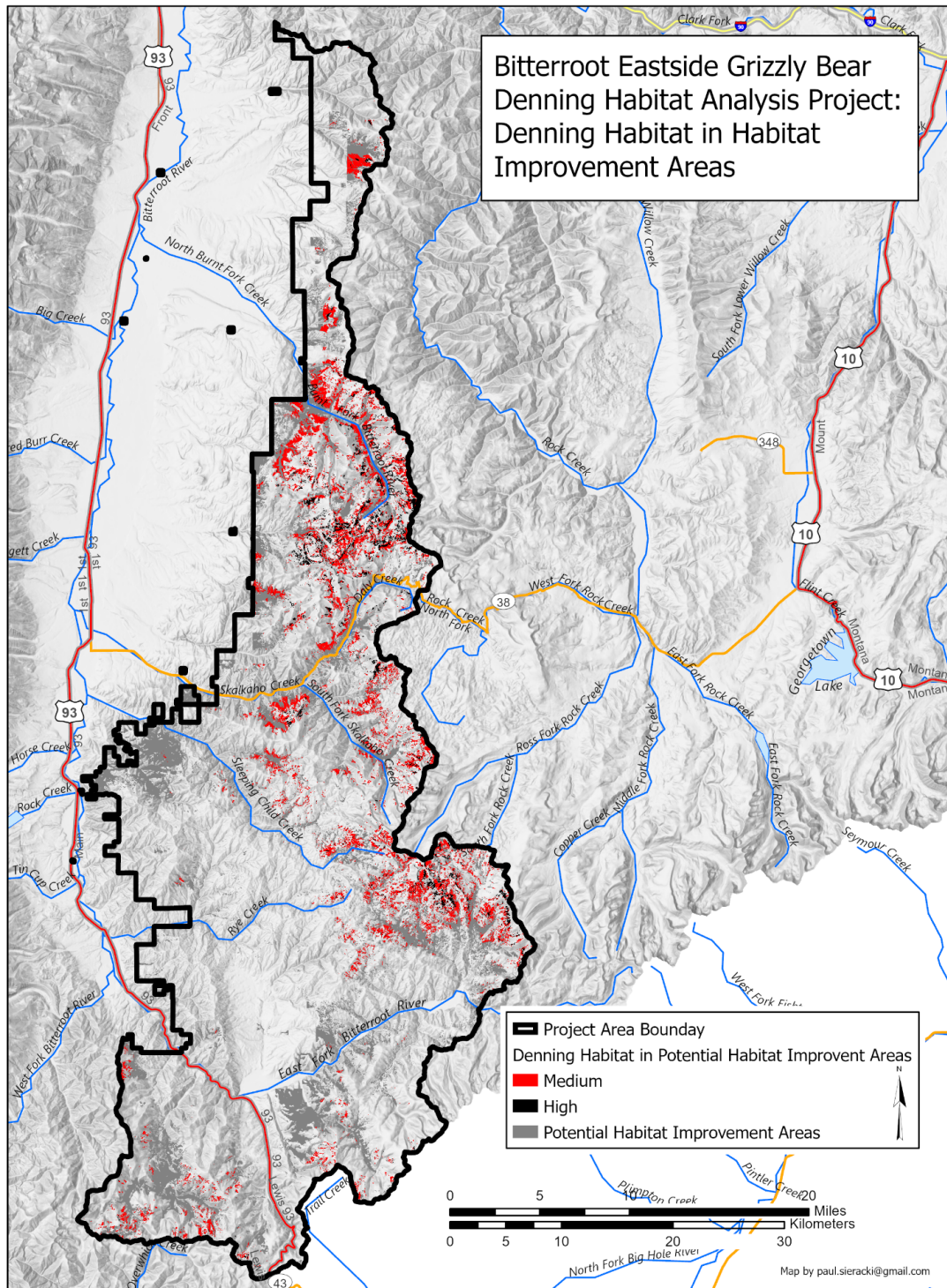
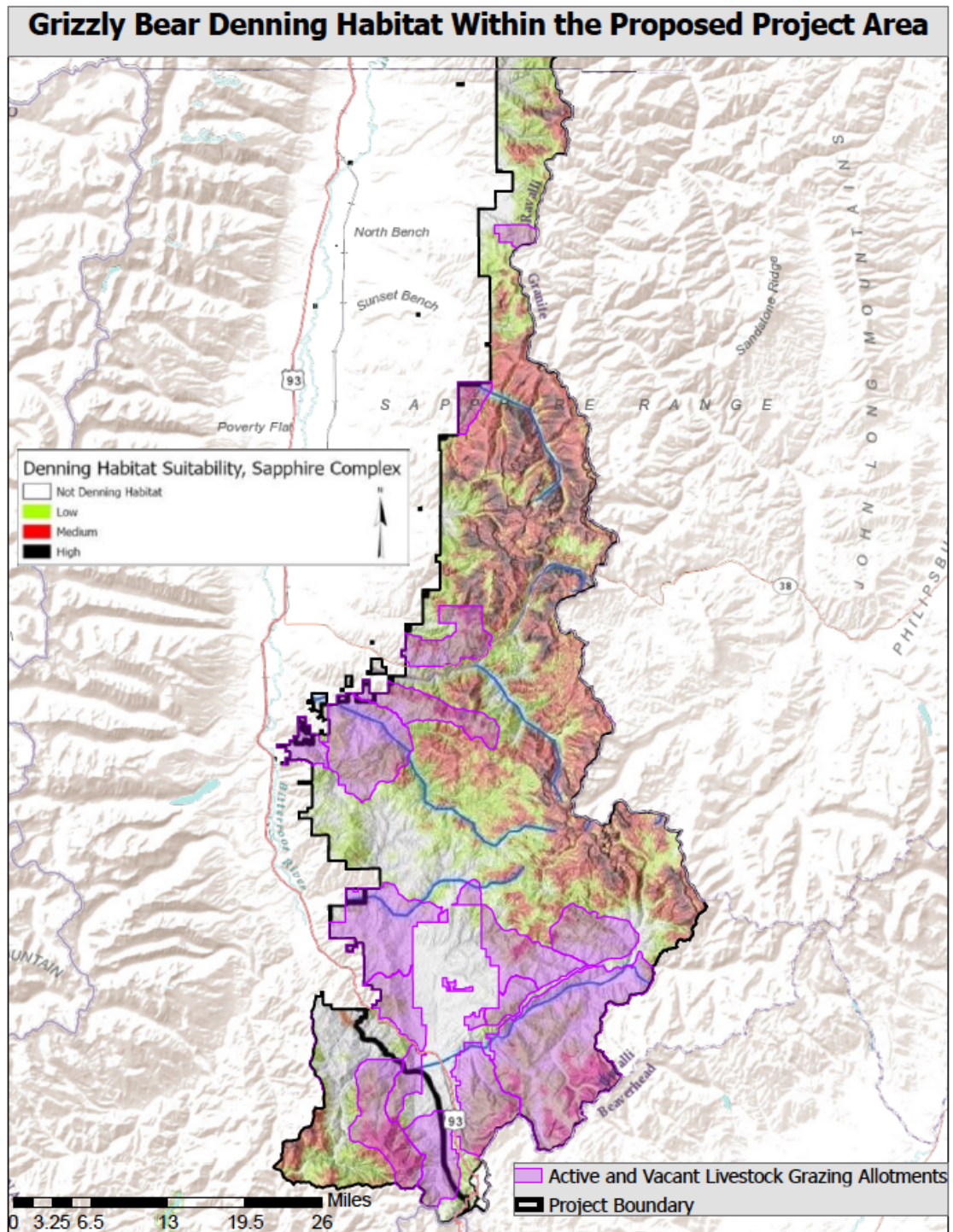


Figure 5. Active & Vacant Grazing Allotments within Suitable Grizzly Bear Denning Habitat.





## F. A Special Note on Canada Lynx

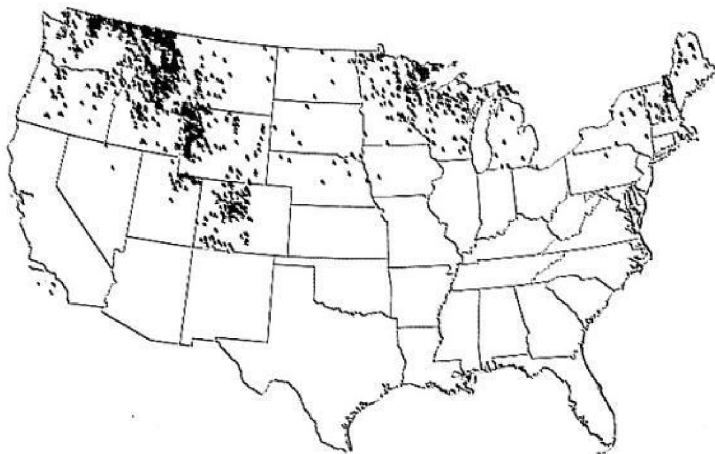
### Canada Lynx

The Forest Service project webpage states that potential treatment activities will not occur in lynx habitat.<sup>6</sup> Scoping documentation does not confirm this statement and stopping activities at the edge of lynx habitat does not take into consideration connectivity between areas of habitat on the forest. The Biological Assessment for Canada lynx documents the importance of peripheral areas as:

*Peripheral populations may contain valuable genetic, physiological or behavioral adaptations that are unique to their ecological success. Because suitable habitats in areas where populations act as metapopulations are spatially separated, the persistence of a metapopulation is dependent on the efficiency and success of dispersing animals in reaching isolated patches of suitable habitat. When patches are fragmented and connections between patches do not exist, recolonization becomes problematic and the metapopulation may be unable to persist, even though patches of suitable habitat remain (Meffe and Carroll 1997). Additional fragmentation and isolation of suitable habitat occurring as a result of land management activities can not only affect small isolated habitat patches supporting smaller populations but also large contiguous patches supporting higher population levels.<sup>7</sup>*

USDA Forest Service 1999. The historical lynx habitat map (Figure 6) shows that the Bitterroot National Forest area has housed lynx in the past and the referenced link of currently occupied and unoccupied habitat shows the project area borders areas of current occupation.<sup>8</sup> There are core and peripheral or linkage areas. Ruggiero et al 1999 also discuss the effects of fragmentation on competition with lynx by other carnivores and the loss of connectivity. The linkage areas and peripheral areas of lynx habitat will be affected by the project.

Figure 6. Historical Canada lynx habitat



The importance of stepping stone areas to species in a changing climate is demonstrated in Saura et al 2014:

*Synthesis and applications. Previous static connectivity models seriously underestimate the importance of stepping-stone patches in sustaining rare but crucial dispersal events. We provide*

<sup>6</sup> <https://www.fs.usda.gov/project/?project=59985>

<sup>7</sup> USDA Forest Service 1999. Biological Assessment of the Effects of National Forest Land and Resource Management Plans and Bureau of Land Management Land Use Plans on Canada Lynx. 149p.

<sup>8</sup> [https://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb5193020.pdf](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5193020.pdf)

*a conceptually broader model that shows that stepping stones (i) must be of sufficient size to be of conservation value, (ii) are particularly crucial for the spread of species (either native or invasive or genotypes over long distances and (iii) can effectively reduce the isolation of the largest habitat blocks in reserves, therefore largely contributing to species persistence across wide spatial and temporal scales.*

As shown in the Western Wildway Map (Figure 7), the project area is a part of the Continental Corridor connecting Mexico to Alaska, and the regions of that corridor being addressed by scientists and advocates of connectivity for wildlife. This represents a conservation biology approach to landscape conservation which emphasizes linkage zones and connectivity for Canada lynx and other species. The complete lack of analysis of the Eastside Project, in addition to inadequate analysis on most if not all other projects on the BNF, seem to abandon conservation biology principles and connectivity linkage zones. Even though project activities will not be in designated lynx habitat, the project will most certainly affect important peripheral and connectivity areas.

Figure 7. Western Wildway Map: Connecting and Restoring the Spine of the Continent



A “hard look” must be conducted of habitat fragmentation, corridor functionality, vegetation treatments, road density, snowmobile, and motorized activity, trapping and other human activity as well as livestock grazing on Canada lynx. The project must also take into account new trapping laws in Montana, with extended seasons and the incorporation of wolf snaring, and what they will mean for lynx. That look must also include all Forest Plan requirements and intent as well as embody the best available science applicable to Canada lynx. Absent such analysis, it is arbitrary and a violation of NEPA for the Forest Service to claim no extraordinary circumstances exist regarding Canada lynx recovery.

## **G. A Special Note on Wolverine**

Recently, a US District Court ruling remanded the USFWS withdrawal of its Proposed Rule to list the distinct population segment of the North American wolverine occurring in the contiguous United States as a threatened species under the Endangered Species Act for further consideration. The ruling reviewed the science relating to the selection of denning sites in combination with snow presence during the natal period and recent analyses of potential climate change effects to snow pack that indicate a severe reduction in snow cover during this century with negative implications to wolverine populations. This factor alone should place greater emphasis on habitat integrity and restoration for corridors, connectivity for both lynx and wolverine.

The ruling also emphasized that populations in the US, which exist as meta-populations “require some level of regular or intermittent migration and gene flow among subpopulations, in which individual subpopulations support one-another by providing genetic and demographic enrichment through mutual exchange of individuals.” If connectivity is lost, “an entire meta-population may be jeopardized due to subpopulations becoming unable to persist in the face of inbreeding or demographic and environmental stochasticity.”

