November 13, 2020

Objection Reviewing Officer
USDA Forest Service, Northern Region
26 Fort Missoula Road
Missoula, MT 59804
Email: appeals-northern-regional-office@usda.gov

Re: OBJECTIONS Pursuant to 36 C.F.R. § 218.8 to Black Ram Project, Three Rivers Ranger District, Kootenai National Forest

Dear Reviewing Office:

The Center for Biological Diversity ("the Center") and WildEarth Guardians ("Guardians"), collectively "Objectors," hereby submit these objections to the Kootenai National Forest's Draft Decision Notice, Finding of No Significant Impact (FONSI) and final environmental assessment (Final EA) for the Black Ram Project.

Project Objected To

Pursuant to 36 C.F.R. § 218.8(d)(4), I object to the following project:

Project: Black Ram Project, Three River Ranger District, Lincoln County, Montana

Responsible Official and Forest/Ranger District: Kirsten Kaiser, District Ranger, Three Rivers Ranger District, Kootenai National Forest

Timeliness

These objections are timely filed. Notice of the Draft Decision Notice and FONSI was published in the Missoulian (the newspaper of record) on September 29, 2020. The deadline to submit objections is thus November 13, 2020.

Lead Objector

As required by 36 C.F.R. § 218.8(d)(3), the Objectors designate the "Lead Objector" as follows:

Edward B. (Ted) Zukoski, Senior Attorney
Center for Biological Diversity
1536 Wynkoop Street, Suite 421
Denver, CO 80202
(303) 641-3149
tzukoski@biologicaldiversity.org

Interests and Participation of the Objectors

The Center for Biological Diversity is a non-profit environmental organization with more than 81,000 members, and 1.7 million members and online activists nationwide who value wilderness, biodiversity, old growth forests, and the threatened and endangered species which occur on America's spectacular public lands and waters. Center members and supporters use and enjoy the Kootenai National Forest, and the lands of the Black Ram Project area for recreation, photography, nature study, and spiritual renewal.

The Center for Biological Diversity believes that the welfare of human beings is deeply linked to nature — to the existence in our world of a vast diversity of wild animals and plants. Because diversity has intrinsic value, and because its loss impoverishes society, we work to secure a future for all species, great and small, hovering on the brink of extinction. We do so through science, law and creative media, with a focus on protecting the lands, forests, waters and climate that species need to survive. The Center has and continues to actively advocate for increased protections for species and their habitats in the Rocky Mountain West. The Center submitted comments on the Black Ram Project on August 8, 2019, and submitted a supplemental comment letter on October 23, 2019.

WildEarth Guardians is a nonprofit conservation organization with offices in Montana and five other states. Guardians has more than 188,000 members and supporters across the United States and the world. Guardians' mission is to protect and restore wildlife, wild places, wild rivers, and the health of the American West. WildEarth Guardians has organizational interests in the proper and lawful management of the forest road system and motorized trail system and the associated impacts on the forest's wildlife and wild places. Guardians also has an organizational interest in ensuring the Forest Service complies with all environmental laws. Guardians submitted comments on the Black Ram Project on August 7, 2019.

Both the Center and Guardians filed objections on January 24, 2020 to the Kootenai National Forest's initial draft decision on Black Ram of December 20, 2019. On February 18, 2020, the Forest Service cancelled the objection period on the December 20 draft decision.

The Black Ram Project

The Final EA states that the project's purpose and need is to "manage the forest stands in the Project Area to maintain or improve their resilience to disturbances such as drought, insect and diseases outbreaks, and wildfires."[1]

[1] Forest Service, Black Ram Environmental Assessment (Dec. 2019) at 1 (hereafter "Final EA").

The EA further explains that the purpose and need is to "help move the landscape toward the desired condition" by:

- Promot[ing] resilient vegetation conditions by managing for landscape-level vegetation patterns, structure, patch size, fuel loading, and species composition ….
- Maintain[ing] or improv[ing] watershed conditions in order to provide water quantity, water quality, stream channel conditions, and native aquatic species habitat that support ecological functions and beneficial uses ….
- Improv[ing] big game winter range conditions and promote forage opportunities ….
- Maintain[ing] and improv[ing] the recreation opportunities in the Project Area….
- Reduc[ing] the potential for high intensity wildfire while promoting desirable fire behavior characteristics and fuel conditions in the Wildland Urban Interface and other areas with values at risk… [and]
- Provid[ing] forest products that contribute to the sustainable supply of timber products from National Forest System Lands.[2]

OBJECTIONS

I. THE BLACK RAM PROJECT IMPERILS THREATENED GRIZZLY BEARS.

A. The Forest Service Fails to Take a Hard Look at Baseline Conditions for Grizzlies.[3]

As an initial matter, as noted in the Center's August 2019 comments, the Center demonstrates that the EA failed to provide support for its estimate of 55-60 grizzly bears in the Cabinet-Yaak

[2] Final EA at 1-2.

[3] This action is governed by the Council on Environmental Quality's 1978 regulations, as amended and as in force in 2019, and so all references herein are to those rules. Although CEQ issued a final rulemaking in July 2020 fundamentally rewriting those regulations, the new rules apply only "to any NEPA process begun after September 14, 2020," or where the agency has chosen to "apply the regulations in this subchapter to ongoing activities." 40 C.F.R. § 1506.13 (2020). The Black Ram NEPA process was begun before September 2020; the final EA upon which the Draft Decision Notice relies was issued in December 2019, pre-dating the 2020 regulations. The September 2020 Draft Decision Notice specifically relies on the 1978 CEQ regulations, citing regulatory provisions rescinded by the 2020 regulations. *See* Forest Service, Black Ram Draft Decision Notice (Sep. 2020) at 13, 14 (citing two section numbers, 40 C.F.R. §§ 1508.13 and 1508.27, neither of which exists in the 2020 regulations) (hereafter "2020 Draft Decision Notice"). Further, the Forest Service nowhere indicates that it has chosen to apply the 2020 rules to this project.

Ecosystem, and 2017 DNA sampling had only identified 44 individual grizzlies.[4] The Draft EA cited "W.F. Kasworm et al., 2018" to support its information on the population estimate and population trends for the Cabinet-Yaak Ecosystem bears, but the only 2018 Kasworm publication in the literature cited was the Selkirk Mountains grizzly bear recovery area report, which does not appear to contain this important information.[5]

In response to comments, the Forest Service leads by saying that grizzly bear population estimate and trend "are not necessary to include in the EA."[6] The Forest Service's failure to address baseline conditions, population trends, and the project's impacts on ESA-listed species such as grizzly bears, violates NEPA's requirement that the agency take a hard look at the project's environmental effects.[7] Further, the project record contains ample evidence of the precarious nature of grizzly populations in the Cabinet-Yaak ecosystem, something neither the EA nor the biological assessment accounts for or responds to.[8]

Second, the Forest Service admits that the science it relied upon was omitted in the literature cited section of the Draft EA and is now included in the literature cited section of the Final EA and the project file.[9] Remarkably, however, the only 2018 Kasworm publication in the literature cited list in the Final EA is still the Selkirk Mountains grizzly bear recovery area report.[10] The literature that the Forest Service has allegedly relied upon for information regarding grizzly bear population and trend in the Cabinet-Yaak Ecosystem, therefore, is still absent from the Final EA

---

[4] Objectors challenged the Forest Service's analysis of project impacts to grizzly bears in their respective comment letters. *See* letter of M. Fox, WildEarth Guardians to C. Benson, Kootenai National Forest (Aug. 7, 2019) at 11-12; letter of E. Zukoski *et al*., Center for Biological Diversity to L. Osborn, Kootenai National Forest (Aug. 8, 2019) at 2-9 (both in project file).

[5] *See* Forest Service, Black Ram Project, Draft Environmental Assessment (July 2019) at Appendix page 75 ("Draft EA Appx.").

[6] Final EA Appx. at 116 (Wildlife – grizzly bear intro).

[7] *See Marsh v. Or. Nat. Res. Council*, 290 U.S. 360, 374 (1989) ("NEPA ... require[s] that agencies take a 'hard look' at the environmental effects of their planned action."); *Half Moon Bay Fishermans' Marketing Ass'n v. Carlucci*, 857 F.2d 505, 510 (9th Cir. 1988) (NEPA requires consideration of the environmental baseline); *Blue Mts. Biodiversity Proj. v. Blackwood*, 161 F.3d 1208, 1213 (9th Cir. 1998) ("General 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.") (quoting *Neighbors of Cuddy Mountain v. U.S. Forest Serv.*, 137 F.3d 1372, 1380 (9th Cir. 1998)) (internal quotations omitted); *Or. Natural Desert Ass'n v. Rose*, 921 F.3d 1185, 1190 (9th Cir. 2019) (Agencies must establish adequate baseline conditions; otherwise, "there is simply no way to determine what effect the project will have on the environment and, consequently, no way to comply with NEPA." (quoting *Great Basin Res. Watch v. BLM*, 844 F.3d 1095, 1101 (9th Cir. 2016))).

[8] *See, e.g.*, Dr. D. Mattson, Grizzly Bear Recovery Project, Effects of the Proposed Black Ram Project on Yaak Grizzly Bears (Aug. 6, 2019) at 1-11 (in project file).

[9] Final EA Appx. at 120 (Comment 209).

[10] Final EA Appx. at 141.

and its references, and the Center could not locate any such report in the project file that the Forest Service provided in response to a FOIA request.

Similarly, as noted in our comments, the Center found that the best available science based upon recent sampling identified 20 females and 24 males in the Cabinet-Yaak Recovery Zone, with 23 bears in the Cabinet and 21 bears in the Yaak portion of the ecosystem.[11] This means the Yaak portion of the ecosystem may have as few as 21 bears, with perhaps approximately half of those bears being female bears. Thus, any impact or disturbance of bears in the Yaak ecosystem could have catastrophic consequences for attempts to maintain this tiny population.

The biological assessment (BA) prepared by the Forest Service more than a year after the Final EA was published is hobbled with similar failings, and does not and cannot fix the EA's failings to address baseline grizzly population data.[12] The BA, like the EA, lacks adequate support for the assertion that the Cabinet-Yaak grizzly bear population has reached 55-60 individuals. This population estimate does appear in the Cabinet-Yaak Grizzly Bear Recovery Area 2018 Research and Monitoring Progress Report cited in the BA (hereafter, "Kasworm 2019"), but the estimate is not rationally supported by the underlying data.

Kasworm 2019 explains that the 55-60-bear estimate was generated by applying an estimated annual growth rate of 1.2% to the midpoint of the population range estimate reported in Kendall et al. 2016.[13] That growth-rate estimate is unsupported, meaning the resulting population estimate is flawed and likely inflated. Among other flaws, in calculating the growth-rate estimate Kasworm excluded survival and mortality data for the segments of the Cabinet-Yaak grizzly bear population that suffer the highest mortality rates—namely, adult and sub-adult males, management-trapped bears, and augmentation bears—which skews the results by over-estimating grizzly survival.[14] Kasworm's approach is akin to saying that the resident human population of Montana is growing by 1.2% annually based on an analysis that excludes mortality data for the elderly and chronically ill. Because population size is one of the most powerful predictors of the likelihood of population persistence, errors in the Forest Service's assessment of population size represent a substantial deficiency in both the EA and BA.

---

[11] *See* "Selkirk/Cabinet-Yaak (SCY) Subcommittee of the Interagency Grizzly Bear Committee (IGBC)," May 9, 2019 meeting notes, attached as Ex. 1, and available at http://igbconline.org/wp-content/uploads/2019/06/20190509_SCYMeetingMinutes.pdf (last viewed Nov. 13, 2020).

[12] S. Hill & C. Rossel, Black Ram Project, Biological Assessment for Threatened and Endangered Aquatic and Terrestrial Wildlife Species (Sep. 16, 2020) (hereafter "Black Ram BA") (in project file). Objectors need not have raised issues related to the Black Ram BA's deficiencies in prior comments because BA was not completed and published until more than a year after the Black Ram EA comment period closed on August 8, 2019. 36 C.F.R. § 218.8(c).

[13] Kasworm *et al*., Cabinet-Yaak Grizzly Bear Recovery Area 2018 Research and Monitoring Progress Report (2019) at 38, attached as Ex. 2.

[14] *See* Kasworm 2019 34-35 (summarizing survival rates for various population segments); *id.* at 10, 37 (describing basis for calculating growth rate).

More broadly, the Forest Service failed to take a hard look at the precarious baseline status of the Cabinet-Yaak grizzly bear population, painting a rosy picture of the population's current condition that the data do not support. In the BA, for example, the Forest Service asserts that "[i]n the Cabinet-Yaak Recovery Zone, projects and motorized access management have been implemented, education instituted, food and attractant storage mandated, and bear numbers have been increasing and with increasing confidence."[15] Neither the EA nor BA acknowledges that—even if one credits the flawed 55-60-bear population estimate from Kasworm 2019—the Cabinet-Yaak's grizzly population remains far below the FWS recovery standard of at least 100 individuals. As the U.S. Fish & Wildlife Service ("FWS") has acknowledged, "populations with fewer than 50 to 100 adults are at high risk of extinction."[16] "Proctor et al. (2004) indicated the likelihood of extinction for a grizzly bear population of 50 individuals with vital rates similar to the CYE population was 85 percent."[17]

The Forest Service also failed to acknowledge—and its unelaborated citation to the 55-60-bear population estimate obscures—the fact that the Yaak bears threatened directly by the Black Ram Project are isolated from grizzly bears in the Cabinets, meaning that Yaak grizzlies function as a subpopulation standing at roughly half the size of the overall Cabinet-Yaak population.[18] According to Kendall, *et al*. 2016, just 18-22 grizzlies persist in the Yaak,[19] which places that isolated group at serious risk of extirpation even ignoring the impacts of the Black Ram Project,

---

[15] Black Ram BA at 34. The BA also inexplicably invokes improvements in the Northern Continental Diveide Ecosystem grizzly population and asserts that, "[o]perating under the same IGBC guidelines and with the same activities occurring, it is evident in the Cabinet-Yaak Recovery Zone and on the Kootenai National Forest that Forest Service activities under this framework have been successful at supporting recovery." *Id*. This is a leap of logic utterly unsupported by data, and as such is arbitrary and capricious.

[16] U.S. Fish & Wildlife Serv., Biological Opinion on the Effects to Grizzly Bears, Bull Trout, and Bull Trout Critical Habitat from the Implementation of Proposed Actions Associated with Plan of Operation for the Revett RC Resources Inc. Rock Creek Copper/Silver Mine, at A-16 (2006) ("2006 Rock Creek Mine BiOp") (emphasis added) (citation omitted), attached as Ex. 3; *see also* Proctor, et al., Population Fragmentation and Inter-Ecosystem Movements of Grizzly Bears in Western Canada and the Northern United States, at 31, Wildlife Monographs 180:1–46 (2012) ("[P]opulations fewer than 50-100 adults are at higher risk of extirpation") (citations omitted), attached as Ex. 4.

[17] 2006 Rock Creek Mine BiOp (Ex. 3) at A-14.

[18] *See* Katherine C. Kendall, et al., Density, Distribution, and Genetic Structure of Grizzly Bears in the Cabinet-Yaak Ecosystem, at 325, Journal of Wildlife Mgmt. 80(2) (2016) ("Our results indicated the grizzly bears in the Cabinet and Yaak regions were separate populations split along the Hwy 2 corridor" and "suggest[ed] complete spatial and reproductive isolation between these 2 populations, at least in recent generations"), attached as Ex. 5.

[19] *Id.* at 314. Note that Kasworm 2019 (Ex. 2) at 2 states 29 bears were detected in the Yaak in 2017 "[u]sing all methods of detection (capture, collared individuals, rub tree DNA, corral DNA, opportune DNA sampling, photos, credible observations").

which the BA concludes is "likely to adversely affect" grizzlies.[20] The Forest Service's failure to consider the Yaak population's functional isolation, and the agency's sole reliance on an inflated population estimate that combines bear numbers in the Yaak and Cabinets, is irrational, arbitrary and capricious, and violates both NEPA and the ESA.[21]

The Forest Service also failed to rationally examine the relative lack of secure habitat in the Cabinet-Yaak Ecosystem relative to other recovery zones with substantially larger and more stable grizzly bear populations (such as the Northern Continental Divide Ecosystem), as well as the fact that relationship between timber harvest activities generally, and the presence of roads (regardless of gated or stored status)) leads to greater risks of grizzly bear mortalities.[22]

Further, the Forest Service has failed to justify this project with reference to its stated goal of improving grizzly bear habitat/food availability, and failed to explore alternatives that the best available science indicates would better serve that goal without the negative impacts of large-scale logging. The Final EA states that: "A primary purpose and need of the project is to move vegetative characteristics towards desired conditions which in turn improve habitat conditions favorable to the grizzly bear in treated areas."[23] However, the Forest Service addressed the fact that providing more secure grizzly habitat by removing and effectively blocking roads would be more effective than attempting to "create" more food sources by bulldozing roads and scraping clearcuts.

---

[20] Black Ram BA at 1, 40.

[21] Although Kendall, et al. 2016 cited some evidence of grizzly bear movement from the southern Purcell Mountains into the Yaak, that study "did not detect natural immigration by females to the CYE populations. Although movement and reproduction by males can increase genetic variability and fitness, movement by female bears is most important for demographic rescue of populations." Kendall, et al. 2016 (Ex. 5) at 328-29.

[22] *See* Mattson, Grizzly Bear Recovery Project, Effects of the Proposed Black Ram Project (Aug. 6, 2019) at 12-13 (in project file). Dr. Mattson explains: "Despite these telling differences [between the Cabinet-Yaak Ecosystem and the Northern Continental Divide Ecosystem] in fates and trajectories of grizzly bear populations, the road density and habitat security standards applied by the Kootenai National Forest are more lax, not less, than those applied on the Flathead National Forest. On the Kootenai, areas allowed with >1 mile/mile2 of roads are 1.7-times greater; areas with >2 miles/mile2 of roads are 1.4-times greater; and extents of secure habitat nearly 20% less compared to what is ostensibly allowed on the Flathead NF. These disparities are perverse and not able to be explained on the basis of differences in the extent of movements by grizzly bears. If anything, bears range more widely in the Cabinet-Yaak Ecosystem compared to the NCDE (Kasworm et al. 2018)." *Id*. at 13. The Forest Service fails to respond to this analysis, or to explain the arbitrary, lower protections for grizzlies in the Cabinet-Yaak Ecosystem, in violation of NEPA and the Administrative Procedure Act.

[23] Final EA at 304.

We note that Federal courts have set aside NEPA analysis where the agency failed to respond to scientific analysis that calls into question the agency's assumptions or conclusions.[24] Failure to respond to the above critiques of the highly questionable assumptions in the EA and BA would represent independent NEPA violations. The Forest Service's failure to provide accurate information of high quality regarding crucial baseline data, even after public scrutiny, also violates NEPA.

B. The EA Fails to Take the Required Hard Look at Impacts to Grizzly Bears.

The Forest Service's EA insists that although grizzlies may be temporarily harmed by this project, the project will actually benefit grizzly bears by increasing foraging habitat and huckleberry production by reducing canopy cover. However, the negative impacts to grizzlies from this project will not be offset by these small benefits, and any attempt to characterize this project as beneficial for grizzly bears would be disingenuous. This project threatens to displace a high percentage of grizzly bears in the Yaak ecosystem from existing core habitat and threatens to increase human-caused mortality. The Forest Service, however, fails to adequately analyze the direct, indirect, and cumulative impacts to grizzly bears.

The Forest Service asserts that the agency makes no claim of "offset" in the EA.[25] But whether or not the Forest Service uses the exact terminology, it still tries to couch this Project as being beneficial for grizzly bears, whereas in reality, the negative impacts of the project far outweigh any slight benefits that may occur.

1. The EA Fails to Adequately Analyze Direct and Indirect Impacts to Grizzly Bears and to Analyze a Reasonable Alternative to Protect Grizzlies.

As discussed below, the Forest Service largely fails to respond to specific comments concerning the agency's failure to adequately analyze direct and indirect impacts to grizzly bears. Although comments described in detail the required information and analysis missing from the EA, the Forest Service chooses not to respond in any detail to those comments. Instead, the Forest Service offers an unsupported blanket statement that "[t]he EA met all requirements to analyze

[24] *See Ctr. for Biological Diversity v. U.S. Forest Serv.*, 349 F.3d 1157, 1168 (9th Cir. 2003) (finding Forest Service's failure to disclose and respond to evidence and opinions challenging EIS's scientific assumptions violated NEPA); *Seattle Audubon Soc'y v. Moseley,* 798 F. Supp. 1473, 1482 (W.D. Wash. 1992) ("The agency's explanation is insufficient under NEPA – not because experts disagree, but because the FEIS lacks reasoned discussion of major scientific objections."), *aff'd sub nom. Seattle Audubon Soc'y v. Espy,* 998 F.2d 699, 704 (9th Cir. 1993) ("[i]t would not further NEPA's aims for environmental protection to allow the Forest Service to ignore reputable scientific criticisms that have surfaced"); *High Country Conservation Advocates v. Forest Service*, 52 F. Supp. 3d 1174, 1198 (D. Colo. 2014) (finding Forest Service violated NEPA by failing to mention or respond to expert report on climate impacts).

[25] Final EA Appx. at 121 (Comment 218).

impacts to bears."[26] The Forest Service appears to believe that this suffices to respond to all comments. It does not.

The Grizzly Bear Recovery Plan of 1993 sets goals and objectives for each grizzly bear recovery zone, and agencies proposing projects that may impact grizzly bears must assess whether any of these objectives will be impacted by the project. As noted in comments, the EA does not discuss or analyze the specific recovery plan objectives for grizzly bears in the Cabinet-Yaak Ecosystem as outlined in the Grizzly Bear Recovery Plan, or discuss how this project may impact those objectives. The subgoals for the Cabinet-Yaak Grizzly Bear Recovery Zone include the following:

> (1) Six females with cubs over a running 6-year average both inside the recovery zone and within a 10-mile area immediately surrounding the recovery zone, excluding Canada;
>
> (2) 18 of 22 BMUs occupied by females with young from a running 6-year sum of verified evidence;
>
> (3) Known, human-caused mortality not to exceed 4 percent of the population estimate based on the most recent 3-year sum of females with cubs. No more than 30 percent of this 4 percent mortality limit shall be females. These mortality limits cannot be exceeded during any 2 consecutive years for recovery to be achieved.[27]

The Forest Service does not assess the status of any of the recovery plan's objectives described above or analyze how the project may impact any of these objectives. This is a serious omission that must be corrected, and demonstrates that the EA fails to take the hard look NEPA requires. The Final EA fails to contain any analysis of how grizzly bears in the Yaak ecosystem are moving toward recovery goals and how this project may impact achieving these goals.

The Interagency Grizzly Bear Guidelines also provide guidance as to how to manage for grizzly bear recovery. They call on the Forest Service to "emphasize actions which contribute toward conservation and recovery of the bear within areas identified in the Grizzly Bear Recovery Plan" and "to maintain and enhance habitat and to minimize potential for grizzly-human conflicts."[28] The agency will manage these lands for multiple land use benefits, but only "to the extent these land uses are compatible with the goal of grizzly recovery."[29] "Land uses which cannot be made compatible with the goal of grizzly recovery, and are under FS control, will be redirected or discontinued."[30] As the Forest Service appropriately notes, more than 99 percent of BMU 14 and

---

[26] Final EA Appx. at 119 (Comment 204).

[27] Servheen, Christopher, U.S. Fish and Wildlife Service, Grizzly Bear Recovery Plan (Sept. 10, 1993), at 3 (in Black Ram project file at filename usfws_1993__grizzly_bear.pdf).

[28] Interagency Grizzly Bear Committee, Interagency Grizzly Bear Guidelines (1986), at 2 (in Black Ram project file at filename igbc_1986_Interagency_Grizzly_Bear_guidelines.pdf).

[29] *Id.* at 2.

[30] *Id.* at 2.