The study by Copeland, 2010 cited in the ruling, analyzed spring snow cover to determine overlap with known den sites, finding 97.9% overlap. They concluded that if reductions in snow cover continue to occur, “habitat conditions for the wolverine along the southern extent of its circumboreal range will likely be diminished through reductions in the size of habitat patches and an associated loss of connectivity, leading to a reduction of occupied habitat in a significant portion of the species range.” A second analysis by McKelvey, 2011 used Global Climate Models to predict the change in distribution of persistent spring snow cover so that “for conservation planning, predicting the future extent and distribution of persistent spring snow cover can help identify likely areas of range loss and persistence, and resulting patterns of connectivity.” McKelvey concluded that they expect, “the geographic extent and connectivity 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.”

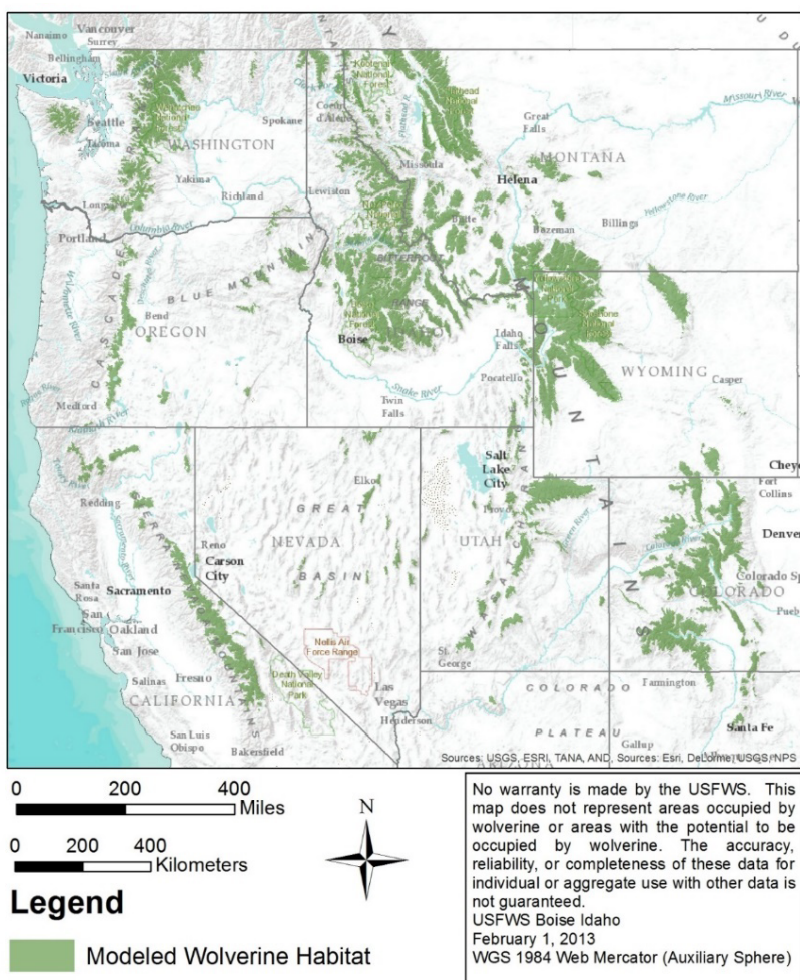
In its Proposed Rule, the USFWS accepted these studies as the best available science with climate change as the driving factor. Other threats were considered of lower priority in comparison, “however, cumulatively they could become significant when working in concert with climate change if they further suppress an already stressed population.” The USFWS noted harvest, demographic stochasticity and loss of genetic diversity as these secondary factors but avoided mention of habitat integrity and fragmentation by roads, infrastructure and human activity or loss of prey base due to depletion of herbaceous plant communities and cover by livestock grazing.

Robert Inman, PhD, a biologist and Director of the Greater Yellowstone Wolverine Program at the Horner Institute/Wildlife Society 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, 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 are 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. Inman et al. 2013.

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 from suitable places before records were kept.

So, while the USFWS emphasizes the role of connectivity and genetic exchange in maintaining meta-populations and genetic diversity, it avoids the identification of the connections vital to maintenance and recovery of species. The map of the FWS modeled wolverine habitat (Figure 8) shows wolverine habitat areas in Montana, Idaho, Utah and Wyoming but provides no indication of travel corridors that wolverine might use to connect these.

Figure 8. U.S. Fish & Wildlife Service Modeled Wolverine Habitat Map



#### H. The Forest Service Cannot Rely on BMPs or Design Features to Comply with NEPA

The Forest Service may assert in its decision memo that best management practices or project design features, or resource protection measures will effectively mitigate any resource concerns as we have seen in multiple other agency projects. We caution the Forest Service against such assumptions as they do not absolve the agency from its responsibilities under NEPA or other applicable laws such as the Clean Water Act. Should the agency propose specific BMPs or other measures to mitigate resource damage, in particular those from road



maintenance, construction, reconstruction and use, then it must demonstrate a history of both proper implementation and effectiveness.

Specifically, when considering how effective BMPs or design features are at controlling nonpoint pollution on roads, both the rate of implementation, and their effectiveness should both be considered. The Forest Service tracks the rate of implementation and the relative effectiveness of BMPs from in-house audits. This information is summarized in the National BMP Monitoring Summary Report with the most recent data being the fiscal years 2013-2014. Carlson et al. 2015. The rating categories for implementation are “fully implemented,” “mostly implemented,” “marginally implemented,” “not implemented,” and “no BMPs.” “No BMPs” represents a failure to consider BMPs in the planning process. More than a hundred evaluations on roads were conducted in FY2014. Of these evaluations, only about one third of the road BMPs were found to be “fully implemented.” *Id.* at 12.

The monitoring audit also rated the relative effectiveness of the BMP. The rating categories for effectiveness are “effective,” “mostly effective,” “marginally effective,” and “not effective.” “Effective” indicates no adverse impacts to water from projects or activities were evident. When treated roads were evaluated for effectiveness, almost half of the road BMPs were scored as either “marginally effective” or “not effective.” *Id.* at 13.

Further, a technical report by the Forest Service entitled, “Effectiveness of Best Management Practices that Have Application to Forest Roads: A Literature Synthesis,” summarized research and monitoring on the effectiveness of different BMP treatments for road construction, presence and use. Edwards et al. 2016. The report found that while several studies have concluded that some road BMPs are effective at reducing delivery of sediment to streams, the degree of each treatment has not been rigorously evaluated. Few road BMPs have been evaluated under a variety of conditions, and much more research is needed to determine the site-specific suitability of different BMPs (Edwards et al. 2016, also see Anderson et al. 2011). Edwards et al. (2016) cites several reasons for why BMPs may not be as effective as commonly thought. Most watershed-scale studies are short-term and do not account for variation over time, sediment measurements taken at the mouth of a watershed do not account for in-channel sediment storage and lag times, and it is impossible to measure the impact of individual BMPs when taken at the watershed scale. When individual BMPs are examined there is rarely broad-scale testing in different geologic, topographic, physiological, and climatic conditions. Further, Edwards et al. (2016) observe, “[t]he similarity of forest road BMPs used in many different states’ forestry BMP manuals and handbooks suggests a degree of confidence validation that may not be justified,” because they rely on just a single study. *Id.* at 133. Therefore, ensuring BMP effectiveness would require matching the site conditions found in that single study, a factor land managers rarely consider.

Climate change will further put into question the effectiveness of many road BMPs (Edwards et al. 2016). While the impacts of climate will vary from region to region (Furniss et al. 2010), more extreme weather is expected across the country which will increase the frequency of flooding, soil erosion, stream channel erosion, and variability of streamflow (Furniss et al. 2010). BMPs designed to limit erosion and stream sediment for current weather conditions may not be effective in the future. Edwards et al. (2016) states, “[m]ore-intense events, more frequent events, and longer duration events that accompany climate change may demonstrate that BMPs perform even more poorly in these situations. Research is urgently needed to identify BMP weaknesses under extreme events so that refinements, modifications, and development of BMPs do not lag behind the need.” *Id.* at 136.

Significant uncertainties persist about BMP or design feature effectiveness as a result of climate change, which compound the inconsistencies revealed by BMP evaluations and suggest that the Forest Service cannot simply rely on them to mitigate project-level activities. This is especially relevant where the Forest Service relies on the use of BMPs or design features instead of fully analyzing potentially harmful environmental consequences from road design, construction, maintenance or use, in studies and/or programmatic and site-specific NEPA analyses. Moreso, the Forest Service must demonstrate how BMP effectiveness will be maintained in the long term, especially given the lack of adequate road maintenance capacity.

Finally, our concern regarding BMP or design feature implementation and effectiveness is not purely hypothetical or academic given recent history on the Bitterroot National Forest. Specifically, when implementing the Westside Collaborative Vegetation Management Project, the Forest Service explained it would follow specific BMPs, in particular the installation of culverts when natural drainage would be insufficient to protect natural resources:

- F. Locate and design roads and trails to drain naturally by appropriate use of out-sloping or insloping with cross drainage and grade changes, where possible. Relief culverts and roadside ditches will be designed whenever reliance upon natural drainage would not protect the running surface, excavation, or embankment. Road and trail drainage should be channeled to effective buffer areas to maximize sediment deposition prior to entry into live water.

Westside Collaborative Vegetation Management Project Environmental Assessment (EA) - Appendix A - Best Management Practices (PDF 248kb) at A-16.<sup>9</sup> Yet, Friends of the Bitterroot documented inadequate drainage on a newly constructed road authorized under the Westside project decision notice. Figure 9.

Figure 9. Inadequate drainage on newly constructed Westside project road.



<sup>9</sup> Available at [https://www.fs.usda.gov/nfs/11558/www/nepa/102372\\_FSPLT3\\_3017352.pdf](https://www.fs.usda.gov/nfs/11558/www/nepa/102372_FSPLT3_3017352.pdf) (last viewed 6/10/2020).



In addition, when implementing the Darby Lumber Lands Phase II project the Forest Service violated Montana's Streamside Zone Management along a section of Roan Creek. The rules are in place to ensure compliance with the Clean Water Act, and Montana's Department of Natural Resources and Conservation sent a notice of violation to the Forest Service. The state later withdrew its repair order citing a September 2016 MOU, but the matter of the violation remains, which was raised and documented in several letters to the Forest Service and state of Montana. Ex. 31. Further, Friends of the Bitterroot documented other design feature violations including inadequate road drainage and damage, including pooling, rutting, haphazard straw bale placement, and ultimately a road failure. *Id.* In sum, the Forest Service cannot rely on general, statewide BMP monitoring reports conducted by the state of Montana, or general Forest Plan monitoring reports to show successful BMP implementation and effectiveness rates. Rather, the agency must show how the Bitterroot National Forest ensures its project design criteria and BMPs effectively mitigates harm to natural resources on the forest.

## **I. The Forest Service Must Evaluate the Potential for Cumulative Effects.**

### **1. The 2020 NEPA Regulations Cannot Eliminate the Requirement that the Forest Service Disclose Cumulative Effects.**

Although CEQ adopted new regulations implementing NEPA in July 2020, 85 Fed. Reg. 43304 (July 16, 2020), and those regulations became effective for projects "begun" after September 14, 2020, those regulations have been challenged as illegal in numerous courts and are likely to be vacated. *See Environmental Justice Health Alliance v. CEQ*, Case 1:20-cv-06143 (S.D.N.Y. Aug. 6, 2020); *Wild Virginia v. CEQ*, Case 3:20-cv-00045-NKM (W.D. Va. July 29, 2020); *Alaska Community Action on Toxics v. CEQ*, Case 3:20-cv-05199-RS (N.D. Ca. July 29, 2020); *State of California v. Council on Environmental Quality*, Case No. 3:20-cv-06057 (N.D. Cal. Aug. 28, 2020).

While the 1978 NEPA regulations identified three types of impacts – direct, indirect, and cumulative – the revised 2020 regulations eliminate the terms "indirect" and "cumulative," and explicitly repeal the definition of cumulative effects. 40 C.F.R. § 1508.1(g)(3) (2020). However, this attempt to eliminate the mandate that agencies analyze and disclose cumulative impacts contravenes Congressional intent, statutory language, previous CEQ guidance, and federal court decisions interpreting NEPA prior to the adoption of the agency's 1978 regulations that the 2020 regulations purport to re-write. If the Forest Service here fails to address cumulative effects, it does so at considerable legal peril.

As it considered taking action that ultimately resulted in NEPA's enactment, the United States Congress hosted a joint House-Senate Colloquium on a "National Policy for the Environment" on July 17, 1968. *See* Congressional White Paper on a National Policy for the Environment, U.S. Gov't Printing Office (Oct. 1968). Ex.G. Invited to participate in the Colloquium were "interested members with executive branch heads and leaders of industrial, commercial, academic, and scientific organizations," with the purpose of "focus[ing] on the evolving task the Congress faces in finding more adequate means to manage the quality of the American environment." *Id.* at III, 1. The outcome of the day-long discussion was a Congressional White Paper on a National Policy for the Environment, published in October 1968. *Id.* Noting the near-consensus views expressed by those participating in the Colloquium, the Congressional White Paper explained that "in the recent past, a good deal of public interest in the environment has shifted from its preoccupation with the

extraction of natural resources to the more compelling problems of deterioration on natural systems of air, land, and water. The essential policy issue of conflicting demands has become well recognized.” *Id.* at 1. The Congressional White Paper highlighted additional issues that stakeholders agreed were essential and ripe for Congressional consideration in its development of a national environmental policy. For example, Dr. Walter Orr Roberts, an atmospheric physicist and founder of the National Center for Atmospheric Research, explained the importance of considering climate change due to “[s]ubtle alterations of the chemical constitution of the atmosphere, through pollutants added in the form of trace gases, liquids, or solids, result from industrial activity or urbanization. This is an area of biometeorology that has significance in every living person and yet we have not yet seen even the first beginnings of an adequately sustained research effort in this area.” *Id.* at 5-6. Subtle alterations from multiple projects, including the type of projects at issue here, could also have significant impacts when viewed cumulatively.

NEPA’s legislative history is replete with additional references to the complexity of environmental impacts, the consequences of “letting them *accumulate* in slow attrition of the environment” and the “ultimate consequences of quiet, creeping environmental decline,” all of which Congress concluded required an analysis of proposed impacts beyond the immediate, direct effects of an action. 115 Cong. Rec. 29070 (October 8, 1969) (emphasis added); *see also*, S. Rep. No. 91-296, 91<sup>st</sup> Cong., 1<sup>st</sup> Sess. (July 9, 1969) at 5 (bemoaning the fact that “[i]mportant decisions concerning the use and the shape of man’s future environment continue to be made in small but steady increments which perpetuate rather than avoid the recognized mistakes of previous decades.”). Ex.H. For 50 years, CEQ interpreted the law to accomplish just that.

NEPA’s statutory text indicates that agencies should address cumulative environmental effects. The evaluation of a proposed project must include a “detailed statement” on “the environmental impact of the proposed action,” including “*any* adverse environmental effects which cannot be avoided should the proposal be implemented.” 42 U.S.C. § 4332(2)(C)(ii) (emphasis added). The evaluation must examine “the environmental impact of the proposed action” “*to the fullest extent possible*.” *Id.* §§ 4332 (emphasis added), 4332(2)(C)(i). The evaluating agency must also seek out other agencies’ expertise regarding “*any* environmental impact involved.” *Id.* § 4332(2)(C) (emphasis added). The statute requires agencies to “recognize the *worldwide* and *long-range* character of environmental problems.” *Id.* § 4332(2)(F) (emphasis added).

Further, the statute itself anticipates that agencies will consider impacts that, like climate pollution and climate change, may accrete from numerous projects with small individual impacts to harm our “biosphere.” 42 U.S.C. § 4321 (NEPA’s purpose is “to declare a national policy which will encourage productive and enjoyable harmony between man and his environment; [and] to promote efforts which will prevent or eliminate damage to the environment and *biosphere* . . .” (emphasis added)).

Within a few months of its establishment, CEQ reinforced the need to address all environmental impacts, including cumulative effects. “The statutory clause ‘major Federal actions significantly affecting the quality of the human environment’ is to be construed by agencies with a view to *the overall, cumulative impacts of the action* proposed (and of *further actions contemplated*).” Council on Environmental Quality: Statements on Proposed Federal Actions Affecting the Environment; Interim Guidelines, April 30, 1970, Section 5(b) (filed with Fed. Reg. May 11, 1970), available in *Environmental Quality, The First Annual Report of the Council on Environmental Quality* (1970) at 288.<sup>10</sup> The CEQ published interim guidance in 1971 that confirmed this mandate. CEQ,

<sup>10</sup> Available at <https://www.slideshare.net/whitehouse/august-1970-environmental-quality-the-first-annual-report-of> (last viewed June 10, 2021).

*Statements On Proposed Federal Actions Affecting The Environment Guidelines*, 36 Fed. Reg. 7,724 (April 23, 1971).

Ex.I. The guidance explained that the requirement in Section 102(2)(C) of NEPA to identify “the relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity” in the detailed statement (now known as an EIS) required the agency “to assess the action for cumulative and long-term effects from the perspective that each generation is trustee of the environment for succeeding generations.” *Id.* at 7,725 (interpreting 42 U.S.C. 4332(2)(C)(iv)).

Some of the earliest Federal court decisions, issued years before CEQ adopted its 1978 regulations, hold that NEPA *requires* disclosure of cumulative effects. The Second Circuit ruled in 1972:

In the absence of any Congressional or administrative interpretation of the term, we are persuaded that in deciding whether a major federal action will “significantly” affect the quality of the human environment the agency in charge, although vested with broad discretion, should normally be required to review the proposed action in the light of at least two relevant factors: (1) the extent to which the action will cause adverse environmental effects in excess of those created by existing uses in the area affected by it, and (2) the absolute quantitative adverse environmental effects of the action itself, including *the cumulative harm* that results from its contribution to existing adverse conditions or uses in the affected area.

*Hanly v. Kleindienst*, 471 F.2d 823, 830-31 (2d Cir. 1972) (emphasis added)). Following *Hanly*, the Second Circuit reiterated the importance of disclosing cumulative impacts.

As was recognized by Congress at the time of passage of NEPA, a good deal of our present air and water pollution has resulted from the *accumulation of small amounts of pollutants added to the air and water by a great number of individual, unrelated sources*. ‘Important decisions concerning the use and the shape of man’s future environment continue to be made in small but steady increments which perpetuate rather than avoid the recognized mistakes of previous decades.’ S. Rep. No. 91-296, 91 Cong., 1st Sess. 5 (1969). NEPA was, in large measure, an attempt by Congress to instill in the environmental decisionmaking process a more comprehensive approach *so that long term and cumulative effects of small and unrelated decisions could be recognized, evaluated and either avoided, mitigated, or accepted* as the price to be paid for the major federal action under consideration.

*Natural Resources Defense Council v. Callaway*, 524 F.2d 79, 88-89 (2d Cir. 1975) (emphasis added) (citation omitted).

The Ninth Circuit in 1975 further explained:

while “foreseeing the unforeseeable” is not required, an agency must use its best efforts to find out all that it reasonably can: It must be remembered that the basic thrust of an agency’s responsibilities under NEPA is to predict the environmental effects of proposed action before the action is taken and those effects fully known. Reasonable forecasting and speculation is thus implicit in NEPA, and we must reject any attempt by agencies to shirk their responsibilities under NEPA by labeling any and all discussion of future environmental effects as “crystal ball inquiry.” Nor does characterization of industrial development as a “secondary” impact aid the defendants. As the Council on Environmental Quality only

recently pointed out, consideration of secondary impacts may often be more important than consideration of primary impacts.

Impact statements usually analyze the initial or primary effects of a project, but they very often ignore the secondary or induced effects. A new highway located in a rural area may directly cause increased air pollution as a primary effect. But the highway may also induce residential and industrial growth, which may in turn create substantial pressures on available water supplies, sewage treatment facilities, and so forth. For many projects, these secondary or induced effects may be more significant than the project's primary effects.

....

While the analysis of secondary effects is often more difficult than defining the first-order physical effects, it is also indispensable. If impact statements are to be useful, they must address the major environmental problems likely to be created by a project. Statements that do not address themselves to these major problems are increasingly likely to be viewed as inadequate. As experience is gained in defining and understanding these secondary effects, new methodologies are likely to develop for forecasting them, and the usefulness of impact statements will increase.

*City of Davis v. Coleman*, 521 F.2d 661, 676-77 (9th Cir. 1975) (quoting *Scientists' Institute for Public Information v. A.E.C.*, 481 F.2d 1079, 1092 (D.C. Cir. 1973) and CEQ, Fifth Annual Report of the Council on Environmental Quality, 410-11 (Dec. 1974)).<sup>11</sup>

The Supreme Court in 1976 endorsed the Second and Ninth Circuits' view that the statute requires disclosure of cumulative effects.

[W]hen several proposals for coal-related actions that will have *cumulative or synergistic environmental impact upon a region* are pending concurrently before an agency, their environmental consequence must be considered together. Only through *comprehensive* consideration of pending proposals can the agency evaluate different courses of action.

*Kleppe v. Sierra Club*, 427 U.S. 390, 410 (1976) (emphasis added) (citation omitted). As a result, CEQ's attempt in its 2020 regulations to eliminate an agency's duty to consider cumulative effects is contrary to legislative intent, statutory language, 40 years of case law, and consistent CEQ interpretation. Therefore, the Forest Service must continue to disclose the cumulative effect of federal actions, including those associated with the Eastside Project and others occurring within or near the project areas including the Gold Butterfly,<sup>12</sup> Darby Lumber Lands Phase II,<sup>13</sup> and any others.

## **2. Even Under the 2020 NEPA Regulations, the Forest Service Must Disclose Environmental Impacts that Occur in the Same Time and Place.**

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<sup>11</sup> Available at <https://www.slideshare.net/whitehouse/august-1974-the-fifth-annual-report-of-the-council-on-environmental-quality> (last viewed June 10, 2021)).

<sup>12</sup> <https://www.fs.usda.gov/project/?project=59262>

<sup>13</sup> <https://www.fs.usda.gov/project/?project=49700>

While the 2020 NEPA regulations rescind the definition of cumulative impacts and are silent as to whether the agency should disclose indirect effects, the 2020 regulations require that agencies disclose:

changes to the human environment from the proposed action or alternatives that are reasonably foreseeable and have a reasonably close causal relationship to the proposed action or alternatives, including those effects that occur at the same time and place as the proposed action or alternatives and may include effects that are later in time or farther removed in distance from the proposed action or alternatives.

40 C.F.R. § 1508.1(g) (2020).

### **III. The Forest Service Fails to Comply with NEPA or the Roadless Area Conservation Rule.**

The U.S. Forest Service adopted the Roadless Area Conservation Rule (Roadless Rule) in 2001 “to protect and conserve inventoried roadless areas on National Forest System lands.” Forest Service, Special Areas, Roadless Area Conservation, Final Rule, 66 Fed. Reg. 3244 (Jan. 12, 2001). The rule observed:

Inventoried roadless areas provide clean drinking water and function as biological strongholds for populations of threatened and endangered species. They provide large, relatively undisturbed landscapes that are important to biological diversity and the long-term survival of many at risk species. Inventoried roadless areas provide opportunities for dispersed outdoor recreation, opportunities that diminish as open space and natural settings are developed elsewhere. They also serve as bulwarks against the spread of non-native invasive plant species and provide reference areas for study and research.

66 Fed. Reg. at 3245. The Rule “prohibits road construction, reconstruction, and timber harvest in inventoried roadless areas because they have the greatest likelihood of altering and fragmenting landscapes, resulting in immediate, long-term loss of roadless area values and characteristics.” 66 Fed. Reg. at 3244.

Despite the institutional command that the Forest Service safeguard and conserve these areas, the Eastside Project encompasses several Roadless Areas, including all of the Sleeping Child, Tolan, Swift, and Needle Inventoried Roadless Areas (IRAs), and portions of the Allan, North Big Hole, Stony and Sapphire IRAs totaling 149,334 acres. Within these IRAs, 38,188 acres would be available for wildlife habitat improvement treatments, in addition to 81 more acres for timber stand improvement treatments, which includes several areas within the Sleeping Child IRA that are adjacent to the Burn Road #1392.

#### **A. The Roadless Area Conservation Rule**

The Roadless Area Conservation Rule (Roadless Rule) generally prohibits road construction and timber removal within IRAs. 36 C.F.R. § 294.12(a) (generally prohibiting road construction); 36 C.F.R. § 294.13(a) (generally prohibiting timber removal). The Roadless Rule contains narrowly tailored exceptions to the logging prohibition:

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

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

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

....

(4) Roadless characteristics have been substantially altered in a portion of an inventoried roadless area due to the construction of a classified road and subsequent timber harvest. Both the road construction and subsequent timber harvest must have occurred after the area was designated an inventoried roadless area and prior to January 12, 2001. Timber may be cut, sold, or removed only in the substantially altered portion of the inventoried roadless area.

36 C.F.R. § 294.13(b)(1), (b)(4) (emphasis added).

The Roadless Rule defines “roadless area characteristics” as including:

- (1) High quality or undisturbed soil, water, and air;
- (2) Sources of public drinking water;
- (3) Diversity of plant and animal communities;
- (4) Habitat for threatened, endangered, proposed, candidate, and sensitive species and for those species dependent on large, undisturbed areas of land;
- (5) Primitive, semi-primitive nonmotorized and semi-primitive motorized classes of dispersed recreation;
- (6) Reference landscapes;
- (7) Natural appearing landscapes with high scenic quality;
- (8) Traditional cultural properties and sacred sites; and
- (9) Other locally identified unique characteristics.

36 C.F.R. § 294.11. The Roadless Rule anticipates that the Forest Service will engage in a highly site-specific analysis before it can consider logging in IRAs, given the regulation’s emphasis on “*locally identified* unique characteristics.” *Id.* (emphasis added).