86 percent of BMU 15 is designated Management Situation 1,[31] meaning that managing for grizzly bears shall receive "the highest management priority," and land management decisions must favor the needs of grizzly bears over other competing land use values.[32] Other land uses will only be permitted if they can be made compatible with grizzly needs.[33]

As noted in previous comments, neither of the EA's action alternatives are compatible with grizzly bear needs, as logging, conducting prescribed burns, and road construction or reconstruction will cause disturbance, avoidance, and is likely to displace bears currently using the area. By approving either of the action alternatives, the Forest Service will fail to follow the mandates of the Interagency Grizzly Bear Guidelines to prioritize grizzly recovery over other land use values in these BMUs. The Final EA provides no response to comments regarding its failure to follow the Interagency Grizzly Bear Guidelines for BMUs designated as MS-1, violating the agency's duties to both take a hard look at impacts and to respond to comments.

The Forest Service also completely fails to analyze or even acknowledge the likelihood that the project – with its road construction, road traffic, and increase in use of grizzly habitat by those implementing treatments – may cause an increase in human-caused mortality. This is a significant failing because "[e]xcessive human-caused mortality has been identified as the primary agent responsible for reducing" the Cabinet-Yaak grizzly bear population to the point of near-extirpation and it remains the primary impediment to recovery.[34] From 1982-2018, 73% of grizzly bear mortalities in the Cabinet-Yaak ecosystem were human-caused,[35] and FWS has recognized that the grizzly population there would face an "imminent" extinction threat if human-caused mortality causes significant loss of female bears.[36] As stated in Kendall, et al. 2016, "[i]n the small Cabinet and Yaak populations, the difference between growth and decline is 1 or 2 adult females being killed annually or not."[37] This presents a serious management challenge because, as FWS has admitted, the agencies "are not able to predict and prevent all

---

[31] Final EA at 296.

[32] *Id.* at 3.

[33] *Id.* at 3.

[34] Kendall, et al. 2016 (Ex. 5) at 326.

[35] Kasworm 2019 (Ex. 2) at 31.

[36] 2006 Rock Creek Mine BiOp (Ex. 3) at A-16.

[37] Kendall, et al. 2016 (Ex. 5) at 329. *See also* U.S. Fish & Wildlife Serv., Final Biological Opinion on the Effects to Grizzly Bears From the Implementation of Proposed Actions Associated with Plan of Operations for the Montanore Minerals Corp. Copper/Silver Mine, at 121 (March 2014) ("Montanore Mine BiOp") ("A population of only 40 to 50 grizzly bears makes any number of human caused mortalities, in addition to natural mortality, a significant factor in population decline. Human-caused mortality in the CYE is limiting population increase and contributing to extinction risk (Mattson and Procter et al. 2004b)."), attached as Ex. 6.

circumstances that could cause any one specific person, at a specific time and place, to kill or cause the death of a grizzly bear."[38]

Instead, the Final EA claims that while "[h]uman-caused mortality may negatively impact the local bear population," "this project does not further contribute to that risk because year-round wheeled motorized vehicle access would not change, and therefore would not contribute to increased risk."[39] The Forest Service's assumption that this project will not increase human-caused mortality ignores important information about human-caused mortality rates. For example, the project will require increased vehicle use in the form of thousands of logging truck trips on existing and potentially new roads, which increases the risks of mortality from vehicle strikes.[40] Additionally, the project will inevitably require workers in the area, which means more people on the ground, increasing the risk of potential conflicts with grizzly bears, as well as the potential for poaching by workers or others who access the roads. Clearcutting will also reduce available cover, increasing the vulnerability of grizzlies to poaching, malicious killing, or mistaken identity killing by black bear hunters. The Forest Service fails completely to respond to comments regarding human-caused mortality, instead standing by its unsupported claim that the project will not increase human-caused mortality.[41] In doing so, the Forest Service completely ignores these important considerations, and fails to disclose these potential impacts to grizzlies, and in doing so falls short of taking the hard look that NEPA requires.

The Forest Service cannot rely on the BA to cure the EA's deficiencies on this score because the BA, like the EA, arbitrarily assumes that the Black Ram Project will have no impact on potential grizzly mortality due to interactions with humans.[42] Instead, the Forest Service concluded—incredibly—that the Black Ram Project poses no risk of human-caused mortality because it supposedly would not increase "year-round wheeled motorized vehicle access" in the project area.[43] This discussion, such as it is, does not satisfy NEPA's hard look requirement, and the contention that the Project poses no mortality threats to grizzly bears is unsupported, arbitrary and capricious. The Forest Service nowhere acknowledges that the level of human-caused mortality in the ecosystem already exceeds levels FWS has called "not sustainable," even without the Black Ram Project or other planned mining and logging projects underway in the

---

[38] Montanore Mine BiOp (Ex. 6) at 121.

[39] Final EA at 306.

[40] Assuming a log truck can haul 4,000 board feet of wood, removing the 57 million board feet of timber for the Black Ram Project will require more than 14,000 out and back truck trips. Final EA at 136 (total board footage of Alternative 2 is 57 million board feet).

[41] Final EA at 306.

[42] *See, e.g.,* Black Ram BA at 14 ("In this part of [grizzly bears'] broad North American range, areas of little to no wheeled motorized vehicle access provide suitable habitat with minimal disturbance. Therefore, the focus of this analysis includes changes in vegetation and motorized access management.").

[43] Black Ram BA at 34; *see also id*. at 41 ("No increased risk of bear mortality is expected on federal lands as a result of the project activities.").

CYE.[44] According to Kasworm 2019, known human-caused mortalities averaged 2.1 bears per year in the last decade—more than double the level FWS deemed unsustainable in 2014.[45] The Forest Service also fails to grapple with the reality that the Forest's food storage order, which the agency touts as a panacea for attractant-related mortality,[46] did not forestall this alarming level of human-caused mortality in recent years.

Further, the Forest Service conclusion here that a decade's worth of intrusion by workers and vehicles engaged in logging, road construction and reclamation, and burning[47] will have zero impacts on grizzly mortality is again in direct conflict with the conclusions made by the FWS in analyzing the Rock Creek and Montanore Mine projects. For those latter two projects, the FWS determined that the greatest threat those projects pose to grizzly bears "would stem from the influx of mine employees into this relatively remote area," which would increase human-caused mortality risks regardless of those projects' asserted compliance with access management standards and ongoing implementation of the Forest's food storage order.[48] The FWS also acknowledged in those analyses that even nonmotorized recreation increases human-caused mortality risks to grizzlies by increasing the potential for human-bear confrontations and generating attractants.[49] Finally, the FWS cited evidence that spikes in grizzly bear poaching tend to coincide with the initial phases of industrial projects that draw in workers from outside the local community, a concern that would appear to apply to Black Ram.[50] The Forest Service's conclusion that Black Ram poses no mortality threats to grizzlies is irrational on its face and at odds with this FWS analysis of projects in the same ecosystem.

Relatedly, as also noted in comments, the Forest Service acknowledges that the Kootenai Forest Plan includes a desired condition to ensure that "[a]ll grizzly BMUs have low levels of disturbance to facilitate denning activities, spring use, limit displacement, and reduce

---

[44] Montanore Mine BiOp (Ex. 6) at 121 (describing annual human-caused mortality rate of approximately one bear/year in the Cabinet-Yaak "not sustainable" with or without the Montanore Mine).

[45] Kasworm 2019 (Ex. 2) at 17-18, Table 1. This calculation excludes a mortality listed in the table that occurred more than 10 miles outside the Cabinet-Yaak recovery zone. Notably, Kasworm acknowledges that "[u]se of known human-caused mortality counts probably under-estimates total human-caused mortality. Numerous mortalities identified by this study were reported only because animals wore a radio-collar at death." *Id*. at 33. Kasworm estimates that an additional 22 unreported human-caused mortalities occurred in the Cabinet-Yaak between 2007-2018. *Id*., Table 11.

[46] *See, e.g.*, Black Ram BA at 24-25.

[47] *See* Final EA at 260 (project "activities would realistically be distributed over approximately the next 10 years.").

[48] 2006 Rock Creek Mine BiOp (Ex. 3) at A-68; Montanore Mine BiOp (Ex. 6) at 95.

[49] *See* Montanore Mine BiOp (Ex. 6) at 99.

[50] *Id.* at 99.

human/bear conflicts and potential bear mortality."[51] The Forest Service asserts that this project will maintain or make progress toward achieving this desired condition because "[s]pring, summer, and fall forage is widely available for grizzly bears."[52] This assertion ignores the Forest Plan's stated objective to limit disturbance and displacement. This project, however, will inevitably disturb and displace grizzly bears. The Forest Service's cavalier approach to explaining away these impacts does not constitute the hard look required by NEPA. The Forest Service provides no response to the Center's comments regarding FW-DC-WL-04.

And although the alternatives analysis in a NEPA document is supposed to help the public understand the differing impacts, the Final EA fails to discuss how impacts may vary between the two action alternatives. Instead, the Final EA analyzes impacts to grizzly bears in a single section, demonstrating the agency's assumption that impacts to grizzlies from both action alternatives would be nearly identical. This emphasizes the need for a more environmentally protective alternative to be considered.

The Forest Service does not respond to the fact that it does not differentiate the impacts to grizzly bears between the two alternatives. However, the Forest Service somewhat responds to the need for a more environmentally protective alternative, with a focus based on comments seeking an alternative that would protect wildlife corridors and important habitat for grizzly bears and lynx.[53] But the Forest Service doesn't agree to analyze a reasonable alternative that would prioritize grizzly bear and wildlife habitat. Instead, the Forest Service just avers that the current alternatives "do consider and meet the needs of wildlife" and therefore there is no need to look at other alternatives.[54] For all of the reasons described herein, we strongly disagree that the current action alternatives meet the needs of wildlife and therefore find this response insufficient.

Further, as noted in comments, the EA does not contain sufficient information for the public to truly gauge the impacts to grizzly bears and their habitat. Significant information regarding the location of the treatments in relation to grizzly habitat, for example, is often vague. For example, the EA contains no maps that overlay harvest and burning activities with the BMUs. The Forest Service suggests that the public must review "the wildlife project file for a map of existing, affected, and in-kind replacement of core."[55] But this information should be contained within the EA itself.

The Forest Service did not respond to this comment in the Final EA, but upon receiving the project file through a FOIA request we have found a map showing where in-kind core replacement will be and where existing core from the project will be impacted. It would helpful, however, if this map also overlays treatment areas. For example, what areas will be impacted by logging and what areas will be impacted by prescribed burns? In any event, this information

[51] Final EA at 308 (citing FW-DC-WL-04).

[52] *Id.*

[53] Final EA Appx. at 71-72 (Comment 26); *id.* at 112-13 (Comment 186).

[54] *Id.* at 113 (Comment 186).

[55] Final EA at 302.

should have been contained within the EA and readily available to the public. Failure to disclose this information to the decisionmaker and the public violates NEPA.[56]

As noted in comments, even less information is available regarding timber harvest, with the EA failing to provide information as to acres impacted in the two BMUs or how many acres of existing grizzly core habitat will be impacted by timber harvest. Instead, the Forest Service merely provides that "[u]nder each alternative, *nearly all* the harvest units are not in core."[57] This equivocal assertion is insufficient to allow the public to assess the impacts to grizzly bears from timber harvest. The Forest Service did not respond to this comment. NEPA requires more.[58]

2. The EA Fails to Adequately Analyze Cumulative Impacts to Grizzly Bears.

CEQ guidance states that a broader geographic scope of analysis is required for cumulative effects as compared to project-specific analysis.[59] "Cumulative effects analysis should be conducted on the scale of human communities, landscapes, or airsheds."[60] Further, the appropriate scope for the analysis should be the largest of the geographic areas occupied by resources that are in the project's "impact zone."[61]

The Ninth Circuit held a timber sale EIS inadequate where it failed to consider the cumulative impacts of the sale on spotted owl habitat in an adjacent forest.[62] Likewise, courts have held that federal land management agencies violated NEPA when they failed to consider the impacts to faltering sage-grouse populations from management in adjacent areas.[63]

---

[56] *WildEarth Guardians v. Montana Snowmobile Ass'n*, 790 F.3d 920, 926-28 (9th Cir. 2015) (failure to provide public information about where impacts would to wildlife would occur violated NEPA).

[57] Final EA at 304 (emphasis added).

[58] *WildEarth Guardians*, 790 F.3d at 926-28.

[59] CEQ Guidance, Considering Cumulative Effects Under the National Environmental Policy Act, at 12 (1997), available at https://www.energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/G-CEQ-ConsidCumulEffects.pdf (last viewed Nov. 13, 2020).

[60] *Id*.

[61] *Id*. at 15.

[62] *Earth Island Inst. v. U.S. Forest Serv.*, 351 F.3d 1291, 1306–07 (9th Cir. 2003).

[63] *W. Watersheds Proj. v. Jewell*, 56 F. Supp. 3d 1182, 1190 (D. Idaho 2014) (cumulative impacts discussion violated NEPA where agency did not discuss impacts of authorized grazing on sage-grouse in surrounding areas); *W. Watersheds Project v. Salazar*, 843 F. Supp. 2d 1105, 1125-28 (D. Id. 2012) (same); *W. Watersheds Proj. v. Bennett*, 392 F. Supp. 2d 1217, 1223–25 (D. Idaho 2005) (agency violated NEPA, acting "like a horse with blinders," by not considering impacts to a declining sage-grouse population from management in adjacent areas).

As noted in comments, the EA here inappropriately limits the cumulative impacts analysis for grizzlies to the project area. This limitation does not recognize the fact that grizzly bears have large home ranges, and it is likely that many bears spend time both inside and outside of the project area, including to the north of the project boundary in Canada, and south of the project area in the Yaak ecosytem. The cumulative impacts analysis should reflect these facts. The Forest Service failed to respond to this comment. However, a map dated May 17, 2019 found in the project file, and only made available via a Freedom of Information Act request, reveals that there is one large area of existing core in BMU 14 and one large area of existing core in BMU 15 that will be impacted by the project.[64] Thus, the need to consider grizzly bears in Canada that may be impacted by the project is especially important and must be addressed.

Moreover, the Forest Service cannot narrowly define the analysis area while simultaneously using the grizzly bear population estimate from the entire Cabinet-Yaak Recovery Zone to assess the impacts to grizzly bears. For example, the Final EA notes that the Cabinet-Yaak Ecosystem had an estimated 55-60 individuals with a 73 percent probability that the population was stable or increasing in 2017 (an estimate we contest above).[65] The Forest Service then uses this information to assess the impact to grizzly bears in the Final EA.[66] Nevertheless, the Forest Service limits the cumulative effects analysis area to the same area described for the direct and indirect effects analysis, a far smaller area than the Cabinet-Yaak Recovery Zone.[67]

The Forest Service can't have it both ways, invoking the size and status of the Cabinet-Yaak grizzly population to suggest that the Project would minimally impact a robust and improving population, while simultaneously excluding from its analysis other projects that threaten that population on the basis that they are outside the Project boundaries. To do so is the very definition of "arbitrary and capricious."[68]

---

[64] Forest Service, Black Ram Project, Map, In-kind Replacement of Grizzly Bear Core (May 17, 2019), attached as Ex. 7 (and in Black Ram project file). *See also* Center for Biological Diversity, Map, Black Ram Project (2020), attached as Ex. 8 (showing treatments in relation to BMUs and lynx habitat).

[65] Final EA at 290.

[66] *See, e.g., id.* at 306 (noting the project is consistent with IGBC guidelines because the project will support recovery in the Cabinet-Yaak Recovery Zone and on the Kootenai National Forest).

[67] *Id.*

[68] We note that the Forest Service found that the two previously-approved logging projects in the Yaak ecosystem – the Buckhorn Project (approved circa 2014) and the Lower Yaak, O'Brien, Sheep (OLY) Project (approved circa 2016) – were both likely to adversely affect grizzly bears. *See* Kootenai NF, Biological Assessment For Threatened and Endangered Wildlife Species, Buckhorn Project (Feb. 14, 2014) attached as Ex. 9; Kootenai NF, Biological Assessment for Threatened and Endangered Aquatic and Terrestrial Wildlife Species, Lower Yaak, O'Brien, Sheep (OLY) Project (Mar. 30, 2016), attached as Ex. 10. The Forest Service appears to have ignored the cumulative impacts of these three projects together with the Black Ram Project, all of which are adjacent and all of which are likely to adversely affect grizzly bears in the Yaak ecosystem.

The proposed Montanore Mine and Rock Creek Mine, for example, lie within the Cabinet-Yaak Recovery Zone and are likely to have cumulative impacts on grizzly bears in the Recovery Zone area. Yet the EA and the BA ignore the impacts of these projects.[69]

The Forest Service's approach of ignoring such impacts violates applicable NEPA regulations, which require the Forest Service to analyze the effects of all past, present, and reasonably foreseeable future actions on the affected grizzly bear population.[70] The Forest Service's narrowly circumscribed approach to analyzing cumulative effects in the Black Ram EA is also arbitrary because it is inexplicably inconsistent with the agency's cumulative effects analysis for other projects affecting grizzly bears in the Cabinet-Yaak ecosystem, such as the Rock Creek Mine. In its 2018 EIS for the Rock Creek Mine, the Forest Service's cumulative effects analysis addressed multiple past, present, and reasonably foreseeable future actions that would affect grizzlies in the ecosystem but are located *well outside* the boundaries of the action area for the mine.[71] At a minimum, NEPA required the Forest Service to take a hard look at the impacts of the proposed Rock Creek and Montanore Mines and the newly-proposed Knotty Pine logging project[72] as part of its cumulative effects analysis, as these all constitute "reasonably foreseeable" future projects that will significantly impact grizzly bears in the Cabinet-Yaak ecosystem.[73]

The Forest Service's failure to consider any actions outside the immediate boundaries of the Black Ram Project is also inconsistent with the ESA, which defines the "action area" broadly to include "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action."[74]

The agency's failure to consider the impacts of other actions that threaten grizzly bears in the ecosystem is an acute concern given the precarious baseline status of the affected population; the narrow configuration of the Cabinet-Yaak recovery zone, which "places bears at greater risk of

---

[69] *See* Black Ram BA at 21 (asserting that mining "is not a stressor for grizzly bears in the Black Ram Project Area" because "[t]here are no large mining operations located within the Black Ram Project Area and none are proposed. Therefore, this activity … will not be addressed further.").

[70] *See* 40 C.F.R. § 1502.7 (2019).

[71] Kootenai Nat'l Forest, Final Suppl. Envtl. Impact Statement for the Rock Creek Project, at 2-129–2-139, 3-2 – 3-3 (Mar. 2018), excerpts attached as Ex. 11.

[72] *See* Kootenai Nat'l Forest, Knotty Pine, https://www.fs.usda.gov/project/?project=57657 (last visited Nov. 13, 2020), and discussion below.

[73] 40 C.F.R. § 1508.27 (2019); *see also, e.g.*, *Te-Moak Tribe of W. Shoshone of Nev. v. U.S. Dep't of Interior*, 608 F.3d 592, 603 (9th Cir. 2010) (holding BLM violated NEPA by failing to take hard look at impacts of proposed mining operation in cumulative effects analysis).

[74] 50 C.F.R. § 402.02. Further, in preparing its biological opinion for the Project, FWS will be required to consider as part of the relevant environmental baseline the anticipated effects on grizzly bears from "all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation," which will include at a minimum the Rock Creek Mine Project. *Id.* (defining "environmental baseline"); *see also* 50 C.F.R. § 402.14(g)(2) (requiring FWS to evaluate environmental baseline during formal consultation).

coming into contact with people and intentional or accidental killing by humans"; and "the relatively high density of roads and diversity of human activities in the CYE compared with other recovery zones."[75]

Even where the EA purports to address the cumulative harm from other projects within the too-narrowly-drawn project boundary, it fails to take the hard look NEPA requires. The EA notes that past logging projects that have taken place in the project area have provided favorable conditions for huckleberry production and other forage for grizzly bears.[76] However, the Forest Service cites no evidence that the availability of foraging habitat or natural foods is limiting the grizzly bear population's size in the Cabinet-Yaak. In fact, the Black Ram BA contradicts that assumption, stating that currently "[h]uckleberries are *widely available throughout the Project area units*."[77] As discussed elsewhere, recent literature emphasizes excessive human-caused mortality as the principal driver of population dynamics in the ecosystem, not lack of food. Thus, in addition to failing to adequately analyze the Project's adverse effects on grizzly bears, the Forest Service's analysis promotes asserted benefits that appear spurious at best. There is simply no indication that Cabinet-Yaak grizzly bears require more berries or foraging habitat to recover at this time; in contrast, there is ample evidence that additional logging and the human presence it will bring in the Yaak will threaten bears.

The Forest Service fails to mention any negative impacts that grizzly bears likely experienced during these projects, including disturbance and displacement. The agency glosses over negative impacts to grizzly bears from past logging projects and the likelihood that another logging project will further harm grizzly bears and their habitat. The NEPA analysis must include a discussion of negative impacts to grizzly bears from previous projects. The EA also apparently fails to analyze the miles-long fire break constructed during the Davis Fire that is within or near the project area. This fuel break could be used for snowmobiles and other motorized recreation that would disturb grizzlies (and other wildlife).

The Forest Service briefly responds, merely stating that "[e]ffects of past projects are documented in those analyses and a cumulative effects analysis was completed for this project," and pointing the public to the skimpy grizzly bear analysis in the EA.[78] This response does not meaningfully respond to the inadequacy of the analysis and does nothing to provide the requested information that is important to include in this analysis to allow the public to understand the impacts of past projects.

---

[75] Kendall, *et al*. 2016 (Ex. 5) at 326-27.

[76] Final EA at 295-96. The EA also asserts, without supporting evidence, that the project is needed "to move vegetative characteristics towards desired conditions which in turn improve habitat conditions favorable to the grizzly bear in treated areas." *Id*. at 304. There is no evidence that logging benefits grizzlies and plenty of data to the contrary. *See, e.g.*, D. Mattson, Grizzly Bear Recovery Project, Effects of the Proposed Black Ram Project on Yaak Grizzly Bears (Aug. 6, 2019) (project file).

[77] Black Ram BA at 32 (emphasis added).

[78] Final EA Appx. at 119 (Comment 205).

The EA also fails to adequately disclose impacts to grizzlies from snowmobiling and how this project may increase those impacts. For example, the EA admits that snowmobiling in the spring may impact grizzly bears, but declines to offer substantive analysis, instead stating that the project would not change snowmobiling as it relates to grizzly bears and so a true analysis is not required.[79] The EA does note that there is snowmobiling on roads in the project area,[80] but fails to discuss the fact that road construction or reconstruction associated with the current project could open up new areas for snowmobilers to recreate. Additionally, the EA states that dense forest vegetation prevents snowmobilers from going off route[81] but this project will remove forest vegetation through logging and prescribed fires, potentially making it easier for snowmobilers to explore and traverse new areas off routes.

The Forest Service responds briefly with no additional information and without acknowledging the fact that the project could lead to more impacts from snowmobiling. Instead, the Forest Service simplistically asserts that "[p]otential over snow recreation impacts were presented in the EA" and that "[t]he project would not affect over snow recreation as indicated it the existing condition section …."[82] Whether or not the purpose of the project is to expand snowmobiling is not the point. The Forest Service's choice to ignore the potential for impacts from snowmobiling to increase in the project area as new roads are opened and vegetation is removed fails to comply with NEPA's hard look requirement.

As described in our comments, the EA describes a number of new or upgraded pedestrian and/or equestrian trails to be built under both of the action alternatives.[83] The purpose and predicted effect of these new routes is to "increase recreational opportunities in the Project Area."[84] The recently-designated Pacific Northwest National Scenic Trail has also increased hiking traffic in sensitive habitat, including core grizzly habitat, and will continue to do so.[85] Increasing recreational opportunities means increasing the number and frequency of recreational users, which increases opportunities for human-bear interactions, vehicle collisions, poaching or other

[79] Final EA at 293-94.

[80] *Id.*

[81] Final EA at 293.

[82] Final EA Appx. at 119 (Comment 206).

[83] Final EA at 188-96.

[84] Final EA at 189-192. *See also id*. at 190 ("As visitation to the Forest increases, public recreation into areas such as this [part of the project area] would increase as well."); *id*. at 191, Table 61 (predicting an "[i]ncrease in numbers of visitors"); *id*. at 199 (proposed actions will "increase … day use access").