## **B. The Forest Service’s proposed action violates the Roadless Rule.**

The Forest Service fails to explain, let alone analyze, how treating 38,188 for wildlife habitat improvement, in addition to 81 more acres for timber stand improvement falls under the Roadless Rule exemptions. The agency also fails to demonstrate how such actions do not constitute extraordinary circumstances, especially since the proposed action will last an unspecified number of years and certainly affect several roadless

characteristics. Further, the agency fails to define whether or how it will log generally small diameter trees. The Forest Service's vague statement that "[t]imber stands would be improved by increasing crown spacing," and the intent of the project to "[c]reat[e] a patchy mosaic of vegetation" certainly could allow for, and contains no protection from, logging the largest trees, or logging only the largest trees. Scoping at 1. Nor does the Forest Service describe or assert how its logging proposals would maintain or improve one or more of the roadless area characteristics, as the regulations require. Given the undefined duration the agency seeks to authorize treatments, any claim that they would occur infrequently is arbitrary and a violation of the Roadless Rule. Further, we explain above in Section I that the Forest Service relies on erroneous assumptions regarding the need for and effectiveness of the proposed actions, and as such any assertions that the wildlife habitat improvement treatments would "improve threatened, endangered, proposed, or sensitive species habitat" are without merit. 36 C.F.R. § 294.13(b)(1). Certainly timber stand improvement treatments are not appropriate within IRAs. Moreover, any assertions by the Forest Service that the proposed treatments will "reduce the risk of uncharacteristic wildfire effects, within the range of variability that would be expected to occur under natural disturbance regimes of the current climatic period" are equally arbitrary. *Id.* Specifically, the agency fails to provide any supporting analysis or evidence that its proposed treatments will effectively reduce wildfire effects under the current climatic period, especially since the Forest Service continues to rely on historic ranges of variability to determine its proposed actions. Scoping at 1. The agency must acknowledge that persistent drought, higher temperatures and windy conditions are the determining factors for wildfire severity, and no amount of fuel reduction is going to overcome those factors. In other words, the agency cannot thin and burn its way out of the climate crisis. More effective strategies would be to create cooler micro-climates through road removal and reforestation, along with preserving mature, intact forests that serve as a natural climate change solution that we explain in Section IV. D. of these comments.

In addition, the Forest Service cannot claim the Roadless Rule exemption is appropriate because the IRAs are "substantially altered." Unless and until the Forest Service properly identifies and maps the boundaries of lands it deems "substantially altered," and provides a non-arbitrary explanation as to why currently undisturbed, roadless forest should be included within that designation, any attempt to justify treatments within portions of the IRAs under the "substantially altered" exception to the Roadless Rule would violate that law because the agency fails to provide the site-specific justification as required.

### **C. A Special Note on Roads**

We explain above that the CE authority cited by the Forest Service to approve the Eastside Project fails to distinguish between system and unauthorized roads, and simply authorizes up to one mile of low standard road construction. 36 C.F.R. § 220.6(e)(6). We caution the Forest Service from using such ambiguities to utilize roads that may occur within IRAs.

Under the Roadless Rule, "[a] road may not be constructed or reconstructed in inventoried roadless areas of the National Forest System" unless a narrow set of exceptions apply. 36 C.F.R. § 294.12(a). The Rule defines roads, and road "maintenance," which is generally permitted, and "road reconstruction" which is not:

*Road:* A motor vehicle travelway over 50 inches wide, unless designated and managed as a trail. A road may be classified, unclassified, or temporary.

*Road maintenance.* The ongoing upkeep of a road necessary to retain or restore the road to the approved road management objective.

*Road reconstruction.* Activity that results in improvement or realignment of an existing classified road defined as follows:

- (1) *Road improvement.* Activity that results in an increase of an existing road's traffic service level, expansion of its capacity, or a change in its original design function.
- (2) *Road realignment.* Activity that results in a new location of an existing road or portions of an existing road, and treatment of the old roadway.

36 C.F.R. § 294.11.

The above definitions, coupled with the lack of direction in the CE authority may be misinterpreted by the Forest Service to mean that it may “maintain” unclassified roads (redefined as unauthorized roads in the 2005 Travel Management Rule, 70 FR 68287) inside IRAs. Such a misinterpretation would violate the Roadless Rule, especially since the agency fails to provide any analysis or direction regarding roads under the proposed action. To clarify, any action that would open overgrown closed roads, or bring unauthorized roads to even a low-standard would constitute road reconstruction thereby violating the Roadless Rule. This was underscored by a 2020 U.S. District Court decision from Montana holding that the Helena-Lewis and Clark National Forest violated the Roadless Rule by failing to ensure that existing routes used for timber harvest in IRAs would not be effectively “reconstructed” under the guise of “maintenance.” *Helena Hunters & Anglers Ass’n v. Marten*, 470 F. Supp. 3d 1151, 1169-72 (D. Mont. 2020). That decision requires the Forest Service to provide detailed, on-the-ground information concerning road use and “maintenance” to ensure compliance with the Roadless Rule, including but not limited to: which routes will be used, what condition each route is in now, the precise nature of the equipment needed to perform the timber harvest, and what road clearance and width such equipment will require. The Eastside Project scoping letter contains none of this information.

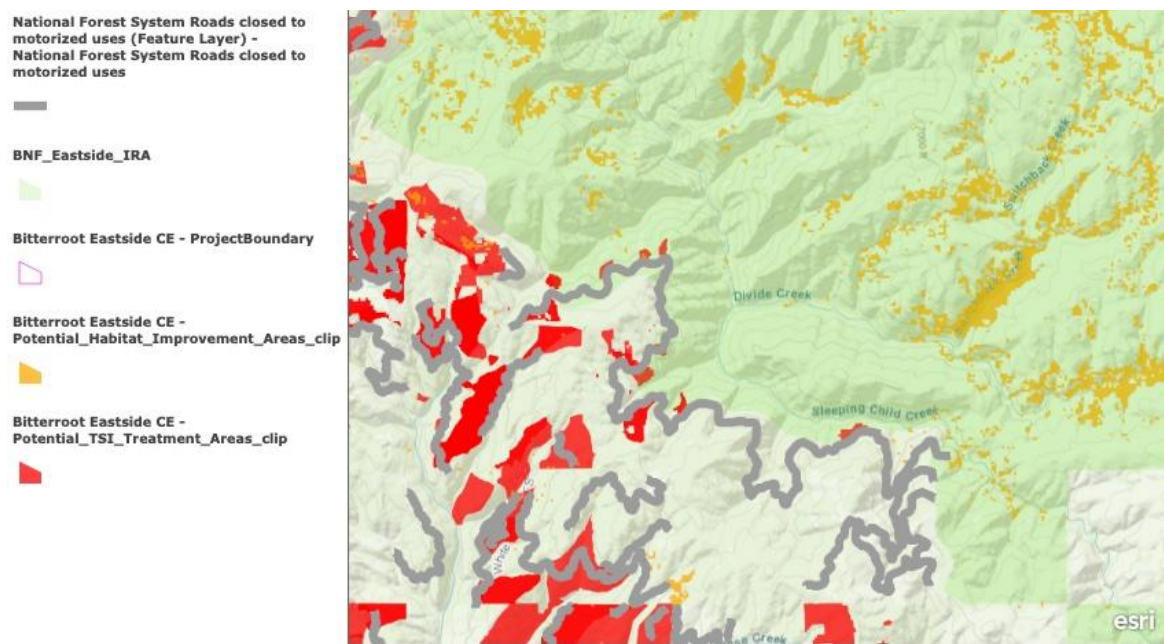
As noted above, FSR #1392 weaves itself along the boundary of the Sleeping Child IRA with several potential treatment areas located alongside and at its end past the roadless boundary. See Figure 10. Opening this road to allow for vegetation treatments would likely constitute road construction since it has both a closed operational and objective maintenance level, (ML 1), and its functional class is as a local road. Such roads are often considered in long-term storage where they have been hydrologically disconnected from the watershed, treated in some fashion to prevent unauthorized use, and allowed to revegetate. In other scenarios, the agency installs a gate, berm or blocks the entrance in some manner, and then abandons it until needed. In either case, opening roads for vehicle use requires treatments that can reasonably be considered road reconstruction, primarily due to the fact that such action will improve road conditions. Again, the Roadless Rule also defines “improvement” to mean an increase of the *existing* road's traffic service level and expansion of route capacity. By opening closed roads, especially roads with an operational ML 1 classification, both the traffic service level and route capacity will increase. Similarly, treating unauthorized roads to provide access for high-clearance vehicles would also constitute road reconstruction that the Roadless Rule defines as applying to only classified roads (redefined as Forest Service System Roads in the 2005 Travel Management Rule, 70 FR 68288). As such, the Roadless Rule precludes the agency from using unauthorized roads, especially untreated or partially treated decommissioned roads, remnants of temporary roads, and those created through illegal use.



Further, the Roadless Rule qualifies road maintenance to mean “ongoing upkeep,” and for the Forest Service to invoke the road maintenance exemption, it will have to demonstrate that the road has been receiving “ongoing” maintenance as set forth in its Road Management Objectives. If the roads proposed for use have missed their scheduled maintenance, the agency cannot consider its road treatments as “ongoing upkeep.”

The fact that the Forest Service identifies so many areas within IRAs for potential treatment, and fails to explain how it will access those areas, it is arbitrary for the agency to assert there would be no extraordinary circumstances, especially given the lack of analysis or disclosure of the proposed action. Increasing motorized disturbance and potentially utilizing roads within and adjacent to IRAs will most certainly cause significant effects on the areas’ roadless character.

Figure 10. Sleeping Child IRA Section with Potential Treatment Areas and Closed Roads.



#### IV. Failure to Consider the Project’s Impacts on Climate Pollution

##### A. The Climate Crisis

The climate crisis is the overriding environmental issue of our time, threatening to drastically modify ecosystems, alter coastlines, worsen extreme weather events, degrade public health, and cause massive human displacement and suffering. Its impacts are already being felt in the United States, and recent studies confirm that time is running out to forestall the catastrophic damage that will result from 1.5 degrees Celsius of warming. *See* IPCC, Summary for Policymakers, Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways (2018), attached as Ex. 11. More recent studies have confirmed that climate change is accelerating, making the need to protect carbon stores even more urgent than it was just a few years ago. *See, e.g.,* H. Fountain, Climate Change Is Accelerating, Bringing World ‘Dangerously Close’ to Irreversible Change, The

New York Times (Dec. 4, 2019), attached as Ex. 12. Climate change is impacting Montana. A 2017 assessment found that temperatures in Montana had risen between 2.0-3.0°F (1.1-1.7°C), and concluded that:

Montana is projected to continue to warm in all geographic locations, seasons, and under all emission scenarios throughout the 21st century. By mid-century, Montana temperatures are projected to increase by approximately 4.5-6.0°F (2.5-3.3°C) depending on the emission scenario. By the end-of-century, Montana temperatures are projected to increase 5.6-9.8°F (3.1-5.4°C) depending on the emission scenario. These state-level changes are larger than the average changes projected globally and nationally.

Whitlock C., Cross W., Maxwell B., Silverman N., Wade A.A. 2017. Executive Summary. Montana Climate Assessment. Bozeman and Missoula MT: Montana State University and University of Montana, Montana Institute on Ecosystems. doi:10.15788/m2ww8w. At pp. 8-9. Available at <http://montanacclimate.org/sites/default/files/thumbnails/image/2017-Montana-Climate-Assessment-Executive-Summary-lr.pdf>, and attached as Ex. 13.

## **B. President Biden Requires Prompt Action to Assess and Reduce Climate Pollution.**

On the day he was inaugurated, President Biden committed to overturning the prior administration's failure to address, and its outright denial of, the climate emergency.

It is, therefore, the policy of my Administration to listen to the science; to improve public health and protect our environment; to ensure access to clean air and water; to limit exposure to dangerous chemicals and pesticides; to hold polluters accountable, including those who disproportionately harm communities of color and low-income communities; *to reduce greenhouse gas emissions; to bolster resilience to the impacts of climate change*; to restore and expand our national treasures and monuments; and to prioritize both environmental justice and the creation of the well-paying union jobs necessary to deliver on these goals. To that end, this order directs *all executive departments and agencies* (agencies) to immediately review and, as appropriate and consistent with applicable law, take action to address the promulgation of Federal regulations and other actions during the last 4 years that conflict with these important national objectives, and *to immediately commence work to confront the climate crisis*.

Executive Order 13,990, 86 Fed. Reg. 7037 (Jan. 20, 2021) at Sec. 1 (emphasis added), attached as Ex. D. Days later, President Biden further committed to taking swift action to address the climate crisis. Per Executive Order 14,008, he has recognized that “[t]he United States and the world face a profound climate crisis. We have a narrow moment to pursue action at home and abroad in order to avoid the most catastrophic impacts of that crisis and to seize the opportunity that tackling climate change presents.” Executive Order 14,008, 86 Fed. Reg. 7619 (Jan. 27, 2021), attached as Ex. 15. Pres. Biden announced that under his administration,

The Federal Government must drive *assessment, disclosure, and mitigation* of climate pollution and climate-related risks in every sector of our economy, marshaling the creativity, courage, and capital necessary to make our Nation resilient in the face of this threat. Together, we

must combat the climate crisis with bold, progressive action that combines the full capacity of the Federal Government with efforts from every corner of our Nation, every level of government, and every sector of our economy.

*Id.* at 7622 (Sec. 201) (emphasis added). Addressing the need for the accurate assessment of climate costs, Pres. Biden announced on day one that “[i]t is *essential* that agencies capture the full costs of greenhouse gas emissions as accurately as possible, including by taking global damages into account.” Executive Order 13,990 (Ex. 14), 86 Fed. Reg. at 7040, Sec. 5(a) (emphasis added). He noted that an effective way to undertake this essential task was to use the social cost of carbon to quantify and disclose the effects of additional climate pollution:

The “social cost of carbon” (SCC), “social cost of nitrous oxide” (SCN), and “social cost of methane” (SCM) are estimates of the monetized damages associated with incremental increases in greenhouse gas emissions. They are intended to include changes in net agricultural productivity, human health, property damage from increased flood risk, and the value of ecosystem services. An accurate social cost is essential for agencies to accurately determine the social benefits of reducing greenhouse gas emissions when conducting cost-benefit analyses of regulatory *and other actions*.

*Id.* (emphasis added). The President also re-established the Interagency Working Group on the Social Cost of Greenhouse Gases, and directed the Secretary of Agriculture to serve on it. *Id.*, Sec. 5(b). The President directed the Working Group to publish interim values for the social cost of carbon by February 19, 2021. *Id.*, Sec. 5(b)(ii)(A). The Working Group that month set that price at \$51/ton at a 3% discount rate. Interagency Working Group on Social Cost of Greenhouse Gases, Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under Executive Order 13990 (Feb. 2021)<sup>14</sup> and attached as Ex. 16. We note that the U.S. Department of Agriculture, the Forest Service’s parent agency, is part of the Interagency Working Group and participated in, and endorsed, the update to the social cost of carbon. *Id.* at cover page, 14.

### C. NEPA Requires the Forest Service to Disclose the Climate Impacts of Proposed Actions.

The Forest Service must analyze the direct, indirect, and cumulative impacts of a proposed action. *Colo. Envtl. Coal. v. Dombeck*, 185 F.3d 1162, 1176 (10th Cir. 1999); *see also* 40 C.F.R. § 1508.25(c) (1978) (when determining the scope of an EIS, agencies “shall consider” direct, indirect, and cumulative impacts). NEPA and NFMA require the Forest Service to use high quality, accurate, scientific information to assess the effects of a proposed action on the environment. *See* 40 C.F.R. § 1500.1(b) (1978); 36 C.F.R. § 219.3.

NEPA requires agencies to undertake meaningful consideration of greenhouse gas emissions (GHGs) and carbon sequestration (carbon storage). *Ctr. for Biological Diversity v. Nat’l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1217 (9th Cir. 2008). As the Ninth Circuit has held, in the context of fuel economy standard rules:

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<sup>14</sup> Available at [https://www.whitehouse.gov/wp-content/uploads/2021/02/TechnicalSupportDocument\\_SocialCostofCarbonMethaneNitrousOxide.pdf](https://www.whitehouse.gov/wp-content/uploads/2021/02/TechnicalSupportDocument_SocialCostofCarbonMethaneNitrousOxide.pdf) (last viewed June 10, 2021)

The impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct. Any given rule setting a CAFE standard might have an “individually minor” effect on the environment, but these rules are “collectively significant actions taking place over a period of time.”

*Id.*, 538 F.3d at 1216 (quoting 40 C.F.R. § 1508.7 (1978)). *See also WildEarth Guardians v. BLM*, 870 F.3d 1222, 1237 (10th Cir. 2017) (failure to disclose climate impacts of various alternatives “defeated NEPA’s purpose”). Courts have held that a “general discussion of the effects of global climate change” does not satisfy NEPA’s hard-look requirement. *High Country Conservation Advocates v. U.S. Forest Serv.*, 52 F. Supp. 3d 1174, 1189-90 (D. Colo. 2014).

Further, courts have ruled that federal agencies must consider indirect GHG emissions resulting from agency policy, regulatory, and fossil fuel leasing decisions. For example, agencies cannot ignore the indirect air quality and climate change impact of decisions that would open access to coal reserves. *See Mid States Coal. For Progress v. Surface Transp. Bd.*, 345 F.3d 520, 532, 550 (8th Cir. 2003); *High Country Conservation Advocates*, 52 F. Supp. 3d at 1197-98; *Montana Environmental Information Center v. U.S. Office of Surface Mining* 274 F. Supp. 3d 1074 (D. Mont. 2017), *amended in part, adhered to in part*, 2017 WL 5047901 (D. Mont. 2017). A NEPA analysis that does not adequately consider the indirect effects of a proposed action, including climate emissions, violates NEPA. *Ctr. for Biological Diversity v. Bernhardt*, 982 F.3d 723, 2020 U.S. App. LEXIS 38033, \*20 (9th Cir. 2020). The disclosure of merely the volume of GHG emissions is insufficient; agencies must also disclose the impacts of those emissions. *Utah Physicians For A Healthy Env’t v. United States BLM*, 2021 U.S. Dist. LEXIS 57756 (D. Utah Mar. 24, 2021).

NEPA requires “reasonable forecasting,” which includes the consideration of “reasonably foreseeable future actions ... even if they are not specific proposals.” *N. Plains Res. Council, Inc. v. Surface Transp. Bd.*, 668 F.3d 1067, 1079 (9th Cir. 2011) (citation omitted). That an agency cannot “accurately” calculate the total emissions expected from full development is not a rational basis for cutting off its analysis. “Because speculation is ... implicit in NEPA,” agencies may not “shirk their responsibilities under NEPA by labeling any and all discussion of future environmental effects as crystal ball inquiry.” *Id.* (citations omitted). The D.C. Circuit has echoed this sentiment, rejecting the argument that it is “impossible to know exactly what quantity of greenhouse gases will be emitted” and concluding that “agencies may sometimes need to make educated assumptions about an uncertain future” in order to comply with NEPA’s reasonable forecasting requirement. *Sierra Club v. Federal Energy Regulatory Commission*, 863 F.3d 1357, 1373-74 (D.C. Cir. 2017).

Nor can the Forest Service allege that it need not quantify the project’s climate impacts by relying on NEPA regulations concerning “incomplete or unavailable information.” Those NEPA provisions require the agency to identify the information as such, to “make clear that such information is lacking,” and nonetheless include the information in the NEPA document if the overall costs of obtaining it are not “exorbitant” and the information is “essential to a reasoned choice among alternatives.” 40 C.F.R. § 1502.22 (1978); *see also* 40 C.F.R. § 1502.21 (2020) (same, except replacing the word “exorbitant” with “unreasonable”).

The 2016 final CEQ *Guidance on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Review* provides useful direction on the issue of federal agency review of greenhouse gas emissions as foreseeable direct and indirect effects of a proposed action. Notice available at 81 Fed. Reg. 51,866 (Aug. 5,

2016); full guidance attached as Ex. 17.<sup>15</sup> The CEQ guidance provides clear direction for agencies to conduct a lifecycle greenhouse gas analysis that quantifies GHG emissions and storage because the modeling and tools to conduct this type of analysis are available:

If the direct and indirect GHG emissions can be quantified based on available information, including reasonable projections and assumptions, agencies should consider and disclose the reasonably foreseeable direct and indirect emissions when analyzing the direct and indirect effects of the proposed action. Agencies should disclose the information and any assumptions used in the analysis and explain any uncertainties. To compare a project's estimated direct and indirect emissions with GHG emissions from the no-action alternative, agencies should draw on existing, timely, objective, and authoritative analyses, such as those by the Energy Information Administration, the Federal Energy Management Program, or Office of Fossil Energy of the Department of Energy. In the absence of such analyses, agencies should use other available information.

*Id.* at 16 (citations omitted). The guidance further specifies that estimating GHG emissions is appropriate and necessary for actions such as federal logging projects.

In addressing biogenic GHG emissions, resource management agencies should include a comparison of estimated net GHG emissions and carbon stock changes that are projected to occur with and without implementation of proposed land or resource management actions. This analysis should take into account the GHG emissions, carbon sequestration potential, and the changes in carbon stocks that are relevant to decision making in light of the proposed actions and timeframes under consideration.

*Id.* at 26 (citations omitted). The guidance shows that CEQ expects that agencies will perform such analysis not only at a programmatic or plan level, but at the level of an individual project (such as an individual prescribed burn) as well.

Biogenic GHG emissions and carbon stocks from some land or resource management activities, such as a prescribed burn of a forest or grassland conducted to limit loss of ecosystem function through wildfires or insect infestations, may result in short-term GHG emissions and loss of stored carbon, while in the longer term a restored, healthy ecosystem may provide long-term carbon sequestration. Therefore, the short- and long-term effects should be described in comparison to the no action alternative in the NEPA review.

*Id.* at 18. Although the Trump administration withdrew the 2016 CEQ guidance, President Biden on January 20, 2021 rescinded that Trump Executive Order, and directed CEQ to “review, revise, and update” its 2016 climate guidance. Executive Order 13,990 (Ex. D), Sec. 7(e), 86 Fed. Reg. at 7042. On February 19, 2021, CEQ effectively reinstated the 2016 GHG guidance:

CEQ will address in a separate notice its review of and any appropriate revisions and updates to the 2016 GHG Guidance. In the interim, agencies should consider all available tools and

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<sup>15</sup> Available at [https://ceq.doe.gov/docs/ceq-regulations-and-guidance/nepa\\_final\\_ghg\\_guidance.pdf](https://ceq.doe.gov/docs/ceq-regulations-and-guidance/nepa_final_ghg_guidance.pdf) (last viewed June 10, 2021).

resources in assessing GHG emissions and climate change effects of their proposed actions, including, as appropriate and relevant, the 2016 GHG Guidance.

Council on Environmental Quality, National Environmental Policy Act, Guidance on Consideration of Greenhouse Gas Emissions, 86 Fed. Reg. 10,252 (Feb. 19, 2021), attached as Ex. 18.<sup>16</sup> Further, whatever the state of federal guidance, the underlying requirement from federal caselaw to consider climate change impacts under NEPA, including indirect and cumulative combustion impacts and loss of sequestration foreseeably resulting from commercial logging decisions, has not changed. *See S. Fork Band Council of W. Shoshone v. United States Dept. of Interior*, 588 F.3d 718, 725 (9th Cir. 2009); *Ctr. for Biological Diversity*, 538 F.3d at 1214-15; *Mid States Coalition for Progress*, 345 F.3d at 550; *WildEarth Guardians v. United States Office of Surface Mining, Reclamation & Enft.*, 104 F. Supp. 3d 1208, 1230 (D. Colo. 2015) (coal combustion was indirect effect of agency's approval of mining plan modifications that "increased the area of federal land on which mining has occurred" and "led to an increase in the amount of federal coal available for combustion."); *Diné Citizens Against Ruining Our Env't v. United States Office of Surface Mining Reclamation & Enft.*, 82 F. Supp. 3d 1201, 1213-1218 (D. Colo. 2015); *High Country Conservation Advocates*, 52 F. Supp. 3d at 1174; *Utah Physicians For A Healthy Env't*, 2021 U.S. Dist. LEXIS 57756.

The Interagency Social Cost of Carbon was developed specifically to provide agencies with a way to quantify and compare those impacts, and courts and agencies have regularly required this method to disclose the climate impacts of federal actions. *High Country Conservation Advocates*, 52 F. Supp. 3d at 1190-93 (finding Forest Service violated NEPA by failing to disclose the climate impacts via the social cost of carbon); *Wildearth Guardians v. Bernhardt*, 2021 U.S. Dist. LEXIS 20792, CV 17-80-BLG-SPW (D. Mont. Feb. 3, 2021) at \*25-\*31 (finding Office of Surface Mining violated NEPA by failing to disclose the climate impacts via the social cost of carbon). *See also* CEQ, 2016 NEPA Climate Guidance (Ex. 17) at 32-33 (noting the appropriateness of monetizing climate impacts).

#### **D. The Forest Service's Failure to Disclose and Quantify the Eastside Project's Climate Damage Violates NEPA.**

The Forest Service proposal to authorize the Eastside Project under a CE authority coupled with the condition-based approach of identifying specific treatments and associated actions at some unspecified time in the future precludes the agency from properly disclosing and quantifying the project's contribution to the ongoing climate crisis. The Forest Service's lack of climate analysis for the project thus violates NEPA's hard look mandate.

Specifically, the Forest Service fails to disclose or acknowledge the legal and regulatory framework that should guide its analysis of climate impacts. This ignores that CEQ effectively reinstated the 2016 GHG guidance in February 2021. CEQ, NEPA Guidance on Consideration of Greenhouse Gas Emissions (Feb. 19, 2021) (Ex. 18). In light of the guidance's reinstatement, the Forest Service must apply CEQ's 2016 NEPA climate guidance (or provide a non-arbitrary basis for declining to do so). As described above, the 2016 CEQ guidance contains specific directions concerning how agencies should analyze climate impacts from site-specific forest management projects (using the example of "a prescribed burn") that the agency ignored.

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<sup>16</sup> Available at <https://www.govinfo.gov/content/pkg/FR-2021-02-19/pdf/2021-03355.pdf> (last viewed May 7, 2021).



Further, the Eastside Project will have direct, indirect, and cumulative impacts on climate change because the vegetation treatments will impact the ecosystem's ability to store carbon. The area's forests are likely currently acting as carbon sinks, meaning they are storing more carbon than they are emitting. Science makes clear that the proposed action will likely worsen climate emissions by removing trees that are currently fixing carbon, turning them into wood products (which results in a significant loss of that carbon fixed in wood), and leaving a landscape with fewer or no trees and (eventually) seedlings that fix far less carbon than mature forests for decades if not centuries. While the Forest Service asserts it will limit tree-cutting to non-commercial thinning, the proposed action would also create "a patchy mosaic of vegetation," suggesting the agency will authorize regeneration harvests or clearcuts to establish such patchiness. Scoping at 1.