[85] In discussing the trail, the Forest Service notes that" "[t]he popularity of long-distance hiking and 'thru-hiking'—hiking the entire trail in a season—has grown in recent years," and disclosed that the number of thru-hikers on this trail doubled from 2015 to 2017. Final EA at 186.

killing, and thus grizzly mortality. The Final EA does not appear to address these potentially significant impacts induced by action alternatives.[86]

Once again, as is a constant theme here, the Forest Service provides no meaningful response and simply states that "[t]he EA reports the potential effects of reasonably predictable trail use."[87] As described above, however, there is important information missing from the EA, including the actual impacts from increased trail use on grizzly bears. With the foreseeable increase in the frequency of recreational users, impacts to grizzly bears may include increases in human-bear interactions, vehicle collisions, and poaching. Ignoring these potential impacts violates NEPA's hard look mandate. The EA fails to contain disclose effective monitoring of trail use, administrative use behind "closed" gates, user-created trails, the impact of proposed spur routes to an already out-of-compliance Scenic Trail, or inventory of and assessment of impact created by user-created campgrounds associated with the Trail.

The Forest Service also relies on seasonal restrictions to potentially mitigate impacts to grizzlies, stating that "[i]n areas with important seasonal components, such as spring range and denning habitat, potential disturbance to grizzly bears *can* be reduced by scheduling proposed major activities, such as timber harvest, to avoid areas near denning habitat when bears emerge from dens (April 1 through May 1) and known denning habitats during the winter (December 1 through March 31)."[88] However, the Forest Service either does not commit to such seasonal restrictions, or what "scheduling" the agency proposes is unlikely to provide protection for denning bears. For example, we can find no design features meant to protect bears that limit activities in known denning habitats from December through March.[89] One design feature to protect grizzlies only limits certain activities for the month of April "in the first year of project activity … from April 1 through June 15th."[90] It is unclear how limiting certain activities only in the *first year* of project activity provides any protection to denning grizzlies in subsequent years. One design element actually permits the use of helicopters to ignite wildfires during the sensitive April 1 to May 1 den emergence period, utterly upending the idea of a seasonal restriction to benefit grizzlies.[91] Another design element allows burning, hand slashing and fire-line construction, includes use of chainsaws, and planting and seeding during the den emergence period. Thus while the Forest Service might be able to mitigate impacts to grizzlies during sensitive times of the year through seasonal restrictions, the proposed decision fails to do so.

In order to take the hard look that NEPA requires, the Forest Service must provide a more honest and inclusive analysis of the direct, indirect, and cumulative impacts that this project will have

---

[86] Increased recreational use of the area may also increase disturbance of other endangered, threatened, and sensitive wildlife, impacts the EA also appears to omit.

[87] Final EA Appx. at 119 (Comment 207).

[88] Final EA at 296 (emphasis added).

[89] *See* Final EA at 21-22 (grizzly bear design features); Final EA Appx. at 28-37 (Appendix D, addressing route management but not containing any seasonal limits).

[90] Final EA at 21.

[91] *See id*.

on grizzly bears. Further, because this project has the potential to significantly impact grizzlies, a federally protected species, the agency must prepare an EIS, as discussed further below.

3. The Forest Service's failure to respond to comments is an independent NEPA violation.

NEPA requires agencies to explain opposing viewpoints and their rationale for choosing one viewpoint over the other.[92] Federal courts have set aside NEPA analysis where the agency failed to respond to scientific analysis that calls into question the agency's assumptions or conclusions.[93]

As noted above, the Final EA on numerous occasions fails to respond, or responds in an arbitrary and unsupported manner, to many of the issues raised by the Center and Guardians concerning grizzly bears. The same can be said for the Final EA's dismissal of expert analysis provided by grizzly expert Dr. David Mattson. The Forest Service's failure to respond to the Objectors', and Dr. Mattson's, comments and analysis violate NEPA.

C. The Action Alternatives Do Not Comply with the Kootenai National Forest Plan, and Thus Violate the National Forest Management Act.

In implementing the Black Ram Project, the Forest Service must comply with the National Forest Management Act ("NFMA") and its implementing regulations. NFMA requires the Forest Service to ensure that site-specific management projects are consistent with the applicable forest plan.[94] Thus, the Forest Service must ensure that all aspects of the proposed action comply with the Kootenai National Forest Land Management Plan.

One of the biggest indicators of good habitat for grizzly bears is the absence of roads, which grizzly bears are known to avoid. There has been a wealth of scientific research documenting the negative impacts on bears from roads, including habitat fragmentation, displacement, potential for human-grizzly bear conflicts, vehicle strikes, and poaching.[95] Notably, many of these studies

---

[92] 40 C.F.R. § 1502.9(b) (2019) (requiring agencies to disclose, discuss, and respond to "any responsible opposing view").

[93] *See Ctr. for Biological Diversity.*, 349 F.3d at 1168 and additional cases cited in footnote 24, above.

[94] 16 U.S.C. § 1604(i).

[95] Proctor, Michael *et al.* 2019. Effects of Roads and Motorized Human Access on Grizzly Bears in British Columbia and Alberta, Canada. Ursus 2019 (30e2): 16-39, attached as Ex. 12; Proctor, Michael *et al.* 2018. Conservation of Threatened Canada-USA Trans-border Grizzly Bears Linked to Comprehensive Conflict Reduction. Human-Wildlife Interactions 12(3): 348-372 (in Black Ram project file); Proctor, Michael *et al.* 2018. Resource Roads and Grizzly Bears in British Columbia and Alberta, Canada, attached as Ex. 13; Lamb, Clayton *et al.* 2018. Effects of Habitat Quality and Access Management on the Density of a Recovering Grizzly Bear Population. J Appl Ecol. 2018: 1-12, attached as Ex. 14; MacHutchon, Grant & Michael Proctor. 2015. The Effect of Roads and Human Action on Roads on Grizzly Bears and Their Habitat. Trans-border Grizzly Bear Project, available at www.transbordergrizzlybearproject.ca (last

deal specifically with threats to trans-border grizzly bears that use habitat in both northwest Montana and Canada.

The Grizzly Bear Access Amendment sets standards for open motorized route density ("OMRD"), total motorized route density ("TMRD"), and retention of core grizzly bear habitat within bear management units in the Cabinet-Yaak and Selkirk Recovery Zones. The Amendment is incorporated as a standard (FW-STD-WL-02) in the Kootenai National Forest Plan at Appendix B. The Access Amendment adopted the following standards for the Northwest Peak and Garver BMUs:

> Northwest Peak BMU (BMU 14):
>
> 1. OMRD of greater than 1 mile per square mile on no more than 31 percent of the BMU;
> 2. TMRD of greater than 2 miles per square mile on no more than 26 percent of the BMU;
> 3. Grizzly core area habitat comprising at least 55 percent of the BMU.
>
> Garver BMU (BMU 15):
>
> 1. OMRD of greater than 1 mile per square mile on no more than 33 percent of the BMU;
> 2. TMRD of greater than 2 miles per square mile on no more than 26 percent of the BMU;
> 3. Grizzly core area habitat comprising at least 55 percent of the BMU.[96]

As noted in the Center's comments, currently it appears the Forest Service may not be in compliance with the Access Amendment standards in the project area.[97] In the Final EA, the Forest Service does not provide a response regarding its current compliance with the Access

---

visited Nov. 13, 2020), and attached as Ex. 15; Northrup, Joseph *et al.* 2012. Vehicle Traffic Shapes Grizzly Bear Behaviour on a Multiple-Use Landscape. J Appl Ecol. 2012: 1-9, attached as Ex. 16; Wakkinen, Wayne & Wayne Kasworm. 2004. Demographics and Population Trends of Grizzly Bears in the Cabinet-Yaak and Selkirk Ecosystems of British Columbia, Idaho, Montana, and Washington. Ursus 15(1) Workshop Supplement: 65-75, attached as Ex. 17.

[96] United States Forest Service, Kootenai National Forest Land Management Plan (2015 Revision) (hereinafter, "Kootenai Nation Forest Plan") App. B, Table 25, at 147. Further, the Forest Service's assessment of the efficacy of these plan standards rests fundamentally on outdated science regarding grizzly bear habitat security. The standards appear to be based entirely on Wakkinen & Kasworm (1997), a 23-year-old report that no longer represents the best available science, and that was based on a tiny sample of observed grizzly behavior elsewhere. The Forest Service cannot rely on this outdated report for compliance with either NEPA or NFMA, because these standards are no longer valid.

[97] *See* Draft EA at 298, Table 84 (showing compliance); *but see* Draft EA at 308, Table 88 (showing the existing TMRD in BMU 15 as being 27%, and thus above the 26% limit).

Amendment standards, and does not fix existing inconsistencies within the EA itself.[98] This remaining inconsistency raises questions as to how thoroughly the Forest Service responded to comments as well as questions about the accuracy of the information in the EA itself. As noted above, the Forest Service is required to provide baseline data against which impacts can be measured, and this data is to be "of high quality" with "[a]ccurate scientific analysis."[99]

Moreover, as also noted in the Center's August 2019 comments, the Forest Service admitted in the Draft EA that the Project would not comply with the Forest Plan Access Amendment's TMRD standards for BMU 15 during the entire life of the project, which is up to ten years long. The Final EA confirms this.[100] Similarly, as noted in the Center's comments, the Forest Service will not comply with OMRD standards in BMU 15 during project implementation, stating that the OMRD during implementation will be 36% even though the standard requires an OMRD of 33% or lower. The Final EA confirms this.[101] The Forest Service does not respond with any directive that permits it to violate the TMRD and OMRD standards for ten years. Instead, the Forest Service simply states that all project activities will be complete within a decade, most intensive road use is likely to last two to three years, and points again to its analysis to concluding that the project area BMUs will be in compliance with the Access Amendment standards after completion of the project.[102] The Access Amendment standards provide no exception to exceed TMRD and OMRD standards for timber harvest or prescribed fire in BMUs for a decade, and indeed the Forest Service fails to point to any such language that would provide for such an exception to compliance in its simplistic response. This noncompliance with the Access Amendment standards is a direction violation of NFMA and NFMA's implementing regulations.[103]

As an additional problem, as noted in the Center's comments, citizens have informed the Forest Service that barriers meant to deter motorized use have been breached or are otherwise not functioning within the project area, yet this issue is not addressed in the Final EA. In response to

---

[98] *See* Final EA at 291, Table 84 (showing the existing TMRD in BMU 15 as being 26%, and thus in compliance); *but see id.* at 301-02, Table 88 (showing the existing TMRD in BMU 15 as being 27%, and thus *not* in compliance).

[99] *Half Moon Bay*, 857 F.2d at 510; 40 C.F.R. § 1500.1(b) (2019); *see also Nat'l Parks Conservation Ass'n v. E.P.A.*, 788 F.3d 1134, 1141 (9th Cir. 2015) ("[A]n internally inconsistent analysis is arbitrary and capricious.").

[100] *See* Final EA at 301-02, Table 88 (showing TMRD will be 32% in BMU 15 during the life of the project under Alternative 2, higher than the permitted 26% standard); *see also* 2020 Draft Decision Notice at 2 (choosing to implement Alternative 2).

[101] Final EA at 301, Table 87.

[102] Final EA Appx. at 118-19 (Comment 202).

[103] *See* 16 U.S.C. § 1604(i) (NFMA requires the Forest Service to ensure that site-specific management projects are consistent with the applicable forest plan); United States Forest Service, Kootenai National Forest Land Management Plan (2015 Revision), App. B at 146-51 (incorporating Grizzly Bear Access Amendment into Kootenai Forest Plan); *id.* at 5 (incorporating the Access Amendment as a standard, FW-STD-WL-02).

comments on this issue, the Forest Service offers that it has repaired road closures indicating unauthorized use and closed user-created routes that were identified in October 2019, and that agency staff monitor route closures "daily or weekly."[104] While it is helpful that the Forest Service occasionally takes steps to limit unauthorized use, this effort appears ineffective at halting motor vehicle trespass. A survey conducted by the Yaak Valley Forest Council within the project area earlier this month found that motor vehicle use continues on more than a dozen closed routes within the Black Ram project area, including on routes where gates and other structures have failed to prevent such use.[105] The 2019 EA fails to take this significant new information into account. The report demonstrates that, even with regular monitoring, future illegal motor vehicle use will continue to disrupt grizzly habitat throughout the project area. At best, the Forest Service is playing a game of 'whack-a-mole' with illegal motor vehicle use in the project area, always one step behind such use degrading grizzly habitat. As the number of recreationists increases, and with it the amount of illegal use, so will the harm to grizzlies. Neither the EA not the BA account for this ongoing, and worsening, disruption, as both NEPA and the ESA require.[106]

> *Suggested Remedy*: The Forest Service should prepare a subsequent NEPA document (preferably a draft EIS) that addresses each of the NEPA, Forest Plan, and NFMA violations described above, and that analyzes a range of alternatives, including at least one that would protect wildlife corridors and important habitat for grizzly bears.

---

[104] Final EA Appx. at 118 (Comment 200).

[105] Yaak Valley Forest Council, Black Ram Project Area -- Road Barrier Survey (Nov. 2020), attached as Ex. 18; Yaak Valley Forest Council, Map of Illegally Used Routes in Black Ram Project Area (Nov. 2020), attached as Ex. 19.

[106] The project biological assessment relies on the fact that "almost all forest users respectfully abide by the conservation measures," and that "practically every gate or barrier along an open road is checked to see if it is in reasonably working order." Black Ram BA at 18. The August 2020 Forest-wide BO, upon which any project-specific BO is likely to rely, similarly asserts: "When the Forest discovers unauthorized route use, breaches of barriers, or breaches of gates, the issue is reported and breaches are repaired or addressed as soon as possible, generally within the same bear year or early in the next bear year (U.S. Forest Service 2020, p. 10)." U.S. Fish & Wildlife Service, Biological Opinion on Kootenai National Forest Management Plan (Aug. 28, 2020) (project file). As the YVFC's 2020 report demonstrates, this system is failing to prevent illegal motor vehicle use on many routes in grizzly habitat in the project area, thus rendering arbitrary and capricious the BA's (and BO's) conclusions that illegal use is minimized or eliminated. Nor can the federal agencies ignore illegal use by alleging that it is occurring at the same level as it has for the last few decades. This is a false assertion given that the number of forest users is increasing, and that the off-road vehicles are more powerful, and thus able to overcome berms and barriers more easily, making increased incursions onto closed routes more common.

II. THE BLACK RAM PROJECT THREATENS TO VIOLATE THE ENDANGERED SPECIES ACT REGARDING GRIZZLY BEARS.[107]

Enacted in 1973, the ESA is "the most comprehensive legislation for the preservation of endangered species ever enacted by any nation."[108] 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.[109] 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."[110]

To receive the full protections of the ESA, a species must first be listed by the Secretary of Interior as "endangered" or "threatened" pursuant to ESA Section 4.[111] A species is "endangered" when it is "in danger of extinction throughout all or a significant portion of its range."[112] A species is "threatened" when it is "likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."[113]

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.[114] 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.[115] 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

---

[107] As noted above. objectors challenged the Forest Service's analysis of project impacts to grizzly bears in their respective comment letters. *See* letter of M. Fox, WildEarth Guardians to C. Benson, Kootenai National Forest (Aug. 7, 2019) at 11-12; letter of E. Zukoski *et al*., Center for Biological Diversity to L. Osborn, Kootenai National Forest (Aug. 8, 2019) at 2-9 (both in project file).

[108] *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 180 (1978).

[109] 16 U.S.C. § 1531(b).

[110] *Id.* § 1532(3).

[111] *Id.* § 1533.

[112] *Id.* § 1532(6).

[113] *Id.* § 1532(20).

[114] *Id.* § 1536(a)(2).

[115] *Id.* § 1536(c)(1).

action.[116] If the agency determines that the proposed action may affect any listed species or critical habitat, it must engage in formal consultation with FWS.[117]

Formal consultation results in the issuance of a "biological opinion," where FWS concludes whether the proposed action is likely to jeopardize a listed species or result in the destruction or adverse modification of critical habitat.[118] 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.[119] Agencies are required to "use the best scientific and commercial data available" in assessing impacts to protected species during the consultation process.[120]

During consultation, FWS must review all relevant information, evaluate the current status of the species or critical habitat, and evaluate the effects and cumulative effects of the proposed action on the listed species and their critical habitat.[121] For the purposes of the ESA, "[e]ffects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action."[122] Cumulative effects "are those effects of future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation.."[123] Throughout its analysis, the consulting agency must utilize the "best scientific and commercial data available."[124] The duty to comply with Section 7(a)(2) remains the action agency's even after the issuance of a BiOp. After the completion of consultation, the action agency must determine whether and in what manner to proceed with the action in light of its Section 7 obligations and the BiOp.[125]

In connection with this project, the Forest Service finally issued a biological assessment dated September 16, 2020.[126] As an initial matter, this BA significantly post-dates the Final EA released in December 2019. Creation of a BA so far after the release of the Final EA ignores

---

[116] *Id.*

[117] 50 C.F.R. § 402.14.

[118] *Id.* § 402.14(h).

[119] 16 U.S.C. § 1536(b)(3)(A); 50 C.F.R. § 402.14(h)(3).

[120] 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(d).

[121] 16 U.S.C. § 1536(b)(3)(A); 50 C.F.R. § 402.14(g)(1)−(3).

[122] 50 C.F.R. § 402.02.

[123] *Id*.

[124] 16 U.S.C. § 1536(a)(2); 50 C.F.R. §402.14(d).

[125] 50 C.F.R. § 402.15(a).

[126] Black Ram BA (project file).

ESA's implementing regulations.[127] The concurrency requirement for the NEPA and ESA process is essential for public involvement. There is no opportunity for public comment on the development of a Biological Assessment or Biological Opinion, it is only through the NEPA process that the public may comment on the impacts to listed species.

In the BA issued, the Forest Service found that the project may affect, and is *likely to adversely affect grizzly bears*, triggering the need for formal consultation with FWS.[128] Consultation may result in the FWS requiring that the Forest Service adopt reasonable and prudent measures – including those neither addressed nor disclosed in the EA or the Draft Decision Notice – to avoid jeopardy or take. The Forest Service's NEPA analysis and decision cannot be complete until the agency understands what measures it may need to undertake to comply with the ESA.

It is worth noting that legal claims under the Endangered Species Act do not need to be included in an objection, as often times such claims are not foreseeable and do not become clear until the Fish and Wildlife Service issues a final biological opinion. This is especially true here, where the Forest Service has not completed consultation prior to release of its draft decision. That being said, there are some claims that may be foreseeable at this point that we raise here.

First, once the action agency has initiated consultation under the Endangered Species Act, the agency and the permit or license applicant 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.[129] This means that the Forest Service cannot take any actions in connection with the Black Ram project that would change the landscape.

In fact, the Ninth Circuit has been clear that "timber sales constitute per se irreversible and irretrievable commitments of resources under § 7(d)."[130] 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.

---

[127] *See* 40 C.F.R. § 1502.25(a) (2019) ("To the fullest extent possible, agencies shall prepare draft environmental impact statements *concurrently with and integrated with* environmental impact analysis and related surveys and studies required by the … Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.), and other environmental review laws and executive orders.") (emphasis added).

[128] Black Ram BA at 40.

[129] 16 U.S.C. § 1536(d); 50 C.F.R. § 402.09.

[130] *Pac. Rivers Council v. Thomas*, 30 F.3d 1050, 1057 (9th Cir. 1994); *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.").

It is also possible that implementation of the Black Ram project will harm grizzly bears, resulting in prohibited take under Section 9 of the ESA.[131] "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."[132] The "take" prohibited by Section 9 need not be the result of purposeful action.[133] Thus, if the project harms grizzly bears in any way, the Forest Service may be liable for take under the ESA.

Further, the Kootenai Forest Plan itself, upon which the Black Ram EA and BA rely, violates the ESA and cannot be relied on to ensure the survival of grizzly bears. On Dec. 27, 2018 Kootenai Forest Supervisor Chad Benson signed the final Record of Decision and rationale for approving Amendments to the Kootenai National Forest's Forest Plan to incorporate the grizzly bear habitat management direction.[134] When it authorized the amendment of various plan components, the Forest Service anticipated that "habitat conditions in the primary conservation area will be maintained at levels that occurred during the time period when the grizzly bear population was known to be growing and increasing in distribution and will contribute to sustaining the recovery of the grizzly bear population."[135] This conclusion is based on flawed assumptions and lacks adequate assurances within the plan components.[136]

Specifically, the Forest Service notes that the following plan components provide specific grizzly bear resource direction: FW-STD-WL-02, FW-STD-WL-04, FW-GDL-WL-01, and FW-GDL-WL-15.[137] These plan components do not provide adequate assurances that "habitat conditions in the primary conservation area will be maintained at levels that occurred during the time period when the grizzly bear population was known to be growing and increasing in distribution" and therefore undermine the Forest Service's conclusion that these plan components "will contribute to sustaining the recovery of the grizzly bear population." Under standard FW-STD-WL-02, "[t]he Motorized Access Management within the Selkirk and Cabinet Yaak Grizzly Bear Recovery Zone Management Direction and ROD is included in appendix B, and shall be applied."[138] Yet as previously noted, BMUs 14 and 15 do not currently meet OMRD, TMRD, or secure core, and the project does not include assurances to achieve the 2011 access conditions. Rather, the Black Ram Project proposes to "offset" opening previously barriered roads within these BMUs by creating new barriers on other roads.

---

[131] *See* 16 U.S.C. § 1538(a)(1)(B).

[132] *Id*. § 1532(19).

[133] *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).

[134] 83 Fed. Reg. 66,673 (Dec. 27, 2018) (Final Record of Decisions for the ... Forest Plan Amendments for the Kootenai ... National Forest[]").

[135] *Id.*

[136] *Contra* Black Ram BA at 15.

[137] Black Ram BA at 14.

[138] 2015 Revised Plan at 30; 133; 146-151.

Standard FW-STD-WL-04 requires permits and operating plans to specify sanitation measures and food attractant storage order to reduce human-wildlife conflicts. This standard is not relevant to the question of maintaining habitat conditions in the primary conservation area during the time period when the grizzly bear population was known to be growing and increasing in distribution. Under FW-GDL-WL-01, management activities should avoid or minimize disturbance in areas of predicted denning habitat during spring emergence (April 1 through May 1). This also is not relevant to the question of maintaining OMRD, TMRD, or secure core levels within BMUs 14 and 15. Finally, guideline FW-GDL-WL-15 incorporates elements in the most recent Interagency Grizzly Bear Guidelines to management activities. As a guideline, this plan component is not mandatory and does not provide the necessary assurances.

WildEarth Guardians submitted comments and an objection to the grizzly bear habitat management direction amendments, and hereby incorporates those same concerns as applied to the Black Ram Project in this objection.[139] For example, Guardians explained the grizzly bear plan amendments: (a) improperly relied on the draft NCDE Conservation Strategy; (b) improperly relied on flawed population estimates; (c) improperly relied on flawed habitat based recovery criteria; (d) failed to adequately measure motorized route density and failed to account for impacts; (e) unreasonably relied on flawed population objectives; and (f) unreasonably allowed for temporary increases in motorized route densities and reductions in secure core without ensuring a return to 2011 access conditions.[140]

Concerns about the inadequacy of the grizzly bear plan direction amendments to the Kootenai Forest Plan apply equally to the Black Ram Project. In particular, concerns about the failure of those plan components to ensure road density and secure core necessary to provide for survival and recovery of the grizzly bear population as a whole is a big concern for this project. As noted in Guardians' 2019 comment letter, this project will significantly affect the locale, including important wildlife habitat connectivity between Canada and the Kootenai National Forest as well as the surrounding public lands. The Forest Service itself notes, the "availability of secure grizzly habitat is primarily influenced by motorized access management which, if not managed or mitigated, can negatively impact habitat use and increase the potential for grizzly bear mortality through human-grizzly interactions and the introduction of attractants."[141] Grizzly bear management direction applies to Bear Management Units (BMUs) and Bears Outside of Recovery zone (BORZ) reoccurring use areas. Grizzly bears occur in the Project Area.[142]

Here, the Forest Service proposes road-related project activities in two bear management units: BMU 14 and BMU 15.[143] In light of the flawed grizzly bear plan components to ensure survival

---

[139] *See* Objection from WildEarth Guardians, Western Watersheds Project, and Sierra Club to the Flathead Forest Plan, the NCDE Grizzly Bear Forest Plan Amendments, and the Species of Conservation Concern List (Feb. 8, 2018), attached as Ex. 20.

[140] *See id*. at 2-8.