Logging old and mature forests in particular worsens climate change by releasing significant amounts of carbon and by preventing such forests from continuing to sequester carbon. As the Forest Service has admitted regarding mature forests in Alaska, such forests "likely store considerably more carbon compared to younger forests in this area (within the individual trees themselves as well as within the organic soil layer found in mature forests)." Forest Service, Tongass Land and Resource Management Plan, Final EIS (2016) at 3-14, excerpts attached as Ex. 19. This is so because when a forest is cut down, the vast majority of the stored carbon in the forest is released over time as CO<sub>2</sub>, thereby converting forests from a sink to a "source" or "emitter." *See, e.g.*, D. DellaSala, The Tongass Rainforest as Alaska's First Line of Climate Change Defense and Importance to the Paris Climate Change Agreements (2016) at 5, attached as Ex. 20. As noted above, here the Forest Service's project description allows for, and contains no protection from, logging large and old trees.

A 2019 report found that protecting national forests in the American Northwest, including in Montana, would be an effective way to reduce the contribution of land management to climate pollution. The study concludes:

If we are to avert our current trajectory toward massive global change, we need to make land stewardship a higher societal priority. Preserving temperate forests in the western United States that have medium to high potential carbon sequestration and low future climate vulnerability could account for approximately 8 yr of regional fossil fuel emissions, or 27–32% of the global mitigation potential previously identified for temperate and boreal forests, while also promoting ecosystem resilience and the maintenance of biodiversity.

P. Buotte *et al.*, *Carbon sequestration and biodiversity co-benefits of preserving forests in the western United States*, Ecological Applications, Article e02039 (Oct. 2019) at 8,<sup>17</sup> and attached as Ex. 21. This study was funded in part by the USDA. The coarse-scale map provided with the study indicates that although many stands in the project area are rated as "low" for preservation to mitigate climate change, some appear to be rated as "medium" or "high" for preservation. *Id.* at 4 (Figure 1). Even those forests ranked as "low" for carbon storage sequester significant amounts of carbon. *Id.* at 5 (Table 1). Moreover, it appears that the areas rated medium and high for climate change mitigation also overlap with potential grizzly bear denning habitat.

Recent studies agree that maintaining forests rather than cutting them down can help reduce the impacts of climate change. "Stakeholders and policy makers need to recognize that the way to maximize carbon storage and sequestration is to grow intact forest ecosystems where possible." Moomaw, *et al.*, Intact Forests in the

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<sup>17</sup> Available at <https://esajournals.onlinelibrary.wiley.com/doi/pdf/10.1002/eap.2039> (last viewed June 10, 2021)

United States: Proforestation Mitigates Climate Change and Serves the Greatest Good, *Frontiers in Forests and Global Change* (June 11, 2019) at 7 (emphasis added), attached as Ex. 22. One report concludes:

*Allowing forests to reach their biological potential for growth and sequestration, maintaining large trees* (Lutz et al 2018), reforesting recently cut lands, and afforestation of suitable areas *will remove additional CO<sub>2</sub> from the atmosphere*. Global vegetation stores of carbon are 50% of their potential including western forests because of harvest activities (Erb et al 2017). Clearly, western forests could do more to address climate change through carbon sequestration *if allowed to grow longer*.

T. Hudiburg *et al.*, Meeting GHG reduction targets requires accounting for all forest sector emissions, *Environ. Res. Lett.* 14 (2019) (emphasis added), attached as Ex. 23.

Further, a June 2020 literature review from leading experts on forest carbon storage reported:

*There is absolutely no evidence that thinning forests increases biomass stored* (Zhou et al. 2013). It takes decades to centuries for carbon to accumulate in forest vegetation and soils (Sun et al. 2004, Hudiburg et al. 2009, Schlesinger 2018), and it takes decades to centuries for dead wood to decompose. We must preserve medium to high biomass (carbon-dense) forest not only because of their carbon potential but also because they have the greatest biodiversity of forest species (Krankina et al. 2014, Buotte et al. 2019, 2020).

B. Law, et al., The Status of Science on Forest Carbon Management to Mitigate Climate Change (June 1, 2020), attached as Ex. 24. Two experts in the field recently concluded:

Recent projections show that to prevent the worst impacts of climate change, governments will have to increase their pledges to reduce carbon emissions by as much as 80%. We see the next 10 to 20 years as a critical window for climate action, and believe that *permanent protection for mature and old forests is the greatest opportunity for near-term climate benefits*.

B. Law & W. Moomaw, Keeping trees in the ground where they are already growing is an effective low-tech way to slow climate change, *The Conversation* (Feb. 23, 2021) (emphasis added), attached as Ex. 25.<sup>18</sup>

Further, to address the climate crisis, agencies cannot rely on the re-growth of cleared forests to make up for the carbon removed when mature forest is logged. One prominent researcher explains: “It takes at least 100 to 350+ years to restore carbon in forests degraded by logging (Law et al. 2018, Hudiburg et al. 2009). If we are to prevent the most serious consequences of climate change, *we need to keep carbon in the forests because we don't have time to regain it once the forest is logged* (IPCC, 2018).” B. Law, *et al.*, The Status of Science on Forest Carbon Management (Ex. 24) (emphasis added).

Although vegetation treatments within the project area will remove trees across over several thousands of acres, the Forest Service declines to quantify the climate impacts. Such omissions must be addressed through proper environmental analysis. At a minimum, the agency must take a hard look at the science and policy we

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<sup>18</sup> Available at <https://theconversation.com/keeping-trees-in-the-ground-where-they-are-already-growing-is-an-effective-low-tech-way-to-slow-climate-change-154618> (last viewed June 10, 2021).



present within these comments, in particular studies unaddressed by the Forest Service (in violation of NEPA) that demonstrate significant volumes – in some cases a majority – of carbon stored in trees are *immediately* lost when trees are logged and milled, and the rest is likely to be returned to the atmosphere sooner than would occur if the trees were left standing, eliminating *any alleged benefits* from storing carbon in wood products.

[H]arvesting carbon will increase the losses from the forest itself and to increase the overall forest sector carbon store, the lifespan of wood products carbon (including manufacturing losses) would have to exceed that of the forest. Under current practices this is unlikely to be the case. A substantial fraction (25%– 65%) of harvested carbon is lost to the atmosphere during manufacturing and construction depending on the product type and manufacturing method. The average lifespan of wood buildings is 80 years in the USA, which is determined as the time at which half the wood is no longer in use and either decomposes, burns or, to a lesser extent, is recycled. However, many forest trees have the potential to live hundreds of years ....

B. Law & M.E. Harmon, Forest sector carbon management, measurement and verification, and discussion of policy related to mitigation and adaptation of forests to climate change. *Carbon Management* (2011) 2(1), attached as Ex. 26.<sup>19</sup> and Additional studies conclude that the extent to which carbon benefits can be realized from leaving forests standing depends on a variety of factors, all of which the Forest Service can or could review, but *none* of which the Forest Service evaluated here:

The climate change mitigation benefit of keeping a forest as a carbon sink or to harvest it depends on several factors, including the inventory and age of standing timber, the growth rate of the forest, the dynamics of the carbon fluxes (including the threat of natural disturbance), the time frame being considered, and the context of carbon displacement factors used when wood products replace non-wood products.

C. Howard *et al.*, Wood product carbon substitution benefits: a critical review of assumptions, *Carbon Balance & Management* (2021) 16:9, at 2, attached as Ex. Q 27.<sup>20</sup>

Second, peer-reviewed articles indicate that there is little substitution benefit of using wood compared to using other products (e.g., concrete for building), and that industry talking points to the contrary vastly overestimate the carbon benefits of using wood. *See* M. Harmon, Have product substitution carbon benefits been overestimated? A sensitivity analysis of key assumptions, *Environmental Research Letters* (2019), attached as Ex. 28.<sup>21</sup> Harmon explains that:

Substitution of wood for more fossil carbon intensive building materials has been projected to result in major climate mitigation benefits often exceeding those of the forests themselves. A reexamination of the fundamental assumptions underlying these projections indicates

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<sup>19</sup> Available at [https://www.researchgate.net/publication/235591616\\_Forest\\_sector\\_carbon\\_management\\_measurement\\_and\\_verification\\_and\\_discussion\\_of\\_policy\\_related\\_to\\_climate\\_change](https://www.researchgate.net/publication/235591616_Forest_sector_carbon_management_measurement_and_verification_and_discussion_of_policy_related_to_climate_change) (last viewed June 10, 2021).

<sup>20</sup> Available at [https://www.researchgate.net/publication/350511044\\_Wood\\_product\\_carbon\\_substitution\\_benefits\\_a\\_critical\\_review\\_of\\_assumptions](https://www.researchgate.net/publication/350511044_Wood_product_carbon_substitution_benefits_a_critical_review_of_assumptions) (last viewed June 10, 2021).

<sup>21</sup> Available at <https://iopscience.iop.org/article/10.1088/1748-9326/ab1e95/pdf> (last viewed June 10, 2021).

long-term mitigation benefits related to product substitution may have been overestimated 2- to 100-fold.

The Forest Service must address these scientific findings..

Third, to address the climate crisis, agencies cannot rely on the re-growth of cleared forests to make up for the carbon removed when mature forest is logged. As one prominent researcher explained: “It takes at least 100 to 350+ years to restore carbon in forests degraded by logging (Law et al. 2018, Hudiburg et al. 2009). If we are to prevent the most serious consequences of climate change, *we need to keep carbon in the forests because we don't have time to regain it once the forest is logged* (IPCC, 2018).” B. Law, *et al.*, The Status of Science on Forest Carbon Management (Ex. 24) (emphasis added). The Forest Service ignores the fact that we must reduce climate pollution (and continue robust carbon storage) *now*, not increase carbon emissions over the next century or more as the project could do.

We caution the Forest Service against foregoing proper climate change analysis simply because it may believe the impacts are extremely small when compared with regional, national or global emissions, or performing such analysis is too difficult. Here we remind the agency that NEPA does not permit agencies to ignore impacts because understanding those impacts may be “difficult.” The law acknowledges that “speculation is ... implicit in NEPA,” and so agencies may not “shirk their responsibilities under NEPA by labeling any and all discussion of future environmental effects as crystal ball inquiry.” *N. Plains Res. Council, Inc.*, 668 F.3d at 1079 (citations omitted).

Methods exist that would allow the agency to quantify climate impacts. For example, a 2018 study concludes that carbon storage impacts can be estimated, accounted for, and factored into a model that calculated the net amount of carbon lost due to forest logging in Oregon over two five-year periods. *See Law et al., Land use strategies* (Ex. 29) at 3664 (“Our LCA [life-cycle assessment] showed that in 2001–2005, Oregon’s net wood product emissions were 32.61 million tCO<sub>2</sub>e [tons of carbon dioxide equivalent in net GHG emissions] (Table S3), and 3.7- fold wildfire emissions in the period that included the record fire year (15) (Fig. 2). In 2011–2015, net wood product emissions were 34.45 million tCO<sub>2</sub>e and almost 10-fold fire emissions, mostly due to lower fire emissions.”). This is precisely the type of analysis the Forest Service should, and could, have undertaken for the Eastside Project.

Similarly, Dr. DellaSala’s 2016 report addressed carbon stores from wood products and concluded that logging Tongass old-growth forest under the 2016 Forest Plan would result in net annual CO<sub>2</sub> emissions totaling between 4.2 million tons and 4.4 million tons, depending on the time horizon chosen. DellaSala (Ex. 23) at 14. The Bureau of Land Management more than a decade ago completed an EIS for its Western Oregon Resource Management Plan in which that agency also predicted the net carbon emissions from its forest and other resource management programs. *See Bureau of Land Management, Western Oregon Proposed RMP Final EIS* (2009) at 165-181, excerpts attached as Ex. 30. Because agencies and academics have quantified and compared the carbon emissions of alternative logging proposals, NEPA requires the Forest Service to do so here.

The Forest Service must admit that there are peer-reviewed scientific approaches to estimating net climate damage caused by logging forests and accordingly undertake a rigorous climate analysis. The CEQ 2016 climate guidance, which CEQ in February urged all agencies to rely on, contains explicit guidance on carbon storage, and notes:

Quantification tools [to evaluate climate emissions or storage] *are widely available, and are already in broad use in the Federal and private sectors*, by state and local governments, and globally. Such quantification tools and methodologies have been developed to assist institutions, organizations, agencies, and companies with different levels of technical sophistication, data availability, and GHG source profiles. When data inputs are reasonably available to support calculations, agencies should conduct GHG analysis and disclose quantitative estimates of GHG emissions in their NEPA reviews. These tools can provide estimates of GHG emissions, including emissions from fossil fuel combustion and *estimates of GHG emissions and carbon sequestration for many of the sources and sinks potentially affected by proposed resource management actions*.

CEQ, 2016 NEPA Climate Guidance (Ex. 17) at 12 (emphasis added). The guidance further specifies that estimating GHG emissions is appropriate and necessary for actions such as individual federal forest projects. *Id.* at 25.

The Forest Service must quantify the climate impacts of tree removal or risk violating NEPA.

## **V. Failure to comply with the Endangered Species Act and NEPA**

Enacted in 1973, the ESA is “the most comprehensive legislation for the preservation of endangered species ever enacted by any nation.” *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 180 (1978). The ESA is meant to provide a means to conserve the ecosystems upon which endangered and threatened species depend and to provide a program to conserve endangered and listed species. 16 U.S.C. § 1531(b). To “conserve” means “to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this chapter are no longer necessary.” *Id.* § 1532(3). Section 7 of the ESA requires each federal agency, in consultation with FWS, to insure that any proposed action is not likely to jeopardize the continued existence of a threatened or endangered species, or result in the destruction or adverse modification of its critical habitat. *Id.* § 1536(a)(2). To facilitate compliance with Section 7, the agency must first inquire with FWS to determine whether any listed or proposed species may be present in the area of the proposed action. *Id.* § 1536(c)(1). When a listed or proposed species may be present in the action area, the agency must prepare a “biological assessment” to determine whether the species or their critical habitat may be affected by the action. *Id.* If the agency determines that the proposed action may affect any listed species or critical habitat, it must engage in formal consultation with FWS. 50 C.F.R. § 402.14. For listed species such as grizzly bear, bull trout and Canada lynx known to occur within the project area, Section 7 of the ESA imposes a duty to conserve those listed species and to act to achieve survival and recovery of the species (*Sierra Club v. Glickman*, 156 F3d 606 (5<sup>th</sup> Cir 1998)). Despite any recent ESA rule changes, the requirement to contribute to recovery is core to the ESA statute and necessary in order to achieve its stated goal to conserve species and the ecosystems upon which they depend.

Formal consultation results in the issuance of a “biological opinion,” in which the FWS concludes whether the proposed action is likely to jeopardize a listed species or result in the destruction or adverse modification of critical habitat. *Id.* § 402.14(h). If FWS concludes in the biological opinion that the proposed action is likely to jeopardize a listed species, FWS may recommend reasonable alternatives to avoid the likelihood of jeopardy so that the agency action may proceed. 16 U.S.C. § 1536(b)(3)(A); 50 C.F.R. § 402.14(h)(3). Agencies are required to “use the best scientific and commercial data available” in assessing impacts to protected species during the consultation process. 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(d). Therefore, we

encourage the Forest Service to be transparent about the consultation process and affirmatively post all consultation documents, including any Forest Service Biological Evaluations or Assessments, any letters seeking concurrence, and any responses or Biological Opinions from the FWS. Yet, the Forest Service makes no claim that it will complete consultation with FWS before the decision is final, and fails to provide any documents to demonstrate compliance with the ESA, presumably with the assumption that the project contains no extraordinary circumstances affecting threatened or endangered species. Such assertions are without merit as our comments demonstrate.

Without these records, we are unable to assess the agency's analysis of impacts to wildlife in light of FWS's expert opinion. Providing this information will allow the public to view these critical documents, and other documents in the project record, without the need to submit a formal Freedom of Information Act request. Without this information being publicly available during the notice and comment period, we are unable to meaningfully comment on the agencies' determinations or analysis. This is especially problematic given the agency's statement that "[t]here will be no treatments within areas of mapped lynx habitat as identified by the latest BNF lynx habitat model, or as verified by on the ground habitat typing."<sup>22</sup> Since the Forest Service has not provided the latest BNF lynx habitat model as part of this project, or demonstrated how that model applies to the proposed action, or how those treatments may affect Canada lynx recovery, the public will never have an opportunity for meaningful engagement regarding this issue should it simply issue a decision memo. We have similar concerns regarding other listed species, in particular bull trout and grizzly bears.

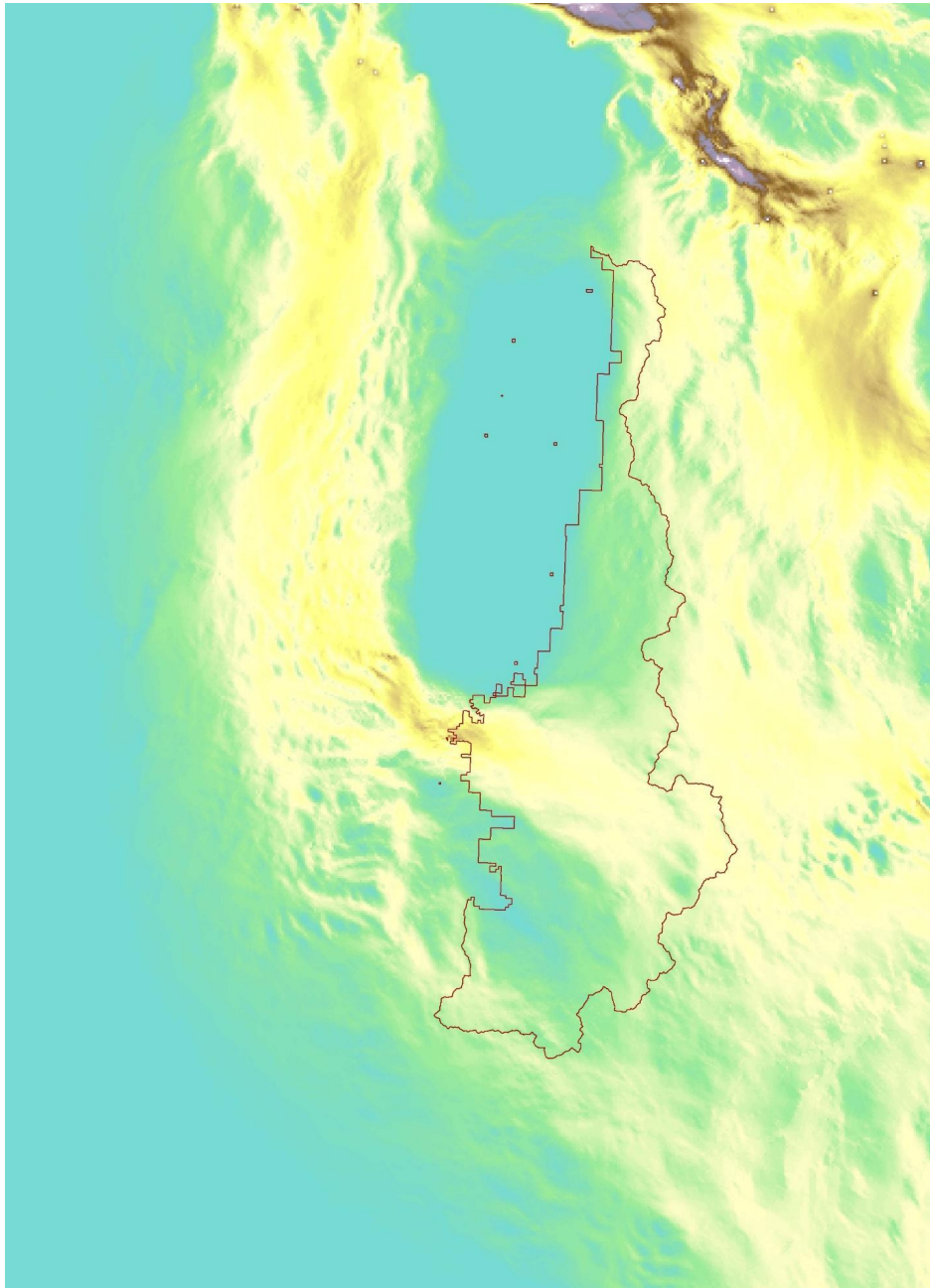
In regards to grizzly bear recovery, recent studies authored by Interagency Grizzly Bear Study Team scientists indicate that the project area could function as a linkage area with the Greater Yellowstone Ecosystem- a key element of grizzly bear recovery across the Northern US Rockies. In addition to the Bader & Seracki, 2021 study that illustrates a significant portion of the planning area provides ideal habitat for demographic grizzly bear connectivity, other studies also show that the majority of the project area could function as a connectivity area, and that one part of the project area is a key linkage area (Figure 11). van Manen et al. and Peck et al. Peck et al made the following comments about the probability of grizzly bear use in these zones: "[t]herefore, with the exception of areas with low numbers of predicted passages (e.g., wide open valleys), we anticipate that sporadic bear sightings and possible interactions with humans may occur almost anywhere along the gradient of our model predictions." Connectivity is an essential element of both survival and recovery of ESA listed species. Specific, appropriate project requirements that are clear and affirmative boundaries are needed to achieve the duty imposed by Section 7 of the ESA. Thus, connectivity for grizzly bears must be explained and supported by the best available science. 36 CFR §219.3 and §219.4. The CE authority cited by the Forest Service to approve the Eastside Project simply does not meet the level of consideration for potential impacts to grizzly bears or measures to protect grizzly connectivity values in violation of the ESA and NEPA requirements for disclosure and analysis of environmental impacts. Further, the studies cited here and elsewhere in these comments demonstrate the high likelihood of significant impacts to grizzly bear recovery from the proposed action, and further the cause-effect relationship rises to the degree that meets the definition of extraordinary circumstances. The BNF needs to address grizzly connectivity in consultation and avoid interfering with recovery by reducing connectivity values of the project area.

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<sup>22</sup> As stated on the project website, but not in the scoping letter: <https://www.fs.usda.gov/project/?project=59985>

Figure 11. Eastside Project Area and van Mannen et al (2017) Grizzly Bear Connectivity Areas.<sup>23</sup>



Indeed, examination of the location of potential treatment areas provided by the Forest Service on the project web page reveals that there is a high likelihood that actual treatments could affect grizzly bear travel through the most important linkage area in the southern BNF and would create a checkerboard of potentially unsuitable habitat to navigate through this key linkage- potentially significantly reducing habitat values in

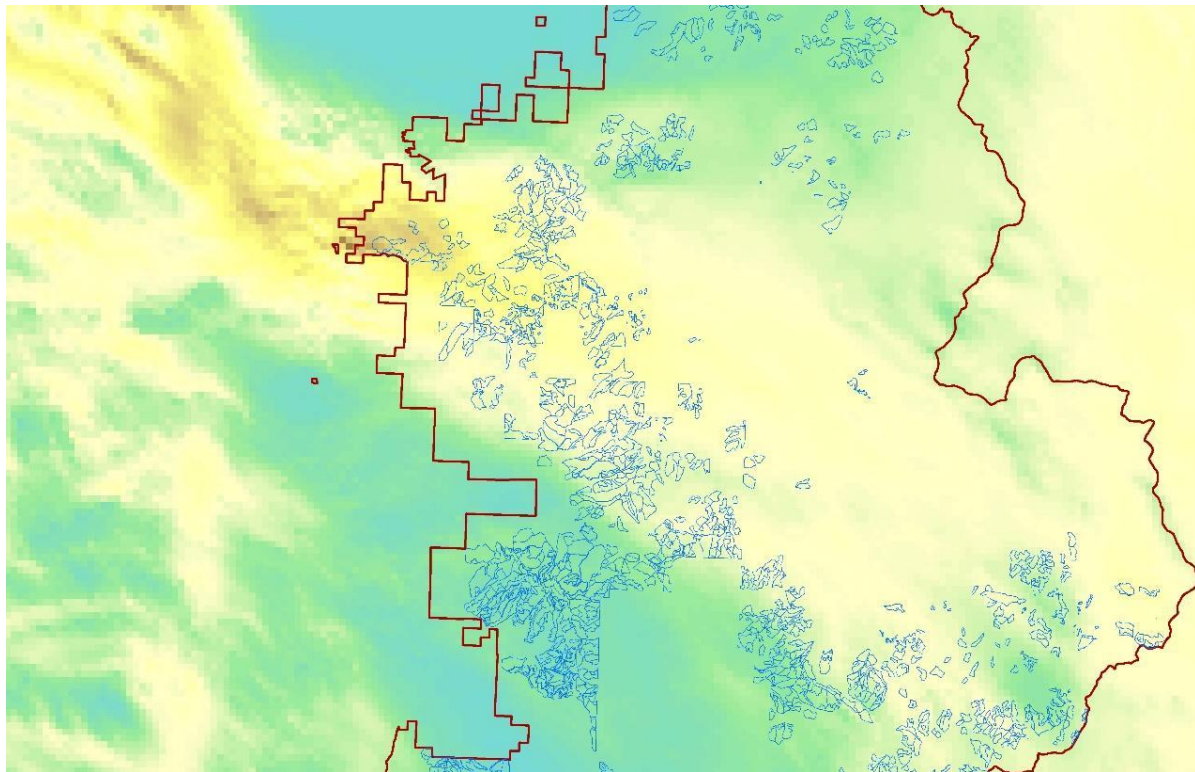
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<sup>23</sup> The Eastside project boundary from the project web page is mapped on grizzly connectivity areas with increasing connectivity probability as the color darkens from yellow to gray as modeled initially by van Mannen et al. and subsequently reported by Peck et al. as well. Data for the grizzly connectivity areas found at: <https://www.sciencebase.gov/catalog/item/59149ee6e4b0e541a03e9a58>



violation of the ESA. Figure 12 illustrates the locations of potential timber stand improvement areas to the connectivity area modeled by van Mannen et al and Peck et al.<sup>24</sup> From East to west across the entire project area along the major band of suitable habitat, many timber stand improvement activities could occur. Habitat improvement (which should be renamed ungulate habitat improvement given the aims of the treatments) even more severely and extensively occurs across the connectivity zones. Yet, the BNF employs a CE for the project despite these critical effects and by the terms of the project letter no mitigating standards will be used to guide the project in the most critical linkage area of the entire BNF according to van Mannen et al 2017. The complete failure to address these issues constitutes a violation of the ESA and NFMA Forest Planning Rules requiring the use of the best science, a violation of the ESA duty to conserve under Section 7, and a violation of the need to address significant or at least potentially significant impacts under NEPA.