[141] Black Ram BA at 2, Table 1.

[142] Black Ram BA at 2, Table 1.

[143] Black Ram BA at 9.

and recovery of grizzly bears, the Forest Service may not reasonably rely on compliance with those plan components to ensure compliance with the ESA for this project.

The BA for the Black Ram Project fails to ensure compliance with the ESA by failing to provide justification or support for its conclusions that closed roads are not subject to motorized use, including illegal or unauthorized motorized use. For example, the agency states that "currently barriered roads" within BMU 14 and 15 do not allow for any motorized use during the active bear year (April 1 to Nov. 30), but the Forest Service does not explain how it ensures these stated seasonal closures are effective.[144] In addition, the agency notes 332 miles of system roads closed year-round. Again, it does not explain how it ensures these closures are effective. It also appears the Forest Service proposes to allow motorized use on barriered roads between April 1 and June 15 after the first year of project activity.[145]

The Forest Service state that in order to use the "currently barriered roads" in BMUs 14 and 15, others must be closed to wheeled motorized use.[146] The agency concludes that by "managing access in this way," (i.e., offsetting opening of closed roads with barriers on other roads), "the amount of core in each BMU would be maintained or improved."[147] This runs contrary to the Grizzly Bear Access Amendments.[148] The agency proposes 34 miles of system roads to be stored for "in-kind replacement of core."[149] Yet as noted, the Forest Service lacks support for its assumption that such road barriers are effective to prevent wheeled motorized use. Reliance on such claimed offsets also fails to provide any support for the assertion that the amount of core would be *improved*. The agency's explanation also fails to consider or account for *volume* of use. The volume of log hauling and heavy equipment use on newly opened roads within BMUs 14 and 15 is a key factor that the agency failed to consider.

The Forest Service improperly relies on non-compulsory forest plan guidelines to claim mechanized equipment operation will be avoided April 1 through May 1 to avoid or minimize disturbance in areas of predicted grizzly bear denning habitat during spring emergence.[150] Rather than rely on a guideline, the Forest Service should make this a requirement of the project design criteria to ensure grizzly bears are not disturbed during vulnerable spring emergence period.

> *Suggested Remedy*: The Forest Service should issue a new NEPA analysis (preferably a draft EIS) only after the agency completes consultation under the ESA.

---

[144] Black Ram BA at 9.

[145] Black Ram BA at 13.

[146] Black Ram BA at 9.

[147] Black Ram BA at 9.

[148] *See* 2015 Kootenai Forest Plan at 146-152.

[149] Black Ram BA at 9.

[150] Black Ram BA at 13 (citing FW-GDL-WL-01).

III. THE FINAL EA FAILS TO ADEQUATELY DISCLOSE IMPACTS TO LYNX.

The Kootenai National Forest, and the project area in particular, appear to be some of the most important habitat for lynx in the conterminous United States. One study the Final EA relies on states:

> Lynx remain threatened in the lower 48 states, and their recovery, largely due to the uncertainties of climate change, remains questionable. *Only two reproducing lynx populations are found in the lower 48* (one in the *Yaak drainage on the KNF*).[151]

The Final EA explicitly states that the two lynx analysis units (LAUs) impacted by this project "are centrally located in the most productive lynx habitat in contiguous United States."[152]

Given the importance and productivity of this area for lynx, the Forest Service should have taken an especially hard look at the proposal to log, burn, and build roads in the project area. Unfortunately, the Forest Service failed to do so.[153]

A. The Scope Of The EA's Lynx Analysis Is Too Narrow.

For Canada lynx, the Forest Service states that it focuses on the affected LAU as the analysis area for analyzing and monitoring project impacts to lynx.[154] This scope of analysis is arbitrarily limited, and precludes the "hard look" NEPA requires because the entire Kootenai National Forest is designated as occupied by lynx; actions taken within the Project area may impact lynx and lynx populations outside the Forest (including in Canada), particularly in light of the importance of this landscape to America's lynx populations.[155] At a minimum, the Forest Service should analyze the impacts of the project on lynx within the entire project area, not just within

---

[151] Ecosystem Research Group, Wildlife Habitat Assessment For The Kootenai And Idaho Panhandle plan revision zone (KIPZ) (2012) at 80 (emphasis added). *See also* Final EA at 319 (citing "ERG 2012").

[152] Final EA at 320 (citing "John R. Squires, 2012."). *See also id.* at 323 ("Again, this area is considered the most productive lynx habitat in the continental United States.").

[153] Objectors challenged the Forest Service's analysis of project impacts to lynx in their respective comment letters. *See* letter of M. Fox, WildEarth Guardians to C. Benson, Kootenai National Forest (Aug. 7, 2019) at 4-6, 11-13; letter of E. Zukoski *et al*., Center for Biological Diversity to L. Osborn, Kootenai National Forest (Aug. 8, 2019) at 9.

[154] Final EA at 316.

[155] *See* Forest Service, Northern Rockies Lynx Management Direction Record of Decision (Mar. 2007), page 1 ("The direction applies to mapped lynx habitat on National Forest System land presently **occupied** by Canada lynx, as defined by the *Amended Lynx Conservation Agreement between the Forest Service and the FWS* (USDA FS and USDI FWS 2006)") (emphasis in original), available at https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5277399.pdf (last viewed Nov. 13, 2020).

LAUs.[156] The agency itself notes science showing lynx "have traveled over 250 kilometers" and that "lynx are a mobile species and are quite capable of traveling between the Project Area and other key habitats."[157] Further, the Forest Service improperly ignores impacts to lynx from activities on private property based on the reasoning that they would not occur within a LAU.[158] The Forest Service ignores private land impacts despite that fact that private property represent an "influential restriction to [lynx] movement," more so than Forest lands.[159] The Forest Service's responds to criticism of its too-narrow scope of analysis by simply alleging that it chose "the appropriate spatial scale for analysis, and … acknowledge[d] your different perspective."[160]

Further, the Final EA makes it impossible for the public to understand why limiting the scope of analysis might distort the Forest Service's analysis, because the EA and its appendices lack any maps showing how the project area relates to the Hawkins LAU or Robinson LAU.[161] Instead, the agency buried such a map in the project record, inexplicably ignoring public requests to include the information in the EA. Relevant maps were only made available to the Center after the close of the comment period and after Center filed a Freedom of Information Act request. To provide for meaningful and informed public comment, the Forest Service must disclose the location of LAUs in relation to this project in the NEPA document itself.[162]

B. The EA Fails To Take A Hard Look At The Project By Failing To Disclose Project Impacts To Lynx.

The EA fails to take a hard look at the Black Ram Projects for a number of reasons.

Failure to identify project impact locations compared to lynx habitat. The EA fails to provide important information about the location of project impacts vis-à-vis important habitat, travel

---

[156] To the extent the Forest Service relies on the 2015 Kootenai Forest Plan for the scope of its analysis of impacts to lynx under NEPA, the Forest Plan direction is similarly flawed. *See, e.g.*, Kootenai National Forest Plan at 112 (defining Lynx Analysis Unit as a "project analysis unit upon which direct, indirect, and cumulative effects analyses are performed"); *id*. at 153 ("The following objectives, standards, and guidelines apply to all management projects in lynx habitat in lynx analysis units (LAUs) in occupied habitat and in linkage areas").

[157] Final EA at 318.

[158] Final EA at 329.

[159] Final EA at 325.

[160] Final EA Appx. at 125.

[161] Final EA at 318 (indicating maps are available in the project file, but not to the public during the comment period).

[162] *See, e.g.*, *Klamath-Siskiyou Wildlands Ctr. v. BLM*, 387 F.3d 989 (9th Cir. 2004) (NEPA documents must contain the environmental data underlying an agency's analysis of impacts, explaining that "generalized conclusory statements are inadequate"); *League of Wilderness Defenders v. Zielinski*, 187 F. Supp. 2d 1263, 1271 (D. Or. 2002) ("A federal agency's defense of its positions must be found in its EA").

corridors, or other landscapes important to lynx. This omission makes it impossible for the public or the decisionmaker to understand how and where the project will impact lynx. Specifically, the EA fails to provide maps displaying the LAUs or overlaying clearcutting, other timber management, or prescribed fire or proposed roads, haul routes, etc., making it impossible for the public to verify or understand the EA's analysis. Nor does the EA map the location and juxtaposition of lynx habitat types (denning, foraging, etc.) in the project area.

In order to comply with NEPA's hard look mandate, the Forest Service should disclose not just the LAU boundaries, but also the different types of lynx habitat in the project area, including denning, foraging, and winter habitat, as well as linkage areas and connectivity corridors in relation to the proposed actions, and the location of any overlap with Inventoried Roadless Areas.[163] Tables 91 and 92 disclose *some* of this information generally in terms of gross acres of the condition of certain stands, but not how it relates to the location of proposed actions.[164] This information is crucial to understanding what type of impact the project activities will have on lynx.

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."[165] 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.[166] Indeed, "location, not merely total surface disturbance, affects habitat fragmentation,"[167] and therefore location data is critical to the site-specific analysis NEPA requires. Merely disclosing the existence of particular geographic or biological features, as the Black Ram Project EA does here, is inadequate; agencies must discuss their importance and juxtaposition, and substantiate their findings as to the impacts.[168]

Courts in the Ninth Circuit have taken a similar approach. For example, the U.S. District Court for the District of Alaska issued a preliminary injunction in 2019, and then a decision on the merits in 2020 in the case *Southeast Alaska Conservation Council v. U.S. Forest Service,* halting implementation of the Tongass National Forest's Prince of Wales Landscape Level Analysis

---

[163] *See* Final EA at 323 (noting over 106,000 acres of IRA associated with the Hawkins, Robinson, and adjacent LAUs, and 40,000 acres of IRA within or intersecting the project LAUs, but failing to provide maps of this overlap).

[164] Final EA at 320.

[165] *New Mexico ex rel. Richardson*, 565 F.3d 683, 706 (10th Cir. 2009).

[166] *Id*. at 707.

[167] *Id*.

[168] *See Or. Natural Res. Council Fund v. Goodman*, 505 F.3d 884, 892 (9th Cir. 2007).

Project.[169] The court did so because the Forest Service's approach failed to disclose the site-specific impacts of that logging proposal, an approach that the court ruled violated NEPA.

The Forest Service apparently argues that the agency need not provide the public or the decisionmaker with information about the location of habitat and the proposed actions that will degrade that habitat because location doesn't matter. The agency asserts that most management actions – such as road construction and use – are unlikely to have any impacts on lynx regardless of road location or density.[170] This is false, and contradicted by the EA which acknowledges that road construction and use and clearcuts can affect lynx. Further, there is clearly a level at which road construction, use, and density will impact lynx and their habitat. Again, the failure to provide information juxtaposing proposed damaging treatments in relation to the varying types of lynx habitat makes it impossible for the public or the decisionmaker to understand the impacts.

Failure to address impacts to lynx (as opposed to hare) habitat. The Forest Service identified vegetation management that affects the suitability of hare habitat as the primary activity that might impact lynx from this project.[171] The agency reasons that because snowshoe hares are the primary prey of lynx, and lynx habitat is associated with conditions that support hare populations, "[t]herefore, young regenerating and mature multistory forest that provide habitat for snowshoe hares is important to lynx conservation."[172] But this project also proposes prescribed burning, new hiking trails, and logging, as well as an increased use of backcountry forest roads to complete the proposed logging and burning – all of which may directly impact lynx – not just hare habitat.[173] The Lynx Conservation Assessment and Strategy (LCAS) finds that risk factors affecting lynx productivity include timber management (not just vegetation management that affects suitable hare habitat), wildland fire management, recreational uses, and forest backcountry roads and trails, each of which this project proposes to implement.[174]

---

[169] *Southeast Alaska Conservation Council v. U.S. Forest Serv.*, 443 F. Supp. 3d 995 (D. Alaska 2020), attached as Ex. 21. The Forest Service recently dropped its appeal of this decision.

[170] *See* Final EA Appx. at 126 ("Lynx are tolerant of traffic on forest roads and these roads do not adversely affect lynx (NRLMD ROD, EIS, and incorporated references.) Forest road use may change depending on whether a road is opened or closed, but these secondary, native surface roads used for project access would continue to be low volume, slow speed routes for the foreseeable future. As such, risk to individual lynx is minimal, see [Final EA] page 323.").

[171] Final EA at 314 ("Because lynx are closely associated to habitat types and structural conditions that support snowshoe hares, the primary activity that might impact lynx is vegetation management that affects the suitability of hare habitat. Therefore, proposed vegetation management that influences the amount and juxtaposition of young regenerating and multistory forest within an analysis area is the focus of the Canada lynx assessment.").

[172] Final EA at 287, 314.

[173] Final EA at 287 ("Both natural (e.g. fire, insects and diseases, and windthrow) and human disturbances such as timber harvest and prescribed fires can affect lynx habitat").

[174] Ruediger, B. *et al.* 2000. Canada lynx conservation assessment and strategy. USDA Forest Service, USDI Fish and Wildlife Service, USDI Bureau of Land Management, and USDI

Failure to address impacts of clearcuts on winter lynx habitat. Scientific studies conclude that lynx avoid areas that have been clearcut, logged, and even thinned.[175] These impacts are most pronounced in winter, which is the most difficult season for lynx to survive. Thus, maintaining and recruiting lynx winter habitat – as opposed to focusing on winter *hare* habitat as the EA does – is critically important to conserve lynx.[176] Reduction in horizontal cover degrades the quality of winter habitat for lynx.[177] The Forest Service response to this information is to argue that the impacts to lynx from clearcuts is less pronounced in summer.[178] This is irrelevant. Lynx that do not survive the winter due to avoidance of disturbed areas will not be able to make use of those areas in the summer. Because lynx are less likely to use recent clearcuts at a time of year critical for their survival, these potentially significant impacts must be disclosed.

Failure to disclose impacts to lynx of road and vehicle use. The Forest Service failed to analyze and disclose the impacts to lynx from forest roads, road constructions, and increased use of roads as a result of this project. Although the Fish and Wildlife Service (FWS) stated it has not found evidence that forest roads *pose a threat* to lynx, that is not the same as concluding forest roads have no impact on lynx or its designated critical habitat. Roads with little traffic understandably will have less impact on lynx.[179] It is important to note this study measured the distance of lynx tracks from roads groomed for snowmobile use, which had approximately 130 machines per day.[180] With this level of snowmobile activity, and the history of use on these groomed roads, it is likely lynx in the area were habituated to the disturbance. As Ruediger (2000) noted:

> Some animals can adapt to predictable human activities. That is, if the activity generally occurs at predictable time periods at the same places or along the same routes, animals may become habituated to the activity. Response of the animal depends on the context within which a human animal encounter takes place, the behavioral state of the animal, the type of human activity, and the time and

---

National Park Service. Forest Service Publication #R1-00-53, Missoula, MT. Available at https://www.fws.gov/mountain-prairie/es/species/mammals/lynx/ruedigeretal_2000.pdf (last viewed Nov. 13, 2020) and in Black Ram project file.

[175] *See* Squires, John *et al.*, *Seasonal Resource Selection of Canada Lynx in Managed Forests of the Northern Rocky Mountains*, 74 J. of Wildlife Mgmt. 1648-1660 (2010), page 1656-1657 ("Forests that were thinned as a silvicultural treatment were generally avoided by lynx") (in Black Ram project file).

[176] *Id.* ("winter is the most constraining season for lynx in terms of resource use").

[177] *Id.*

[178] *See* Final EA at 323 ("While it has been observed that lynx display some avoidance of harvest units with low canopy cover during winter foraging, use of openings and areas of lower canopy cover is less restricted during the snow free season.").

[179] Squires *et al.*, *Seasonal Resource Selection of Canada Lynx in Managed Forests of the Northern Rocky Mountains*, 74 J. of Wildlife Mgmt. at 1657 (finding that lynx "seasonal resource-selection patterns of lynx were little affected by forest roads with low vehicular or snowmobile traffic.").

[180] *Id*. at 1653.

> location of the recreational activity (Bowles 1995, Gutzwiller 1995, Gabrielson and Smith 1995, Knight and Cole 1995a, 1995b).[181]

However, the Forest Service appears to ignore how increased use of forest roads, as will be required to accomplish the proposed activities under this project, will adversely impact lynx. The agency concludes, without citing a basis, that lynx are generally tolerant of human activity, while also failing to consider increased lynx habituation and the resulting consequences. Limited evidence of proof of an impact should not be confused as evidence of the relative absence of such an impact. Indeed, roads impact lynx by fragmenting habitat and increasing the probability of human interactions.[182]

The Forest Service's analysis here precludes meaningful comment by failing to disclose the location of forest roads in relation to the two LAUs and the proposed actions.[183]

The EA also improperly fails to consider the impacts of increased use on forest roads and other project activities on lynx and its designated critical habitat outside of the LAUs. The analysis fails to discuss the effects on lynx and lynx habitat of road construction (both system and temporary), road maintenance activities, and use of those roads (with likely tens of thousands of out-and-back truck trips required to remove more than 50 million board feet of timber; thousands more trips to transport workers to and from logging and prescribed fire treatment sites, etc.). The Forest Service improperly downplays the impacts of over-snow vehicle use, despite the numerous forest roads that will be used for this project and accessible to over-snow vehicles, increasing the likelihood of human interaction with lynx in the project area. Further, the Forest Service defines one need for the project as "Maintain[ing] and improv[ing] the recreation opportunities in the Project Area," while it anticipates an increase in user visitation.[184] Construction of new roads, even temporary roads that later will provide access for snow machines, together with increased visitation, is likely to lead to an increase in vehicle travel on routes, an impact the EA generally ignores. Virtually nowhere does the Final EA address the impacts of this increased traffic, or the increased likelihood that lynx will be struck by vehicles or poached or trapped due to increased human presence. The Forest Service's contention that "native surface roads used for project access would continue to be low volume, slow speed routes for the foreseeable future," and that, "[a]s such, risk to individual lynx is minimal,"[185] is arbitrary and contrary to evidence in the record showing that logging and other treatments will result in significant vehicle traffic, and that visitation is expected to increase.

---

[181] *See* Ruediger, B. *et al.* (2000) at 2-8.

[182] *See, e.g.*, Interagency Lynx Biology Team (Aug. 2013) Canada lynx conservation assessment and strategy, 3rd edition, at 48 (in Black Ram project file).

[183] *See* Final EA at 323, Table 94 (listing the miles of open road in each LAU, but failing to disclose how many miles or the location of roads that will be required for truck hauling or other heavy equipment during the life of this project).

[184] Final EA at 2 (describing project purpose and need); *id*. at 148, 187, 190 (noting increased visitation to the Forest).

[185] Final EA Appx. at 126.

NEPA requires the Forest Service to analyze and disclose how the project – including increased use of forest roads for truck hauling and accessing forest trails – would affect lynx movement though the project area. This should include analysis of impacts to both official linkage areas as well as other known travel corridors in the project area. The Forest Service provides only generalized, conclusory statements that 40,000 acres of IRA within or intersecting the project LAUs provide habitat with low fragmentation, and "there is no concern with regard to habitat continuity."[186] The analysis fails to disclose the location of IRAs in relation to the Hawkins and Robinson LAUs, other adjacent LAUs, or the proposed actions. The Forest Service fails to analyze how the project will impact lynx movement through the area, generally (including outside of, and *between* LAUs). Despite the potential for the Black Ram Project and its new and temporary roads and increased traffic to impact habitat connectivity, and the Forest Service's acknowledgement that "[w]ildlife habitat connectivity is an important consideration on the Forest," the Final EA asserts that the 2015 Forest Plan EIS addressed such impacts.[187] But that document did not address the site-specific impacts of *this* project, and the potential disruption of wildlife travel into and out of *this* project area (as well as between different parts of the project area). The Forest Service cannot rely on a NEPA document that failed to address the site-specific impacts at issue here.

The use of snow machines can harm lynx by compacting snow, thus making travel easier in winter for lynx prey and competitors compared to lynx, who are adapted to pursuing prey in deep snow. The Forest Service alleges that such impacts will be minimal in part because "within the LAUs, no new routes would be created."[188] This ignores the fact that the project proposes to create massive clearcuts, one more than 200 acres in size, that may become open play areas that snow machines will accessible from logging roads. Nowhere does the Forest Service address the impacts of snow machine use *off-road,* though such use is reasonably foreseeable. By failing to address the impacts of snow machine use off roads, the Forest Service also fails to comply with Forest Plan Objective HU O1: "Maintain the lynx's natural competitive advantage over other predators in deep snow, by discouraging the expansion of snow-compacting activities in lynx habitat."[189] Clearcuts large and small, adjacent to temporary or permanent roads, will encourage, rather than discourage, the expansion of snow compacting activities in lynx habitat. Violating Forest Plan objectives would also appear to violate the National Forest Management Act.[190]

Failure to consider the cumulative effect on lynx of private land development. By limiting the analysis of impacts to LAUs, the EA also improperly ignores the cumulative effects to lynx of actions on private property.[191] Clearly, increased construction, noise, and activity on private lands could disturb lynx, who do not recognize private-public land boundaries. The Final EA's

[186] Final EA at 323.

[187] *See* Final EA Appx. at 113.

[188] Final EA at 329; Final EA Appx. at 122.

[189] Final EA at 329.

[190] 16 U.S.C. § 1604(i).

[191] *See* Final EA at 333 ("Activities on private property would not impact lynx habitat because they would not occur in either LAU.").

failure to consider these impacts, and its failure to address the potential for actions on adjacent private lands could result in impacts within LAUs (because noise, private vehicles, etc. travel) violates NEPA's hard look mandate.

> *Suggested Remedy*: The Forest Service should prepare a subsequent NEPA document (preferably a draft EIS) that addresses each of the NEPA, NFMA, and ESA violations concerning lynx described above.

IV. THE FOREST SERVICE'S CONCLUSION THAT THE PROJECT IS "NOT LIKELY TO ADVERSELY AFFECT" LYNX IS ARBITRARY AND CAPRICIOUS.[192]

In conformance with its duties under the Endangered Species Act (ESA), the Forest Service analyzed the potential impacts of the Black Ram Project on lynx and concluded that the proposed action "may affect, [but is] not likely to adversely affect Canada lynx."[193] The agency's conclusion is flawed. The following provides several examples of those flaws, but is not comprehensive.

The Forest Service reached this conclusion based in part on its conclusion that "[i]f any den sites are discovered, design criteria would guide activity so as to minimize impacts."[194] But no design features for lynx protect lynx denning habitat; the only design feature the EA describes for lynx relates to hare habitat in plantations.[195] The Forest Service may argue that design features for grizzly bears that include "periods of [project] inactivity" may somehow protect lynx.[196] But the design features to protect grizzlies only limit certain activities for the month of April, and only limit motorized use "in the first year of project activity … from April 1 through June 15th."[197] It is unclear how limiting certain activities only in the first year of project activity provides any protection to denning lynx or grizzlies in subsequent years. Further, lynx and their kittens remain in their dens long after all of the limits imposed for grizzly expire. A study conducted by staff of the Forest Service's Rocky Mountain Research Station on lynx in the "north-central Rocky Mountains of Montana" found that "Canada lynx in the northern Rocky Mountains give birth in

---

[192] As noted above, Objectors challenged the Forest Service's analysis of project impacts to lynx in their respective comment letters. *See* letter of M. Fox, WildEarth Guardians to C. Benson, Kootenai National Forest (Aug. 7, 2019) at 4-6, 11-13; letter of E. Zukoski *et al*., Center for Biological Diversity to L. Osborn, Kootenai National Forest (Aug. 8, 2019) at 9.

[193] Final EA at 334; Black Ram BA at 1.

[194] Final EA at 334; *see also id*. at 331 ("If any [lynx] den sites are discovered, design criteria would guide activity so as to minimize impacts.").

[195] *See* Final EA at 21.

[196] *See* Final EA at 331 (stating, in addressing impacts to lynx, "Project design criteria for the grizzly bear include periods of inactivity and combined with application of road limits and soil disturbance minimization measures leave a long disturbance-free period when lynx and kittens are in dens and immobile.").

[197] Final EA at 21.

late April to mid-May, with an average parturition date of 9 May, and thus *are potentially restricted to dens from late April to late July*."[198] In addition, while the draft decision for this project references design features, it does not include them in the text of the proposed decision, making it less likely that they will actually be enforced.