Figure 12(a). South Half - Timber Stand Improvement Areas, Eastside Project and Grizzly Connectivity.

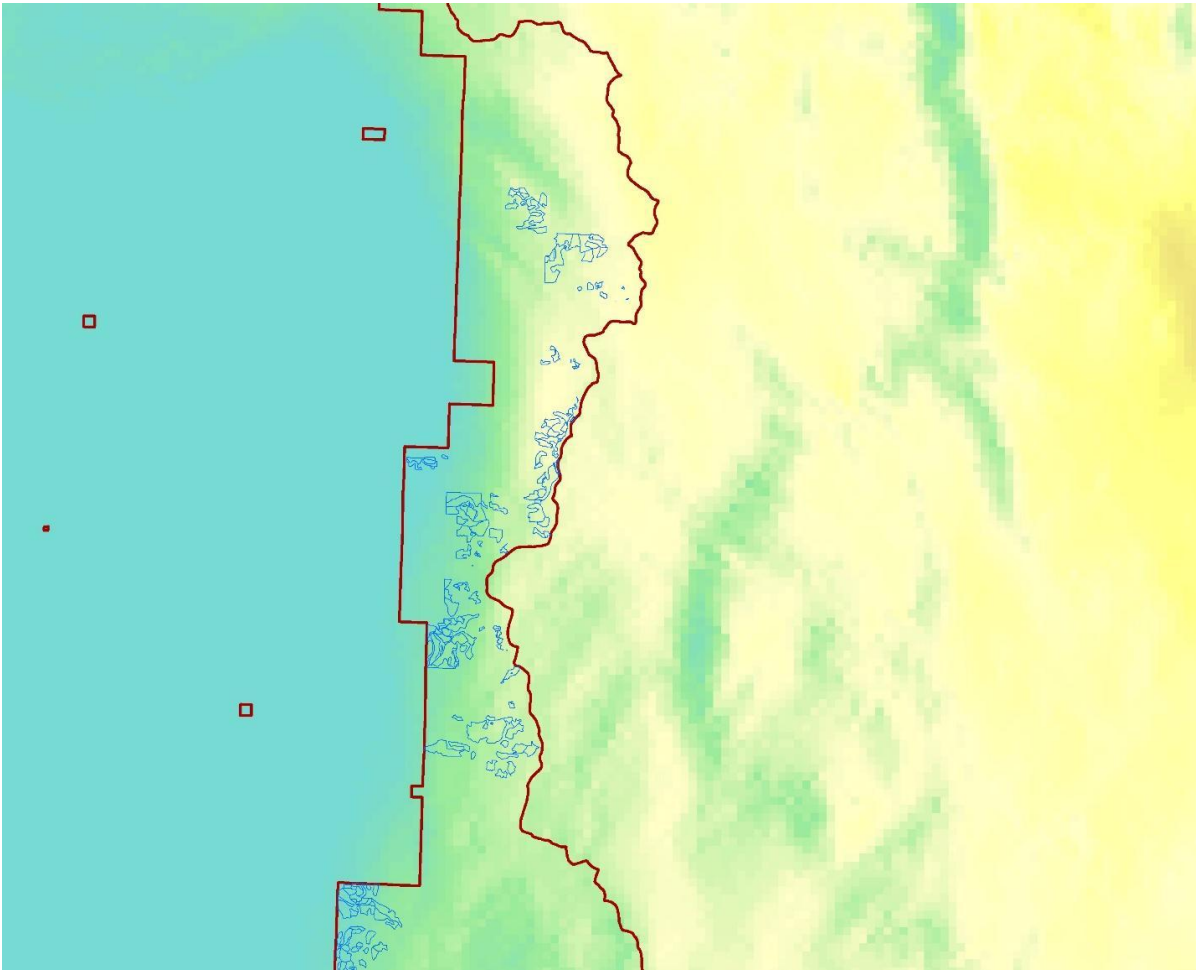


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<sup>24</sup> Timber stand improvement areas are in blue as indicated by geodatabase data provided on the project web page at <https://www.fs.usda.gov/project/?project=59985>

Figure 12(b). North Half - Timber Stand Improvement Areas, Eastside Project and Grizzly Connectivity.



In order to properly analyze grizzly bear connectivity value of the project area and the potential impact on grizzlies colonizing the recovery area that move outside its borders, the following must be included in the analysis and incorporated in project design criteria:

- The effects of new roads, permanent and temporary, on grizzly bear use, movement and habitat security. Reductions of open road density recommended. Avoiding new roads and immediate removal and restoration of temporary roads recommended for grizzly habitat effectiveness and security;
- The effects of new trails or changes in trail use and the potential for increasing human encounters;
- The effects of vegetation management, including commercial, non-commercial and prescribed fire on grizzly bear use, movement and habitat security; and
- Limitations on re-entry (10 years recommended) following management activities.

The Forest Service must produce a biological assessment and initiate formal consultation with the FWS based on the above information, at which point the Forest Service shall not make any irreversible or irretrievable commitment of resources with respect to the agency action which has the effect of foreclosing the

formulation or implementation of any reasonable and prudent alternative measures. 16 U.S.C. § 1536(d); 50 C.F.R. § 402.09. This means that the Forest Service cannot take any actions in connection with the Eastside Project that would change the landscape. The Ninth Circuit has been clear that “timber sales constitute per se irreversible and irretrievable commitments of resources under § 7(d).” *Pac. Rivers Council v. Thomas*, 30 F.3d 1050, 1057 (9th Cir. 1994).<sup>25</sup> Of course, in addition to logging, burning resources would also naturally reflect an irreversible and irretrievable commitment of resources. Thus, until consultation is complete and a legally-defensible biological opinion for this project is issued, the Forest Service cannot take any action on the ground to move forward with this project. Further, the Forest Service should not approve the project until such consultation is complete.

It is also possible that implementation of the Eastside Project will result in prohibited take under Section 9 of the ESA. 16 U.S.C. § 1538(a)(1)(B). “Taking” under the ESA “means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” *Id.* § 1532(19). The “take” prohibited by Section 9 need not be the result of purposeful action. *Nat’l Wildlife Fed. v. Burlington Northern Railroad*, 23 F.3d 1508, 1509 (9th Cir. 1994) (trains accidentally hitting and thereby taking grizzly bears constitutes an ESA violation). Thus, if the project harms grizzly bears in any way, the Forest Service may be liable for take under the ESA.

Ultimately, the Forest Service must prepare an Environmental Impact Statement fully analyzing and avoiding impacts of the project on grizzly connectivity.

## **VI. The Project Does Not Comply with the Forest Plan’s Mandate to Manage Federally Listed Species for Recovery.**

The Bitterroot National Forest Plan (FP) was created in 1987. At the time the FP claimed there was no evidence of endangered species on the forest, “[n]o formal recovery plan has been established for threatened and endangered species on the Bitterroot Forest. Specific population objectives will be established when sufficient biological information is available to do so.” FP II-21. The FP goes on to state that Forest-wide standards are in place for the “protection of threatened and endangered species.” FP II-17. In two recent biological assessments by BNF biologist David Lockman stated that Elk Habitat Effectiveness (EHE) standards provided protections for grizzly bears and Canada lynx which are sensitive to roads. Darby Lumber Lands Biological Assessment and Gold Butterfly Wildlife Specialist Report, Ex. 32. Yet, those assertions lack the necessary supporting analysis or a Biological Opinion from the FWS. Though there are no formal recovery plans, it is clear that forest wide management standards like “minimum standards for EHE”, and “minimum standards for old growth”, as well as “specific old growth standards” (FP II-17) serve as unofficial surrogates to protect threatened and endangered species like grizzly bears, lynx and wolverine (status under litigation). Currently a large percentage of third order drainages across the forest do not comply with EHE standards and the EHE standards have been amended in the majority of recent projects on the forest, six of those in the Eastside project area. Table 4. Specific old growth criteria detailed in the FP have been ignored for the past 26 years as stated earlier in this document. Lynx, grizzly bears and wolverine are dependent upon old growth forests for their survival. Standards for the protection of endangered and threatened species have not been adhered to in the project area and with little site-specific information and no discussion of old

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<sup>25</sup> See also *Lane County Audubon Soc. v. Jamison*, 958 F.2d 290, 295 (9th Cir. 1992) (“The ESA prohibits the ‘irreversible or irretrievable commitment of resources’ during the consultation period. The [timber] sales are such commitments.”).



growth or EHE, it is clear that the Eastside project does not follow the Forest Plan goal to “maintain habitat for the possible recovery of threatened and endangered species” (FP at II-3).

Table 4. Bitterroot National Forest Projects & Project Specific EHE Forest Plan Amendments

Project	Project Boundary (acres)	Site-Specific Amendments	District	Date
Darby Lumber Lands Watershed Improvement Travel Management Project	28,758	EHE	Darby	2015
Darby Lumber Lands Phase 2	27,453	EHE Thermal Cover	Darby	2018
Gold Butterfly	55,147	EHE Thermal Cover	Stevensville	2018
Hackey Claremont Fuels Reduction	3131	EHE CWD	Stevensville	2008
Larry Bass Project	1200	Thermal Cover CWD	Stevensville	2012
Lower West Fork Project	38,400	EHE CWD Thermal Cover	West Fork	2010
Meadow Vapor	11,090	EHE CWD Thermal Cover	Sula	2017
Middle East Fork Hazardous Fuels Project	25,800	CWD Thermal Cover Snag Retention Unsuitable Lands	Sula	2006
Three Saddle Vegetation Management	6300	EHE CWD	Stevensville	2013
Trapper Bunkhouse Land Stewardship Project	23,140	EHE CWD Thermal Cover	Darby	2008
Westside Vegetation Treatment	5700	EHE CWD Visual Quality	Darby	2018
Burned Area Recovery Project	?????	Snag Retention EHE in Laird Creek Thermal Cover in Skalkaho Rye Geographic Area CWD	Darby Sula West Fork	2001
Slate/Hughes Watershed Restoration and Travel Management	?????	EHE	West Fork	2002

The FP is outdated and in need of revision. The most recent discussion states forest planning will begin in 2023. This project will span beyond the forest planning process and should be put on hold until either a BNF programmatic grizzly bear amendment is created and implemented or the forest plan revision has been completed.

### General Compliance with Bitterroot National Forest Plan

According to the Forest Plan, “Elk population status will be used as an indicator of commonly hunted ungulate species and the status of their habitat.” (FP at II-17) The Eastside scoping documents do not analyze or mention elk population status which are well and above Fish Wildlife and Parks (FWP) objectives throughout the project area. It is clear the elk population has not been used to determine the need for habitat improvement as specified in the FP, as such the agency’s stated need to improve elk habitat is suspect at best. The Forest Plan also states, “(t)he habitat need of sensitive species, as listed by the Regional Forester, will be considered in all project planning.” (FP at II-21) It cannot be discerned from scoping whether sensitive species were considered. There is no analysis that shows the reopening of roads and mechanical procedures used to thin and burn will follow management goals to “(p)rovide habitat to support viable populations of native and desirable non-native wildlife and fish.” (FP at II-3). Endangered bull trout are present in the area as well as sensitive cutthroat trout.

The FP elk standards include hiding cover. Management area 2 standards specify that, “[s]ome of the best winter range cover areas are the forested north slopes which support cool/moist habitat types.” (FP at III-9).

Though scoping speaks of treating warm dry forest areas, it is difficult to discern from the low resolution maps whether these north slopes will be maintained for hiding cover. Hiding cover, thermal cover, and coarse woody debris standards are not mentioned in scoping. The failure to provide more specific information that demonstrates compliance with these standards is both a violation of NEPA and NFMA.

The Forest Service must clearly commit to following the 1987 forest plan criteria for old growth in this project as you modify the forest structure. Scoping at 1. The definition of old growth in the FP is 15 trees greater than 20 dbh (6 inches in lodgepole), 75% of site potential canopy closure, multistoried or uneven age, 1.5 snags/acre greater than 6 dbh, .5 snags 20dbh/acre, 25 tons per acre of down material greater than 6dbh.

Insufficient scoping information makes it unclear what, if any old growth trees/stands of any species will be impacted. In order to comply with the forest plan, current old growth status should be mapped using stand exams and quantitative data and overlaid with proposed action areas in high resolution and in a form that the public can access.

The impact of removing or restructuring old growth stands of any tree species on nesting sites and home range habitat for Bald Eagle, Boreal Owl, Flammulated Owl, Great Grey Owl and Northern Goshawk must be included in the project analysis. What is the potential impact on other wildlife species associated with old growth forests such as Northern Fisher, Pine Martin, Brown Creeper, Snowshoe Hare, and Moose?

Forest Plan standard 10 under wildlife and fish states, “[b]eaver **will** be introduced to suitable riparian habitat” (emphasis added, FP at II-20). We are not aware that any beaver introduction plan has been implemented. A map of suitable riparian habitat for beavers should be created as part of any BNF project, especially one that proposes to improve habitat. Given the number of Eastside streams listed as impaired due to sediment, the introduction of beaver should be a priority for habitat improvement. The cost of beaver introduction compared to the value gained makes it very efficient.

## Conclusion

We appreciate the Forest Service’s time and attention considering these substantive comments and urge the agency to forego the proposed use of its CE authority for the Eastside Project, and abandon its condition-based approach in favor of project analysis that can appropriately comply with NEPA.

Cordially,

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