Because the Forest Service does not identify design features that will protect lynx denning for the entirety of the denning period, the "not likely to adversely affect" conclusion is based on a false assumption and is thus arbitrary and capricious.

As noted above, despite our comments urging the Forest Service to consider impacts to lynx (instead of focusing on impacts from vegetation management to the suitability of hare habitat), the Forest Service repeats that same narrowed analysis in its BA.[199] The Black Ram Project also proposes prescribed burning, new hiking trails, logging, and increased use of backcountry forest roads to complete the proposed logging and burning. All of these activities may affect lynx, and should be assessed in the ESA analysis. By failing to assess these effects, the BA ignores relevant factors. As noted above, lynx avoid areas that have been clearcut, logged, and even thinned. The agency's almost exclusive focus on the impacts to hare habitat, as opposed to impacts to lynx and lynx habitat, is misplaced. The Forest Service fails to consider how the project activities will impact individual lynx and lynx critical habitat within the project area.

The Forest Service recognizes that human disturbances such as timber harvest and prescribed fires can affect lynx habitat, but notes that these effects are assessed primarily by addressing the Northern Rockies Lynx Management Direct ("NRLMD").[200] Guardians commented that the Forest Service must explain how the project addresses and complies with the NRLMD, including in the context of climate change, proposed logging, and resulting habitat fragmentation due to logging and forest roads. However, the Forest Service's generalized analysis in the BA fails to demonstrate how the specific project activities within the specified area will comply with the NRLMD.[201] The consistency evaluation table also fails to provide sufficient information about this particular project to demonstrate compliance with the ESA.[202] At bottom, although the NRLMD provides some measures for assessing effects of the project, the Forest Service's focus on demonstrating compliance with these plan components is insufficient to "insure" that the specific Black Ram Project "is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of" habitat

---

[198] L. Olson *et al*., Den Use and Activity Patterns in Female Canada Lynx (Lynx canadensis) in the Northern Rocky Mountains, Northwest Science, Vol. 85, No. 3, 455-462, at 460 (2011) (emphasis added), attached as Ex. 22; *see also id*. at 458 ("Female den use ended from 22 June to 31 July").

[199] *See* Black Ram BA at 42; 53-54.

[200] Black Ram BA at 54.

[201] *See* Black Ram BA at 43-44 (Table 15, listing resource indicators and measures for assessing effects to Canada lynx habitat); 54-59.

[202] *See* 2020 BA at 141-147.

that has been designated as critical for the species. This is especially true where the Forest Service limits is analysis to activities within the LAUs.

The Forest Service asserts that activities will occur in a "very small portion of habitat the Project Area LAUs" and therefore "it is doubtful any potential disturbances would result in an adverse impact to individuals."[203] Yet the Forest Service fails to provide support for this conclusion. As noted above, it did not provide relevant maps showing the location of LAUs, including the location of LAUs in relation to the project activities. The only map we were able to find related to lynx in the BA does not indicate where the Hawkins LAU or Robinson LAU are located in relation to the project area.[204] It is unclear whether the lynx habitat shown in Figure 8 is designated lynx critical habitat, or simply lynx habitat, generally.[205]

We requested the agency disclose the LAU boundaries, the different types of lynx habitat in the project area (including denning, foraging, and winter habitat), as well as linkage areas and connectivity corridors in relation to the proposed action, and the location of any overlap with Inventoried Roadless Areas. In its EA, the Forest Service states the lynx analysis unit map is in the project file.[206] But the BA does not consider or disclose this relevant information.[207] The Forest Service provides only generalized, conclusory statements. The analysis in the BA fails to disclose the location of IRAs in relation to the Hawkins and Robinson LAUs, other adjacent LAUs, or the proposed actions. The Forest Service fails to analyze how the project will impact lynx movement through the area, generally (including outside of, and between LAUs). This information is crucial to understanding what type of impact the project activities will have on lynx.

The Forest Service ignores relevant factors in its BA analysis (and its EA) by failing to consider impacts from the project to lynx outside of LAUs.[208] ESA protections apply to lynx wherever they are found, not just in LAUs.[209] An analysis that focuses on LAUs is too limited, given that the entire Kootenai National Forest is designated as occupied by lynx.[210] The Forest Service

---

[203] Black Ram BA at 53.

[204] *See* Black Ram BA at 47 (Figure 8, Canada lynx habitat in the Black Ram project area).

[205] *Id.*

[206] Final EA at 318.

[207] *See* Black Ram BA at 49-50 (discussing the Hawkins and Robinson LAUs, but providing no maps); *id.* at Appendix B (providing project maps but omitting any maps for Canada lynx); *id.* at 52 (discussing connectivity between LAUs and location of IRAs within LAUs, but failing to provide maps).

[208] *See, e.g.*, Black Ram BA at 60 (describing the analysis area as the LAU).

[209] 79 Fed. Reg. 54782 (Sept. 12, 2014) ("This rule revises critical habitat for the lynx and extends the Endangered Species Act's protections to the species wherever it occurs in the contiguous United States").

[210] *See* 2007 Record of Decision for the Northern Rockies Lynx Management Direction, page 1 ("The direction applies to mapped lynx habitat on National Forest System land presently

should analyze the impacts of the project on lynx within the entire project area, not just within LAUs.

To the extent the Forest Service relies on the 2015 Kootenai Forest Plan for the scope of its analysis of impacts to lynx in the BA, the Forest Plan direction is similarly flawed.[211] As noted above, the limited scope of analysis runs contrary to best science available showing lynx "have traveled over 250 kilometers" and that "lynx are a mobile species and are quite capable of traveling between the Project Area and other key habitats."[212] By limiting its analysis to the project impacts within LAUs, the Forest Service improperly ignores cumulative effects from State or private activities that are reasonably certain to occur within the project area.[213]

The BA, like the EA, fails to consider different impacts to lynx that are likely to occur in different seasons. Guardians commented that the Forest Service should consider differences in lynx use of certain habitat types in different seasons, especially since ensuring winter habitat is the most important for lynx. Maintaining and recruiting lynx winter habitat – as opposed to focusing on winter hare habitat – is most important to conserve lynx, especially in the winter when the species is most taxed.[214] Reduction in horizontal cover degrades the quality of winter habitat for lynx.[215] Yet the Forest Service failed to consider or disclose the anticipated seasons for various activities.[216]

The Forest Service ignored many impacts from roads. The agency concludes, without citing a basis, that lynx are generally tolerant of human activity.[217] Limited evidence of proof of an impact should not be confused as evidence of the relative absence of such an impact. The Forest Service notes that human use in the project area is primarily associated with roads.[218] But the agency fails to consider relevant impacts from forest roads, including disruption of individual lynx, lynx mortality due to roads, and increased use of roads as a result of this project. The

---

occupied by Canada lynx, as defined by the Amended Lynx Conservation Agreement between the Forest Service and the FWS (USDA FS and USDI FWS 2006)") (emphasis in original).

[211] *See, e.g.*, 2015 Kootenai Forest Plan at 112 (defining Lynx Analysis Unit as a "project analysis unit upon which direct, indirect, and cumulative effects analyses are performed"); 153 ("The following objectives, standards, and guidelines apply to all management projects in lynx habitat in lynx analysis units (LAUs) in occupied habitat and in linkage areas").

[212] Final EA at 318.

[213] 50 C.F.R. § 402.02 (defining "[c]umulative effects").

[214] *Compare* Black Ram BA at 42 ("Especially important is winter habitat that provides snowshoe hare forage and cover") *with* Squires (2010) at 1656-57 ("winter habitat is the most constraining season for lynx in terms of resource use").

[215] *See* Squires (2010).

[216] *See, e.g.*, Black Ram BA at 125-135 (Appendix K, Access Management Plan, lacking a schedule of dates or even seasons for anticipated activities).

[217] Black Ram BA at 52.

[218] Black Ram BA at 52.

Forest Service appears to ignore how increased use of forest roads, as will be required to accomplish the proposed activities under this project, will adversely impact lynx. The analysis fails to discuss the effects of road construction (both system and temporary), road maintenance activities, and use of those roads on lynx and lynx habitat. The agency improperly downplays the threat of motor vehicle use on forest roads to individual lynx.[219]

The Forest Service also fails to disclose how the project area relates to designated critical habitat for lynx.[220] Although "[t]he majority of critical habitat acres (99% or 904,242 of 909,816 acres) on the KNF are within a LAU," these are not the same designations.[221] To the extent the Forest Service relies on the 2017 Biological Opinion analyzing the impacts of NRLMD in light of critical habitat designated in 2014, that analysis is insufficient to address the site-specific impacts of this project because the agency action analyzed in that opinion was programmatic in nature.

The Forest Service ignores numerous impacts and ignores the significant disruption of engine noise from over-snow vehicle use in its environmental baseline analysis for lynx. The Forest Service notes that barriered roads may still provide opportunities for over-snow vehicle use.[222] And the agency notes Whitetail-Beetle Creek/North Creek Roads are designated OSV routes in the project area that get regular winter use.[223] But it fails to disclose the location of these routes within the project area on a map, precluding meaningful comment. The Forest Service improperly downplays the impacts of over-snow vehicle use, despite the numerous forest roads that will be used for this project and accessible to over-snow vehicles, increasing the likelihood of human interaction with lynx in the project area.

> *Suggested Remedy*: The Forest Service should prepare a subsequent NEPA document (preferably a draft EIS) that provides effective and enforceable measures to protect lynx denning habitat from disturbance from April 1 to July 31. The Forest Service should also prepare a revised BA that adequately assesses the effects of the Black Ram Project in determining whether the project is likely to adversely affect Canada lynx and its designated critical habitat.

V. THE EA FAILS TO CONSIDER A RANGE OF REASONABLE ALTERNATIVES.

A. Agencies Must Analyze a Range of Reasonable Alternatives in an EA.

CEQ regulations require agencies to "use the NEPA process to identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon

---

[219] *See e.g.*, Ruediger et al 2000 at 48 (Attachment B to 2019 Guardians' Comments).

[220] 79 Fed. Reg. 54782, 54844 (Sept. 12, 2014) (Critical Habitat for Canada Lynx Unit 3 – Northern Rockies).

[221] 2015 Kootenai Forest Plan EIS, page 235 ("not all acres within a LAU are lynx habitat").

[222] Black Ram BA at 52 (noting 144 miles of road open to OSV use within the Hawkins LAU, and 205 miles of road open to OSV use in the Robinson LAU).

[223] Black Ram BA at 53.

the quality of the human environment."[224] NEPA requires that federal agencies consider alternatives to recommended actions whenever those actions "involve[] unresolved conflicts concerning alternative uses of available resources."[225] "NEPA's requirement that alternatives be studied, developed, and described both guides the substance of the environmental decisionmaking and provides evidence that the mandated decsionmaking process has actually taken place."[226]

In taking the "hard look" at impacts that NEPA requires, an EA must "study, develop, and describe" reasonable alternatives to the proposed action.[227] "A properly-drafted EA must include a discussion of appropriate alternatives to the proposed project."[228] This alternatives analysis "is at the heart of the NEPA process, and is 'operative even if the agency finds no significant environmental impact.'"[229]

Reasonable alternatives must be analyzed for an EA even where a FONSI is issued because "nonsignificant impact does not equal no impact. Thus, if an even less harmful alternative is feasible, it ought to be considered."[230] When an agency considers reasonable alternatives, it "ensures that it has considered all possible approaches to, and potential environmental impacts of, a particular project; as a result, NEPA ensures that the most intelligent, optimally beneficial decision will ultimately be made."[231]

In determining whether an alternative is "reasonable," and thus requires detailed analysis, courts look to two guideposts: "First, when considering agency actions taken pursuant to a statute, an

---

[224] 40 C.F.R. § 1500.1(e) (2019).

[225] 42 U.S.C. § 4332(2)(E).

[226] *Bob Marshall Alliance v. Hodel*, 852 F.2d 1223, 1228 (9th Cir. 1988) (citation omitted).

[227] 42 U.S.C. § 4332(2)(C) & (E); 40 C.F.R. § 1508.9(b) (2019) (an EA "[s]hall include brief discussions ... of alternatives"). The Tenth Circuit explains that this mandate extends to EAs as well as EISs.

[228] *Davis v. Mineta*, 302 F.3d 1104, 1120 (10th Cir. 2002) (granting injunction where EA failed to consider reasonable alternatives).

[229] *Diné Citizens Against Ruining Our Env't v. Klein*, 747 F. Supp. 2d 1234, 1254 (D. Colo. 2010) (quoting *Greater Yellowstone Coal. v. Flowers*, 359 F.3d 1257, 1277 (10th Cir. 2004)). *See also W. Watersheds Project v. Abbey*, 719 F.3d 1035, 1050 (9th Cir. 2013) (in preparing EA, "an agency must still give full and meaningful consideration to *all* reasonable alternatives" (emphasis added) (internal quotation and citation omitted)); 40 C.F.R. § 1502.14 (2019) (describing alternatives analysis as the "heart of the environmental impact statement").

[230] *Ayers v. Espy*, 873 F. Supp. 455, 473 (D. Colo. 1994) (internal citation omitted).

[231] *Wilderness Soc'y v. Wisely*, 524 F. Supp. 2d 1285, 1309 (D. Colo. 2007) (quotations & citation omitted).

alternative is reasonable only if it falls within the agency's statutory mandate. Second, reasonableness is judged with reference to an agency's objectives for a particular project."[232]

Any alternative that is unreasonably excluded will invalidate the NEPA analysis. "The existence of a viable but unexamined alternative renders an alternatives analysis, and the EA which relies upon it, inadequate."[233] The agency's obligation to consider reasonable alternatives applies to citizen-proposed alternatives.[234]

Courts hold that an alternative may not be disregarded merely because it does not offer a complete solution to the problem.[235] Even if additional alternatives would not fully achieve the project's purpose and need, NEPA "does not permit the agency to eliminate from discussion or consideration a whole range of alternatives, merely because they would achieve only some of the purposes of a multipurpose project."[236] If a different action alternative "would only partly meet the goals of the project, this may allow the decision maker to conclude that meeting part of the goal with less environmental impact may be worth the tradeoff with a preferred alternative that has greater environmental impact."[237]

The courts also require that an agency adequately and explicitly explain in the EA any decision to eliminate an alternative from further study.[238]

B. The Final EA Failed to Analyze a Range of Reasonable Alternatives.

The Final EA considers three alternatives: [239]

---

[232] *Diné Citizens Against Ruining Our Env't*, 747 F. Supp. 2d at 1255 (quoting *New Mexico ex rel. Richardson*, 565 F.3d at 709). *See also Idaho Conservation League v. Mumma*, 956 F.2d 1508, 1520 (9th Cir. 1992) ("nature and scope of proposed action" determines the range of reasonable alternatives agency must consider).

[233] *Id.* at 1256.

[234] *See Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1217-19 (9th Cir. 2008) (finding EA deficient, in part, for failing to evaluate a specific proposal submitted by petitioner); *Colo. Envtl. Coal. v. Dombeck*, 185 F.3d 1162, 1171 (10th Cir. 1999) (agency's "[h]ard look" analysis should utilize "*public comment* and the best available scientific information") (emphasis added).

[235] *Natural Resources Defense Council, Inc. v. Morton*, 458 F.2d 827, 836 (D.C. Cir. 1972).

[236] *Town of Matthews v. U.S. Dep't. of Transp.*, 527 F. Supp. 1055 (W.D. N.C. 1981).

[237] *North Buckhead Civic Ass'n v. Skinner*, 903 F.2d 1533, 1542 (11th Cir. 1990).

[238] *See Wilderness Soc'y*, 524 F. Supp. 2d at 1309 (holding EA for agency decision to offer oil and gas leases violated NEPA because it failed to discuss the reasons for eliminating a "no surface occupancy" alternative); *Ayers*, 873 F. Supp. at 468, 473.

[239] Objectors challenged the Forest Service's analysis of alternatives in their respective comment letters. *See* letter of M. Fox, WildEarth Guardians to C. Benson, Kootenai National Forest (Aug.

(1) the "no action" alternative, which the Forest Service alleges would have detrimental impacts and would not achieve the purpose and need for the project;

(2) the proposed action, Alternative 2, which would involve 2,011 acres of clearcuts, 4,038 acres of total commercial logging; 7,553 acres of fuel treatments outside logged areas, including 2,199 acres in inventoried roadless areas; 0.8 miles of road construction in old growth forest; and 90.3 miles of road reconstruction or maintenance; and

(3) Alternative 3, which would involve 1,833 acres of clearcuts (91% of that for Alt. 2), 3,577 acres of total commercial logging (89% of that for Alt. 2); 7,553 acres of fuel treatments outside logged areas, including 2,199 acres in inventoried roadless areas (identical to Alt. 2); 0 miles of road construction in old growth forest; and 89.4 miles of road reconstruction or maintenance (99% of that for Alt. 2).[240]

"[P]roposed recreation improvements are the same in both alternative 2 and 3."[241] The Final EA describes Alternative 3 "alternative 2 without the new permanent road construction [through old growth] and treats 461 fewer harvest acres. This alternative address's [sic] public concerns about the impacts of building new roads in the Project Area. Some harvest units would decrease compared to alternative 2 without the new road construction."[242] In short, the two alternatives are nearly identical. The fact that the Final EA repeatedly lumps the two action alternatives together in analyzing their impacts further supports this conclusion.[243]

Analyzing only two action alternatives that are nearly identical does not place in sharp relief the trade-offs at stake in the project, thus cutting out the heart of the NEPA process. Alternative 3 is not a "middle-range" alternative, the very kind courts have held that an agency cannot dismiss from consideration.

7, 2019) at 9; letter of E. Zukoski *et al*., Center for Biological Diversity to L. Osborn, Kootenai National Forest (Aug. 8, 2019) at 10-12.

[240] Final EA at 6-15.

[241] Final EA at 188.

[242] Final EA at 12.

[243] *See, e.g.*, Final EA at 123 (in disclosing effects to vegetation, stating that "Both action alternatives would be described together in this analysis as they are closely related from a vegetation standpoint"); *id*. at 154-55, Table 54 (table describing together, and the same, the impacts of the action alternatives on roadless values); *id*. at 162 ("Both action alternatives would be discussed together in this analysis as they are closely related from a noxious weeds standpoint"); *id*. at 188 ("Alternatives 2 and 3 would have very similar effects to recreational resources"); *id*. at 267 ("Haul route reconstruction/reconditioning work in Alternatives 2 and 3 is nearly identical"); *id*. at 324 ("The action alternatives are discussed together because there are minor differences only" in impacts to lynx and critical habitat); *id*. at 419 ("The action alternatives are discussed together [regarding impacts to migratory birds] because the effects are nearly the same").

The Center requested that the Forest Service consider an additional alternative that would achieve part of the project's purpose and need by avoiding old growth treatments and instead:

- focus treatments in the wildland urban interface (WUI). About 40% of acres proposed for logging, and 40% of acres proposed for fire treatments, under Alternative 2 would occur in what the EA describes as the WUI.[244] The majority of logging proposed in the agency's proposed action would occur many miles upwind from private property, and so will do little to protect communities from fire. The EA should have analyzed an alternative that focuses on increased thinning and hazardous fuels reduction within the WUI. The WUI is very broadly defined in the Yaak Valley and covers significant acres.
- increase treatments in previously logged areas that may require thinning to reduce fire risk.[245]

WildEarth Guardians proposed a similar alternative.[246]

Such an alternative would achieve numerous project purposes and needs by: (a) making forest products available; (b) by promoting desirable fire behavior characteristics and fuel conditions in the WUI; and (c) protecting watersheds. The project area includes 23,846 acres of land within the WUI, providing ample opportunity for treatments to protect life, structures, and property. In light of increasing development in the WUI and the risks of wildfire to homes in those areas, such an alternative is reasonable. Forest Service researchers have long concluded that ignitions "are determined by very, very local conditions" and recommended that property owners focus on the nearby "home ignition zone" to greatly improve a home's chance of surviving a forest fire.[247]

---

[244] *See* Final EA at 13, Tables 4 and 5.

[245] About 40% of acres proposed for logging, and 40% of acres proposed for fire treatments, under Alternative 2 would occur in what the EA describes as the WUI. *See* Final EA at 13, Tables 4 and 5. The majority of logging proposed would occur many miles upwind from private property, and so will do little to protect communities from fire.

[246] *See* letter of M. Fox, WildEarth Guardians to C. Benson, Kootenai National Forest (Aug. 7, 2019) at 9 (asking the Forest Service to consider "an alternative that devotes resources to fire planning and prevention in the communities adjacent to or within the WUI, as opposed to focuses solely on logging.").

[247] H. Powell, Old Flames: The Tangled History of Forest Fires, Wildlife, and People, Living Bird Magazine (Summer 2019), attached as Ex. 23, and available at https://www.allaboutbirds.org/news/old-flames-the-tangled-history-of-forest-fires-wildlife-and-people/ (last viewed Nov. 13, 2020). *See also* Cohen, J. D. (1995), Structure ignition assessment model (SIAM) (General Technical Report PSW-GTR-158), attached as Ex. 24; Cohen, J. D. (2000a), Preventing disaster - Home ignitability in the wildland-urban interface. Journal of Forestry, 98(3), 15-21, attached as Ex. 25; Cohen, J. D. (2000b), What is the wildland fire threat to homes? (all in Black Ram project file).

An alternative that also focuses on treating previously clearcut stands would meet the purpose and need of the project. Specifically, according to the Kootenai Forest Plan FEIS and Black Ram Final EA:

a) The Project Area contains a significant acreage of previously clearcut stands.[248] The Kootenai National Forest produced inordinately high volumes of timber throughout the 1960s, 70s, 80s and 90s with annual board feet cut in the range of 150-250 million, declining to between 50-100 million board feet in the late 1990s. Decades of clearcutting has left a significant legacy of dense plantations across the Forest including in the project area.[249]

b) Clearcut plantations would benefit from treatment, and very few stands have been treated. The Kootenai Forest Plan FEIS acknowledges that "some regeneration harvests conducted prior to the mid-1990s tended to create unnaturally uniform conditions and did not leave the scattered residual snags, residual live tree patches, and scattered fire-tolerant large live trees (larch and ponderosa pine) that were characteristic of historic fires."[250]

c) Treating clearcut plantations would meet the Forest Plan desired condition of reducing the amount of "mid seral" forests as a percent of the forest overall. The Kootenai Forest Plan establishes desired conditions for forest structure/size class. Specifically the plan seeks to reduce the percent of small trees defined at 40-70 years old and ranging from 5-10 inches in diameter at breast height.[251]

d) Thinning plantations would decrease risk of unnatural wildfires. Research shows that plantations resulting from "even aged management" are a more important predictor of fire severity than topographic features or daily weather. Outside of plantations, daily fire weather was the most important predictor of fire severity.[252] The researchers also found that intensive plantation forestry appears to have a greater impact on fire

---

[248] Specifically, the EA identifies 38,101 acres of previously logged areas in the Black Ram project area, of which 19,500 were clearcut. *See* Final EA at Appendix C.

[249] *See* Kootenai National Forest Plan FEIS at 516.

[250] *See* Kootenai National Forest Plan FEIS at 87. *See also id.* at 99 ("Some of the middle-aged stands on the forest have had treatments within them to thin them out and/or to reduce hazardous fuels within them. However, the percentage that has been treated is very low. As articulated in the plan components FW-DC-VEG and FW-DC-VEG-05, the desire is to decrease the percentage in the middle-aged stands on the forest." *See* Kootenai National Forest Plan FEIS at 99.").

[251] *See* Kootenai National Forest Plan FEIS at 90, 92, 94.

[252] H. Zald *et al.*, *Severe fire weather and intensive forest management increase fire severity in a multi-ownership landscape*, Ecological Applications, 28(4) (2018), pp. 1068–1080, attached as Ex. 26.

severity than decades of fire exclusion. Older forests on federal lands were found to have greater resilience to fire, despite long term exclusion.

Two of the project's main goals (goal 1 and goal 5) are to improve resilience and resistance to fire, insects, and disease and reduce the potential for high intensity fire.[253] One of the most effective treatments would be to concentrate silvicultural treatments on thinning existing plantations in the project area. Yet, Black Ram project failed to evaluate this reasonable alternative, violating NEPA. Furthermore, because the Black Ram project proposes thousands of acres of new regeneration harvest in various forms of clearcutting, it will exacerbate uncharacteristic fire in new units and violating the project's stated goals.

The Center further requested that the Forest Service consider an alternative to protect moist/wet old-growth forest types – forests that are most likely to resist fire impacts – from any logging and road construction.

WildEarth Guardians also suggested alternatives that would result in more wildlife security and less habitat disruption from road use and construction, including:

- an alternative that considers decommissioning more system roads to improve water quality and maintain and improve terrestrial wildlife species habitat and security;

- an alternative that actually increases wildlife security by removing existing human uses on old road templates and other locations it was not planned for; and

- an alternative that requires no new roads (temporary or system).

Such an alternative or alternatives could meet all the other purposes and needs of the project while avoiding the harmful and destabilizing impacts that an unmaintained road system has on the landscape, increased impacts of that road system when combined with the effects of climate change (i.e., changes in weather patterns), and the increased risk of fire as a result of forest roads on the landscape.

The Final EA does not provide a rational explanation for eliminating all of these alternatives from detailed consideration. In a general dismissal of all of these reasonable proposals, the Forest Service provides a non-answer: "The purpose and need, the proposed action and the scoping comments the Forest Service received were used to determine the alternatives for this project."[254] While this may explain how the agency chose the nearly-identical Alternatives 2 and 3, it does not explain why the Forest Service rejected one, or any, of the alternatives the Center and Guardians proposed. The Forest Service does not explain why the proffered alternatives do not meet the project purpose and need, nor why they are too similar to other alternatives.

NEPA requires that the agency consider each of the proposed reasonable alternatives, or explain why it would not do so. The Forest Service did neither, violating the law.

---

[253] Final EA at 1-2.

[254] Final EA Appx. at 93.

Suggested Remedy: The Forest Service should prepare a supplemental NEPA document (preferably a Draft EIS) that analyzes in detail alternatives every alternative proposed by the Center and Guardians (including an alternative that focuses treatments in the WUI, an alternative that protects moist/wet old-growth forest types, and an alternative that would result in more wildlife security and less habitat disruption from road use and construction) or that provides a rational basis for dismissing from considering in detail each alternative.

VI. THE EA FAILS TO TAKE A HARD LOOK AT OTHER IMPACTS.

A. The EA Fails to Properly Disclose Impacts to Moist Forest Types.

Over 75 percent of the proposed project area is in moist/wet or high, cool forest types, and 70% of proposed treatments in old growth and recruitment potential old growth are in these types of forests.[255] These forests are generally characterized by multi-layered canopies including shade tolerant species. Though the Forest Service has clearcut significant parts of this landscape, destroying functioning old growth forest, many significant and functioning areas of old growth forests still exist the project area.

The Black Ram project proposes regeneration harvest, variations of clearcuts, in many of these functioning forest areas. Following logging, the areas would be planted with long lived early seral species such as white pine and larch. These species are generally better suited to dry, not moist warm/ or high, cool sites.

The Final EA fails to provide rigorous scientific evaluation to justify the need to "restart" these stands, nor does the EA provide a scientific basis to support the assumption that clearcutting and replanting these clearcuts, some larger than 200 acres, would contribute to resiliency. Further, the rationale for the species that would be replanted is also not supported. To justify a finding of no significant impact, the Forest Service must provide support for the claimed needs for this project, especially where existing science contradicts the agency's assumptions. The Forest Service should drop units in the moist, and high, cool forest types from consideration and focus its efforts on the Wildlands Urban Interface.

The natural disturbance processes of these moister forests are largely based on gap dynamics, wherein older trees die either through windthrow, root rot or other causes. When a tree falls, it creates a gap in forest allowing for new growth. The downed woody debris slowly rots, returning vital nutrients to the soil that support growth of the next cohort of trees. These forests are not in need of "restarting" the stand. In fact, the proposed regeneration harvest or clearcutting would destroy the forest's own natural resilience capabilities in the following ways:

1. *Clearcutting increases habitat fragmentation and natural processes.* Habitat fragmentation is defined as the process during which a large expanse of habitat is transformed into a number of smaller patches of smaller total area isolated from each other by a matrix of habitats unlike the original. The effects of fragmentation are well documented in all forested regions of the planet. In general, by reducing forest health

[255] Final EA at 126, Table 50.

> and degrading habitat, fragmentation leads to loss of biodiversity, increases in invasive plants, pests, and pathogens, and reduction in water quality. These wide-ranging effects all stem from two basic problems: fragmentation increases isolation between forest communities and it increases so-called edge effects. When a forest becomes isolated, the movement of plants and animals is inhibited. This restricts breeding and gene flow and results in long-term population decline. The proposed Black Ram project will reduce and stress these systems, not make the systems more resilient.[256]
>
> Additionally, removing native forest from significant portion of the project area—2,672 acres— would remove cover and shelter for a range of threatened and endangered species including bears and lynx, exposing them to stress and increased human encounters increasing their risk of being killed. Fragmentation is a threat to natural resilience, and connectivity of forest habitats is believed to be a key component of forest adaptation and response to climate change. For ecological systems, biodiversity and functional redundancy can help the ecosystem be more resilient to environmental changes. The Black Ram project will have the opposite effect. The Forest Service failed to provide a critical analysis of these effects nor support their assumptions that the proposed logging will lead to increased resiliency.

In responding to comments on this issue, the Forest Service asserts that while connectivity is important, the purpose of the project is to restore a forest better adapted to fire.[257] Merely acknowledging that connectivity is important and pivoting to another topic fails to respond to the comment. Regarding the stated project goal to "restore a forest better adapted to fire," given the large acreage of plantations in the project area, the Forest Service should have evaluated an alternative that thinned those areas, as that would be a more effective way to restore a forest better adapted to fire.[258]

2. *Clearcutting creates uncharacteristic fire risk.* Scientific studies show that clearcutting and the creation of artificial tree plantations increase risk of uncharacteristic fire. Replacing moist and cool closed canopy forests with densely planted trees opens stands to sunlight facilitating drying of soils and surface water. Densely planted young trees are much more flammable than multi-layered closed canopy moist forests.[259] One such example in Montana is the 2003 Cooley Ridge fire

---

[256] N. Haddad et al., *Habitat fragmentation and its lasting impact on Earth's ecosystems*. Science Advances 20 March 2015, Volume 1, no 2, e1500052, attached as Ex. 27, and available at https://advances.sciencemag.org/content/1/2/e1500052 (last viewed Nov. 13, 2020).

[257] *See* Final EA Appx. at 113.

[258] *See* discussion of alternatives, above.

[259] C. Stone et al., *Forest Harvest Can Increase Subsequent Forest Fire Severity,* Proceedings of the Second International Symposium on Fire Economics, Planning and Policy: A Global View. 2004. Pp. 526-534, available at https://www.fs.fed.us/psw/publications/documents/psw_gtr208en/psw_gtr208en_525-534_stone.pdf (last viewed Nov. 13, 2020), and attached as Ex. 28.

> complex. An extensively and homogenously logged watershed burned severely and due to resulting low fuel moisture from overstory removal, and severe fire weather. This is what the Black Ram project proposes to do. Extensive regeneration harvest including some over 200 acres in size in combination with past clear-cuts will move the watershed closer to the conditions in the Cooney Ridge Fire. Another study demonstrated that forests with higher levels of protection had lower fire severity values even though they are generally identified as having the highest overall levels of biomass and fuel loading.[260] The EA fails to present compelling evidence that the moist and higher elevation cool forests in the Black Ram project that, to date, have not been logged exhibit risk of uncharacteristic wildfire. Further, roads are significant vectors for human caused fires.

Proposed treatments in moist old growth stands, including Unit 72 (now divided into three cutting units) would open the canopy, which in turn lets in sunlight, that in turn dries out the understory.[261] Logging proposed in moist old growth stands would violate Forest Plan standard FW-STD-VEG-01.[262] Specifically, prescriptions to reduce surface and ladder fuels and canopy bulk density reduction in warm/moist old growth will fundamentally change the character of the stand and the Forest Service has shown no scientific basis for these proposed treatments. There may still be older trees left standing, including "leave" islands, but the stand will no longer be an old growth stand.

Nor is there a sound scientific basis to treat warm or dry old growth stands to increase early seral tree species. Again, these stands originated well over 100 years ago, they are fully functioning, including experiencing levels of insects, natural disturbance agents. There is also no basis for "promoting early seral species" in the existing and/or potential future old growth. That may be a legitimate goal to pursue in previously logged areas of the forest, but there is no need to do so in old growth stands. Doing so would degrade these stands and violate the Forest Plan standards, not to mention compacting the soil, damaging adjacent trees by bringing in heavy equipment.

Specifically, the Forest Plan FEIS notes examples where the Plan would allow treatments in warm/moist, warm/dry and subalpine old growth stands. The EIS says that treatments in warm/moist old growth may "include cutting of smaller trees to emulate a non-lethal or mixed-severity wildfire that occasionally occurred on these sites historically, and that served to extend the time that shade intolerant western larch or ponderosa pine could maintain their presence in

---

[260] Bradley, C. M., C. T. Hanson, and D. A. DellaSala. 2016. Does increased forest protection correspond to higher fire severity in frequent-fire forests of the western United States? Ecosphere 7(10):e01492. 10.1002/ecs2.1492, available at https://esajournals.onlinelibrary.wiley.com/doi/pdf/10.1002/ecs2.1492 (last viewed Nov. 13, 2020), and attached as Ex. 29.

[261] The Forest Service's response that "None of the treatments propose to convert 'wet' forests into 'dry' forests" mischaracterizes the Center's concerns. Final EA Appx. at 82

[262] Standard: Within old growth stands, timber harvest or other vegetation management activities shall not be authorized if the activities would likely modify the characteristics of the stand to the extent that the stand would no longer meet the definition of old growth.

stands that would otherwise become dominated by shade tolerant species (e.g., western hemlock, western redcedar, grand fir)."[263]

Rather than allow natural fires to play its role (a stated goal of the Forest Plan and the Black Ram project), the Forest Service instead proposes to log these stands and most likely continue ecologically harmful policies of aggressive fire suppression and post fire logging.

The Forest Service also presumes that having the stand become dominated by shade tolerant species is a bad thing. Depending on the length of time between disturbances, a natural trajectory of an old growth stand may very well be to become dominated by shade tolerant trees. The Forest Service is speculating on the need to intervene and are equally as speculative that such an intervention would be beneficial. That has not been proven. The Forest Service has a long history of a bias towards timber production and a lack of appreciation and tolerance of natural processes that will obtain the same stand conditions that they seek, but says the only way to accomplish these goals is through logging.

According to the Forest Plan FEIS, the modified stand structure and fuel complex that results from the activities described in examples above *could* increase the resistance of the large trees to potential mortality from disturbances and/or stressors (e.g., high intensity wildfire, bark beetle attacks, and/or potential climate change impacts such as more frequent or intense droughts).[264]

The Forest Service acknowledges that logging in these stands "could" increase resilience and resistance to disturbances. But Final EA provides no certainty that this will be the likely outcome, nor does it estimate probability that such treatments would result in the desired outcomes. Importantly, the Forest Service failed to take the hard look at the risks in treating these stands from opening up canopy to sunlight and resulting drying out of soils. Nor did the Forest Service analyze missed fire cycles.

Regarding Unit 72, Rampike (now broken into three units), we strongly oppose the proposal to clearcut (regeneration harvest) this area. Clearcutting this important old growth stand would violate the Kootenai National Forest Plan's goal to increase old growth and the vegetation standard for the Yaak Valley Geographic Area.[265] In fact, clearcutting this stand would take the Forest in the exact opposite direction. Furthermore, we disagree with the Forest's characterization that Unit 72 is not "old growth." There is a tremendous range of natural variation in forests, including in late sessional and old growth stands. While it is fine to use a list of characterizations, features and even ranges to define different old growth types, adherence to an arbitrarily and capriciously stringent definition belies the more important goal of protecting

---

[263] *See* Kootenai National Forest Plan FEIS at 79.

[264] *See* Kootenai National Forest Plan FEIS at 78-79.

[265] *See* Kootenai National Forest Plan FEIS at 77; Kootenai National Forest Plan at 93, Yaak Valley Geographic Area. Note that the Forest Plan desired condition for this area, GA-DC-VEG-YAK-01**,** states that **"**Management of vegetation toward the desired vegetation condition provides habitat for moonworts and northern beechfern and increases in late succession and/or old growth vegetation."

and increasing old growth. The Forest Service stand examiner's description of broken tops and mature spruce/subalpine fir forest and "beetle hazard" describes climax old growth.[266]

An expert forest ecologist disagreed with the Forest Service's characterization of this area's old growth nature in comments submitted on the Draft EA. Mr. Hammond wrote:

> The stands viewed in proposed Unit 72 consist of old-growth Engelmann spruce — subalpine fir in a very moist, cool landscape. Based on field observations, the old-growth forest comprising Unit 72 has been a stable, resilient ecosystem type for 200 years or more. There is evidence that the existing stand developed after the local climate changed from warmer and drier to cooler and wetter. During the warmer drier period, particularly western larch, and likely Douglas-fir and western white pine were frequent in the area. However, under the current climatic conditions, the stand now contains only infrequent old-growth western larch remnant trees and even more scarce remnants of Douglas-fir, with no young western larch, Douglas-fir, and western white pine observed. The proposed regeneration cut treatment for this area will not only remove a potentially unique old-growth forest in this landscape, but also is unlikely to be successful in regenerating early seral species, like western larch and Douglas-fir, due to the cool, moist, and often wet environment.[267]

Even if we were to agree with the Forest Service that this stand is not currently old growth, the stand examiner determined this stand would be old growth in 30 years.[268] Given the Forest's stated goal of increasing old growth, clearcutting this stand violates the Kootenai National Forest goal of increasing old growth.

The Kootenai National Forest has a long history of liquidating old growth forest. It is welcome to see that the Forest finally acknowledge its importance, though we believe the goals set for old growth as a percent of the forest composition are too low. Given the dearth of old growth and its extreme importance to wildlife, biological diversity and natural processes, it is best to have an inclusive definition of old growth and err on the side of preserving too much rather than not enough.

---

[266] *See* N. Macy, Black Ram 72, 72A, 72B, Silvicultural Stand Diagnosis (Apr. 26, 2019) (in Black Ram project file at filename 2019.04.26 DataUntsStdDiagUnit72Abx1MacyN1x.pdf). Boundary adjustments to Unit 72 in the Decision Notice to eliminate cutting from certain "leave islands" (2020 Draft Decision Notice at 8) do not alter the conclusion that the three sub-units to be logged include old growth.

[267] H. Hammond, SILVA ecosystem consultants ltd., Initial Review Black Ram Project (Aug. 5, 2019) at 2-3, attached as Ex. 30. *See also* Memo of H. Hammond, Forest Ecologist & Forester to U.S. Forest Service (Aug. 8, 2019), attached as letter of J. Jacoby, Yaak Valley Forest Council to Supervisor Benson, Kootenai NF (Aug. 8, 2019) at 73 (in Black Ram project file).

[268] *See* N. Macy, Black Ram 72, 72A, 72B, Silvicultural Stand Diagnosis (Apr. 26, 2019) (in Black Ram project file at filename 2019.04.26 DataUntsStdDiagUnit72Abx1MacyN1x.pdf).

The Final EA's failure to disclose and analyze these issues, and to properly evaluate and disclose the project's impacts to large and old trees, violates NEPA.

> *Suggested Remedy*: The Forest Service should issue a new NEPA analysis (preferably a draft EIS) that analyzes and discloses the Black Ram Project's impacts on moist and old forests, and that ensures compliance with Forest Plan goals concerning old growth. The Forest Service should undertake no road construction or harvest treatments in moist old growth or in the Rampike area (units 72, 72A, and 72B).

B. The EA Fails to Adequately Analyze Impacts to Old Growth Stands.

The Black Ram project proposes logging 1363 acres in old growth stands; of which 702 acres are harvest in old growth and recruitment old growth and the balance are fuels treatments in old growth and recruitment old growth.[269]

Logging of and in old growth stands violates the Kootenai Forest Plan (FW-DC-VEG-02) in two ways. First, the Kootenai Forest plan set as a desired future condition ranges for size class of trees. Specifically, the Forest Plan seeks to achieve between 35 and ~70 percent of the forest in the large tree class (defined as 100 years or older and DBH 15"+). Importantly, the Forest Plan indicates that the Kootenai is currently significantly deficient in large trees, with about only 22 percent in the large size class.[270] Second, the Forest Plan also establishes goals to increase old growth (generally 150 years of age) from the current composition of 8.9% of the forest to 13.9% in 2063.[271] The best way to achieve more larger diameter/older trees and old growth is to not log those age classes. The large tree class is the next cohort to become old growth. The Final EA's failure to disclose this conflict with the Forest Plan or to explain how the Black Ram Project will help achieve this Plan standard violates NEPA as well as NFMA.[272]

> *Suggested Remedy*: The Forest Service should issue a new NEPA analysis (preferably a draft EIS) that analyzes and discloses the Black Ram Project's impacts on old growth forests, and that ensures compliance with Forest Plan goals concerning old growth.

C. The EA Fails to Properly Disclose the Project's Impacts to Weeds, Despite Admitting the Potential for Significant Impacts.

The Black Ram proposal would contribute to the already growing problem of invasive weeds. Logging roads, skid trails and log decks, increased truck traffic and heavy machinery will

---

[269] Final EA at 13.

[270] Kootenai National Forest Plan at 22.

[271] *See* Kootenai National Forest Plan FEIS at 77.

[272] The Final EA does acknowledge that the action alternatives "would increase the small and medium size classes in the short term, in the long term these stands would be healthier and more resilient, enabling them to reach the large size class and would contribute to achieving this desired condition." Final EA at 133. It is unclear how many decades that "long term" would require, leaving the Forest out of compliance with the Plan long after the Plan must be revised.

facilitate even greater proliferation of weeds throughout the project area. Weeds crowd out native vegetation and create increased fire risk, another facet of decreased, not increased resiliency. Further, the Forest Service fails to evaluate the impacts of recent fire suppression activities from the Davis fire, especially the very large fuel break, on resiliency and proliferation of weeds and greater human presence.[273]

The Final EA acknowledges the potential for damaging impacts caused by weeds. The dozens of massive clearcuts, road maintenance and road construction will disturb soil and create fertile ground for the spread of invasive vegetation. The Final EA states as much: "Because these treatment types result in significant changes to canopy cover, these treatment areas can result in a moderate risk of weed introduction and spread."[274] The Forest Service concludes that the Black Ram Project, with other past, present and foreseeable project, will result in "a moderate risk for existing infestations of spotted knapweed, thistles, common tansy, oxeye daisy, invasive hawkweeds, and goatweed to spread."[275]

Because the Forest Service admits that there is a potential for "moderate" expansion of weed infestations across thousands of acres of clearcuts in the area, the draft decision notice's conclusion that the project will have "no significant impact" is arbitrary and capricious.[276]

Further, the Forest Service cannot rely on a nearly 13-year-old forest-wide weed management plan that fails to account for significant new information concerning subsequent scientific studies that make clear the damaging and persistent impacts of chemical applications.[277] The Final EA directs that herbicide use is a "design feature" that the Forest Service must use in certain conditions.[278] The Kootenai's Invasive Plant Management plan permits the application of

---

[273] The Center raised this issue in its comments. *See* letter of E. Zukoski *et al*., Center for Biological Diversity to L. Osborn, Kootenai National Forest (Aug. 8, 2019) at 14-15.

[274] Final EA at 164; *see also id*. (concluding that "[t]he action alternatives pose a low to moderate risk of weed spread from adjacent weed populations along roads into the ground-based harvest units" even when "ground-based systems are utilized on frozen soils").

[275] Final EA at 166.

[276] If an agency's FONSI contradicts statements in the EA or the record, the agency has failed to make a convincing case that an EIS is unnecessary. *Humane Soc'y v. Dep't of Commerce*, 432 F. Supp. 2d 4, 21-23 (D.D.C. 2006) (agency FONSI arbitrary for contradicting or omitting impacts identified in EA).

[277] *See* Final EA at 16 ("Weed spraying in the Project Area would be conducted in accordance with the April 2007 [Kootenai National Forest] Invasive Plant Management Record of Decision").

[278] *See* Final EA at 17 (adopting design features that require the following: "Where feasible, herbicide would be used to treat all roads prior to reconstruction activities. If not feasible due to lack of access, herbicide would be used to treat cut-slopes and fill-slopes following reconstruction activities;" "Accessible roads and pullouts open to public use or gated for administrative use would be treated with herbicide once harvest operations are complete;" "Prior to work during decommissioning and storing of roads, weeds would be treated with herbicide where applicable and accessible;" "Surveys for weeds would be conducted before new recreation

glyphosate (Roundup), a chemical that has been banned in numerous municipalities in the United States, and that juries have found is a carcinogen.[279] A 2017 World Health Organization report concluded, based on a review of numerous studies, that "Glyphosate is *probably carcinogenic to humans*."[280]

In response to comments raising these concerns, the Final EA contains a non-answer and an internally inconsistent statement. First, the Final EA responds to comments about the adequacy of its noxious weed analysis by referring the reader back to that analysis. This is circular rejoinder is no answer at all, and violates NEPA's mandate that the agency respond to comments.[281]

Second, in response to concerns about the agency's failure to address studies showing the damaging health impacts of glyphosate, the Final EA contains the contradictory statements that "we do not plan to use [glyphosate] in the project area," but that "[h]erbicides used to control noxious weeds in the project area are used in accordance with the 2007 Kootenai National Forest Invasive Plant Management ROD," which specifically *authorizes* the use of glyphosate.[282] Some vague "plan" not to use a toxic chemical authorized by the decision itself cannot be used to avoid an analysis of glyphosate's use. Because the 2007 plan, and the Black Ram EA, authorizes the use of glyphosate, that toxic chemical's use is reasonably foreseeable. Unless and until the Forest Service adopts a design feature barring its use, the Forest Service must take a hard look at new information describing the impacts of applying this probable carcinogen. Failure to take that hard look violates NEPA.

> *Suggested Remedy*: The Forest Service should prepare a subsequent NEPA document (preferably a draft EIS) that takes a hard look at new information in studies completed since 2007 on the impacts of chemical herbicides that the Forest can use in the area, including glyphosate. In the alternative, the Forest Service should adopt a design feature that prohibits the use of glyphosate within the Black Ram Project.

---

trail construction and monitoring would occur after construction. Pre and post activity spraying would occur as needed.").

[279] *See* Kootenai National Forest, Record of Decision, Invasive Plant Management (Apr. 2007) at C-1 (listing approved herbicides, including glyphosate); J. Jacobs, *Monsanto Ordered to Pay $80 Million in Roundup Cancer Case*, The New York Times (March 27, 2019), attached as Ex. 31 and available at https://www.nytimes.com/2019/03/27/us/monstanto-roundup-california-verdict.html (last viewed Nov. 13, 2020).

[280] World Health Organization, International Agency for Research on Cancer, Some Organophosphate Insecticides and Herbicides, Volume 112 (Lyons, France 2017) pp. 321-412, at 398, excerpts attached as Ex. 32.

[281] *See* Final EA Appx. at 94 (responding to the Center's critique of the EA's noxious weed analysis by stating: "Please refer to the Noxious Weeds section of the EA ….").

[282] Final EA Appx. at 96.

D. The EA Fails to Disclose the Project's Impacts on Climate Pollution.

The Forest Service must analyze the direct, indirect, and cumulative impacts of a proposed action.[283] Cumulative impacts are "the impact[s] on the environment which result[] from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions."[284] Forest Service regulations define reasonably foreseeable future actions as "[t]hose Federal or non-Federal activities not yet undertaken, for which there are existing decisions, funding, or identified proposals."[285]

The Black Ram Project will have direct, indirect, and cumulative impacts on climate change because logging and burning will impact the ecosystem's ability to sequester carbon.[286] 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, including in Montana, and recent studies confirm that time is running out to forestall the catastrophic damage that will result from 1.5 degrees Celsius of warming.[287]

Proposals such as the Black Ram Project are likely to worsen climate pollution impact and reduce carbon sequestration, particularly because the project will result in the logging of some old growth forests, and such forests are critical carbon sinks.

Logging old-growth 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

---

[283] *Colo. Envtl. Coal. v. Dombeck*, 185 F.3d 1162, 1176 (10th Cir. 1999); *see also* 40 C.F.R. § 1508.25(c) (2019) (when determining the scope of an EIS, agencies "shall consider" direct, indirect, and cumulative impacts).

[284] 40 C.F.R. § 1508.7 (2019).

[285] 36 C.F.R. § 220.3.

[286] Objectors challenged the Forest Service's analysis of climate change in their respective comment letters. *See* letter of M. Fox, WildEarth Guardians to C. Benson, Kootenai National Forest (Aug. 7, 2019) at 7; letter of E. Zukoski *et al*., Center for Biological Diversity to L. Osborn, Kootenai National Forest (Aug. 8, 2019) at 16. Further, Objectors respond to the "Carbon Report," which was not made available to Objectors until after the Final EA was published via a Freedom of Information Act request.

[287] *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. 33. *See also* N. Macy, Carbon Report (Apr. 12, 2019) at 1 ("Global climatic warming is not something that is about to happen. It has been ongoing for many decades and the trend is expected to continue into the distant future, continuing to increase risks to our nation's forests") (in Black Ram project file), attached as Ex. 34.

themselves as well as within the organic soil layer found in mature forests)."[288] 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 CO2, thereby converting forests from a sink to a "source" or "emitter."[289] According to a recent IPCC report, deforestation causes climate pollution, and avoiding deforestation will reduce climate pollution.[290]

A 2019 report found that protecting national forests in the American Northwest, including in northwest 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.[291]

The coarse-scale map provided with the study indicates that there are likely forest stands in the Black Ram project area that are rated as "high" or "medium" priority for preservation to mitigate climate change.[292] The Forest Service must address this significant new information and recommendations in any subsequently prepared NEPA document.

This science makes clear that the Black Ram Project will worsen climate emissions by bulldozing nearly a mile of road through old-growth habitat, logging within nearly a square mile of old old-growth stands, and likely decrease the ability of those stands and that land to sequester

---

[288] Forest Service, Tongass Land and Resource Management Plan, Final EIS (2016) at 3-14, excerpts attached as Ex. 35.

[289] *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. 36.

[290] Intergovernmental Panel on Climate Change, *Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse gas fluxes in Terrestrial Ecosystems, Summary for Policymakers* (Aug. 2019) at 7, 23, attached as Ex. 37. *See also* B. Law *et al.*, *Land use strategies to mitigate climate change in carbon dense temperate forests,* Proceedings of the Nat'l Academy of Sciences, vol. 115, no. 14 (Apr. 3, 2018) at 3663 ("Proven strategies immediately available to mitigate carbon emissions from forest activities include ... reducing emissions from deforestation and degradation."), attached as Ex. 38.

[291] 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, available at https://esajournals.onlinelibrary.wiley.com/doi/pdf/10.1002/eap.2039 (last viewed Nov. 13, 2020), and attached as Ex. 39. Note that this study was funded in part by the USDA.

[292] *Id*. at 4 (Figure 1).

carbon. Further, the act of chainsawing forests, building roads and other facilities, and moving wood to mills will result in fossil fuel emissions, adding to climate pollution; the Final EA fails to disclose or estimate any of these emissions.

The "Carbon Report," on which the Final EA repeatedly relies, acknowledges that the Kootenai National Forest plays a role in capturing carbon, and thus mitigating climate pollution.[293] Despite the importance of intact forests to maintaining carbon stores, and the fact that the clearcuts proposed for this project will degrade those stores, the Forest Service concludes that "[t]he Black Ram Project would affect only a tiny percentage of the forest carbon stocks of the Kootenai National Forest, and an infinitesimal amount of the total forest carbon stocks of the United States."[294] The "Carbon Report" specifically states that it will not attempt to quantify climate impacts but instead will provide only a "qualitative analysis."[295]

Further, the report itself is like a time capsule from the past. It ignores all science concerning climate change and/or carbon sequestration that has been published in the last six years. The most recent study the report relies on is dated 2013, and the vast majority of studies it cites predate 2010.[296] And little wonder, because the Carbon Report appears to be cut and pasted, with only minor alterations, from a report prepared *nearly five years ago* for an Idaho timber sale.[297] The Black Ram report, in copying the Idaho report, also appears to have simply substituted the name "Kootenai National Forest" for "Idaho Panhandle National Forest," resulting in the surprising coincidence that the two forests sequester *precisely the same amount* of carbon.[298] In copying the 2015 Idaho Panhandle Carbon Report, the Black Ram Carbon Report assumes there are only two alternatives – the proposed action and no action – which is not the case for the

---

[293] Carbon Report (Ex. 34) at 5 (stating that the Kootenai National Forest stores about 174 terragrams of carbon, or about 191 million pounds; or nearly 5 times as much as is emitted by the State of Montana in a year). *See also* Final EA at 118 ("Refer to the Carbon report in the Project File for full assessment of the project regarding carbon"); Final EA Appx. at 65, 66, 68, 69, 88 (similarly relying on or quoting the Carbon Report).

[294] Carbon Report (Ex. 34) at 5.

[295] Carbon Report (Ex. 34) at 1. The Carbon Report indicates that it will only present a qualitative analysis in part because the issue "did not come up during scoping." *Id*. This is not an excuse for an inadequate analysis that fails to comply with NEPA, particularly when the Forest Service and other agencies have acknowledged the climate impacts of land management decisions for years.

[296] *Id*. at 7-10.

[297] *Compare* Carbon Report (Ex. 34) *with* T. Little *et al.*, Idaho Panhandle NF, Jasper Mountain Project Forest Carbon Cycling and Storage Report (Mar. 30, 2015), attached as Ex. 40. For example, nearly all of the text and the entirety of the "References Cited" section in both documents are identical.

[298] *Compare* Carbon Report (Ex. 34) at 5 ("total carbon stored on the Kootenai National Forest is approximately 174 Tg") *with* 2015 Idaho Panhandle Carbon Report (Ex. 40) ("total carbon stored on the Idaho Panhandle National Forest is approximately 174 Tg").

Black Ram Project.[299] Failure to disclose the potential impacts of an alternative cuts the heart out of the NEPA process. Recycling of the old Idaho Panhandle report also violates NEPA's mandate that the agency use the best available science, particularly in light of the climate and forest sequestration science that has developed since 2013.

The Carbon Report's outdated, cut-and-paste analysis also distorts the Project's climate impacts, using metrics and comparisons tailored to make the impact of logging look small by comparison. Virtually any individual project impacting the climate, except perhaps those on a national scale, will look small by comparison to climate emissions from all U.S. forests. This is the fundamental difficulty at the heart of climate change: it is the product of thousands of different decisions, yet each one adds to and worsens a problem that threatens trillions in dollars in damage (among other things). The Forest Service's labeling the impact as "infinitesimal" in comparison to "total forest carbon stocks of the United States" is thus not only misleading, it masks the fact that every additional bit of climate pollution, or elimination of carbon sequestration ability, makes the problem worse, and that every bit of sequestration is critical to the solution. The agency's analysis fails to provide the public or the decision-maker with a sense of the relevant scale of the climate harm. And it does not permit a comparison among any of the alternatives, nor does it identify measures to mitigate those impacts.[300]

Furthermore, even if the clearcutting and old growth logging permitted in the Black Ram project—when viewed in isolation—may only result in a relatively minor climate impacts, NEPA expressly requires agencies to consider whether agency actions are "related to other actions with individually insignificant but cumulatively significant impacts."[301] Thus, the Forest Service may not blithely dismiss the climate impacts of the Black Ram project without considering the cumulative significance of the project when added to other past, present, and reasonably foreseeable logging projects and Forest Service timber sales in the state, region, and nation.[302]

---

[299] *See* Carbon Report (Ex. 34) at 3-4.

[300] *WildEarth Guardians v. Zinke*, No. CV 17-80-BLG-SPW-TJC, 2019 WL 2404860, at *9 (D. Mont. Feb. 11, 2019) (proposed findings) ("But by only comparing the estimated emissions to total U.S. emissions, OSM potentially diluted the adverse environmental effects of coal combustion at a local level. The Ninth Circuit has stated that when assessing the effects of an agency action, the appropriate analysis must include consideration of both broad scale and local impacts."); *Pac. Coast Fed. of Fisherman's Ass'ns v. Nat'l Marine Fisheries Serv.*, 265 F.3d 1028, 1036-37 (9th Cir. 2001); *Or. Nat. Res. Council Fund v. Brong*, 492 F.3d 1120, 1129-30 (9th Cir. 2007) (noting that averaging environmental effects based on a broad scope can lead to misleading results).

[301] 40 C.F.R. § 1508.27(b)(7) (2019).

[302] *Id.* § 1508.7; *WildEarth Guardians v. Zinke*, 368 F. Supp. 3d 41 (D.D.C. 2019) (holding that BLM erred by failing to consider the cumulative climate impacts of oil and gas leases together with "GHG emissions generated by past, present, and reasonably foreseeable BLM lease sales in the region and nation").

The Forest Service's approach violates NEPA. Here, the Forest Service did not use its best efforts or the best available information to address climate impacts, as required by NEPA, because methods exist that would have allowed the agency to quantify those 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.[303] This is precisely the type of analysis the Forest Service should, and could, have undertaken for Black Ram EA.

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 CO2 emissions totaling between 4.2 million tons and 4.4 million tons, depending on the time horizon chosen.[304] The Bureau of Land Management 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.[305] Because agencies and academics have quantified and compared the carbon emissions of alternative logging proposals, NEPA requires the Forest Service to do the same thing here.

The Forest Service failure to address or acknowledge that there are peer-reviewed scientific approaches to estimating net climate damage caused by logging forests is an independent NEPA violation. NEPA requires agencies to explain opposing viewpoints and their rationale for choosing one viewpoint over the other.[306] Courts will set aside a NEPA document where the agency fails to respond to scientific analysis that calls into question the agency's assumptions or conclusions.[307] Here, the EA fails to grapple with the most recent science on forests and carbon sequestration. The "Carbon Report" ignores years of recent science that: underscores the desperate need for action on climate change; shows that forest logging like that proposed for old

---

[303] *See* Law *et al*., *Land use strategies* (Ex. 38) at 3664 ("Our LCA [life-cycle assessment] showed that in 2001–2005, Oregon's net wood product emissions were 32.61 million tCO2e [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 tCO2e and almost 10-fold fire emissions, mostly due to lower fire emissions.").

[304] DellaSala (Ex. 36) at 14.

[305] *See* Bureau of Land Management, Western Oregon Proposed RMP Final EIS (2009) at 165-181, excerpts attached as Ex. 41.

[306] 40 C.F.R. § 1502.9(b) (2019) (requiring agencies to disclose, discuss, and respond to "any responsible opposing view").

[307] *See Ctr. for Biological Diversity v. U.S. Forest Serv*., 349 F.3d 1157, 1168 (9th Cir. 2003) (finding Forest Service's failure to disclose and respond to evidence and opinions challenging EIS's scientific assumptions violated NEPA); *Seattle Audubon Soc'y v. Moseley*, 798 F. Supp. 1473, 1482 (W.D. Wash. 1992) ("The agency's explanation is insufficient under NEPA – not because experts disagree, but because the FEIS lacks reasoned discussion of major scientific objections."), aff'd sub nom. *Seattle Audubon Soc'y v. Espy*, 998 F.2d 699, 704 (9th Cir. 1993) ("[i]t would not further NEPA's aims for environmental protection to allow the Forest Service to ignore reputable scientific criticisms that have surfaced").

growth in the Black Ram Project will worsen climate pollution and the climate emergency; and the climate impacts of the Project can be quantified.

We note that the EA carefully quantifies the economic benefits of logging – a complex task – while declining to calculate the climate costs. The Final EA tallies the "Average Annual Employment and Labor Income Contributions from all Project Activities," and direct income.[308] Yet the Forest Service fails not only to estimate the volume of climate emissions, it fails to weigh the economic benefits of the project against the costs of climate change, which can be estimated using the Interagency Working Group's global estimate of the social cost of carbon.[309] Once an agency chooses to "trumpet" a set of benefits, it also has a duty to disclose the related costs.[310] "There can be no hard look at costs and benefits unless all costs are disclosed."[311]

Finally, the Forest Service cannot allege that it need not quantify the climate impacts of logging, hauling, and road construction by relying on NEPA regulations concerning "incomplete or unavailable information."[312] 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."[313] The EA makes none of these required findings.

> *Suggested Remedy*: The Forest Service should prepare a subsequent NEPA document (preferably a draft EIS) that quantifies and discloses the impacts of each of the alternatives for the Black Ram Project from logging and transportation on carbon emissions and sequestration.

E. The EA Fails to Address the Cumulative Impacts of the Black Ram Project Together with the Knotty Pine Project.

An EA must "include brief discussions of the need for the proposal, of alternatives [to the proposed action], [and] of the environmental impacts of the proposed action and alternatives."[314]

---

[308] Final EA at 72 (Table 23).

[309] *See High Country Conservation Advocates v. U.S. Forest Serv.*, 52 F. Supp. 3d 1174, 1190-93 (D. Colo. 2014).

[310] *Sierra Club v. Sigler*, 695 F.2d 957, 979 (5th Cir. 1983).

[311] *Id*.

[312] 40 C.F.R. § 1502.22 (2019).

[313] *Id*. § 1502.22(a) (2019).

[314] 40 C.F.R. § 1508.9(b) (2019).

As part of the analysis, the agency must consider "the direct, indirect, and cumulative impacts of the action."[315]

The Ninth Circuit has held that a future project is "reasonably foreseeable" and must be considered as part of the cumulative effects analysis when the project has been "formally proposed," or when the agency issues "a press release and Notice of Intent."[316]

On September 25, 2020, the Forest issued a letter notifying the public of the Forest Service's intent to undertake the "Knotty Pine" project.[317] The Kootenai National Forest thus "formally proposed" the Knotty Pine project three days before the Kootenai National Forest issued its September 28, 2020 Draft Decision Notice for the Black Ram Project, and four days before notice of the that Decision Notice was published in the *Missoulian*.[318]

The EA on which September 28, 2020 Black Ram Decision Notice relies, however, was published in December 2019, and fails to address the potential for synergistic effects of the two projects, as NEPA requires. The Black Ram Final EA's list of "Ongoing and Reasonably Foreseeable Actions within or Adjacent to the Black Ram Project Area" does not list the Knotty Pine project.[319]

Because the Knotty Pine project is likely to have cumulative and synergistic impacts on resources found within the Black Ram Project area, and because the Knotty Pine project was "formally proposed" before the Forest Service issued the 2020 Black Ram Draft Decision

---

[315] *Or. Natural Desert Ass'n v. Bureau of Land Mgmt*., 625 F.3d 1092, 1100 (9th Cir. 2010) (citing 40 C.F.R. §§ 1508.7-.8 (2019)). *See also* *Ctr. for Envtl. Law & Policy v. United States Bureau of Reclamation*, 655 F.3d 1000, 1006 (9th Cir. 2011).

[316] *See Ctr. for Envtl. Law & Policy*, 655 F.3d at 1010 ("We have define[d] ... reasonably foreseeable action[s], for which cumulative impacts must be analyzed, to include proposed actions," and concluding that the Ninth Circuit has "previously held that an action is not too speculative to qualify as a proposed action when the agency issues a notice of intent to prepare an EIS." (alterations in original) (internal quotation marks omitted)); *N. Alaska Envtl. Ctr v. Kempthorne*, 457 F.3d 969, 980 (9th Cir. 2006).

[317] *See* letter of K. Kaiser, District Ranger re: Opportunity to Comment, Knotty Pine Project Proposed Action (Sep. 25, 2020), attached as Ex. 42.

[318] Although the *legal notice* for Knotty Pine scoping was published in the newspaper on September 30, 2020, the day after the Black Ram Draft Decision Notice issued, that notice still predates any final decision on the Black Ram Project. Further, the Forest Service cannot game the system by withholding its Knotty Pine scoping notice until a day after the Black Ram Draft Decision Notice was published in the hopes of evading analyzing the cumulative impacts of the two projects before approving the Black Ram Project. Such a transparent attempt to evade cumulative impacts analysis would be struck down by the courts.

[319] Final EA at 24 (Table 9).

Notice, the Forest Service must address the potential for the Black Ram and Knotty Pine projects to have cumulative effects before it can approve the Black Ram Project.[320]

The Knotty Pine project is located between two projects – the Buckhorn Project (approved circa 2014) and the Lower Yaak, O'Brien, Sheep (OLY) Project (approved circa 2016) – that the Kootenai NF has recently implemented or continues to implement, and about ten miles from the southern boundary of the Black Ram project.[321]

The Forest Service at Knotty Pine proposes to, among other things:

- seek approval from the Regional Forester for numerous clearcuts larger than 40 acres, as it did for the Black Ram Project. One of the clearcuts is over one-third of a square mile in size.

- alter habitat within the range of the imperiled Cabinet-Yaak population of grizzly bears, including constructing temporary and permanent roads and degrading habitat within a Bear Management Unit.

- alter habitat through logging and road construction for other wide-ranging species such as lynx.

- undertake logging, road construction, and burning that may increase sediment loads into tributaries of the Yaak River.

Thus, the Black Ram Project has the potential to have significant impacts cumulatively when taken together with those of the Knotty Project. The Forest Service cannot approve the 2020 Black Ram Draft Decision Notice unless and until the agency discloses the effects of the Black Ram project when viewed together with the impacts of the Knotty Pine project.[322]

VII. THE FOREST SERVICE MUST PREPARE AN EIS.

A. An Agency Must Prepare an EIS If There Are Questions as to Whether Impacts May Be Significant.

NEPA requires federal agencies to prepare a full environmental impact statement (EIS) before undertaking "major Federal actions significantly affecting the quality of the human environment."[323] The Ninth Circuit agrees.

---

[320] Objectors need not have raised this issue in prior comments because this issue arose after the Black Ram EA comment period closed. 36 C.F.R. § 218.8(c).

[321] *See* Map of Logging Projects, Kootenai NF (2020), attached as Ex. 43.

[322] Guardians and the Center addressed this issue in scoping comments on the Knotty Pine Project as well. A. Rissien & E. Zukoski, WildEarth Guardians, Comments for the Knotty Pine Project Proposed Action (Oct. 29, 2020), attached as Ex. 44.

[323] 42 U.S.C. § 4332(C).

> We have held that an EIS *must* be prepared if 'substantial questions are raised as to whether a project ... *may* cause significant degradation to some human environmental factor.' To trigger this requirement a 'plaintiff need not show that significant effects *will in fact occur*,' [but instead] raising 'substantial questions whether a project may have a significant effect' is sufficient.[324]

The Tenth Circuit agrees. "If the agency determines that its proposed action *may* 'significantly affect' the environment, the agency must prepare a detailed statement on the environmental impact of the proposed action in the form of an EIS."[325]

If an agency "decides not to prepare an EIS, 'it must put forth a convincing statement of reasons' that explains why the project will impact the environment no more than insignificantly. This account proves crucial to evaluating whether the [agency] took the requisite 'hard look.'"[326]

"Significance" under NEPA requires consideration of the action's context and intensity.[327] An agency must analyze the significance of the action in several contexts, including short- and long-term effects within the setting of the proposed action (including site-specific, local impacts).[328] Intensity refers to the severity of the impact and requires consideration of ten identified factors that may generally lead to a significance determination, including:

> (1) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas;
>
> (2) whether the action is likely to be highly controversial;
>
> (3) whether the effects on the environment are highly uncertain or involve unique or unknown risks;
>
> (4) whether the action may have cumulative significant impacts;

---

[324] *Idaho Sporting Cong. v. Thomas*, 137 F.3d 1146, 1149-50 (9th Cir. 1998) (citations omitted) (emphasis original). *See also Ocean Advocates v. U.S. Army Corps of Eng'rs*, 402 F.3d 846, 864-65 (9th Cir. 2005) ("To trigger this [EIS] requirement a plaintiff need not show that significlant effects will in fact occur, but raising substantial questions whether a project may have a significant effect is sufficient." (internal quotations, citations, and alterations omitted)).

[325] *Airport Neighbors Alliance v. U.S.,* 90 F.3d 426, 429 (10th Cir. 1996) (citation omitted) (emphasis added).

[326] *Ocean Advoc.*, 402 F.3d at 864.

[327] 40 C.F.R. § 1508.27 (2019).

[328] *Id.* § 1508.27(a).

(5) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973; and

(6) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.[329]

With respect to the degree to which the environmental effects are likely to be highly controversial, the word "controversial" refers to situations where "'substantial dispute exists as to the size, nature, or *effect* of the major federal action.'"[330]

B. Because The Black Ram Project Is Likely To Have Significant Impacts, The Forest Service Should Prepare An EIS.

The Black Ram Project meets numerous standards for "significance." We note that the Forest Service itself identified its 2019 draft decision document as a "Record of Decision," the term of art for decisions made pursuant to an EIS as opposed to a "Decision Notice," the term used for an EA, indicating that the agency itself may have believed an EIS was mandated.[331]

The Black Ram project area has unique characteristics including wild and scenic rivers and ecologically critical areas. The Black Ram project area contains a multitude of unique and sensitive values, all of which are at risk from logging, road building, road maintenance, road use, and fire. In fact, it is hard to conceive of a project that would overlap and impact so many unique and sensitive values. The project area includes:

- River segments eligible for wild and scenic river protection. River stretches eligible for protection as wild and scenic rivers and protected by special management provisions of the Kootenai Forest Plan exist within the Black Ram Project area.[332] Within the special management areas, the Project allows 454 acres of logging (including 274 acres of intermediate or regeneration harvest, 177 acres of "slashing" trees up to 22 inches in

[329] *Id.* § 1508.27(b)(3)-(5), (7), (9)-(10).

[330] *Town of Cave Creek v. FAA,* 325 F.3d 320, 331 (D.C. Cir. 2003) (quoting *North American Wild Sheep v. U.S. Department of Agriculture*, 681 F.2d 1172, 1182 (9th Cir. 1982)) (emphasis in original). *See also Middle Rio Grande Conservancy Dist. v. Norton*, 294 F.3d 1220, 1229 (10th Cir. 2002) (same); *Town of Superior v. U.S. Fish and Wildlife Serv.*, 913 F. Supp. 2d 1087, 1120 (D. Colo. 2012) (same).

[331] *See* Forest Service, Black Ram, Draft Record of Decision and Finding of No Significant Impact (Dec. 2019) at cover page.

[332] *See* Final EA at 185 ("Segments of West Fork Yaak and Yaak River within the Project Area are in MA 2, Eligible Wild and Scenic Rivers. The West Fork Yaak River has a segment with preliminary classification of 'wild' and a segment with preliminary classification of 'recreational.' The Yaak River has a preliminary classification of 'recreational' within the Project Area. These river segments have outstanding remarkable values (ORV) of scenery, fisheries, recreation and history.")

circumference, and 3 acres of "fuel breaks," which may result in the complete eradication of trees), and an additional 200 acres of "ecosystem burning."[333]

In response to comments raising the potential significance of the impacts of logging and burning over a square mile of forest within areas to be managed to protect wild and scenic river values, the Forest Service takes two different tacks. First, the agency dodges the issue, asserting that a it is up to the "responsible official" signing the FONSI to determine significance.[334]

Second, the Final EA alleges that the Black Ram Project complies with "Forest Plan desired conditions and standards" for Management Area 2, which includes lands eligible for wild and scenic rivers designation. These lands are to be managed such that "[n]atural ecological processes (e.g., plant succession) and disturbances (e.g., floods, fire, insects, and disease) are the primary forces affecting the composition, structure, and pattern of vegetation," something that will no longer be true on the acreage slated for chainsawing and prescribed burning.[335] The Final EA alleges that the Project will comply with the Forest Plan because the lands impacted are too small to matter.[336] This ignores the fact that the project will represent a sizable chunk of the West Fork Yaak (2,758 acres) and Yaak (9,230 acres) wild and scenic eligible acreage.

The Project will also violate the Forest Plan guideline for logging in scenic and recreational-eligible rivers which allows timber harvest only to "maintain or restore the values for which the eligible scenic or recreational river was identified."[337] The Final EA does not allege that the three acres of logging are needed to "maintain or restore" the river's values, but that the logging will "anchor and improve opportunities for fire suppression tactics in the WUI."[338]

Finally, even if the Project would not violate Forest Plan direction, the impacts – dramatically altering the landscape on 600+ acres – may still be significant. This factor thus tips in favoring of preparing an EIS.

---

[333] Final EA at 11. Ladder fuel reduction involves the slashing and removal of trees 7 inches or less in diameter (22 inches in circumference). *See* Final EA at 90, 270. Note that the Final EA does not appear to describe what the "fuel break" treatment would entail.

[334] Final EA Appx. at 70 ("Significance would be determined in the FONSI."); *id*. at 69 ("A determination of significance under NEPA is a Responsible Officials decision"). The Final EA also state "see response to comment 12," *id*. at 70, which merely explains that there is a difference between significance determinations under the ESA and NEPA, a distinction not helpful here.

[335] Forest Service, Kootenai National Forest Plan (2015) at 53, MA2-DC-VEG-01.

[336] Final EA at 139 ("Given the small area that would be treated, this project would be consistent with this desired condition.").

[337] Forest Service, Kootenai National Forest Plan (2015) at 55, MA2-GDL-TBR-02.

[338] Final EA at 95.

- Inventoried roadless areas within the Project Area include all 8,233 acres of the West Fork Yaak IRA (#694) and 10,731 acres of the Northwest Peaks IRA (#663).[339] Slashing understory vegetation up to 7-inch diameter breast height may occur on up to 200 acres in IRAs.[340] The Final EA admits that the more than 2,300 acres of prescribed burns would impact roadless area values.[341] Prescribed fire and pre-fire logging of trees up to 22 inches around could result in "a short-term loss of opportunities for solitude, primitive and unconfined type of recreational experiences during prescribed burning operations."[342]

  The Final EA's only response to the Center raising this issue was that "[t]here is no road building, road use or mechanized equipment use proposed in the IRAs."[343] This ignores the fact that fire and logging can and will impact the two roadless areas.

- The Pacific Northwest Scenic Trail (PNNST) runs through the Project Area, and the project would degrade the experience along the trail. Of the 28 miles of PNNST in the Project Area, 18.5 miles are on open Forest Service roads and 9.6 miles are on non-motorized trails.[344] "Proposed timber harvest and fuel treatments may affect user access to this trail during project implementation."[345] Logging and burning – including 11 timber harvest units – will occur adjacent to over 8 miles of the official trail.[346] Logging would make it impossible for views along the PNNST to meet the designated "high" scenic integrity objective (SIO) for up to 15 years, despite the Forest Service proposing additional mitigation measures between the draft and final EA.[347]

- Threatened and endangered species, and critical habitat. Habitat for numerous imperiled wildlife, including grizzly bears, lynx, and wolf will be impacted by the proposed action, and habitat for the proposed wolverine is also present. As noted above, the grizzly population in the Yaak ecosystem is in a precarious position. The project BA admits that the Project is likely to adversely affect grizzlies,[348] which alone indicates the potential for significant impacts. As discussed above, both the EA and BA downplay the project's potential impacts to grizzlies while ignoring key impacts, such as human-caused mortality. The population of imperiled lynx in the Yaak is important to the nation, as it is

[339] Final EA at 1.

[340] Final EA at 90.

[341] Final EA at 148-49.

[342] Final EA at 154, 155.

[343] Final EA Appx. at 92.

[344] Final EA at 186.

[345] Final EA at 195.

[346] Final EA at 195 (Table 64), 227.

[347] Final EA at 228 ("Timber harvest along these NFSRs would not achieve the designated SIO of high immediately after harvest in the foreground. The design features listed above would be effective in meeting the intent of a High SIO in … 5-15 years ….").

[348] Black Ram BA at 1, 40.

one of only two reproducing lynx populations found in the lower 48. The project also "may affect" the lynx and its designated critical habitat.[349] The Final EA admits that prescribed fire "may consume downed wood accumulations and so there may be localized reductions of potential den sites," a deficit that will only be overcome in "100 years."[350] Individual wolves and their habitat may also be impacted, as may individual bald eagles and flammulated owls.[351] Impacts to grizzlies, as noted above, are certain over the next decade and longer, and will lead to violations of the Forest Plan during project implementation because the project will cause exceedances of road density standards.

- Old growth. The proposed action would log 579 acres of old growth forest, and burn another 343 acres. It would also fragment old growth with 0.8 miles of road, and impact an additional 440 acres of "recruitment potential old growth" with logging and burning.[352] The Forest Service asserts that logging old-growth forest stands will make those stands more "resilient" and "resistant" to stresses include beetles, fire, and climate change over the long run. But the Final EA also admits that while logging will immediately degrade old growth forests, the threat such logging attempts to forestall may never occur.[353] Thus, there is a 100% certainty that old growth will be destroyed by the Black Ram Project, while there is a good chance none will be destroyed under the no action alternative. The impacts to old growth forest are thus not only damaging, they are potentially unnecessary.

- Other special areas. The proposed action would use heavy equipment to clear two miles of trail within the Wood Creek Scenic Larch Area (WCSLA), which is designated as "Scenic Special Area" under the Forest Plan.[354] The Final EA asserts, without providing evidentiary support, that the trail would be built "through more open timber" and that "[n]o significant areas of deciduous trees would be impacted."[355] This conclusory statement, without more, cannot support a finding of no significant impacts. The Final EA further asserts that "[t]he Yaak Geographic Area offers numerous trails that are highly vegetated. The unique open timber of this area is the desired route."[356] But this is a

[349] Final EA at 287, 334, 342.

[350] Final EA at 339.

[351] Final EA at 348, 357 (eagles); *id*. at 366, 372 (owls); *id*. at 385, 392 (wolves).

[352] Final EA at 8.

[353] Final EA at 123 ("Potential natural disturbances (wildfire, insect or disease epidemics, wind) *could* reduce old growth characteristics or completely remove an area of old growth under extreme conditions. While these events *might* occur, extreme conditions are *not predictable*, so *it cannot be said, with reasonable certainty, whether these events would have an effect* versus the action alternatives.") (emphasis added).

[354] Final EA at 190.

[355] Final EA Appx. at 104.

[356] Final EA Appx. at 104.

statement that the Forest Service favors trading off certain significant values (undisturbed larch forests) for others (a unique trail experience). This is exactly the kind of trade-off that must be analyzed in a full EIS.

The proposal would also log a 7-acre fuel break in the Pete Creek Special Botanical Area, treatment that would, the Final EA alleges, without analyzing the potential damage caused by the treatment, "reduce fuels and decrease the potential fire severity."[357] Further, the action alternative proposes logging and burning units directly adjacent to the Pete Creek Meadow Research Natural Area.[358] The RNA's unique habitat could be harmed by increased weeds and potential fire from logging and burning, and whose wildlife could be driven from the area by noise and activity. The Forest Service responds by alleging that the RNA's habitat is already degraded by the adjacent road, so more "road associated activity … is not likely to result injury" to wildlife.[359] This is not a rigorous cumulative impacts analysis. The Final EA also asserts that impacts to the area may be mitigated because "[m]any trees may be limbed rather than removed to meet the desired outcome,"[360] although the design criteria for the project do not apparently require such limbing. In short, there is a potential for significant impacts to these special areas.

In sum, it is hard to find any part of the area that is not host to an outstanding resource. All of these values may be impacted by the proposed action, and the Final EA itself admits some damage and potential for damage to numerous values. The fact that this incredibly special area is ground zero for a significant logging project should, of itself, require the Forest Service to prepare an EIS. It is hard to imagine an area where massive clearcuts would be less likely to have 'no significant impact.'

The impacts of the proposed giant clearcuts are controversial. Clearcuts, and their impact on the landscape, have generated huge scientific and public controversy for decades. Forest Service abuse of clearcutting, the ecological and scenic degradation the practice entails led Congress to rein in the agency through the National Forest Management Act (NFMA). NFMA generally prohibits logging that will result in clearcuts larger than 40 acres.[361] Despite this fact, the Forest Service proposes to approve "36 units [which] would contribute to 21 openings over 40 acres …. The largest of these openings would be approximately 293 acres," or nearly a *half square mile*.[362]

The Forest Service apparently plans to use one of three identified exceptions to NFMA's prohibition, which states that "[p]lan components may allow for size limits exceeding those established in paragraphs (d)(4) introductory text and (d)(4)(i) of this section on an individual

[357] Final EA at 91.

[358] Final EA Appx. at 129-130 (maps).

[359] Final EA Appx. at 105.

[360] Final EA Appx. at 105.

[361] *See, e.g.*, 36 C.F.R. § 219.11(d)(4) (2016).

[362] Final EA at 8.

timber sale basis after 60 days' public notice and review by the regional forester."[363] However, the Forest Service cannot legally utilize this exception because neither the Kootenai Forest Plan nor the Black Ram Project itself contain a provision or component placing size limits on clearcuts greater than 40 acres, as required by NFMA's planning rules.[364] Nothing in the plan purports to set size limits on clearcuts larger than 40 acres, nor does the project EA or proposed FONSI. In any event, the fact that the law requires Regional Forester approval of any larger clearcuts indicates that such treatments are rare, controversial, and likely to spark public concern. The fact that the Forest Service provided only 30 days for public comment on this EA while the Regional Forest must provide twice that notice to the public for these numerous, massive clearcuts further demonstrates that controversy surrounding the nature of impacts requires that the Forest Service prepare an EIS.

The Final EA does not address the controversial nature of the clearcuts, other than to explain the agency's basis for them.[365] The Forest Service's explanation, however, does not contradict the controversy surrounding the huge clearcuts.

Finally, the entire purpose of the Black Ram Project in general, and of the clearcuts in particular, is to work a dramatic change on the landscape. According to the Forest Service,

> Currently, large patches of potentially long-lived early seral species (e.g. western white pine, western larch and ponderosa pine) are under-represented relative to the historic range of variability in the planning area and surrounding landscape. One of the purpose and needs of the Black Ram project is to trend the landscape pattern, stand composition, structure and patch sizes towards a configuration within the historic range of variability.[366]

While there are numerous reasons to disagree with the Forest Service's rationale and conclusions, it is plain that, by its own terms, the Forest Service seeks to fundamentally alter the trajectory of the Forest within the project area. Such a change would be significant, requiring preparation of an EIS.

The Black Ram project's effects on the environment are highly uncertain or ***involve unique or unknown risks***. The Final EA is based on the critical assumption that logging and burning now

---

[363] 36 C.F.R. § 219.11(d)(4)(ii) (2012 and 2016 planning regulations); *see also* 36 C.F.R. § 219.27(d)(2)(ii) (1982 planning regulations) ("Size limits exceeding those established in paragraphs (d)(2) and (d)(2)(i) of this section are permitted on an individual timber sale basis after 60 days' public notice and review by the Regional Forester.").

[364] *See id*.

[365] The Forest Service's response to comments on this issue states: "See response to comments 12, 65, 77, and 86." Final EA Appx. at 70. None of those responses addresses the issue of controversy, and the response to comment 86 says only "See response to comment 87." *Id*. at 87. While the response to comment 87 does address the over-sized clearcuts, it does not address the issue of controversy, instead merely attempting to justify the need for clearcutting. *Id*.

[366] Final EA at 15.

will improve the forest's "resilience" in comparison to the "no action" alternative because it will forestall damaging impacts (e.g., from fire or bugs). But the EA admits that while logging will immediately degrade old growth forests, bear habitat and other values, the threat such logging attempts to forestall may never occur.

> While these events [e.g., wildfire, insect or disease epidemics] *might* occur, extreme conditions are *not predictable*, so *it cannot be said, with reasonable certainty, whether these events would have an effect* versus the action alternatives.").[367]

In short, the "heart" of the NEPA analysis – the fundamental contrast between the action alternatives and the no-action alternative – is uncertain because whether the baseline conditions will result in the dire outcomes the Forest Service supposes is uncertain. Because the impacts of taking no action are highly uncertain (therefore rendering the comparison of impacts among alternatives highly uncertain), the Forest Service must prepare an EIS.

The Black Ram project may have cumulative significant impacts. As discussed above, in numerous areas the Final EA fails to address potentially significant cumulative effects. In addition, the U.S.-Canada border forms the project area's northern boundary. The Final EA recognizes that vegetation management in Canada, including "[c]ontinued harvest and prescribed burning [that] is likely to occur on public lands adjacent to the Project Area" could, together with the proposed action, have cumulative impacts on the values and resources found within the project area.[368] Aerial photos in the EA appear to show clearcuts in Canada right up to the U.S. line.[369] The Final EA fails to take the hard look at these impacts. For example, wide-ranging species, including grizzly bear, lynx, moose, and elk likely roam on both sides of the border. Continued logging in Canada could have significant impacts on such wildlife when taken together with logging and burning within the project area. The Final EA fails to disclose these impacts, nor did it directly respond to comments raising this issue.

The Black Ram Project threatens to violate the Kootenai Forest Plan. As noted above, the Forest Service predicts that the proposed action will lead to violations of the open motorized route density and total motorized route density for a Bear Management Unit during project implementation. This threatens a violation of Federal requirements imposed for the protection of

---

[367] Final EA at 125 (emphasis added). The Final EA's discussion of impacts to water resources also reflects uncertainty concerning how and whether "resilience" treatments may have significant impacts.

> Due to the *unpredictability* of a wildfire occurrence, the cumulative effects from this potential natural disturbance or from fire suppression on the watershed *cannot be quantified*, but potential effects are expected to be limited to local sites only.

Id. at 278 (emphasis added); *see also id*. at 240 (making same statement re: impacts to soils).

[368] Final EA at 25.

[369] Final EA at 226.

the environment, and thus requires preparation of an EIS, even if the violation is only "temporary" for the decade of project implementation.

> <u>*Suggested Remedy*</u>: The Forest Service should prepare an environmental impact statement to evaluate and disclose the potentially significant impacts of the Black Ram Project.

C. Where, as Here, an Agency Prepares a Long EA, It Should Prepare an EIS.

The CEQ has stated: "While the regulations do not contain page limits for EA's [sic], the Council has generally advised agencies to keep the length of EAs to not more than approximately 10-15 pages …. *In most cases … a lengthy EA indicates that an EIS is needed*."[370]

Courts have concluded that even EAs of less than 100 pages in length provide evidence of the need to complete an EIS.[371] More than three decades ago, First Circuit Court Judge Stephen Breyer, now a Justice of the U.S. Supreme Court, set aside a lengthy EA and required preparation of an EIS, explaining:

> To announce that these documents – despite their length and complexity – demonstrate no need for an EIS is rather like the mathematics teacher who, after filling three blackboards with equations, announces to the class 'you see, it is obvious.'")[372]

Here, the very length and complexity of the Black Ram Project EA require the Forest Service to prepare an EIS. The Final EA itself clocks in at 425 pages long – nearly ***30 times as long*** as the maximum suggested by CEQ regulations, and that's without counting the additional 155 pages of appendices, bringing the total to 580 pages. This EA is longer than many Forest Service EISs. CEQ regulations state that "[t]he text of final environmental impact statements … shall normally be less than 150 pages and for proposals of unusual scope or complexity shall normally be less than 300 pages," a limit the Black Ram EA far exceeds.[373] The fact that it takes the Forest Service more than 500 pages to reach the conclusion that the proposal can't possibly have significant impacts indicates that the opposite conclusion is more likely. The Forest Service must prepare an EIS.

---

[370] 46 Fed. Reg. 18,026, 18,037 (1981) (emphasis added).

[371] *See National Audubon Society v. Hoffman*, 917 F. Supp. 280, 287 (D. Vt. 1995), *aff'd* 132 F.3d 7 (2nd Cir 1997) (65-page EA); *Curry v. U.S. Forest Service*, 988 F. Supp. 541, 552 (W.D. Pa. 1997) (49-page EA).

[372] *Sierra Club v. Marsh*, 769 F.2d 868, 874 (1st Cir. 1985). *See also Evans v. Anderson*, 314 F.3d 1006, 1023 (9th Cir. 2002) ("No matter how thorough, an EA can never substitute for preparation of an EIS, if the proposed action could significantly affect the environment.") (requiring agency prepare EIS rather than EA); *Puerto Rico Conservation Foundation v Larson*, 797 F. Supp. 1066, 1069 n.3 (D. Puerto Rico 1992) (enjoining road construction in national forest because agency relied on EA rather than preparing EIS).

[373] 40 C.F.R. § 1502.7 (2019).

The Forest Service cannot argue that the EA it prepared is the functional equivalent of an EIS and therefore no violation has occurred. Among other things, agencies must allow 45 days for public comment on an EIS, 40 C.F.R. § 1506.10(d) (2019) (which the Forest Service did not provide here), and Clean Air Act Section 309 requires EPA to review each EIS for comment, a mandate that does not apply to EAs. Further, as now-Justice Breyer noted in *Sierra Club v. Marsh*:

> [U]nder NEPA and its implementing regulations, we cannot accept the EA[s] as a substitute for an EIS -- despite the time, effort, and analysis that went into their production -- because an EA and an EIS serve very different purposes. An EA aims simply to identify (and assess the 'significance' of) potential impacts on the environment; it does not balance different kinds of positive and negative environmental effects, one against the other; nor does it weigh negative environmental impacts against a project's other objectives, such as, for example, economic development…. The purpose of an EA is simply to help the agencies decide if an EIS is needed.
>
> To treat an EA as if it were an EIS would confuse these different roles, to the point where neither the agency nor those outside it could be certain that the government fully recognized and took proper account of environmental effects in making a decision with a likely significant impact on the environment.[374]

Despite its 580-page length, the Forest Service failed to respond to comments making this point, resulting in yet another NEPA violation.

> *Suggested Remedy*: The Forest Service should prepare an environmental impact statement to disclose the potentially significant impacts of the Black Ram Project.

CONCLUSION.

The Center and Guardians hereby request a meeting to discuss potential resolution of issues raised in this objection, pursuant to 36 C.F.R. § 218.11(a).

We hope that the Forest Service will use the objection process and such a meeting as opportunities to engage with stakeholders, including the Center and Guardians, to develop a project that is legally and ecologically sound and enjoys broad support from all stakeholders.

[374] *Sierra Club v. Marsh*, 769 F.2d at 875.

Sincerely,

Edward B. Zukoski, Senior Attorney
Center for Biological Diversity
1536 Wynkoop Street, Suite 421
Denver, CO 80202
(303) 641-3149
tzukoski@biologicaldiversity.org

Marla Fox, Staff Attorney
WildEarth Guardians
P.O. Box 13086
Portland, OR 97213
(651) 434-7737
mfox@wildearthguardians.org

Andrea Santarsiere, Senior Attorney
Center for Biological Diversity
P.O. Box 469
Victor, ID 83455
(303) 854-7748
asantarsiere@biologicaldiversity.org

Adam Rissien, ReWilding Advocate
WildEarth Guardians
P.O. Box 7516
Missoula, MT 59807
(406) 370-3147
arissien@wildearthguardians.org

cc: Katherine O'Brien, Staff Attorney, Earthjustice, kobrien@earthjustice.org
Chad Benson, Supervisor, Kootenai National Forest, chad.benson@usda.gov
Kirsten Kaiser, District Ranger, Three River Ranger District, Kootenai National Forest, kirsten.a.kaiser@usda.gov
Lisa Osborn, Project Leader, Kootenai National Forest, lisa.osborn@usda.gov

TABLE OF EXHIBITS

Exhibit 14. Lamb, Clayton *et al.* 2018. Effects of Habitat Quality and Access Management on the Density of a Recovering Grizzly Bear Population. J Appl Ecol. 2018: 1-12

Exhibit 15. MacHutchon, Grant & Michael Proctor. 2015. The Effect of Roads and Human Action on Roads on Grizzly Bears and Their Habitat. Trans-border Grizzly Bear Project

Exhibit 16. Northrup, Joseph *et al.* 2012. Vehicle Traffic Shapes Grizzly Bear Behaviour on a Multiple-Use Landscape. J Appl Ecol. 2012: 1-9

Exhibit 17. Wakkinen, Wayne & Wayne Kasworm. 2004. Demographics and Population Trends of Grizzly Bears in the Cabinet-Yaak and Selkirk Ecosystems of British Columbia, Idaho, Montana, and Washington. Ursus 15(1) Workshop Supplement: 65-75

Exhibit 18. Yaak Valley Forest Council, Black Ram Project Area -- Road Barrier Survey (Nov. 2020)

Exhibit 19. Yaak Valley Forest Council, Map of Illegally Used Routes in Black Ram Project Area (Nov. 2020)

Exhibit 20. Objection from WildEarth Guardians, Western Watersheds Project, and Sierra Club to the Flathead Forest Plan, the NCDE Grizzly Bear Forest Plan Amendments, and the Species of Conservation Concern List (Feb. 8, 2018)

Exhibit 21. *Southeast Alaska Conservation Council v. U.S. Forest Serv.*, 443 F. Supp. 3d 995 (D. Alaska 2020)

Exhibit 22. L. Olson *et al.*, Den Use and Activity Patterns in Female Canada Lynx (Lynx canadensis) in the Northern Rocky Mountains, Northwest Science, Vol. 85, No. 3, 455-462, at 460 (2011)

Exhibit 23. H. Powell, Old Flames: The Tangled History of Forest Fires, Wildlife, and People, Living Bird Magazine (Summer 2019),

Exhibit 24. Cohen, J. D. (1995), Structure ignition assessment model (SIAM) (General Technical Report PSW-GTR-158)

Exhibit 25. Cohen, J. D. (2000a), Preventing disaster - Home ignitability in the wildland-urban interface. Journal of Forestry, 98(3), 15-21

Exhibit 26. H. Zald *et al.*, *Severe fire weather and intensive forest management increase fire severity in a multi-ownership landscape*, Ecological Applications, 28(4) (2018), pp. 1068–1080

Exhibit 27. N. Haddad et al., *Habitat fragmentation and its lasting impact on Earth's ecosystems*. Science Advances 20 March 2015, Volume 1, no 2, e1500052

Exhibit 28. C. Stone et al., *Forest Harvest Can Increase Subsequent Forest Fire Severity,* Proceedings of the Second International Symposium on Fire Economics, Planning and Policy: A Global View. 2004. Pp. 526-534

Exhibit 29. Bradley, C. M., C. T. Hanson, and D. A. DellaSala. 2016. Does increased forest protection correspond to higher fire severity in frequent-fire forests of the western United States? Ecosphere 7(10):e01492. 10.1002/ecs2.1492

Exhibit 30. H. Hammond, SILVA ecosystem consultants ltd., Initial Review Black Ram Project (Aug. 5, 2019)

Exhibit 31. J. Jacobs, *Monsanto Ordered to Pay $80 Million in Roundup Cancer Case*, The New York Times (March 27, 2019),

Exhibit 32. World Health Organization, International Agency for Research on Cancer, Some Organophosphate Insecticides and Herbicides, Volume 112 (Lyons, France 2017) pp. 321-412

Exhibit 33 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)

Exhibit 34. N. Macy, Carbon Report (Apr. 12, 2019)

Exhibit 35. Forest Service, Tongass Land and Resource Management Plan, Final EIS (2016) (excerpts)

Exhibit 36. D. DellaSala, *The Tongass Rainforest as Alaska's First Line of Climate Change Defense and Importance to the Paris Climate Change Agreements* (2016)

Exhibit 37. Intergovernmental Panel on Climate Change, *Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse gas fluxes in Terrestrial Ecosystems, Summary for Policymakers* (Aug. 2019)

Exhibit 38. B. Law *et al*., *Land use strategies to mitigate climate change in carbon dense temperate forests,* Proceedings of the Nat'l Academy of Sciences, vol. 115, no. 14 (Apr. 3, 2018)

Exhibit 39. P. Buotte *et al*., *Carbon sequestration and biodiversity co-benefits of preserving forests in the western United States*, Ecological Applications, Article e02039 (Oct. 2019)

Exhibit 40. T. Little *et al.*, Idaho Panhandle NF, Jasper Mountain Project Forest Carbon Cycling and Storage Report (Mar. 30, 2015)

Exhibit 41. Bureau of Land Management, Western Oregon Proposed RMP Final EIS (2009) (excerpts)

Exhibit 42. Letter of K. Kaiser, District Ranger re: Opportunity to Comment, Knotty Pine Project Proposed Action (Sep. 25, 2020)

Exhibit 43. Map of Logging Projects, Kootenai NF (2020)

Exhibit 44. A. Rissien & E. Zukoski, WildEarth Guardians, Comments for the Knotty Pine Project Proposed Action (Oct. 29, 2020)