**Bitterroot Front Project Scoping Comments**

May 19, 2021

Mr. Stephen Brown (Stevensville District Ranger),

Please accept the following comments, all of which are in response to the scoping letter dated, April 20, 2022, for the Bitterroot Front Project.

The project location is described as:

The project area is located along the eastern face of the Bitterroot Range from the Bitterroot National Forest boundary at the northern end of the Stevensville Ranger District near McClain Creek to the southern end of the Darby Ranger District near Trapper Creek (Figure 1 and Figure 2). The Bitterroot Front runs north to south, bounded on the east by private lands and communities situated along U.S. Highway 93. The Selway-Bitterroot Wilderness Area bounds the project area to the west. Elevation ranges from about 3,400 to over 9, 100 feet. Notable landforms include Lolo Peak on the northern end of the project and Trapper Peak at the south. Blodgett Canyon, Mill Creek, Lake Como, and Bass Creek recreation areas, as well as various motorized and non-motorized recreational trails, fall within the project boundary.

National Forest System (NFS) lands cover approximately 99 percent of surface ownership within the 143,983-acre project area. Most of the project area (97 percent) falls within Ravalli County, Montana with the remaining 3 percent in Missoula County, MT. (Scoping Document, p. 1)

That scoping letter for the Bitterroot Front Project begins with the following:

The Forest Service, in partnership with the Confederated Salish and Kootenai Tribes, Ravalli County, State of Montana, and other federal agencies are proposing to conduct forest management activities in the Bitterroot Front Project area and invites your comments. The project area is approximately 144,000 acres in size and is located within Ravalli County, Montana encompassing various watersheds of the Bitterroot Valley. This project is a landscape-scale proposal to address the wildfire risk to our communities and promote forest restoration using a wide range of tools, including tree thinning, harvest, and prescribed burning on lands administered by the Stevensville and Darby-Sula Ranger Districts. Our team plans to work with other landowners, local organizations and other agency partners in an all-lands approach to this forest restoration effort, with an emphasis on reducing fuels and improving forest resiliency to disturbances. The desired outcome is to increase forest health and landscape resiliency, provide for public and firefighter safety, reduce fire risk to communities, improve wildlife habitat, contribute to community viability with forest products and jobs - all while restoring fire to our fire dependent ecosystems.

The interdisciplinary team will utilize a suite of actions to fulfill the appropriate level of environmental analysis following the National Environmental Protection Act (NEPA) at the appropriate scale. The proposed action includes vegetation management and fuel reduction activities; road improvement and road management activities; recreation improvements, and wildlife habitat opportunities. Your input will help us identify potential issues and concerns that should be analyzed in the environmental assessment (EA) for this project. (Scoping Letter, p. 1)

Under **Request for scoping input and how to submit your feedback** is the following:

Project-specific feedback received during this 30-day scoping period will be reviewed for additional information to include in the purpose and need or proposed action, considerations of alternative means to achieve the project's purpose and need, and additional project-relevant information to include as we finalize the proposed action and begin the environmental analysis process. (Scoping Document, p. 1)

**Project Objects** are listed as: (Scoping Document, pp. 4-5)

**1. Reduce Fuels:** Decrease the quantity, and modify the arrangement, of hazardous forest fuels to reduce the current and future wildfire risk to people, private lands, and resource values

* There is a need to reduce crown fire hazard potential within the wildland-urban interface, adjacent community protection zone, and low and moderate severity fire regimes.
* Removing ladder fuels reduces the potential for a surface fire to transition to the canopy. Desired tree spacing in ponderosa pine and Douglas-fir should minimize the potential for active crown fire in these fire resilient vegetation types. Prescribed fire decreases surface fuel loads. Many of these stands will require future prescribed fire to maintain the desired conditions in the high frequency, low severity fire regime.
* The pace and scale of historic current prescribed fire and hand mechanical treatments of vegetation is not sufficient to maintain ecosystem health or to mitigate wildfire hazard.

**2. Improve landscape resilience to disturbances (such as insects, diseases, and fire) by modifying forest structure, and composition.**

The departure from historic fire regimes within the project area has created forest stands characterized by high stem densities, hazardous fuels buildup, stressed tree conditions, and a loss of meadow habitat and quality. The result is forested stands with high levels of surface and ladder fuels with high susceptibility to uncharacteristic fire behavior, and stands at high risk to future insect outbreaks. Meadow habitats are experiencing a 'reduction in size through conifer encroachment and quality, due to the lack of fire necessary to stimulate growth of forbs and grasses.

* There is a need to reduce stand densities, increase age class diversity, and favor shade intolerant species to promote resilience to stressors (for example, drought, insects, and diseases).

**3. Seek wildlife habitat improvement opportunities**

* The improvement cut, commercial thin and prescribed burn treatments on dry forest sites in the project area should help trend stands towards the desired conditions for certain forest species.
* The types of prescribed burning/managed natural fire planned will generate forage for elk and other big game animals. Reducing conifer encroachment in meadow habitats will restore and increase forage and nutritional value for big game species and important songbird breeding and rearing habitat.

**4. Contribute to the local economy and forest products industry through fuels reduction activities and timber production**

* Providing timber products and fuels reduction-related jobs contributes to local economic value.
* There is a need to provide sawtimber and other wood products to help sustain a viable local economy in accordance with the Forest Plan goals (p. 11-3), desired future conditions (pp. 11-14 and II-16), and management area direction for MA 1, 2, 3a, 3c, and 5.

**5. Other natural resource objectives we'd like to accomplish as opportunities become available:**

Recreation improvements

Heritage resource management

Fish, rare plants

Grazing management

Watershed management

Transportation/road management

**The Bitterroot Front Project will negatively impact the human environment and requires an Environmental Impact Statement (EIS)**

Although the scoping documents are not explicit in this regard, the Forest Service (FS) proposes to execute a “condition-based” implementation of this project. (See 2019 Bitterroot Star article which included interview with Forest Supervisor, Matt Anderson)[[1]](#footnote-1)

Scoping documents identify management actions and “Opportunity Areas.” However, there is no indication of where management actions would be implemented. Implied, is that such decisions would be made at some undetermined point in the future, well after the NEPA process is completed. Because a list of site-specific management actions is not made public during the NEPA process, a condition-based procedure eliminates meaningful public input.

The project area is approximately 144,000 acres. (Scoping Letter, p. 1). That is almost 3 times as large as the Gold Butterfly Project which covers approximately 55,000 acres. The suggestion that this proposed project can satisfy NEPA regulations using an Environment Analysis (EA) is questionable when a project a fraction of its size (Gold Butterfly) required an EIS.

The attempt by the Agency to conduct this gigantic, multi-year project using an EA indicates three things.

First, advertising that this proposed project will be conducted using an EA reveals the FS has already completed the scoping process. Exposed is what has long been suspected; asking for public input is nothing more than window dressing used to satisfy NEPA requirements. [[2]](#footnote-2)

Second, the Agency has no interest in achieving broad public support for its actions. The use of an EA forces those segments of the public whose interests are being threatened with harm to petition the courts simply to be heard.

Three, the negative impact this multi-year project may have on the human environment is ignored in the scoping documentation. For example, logging/thinning trees, removing vegetation, and disturbing soil all have a negative effect on the ability of the forest to sequester carbon. Diminishing carbon sequestration means increased Greenhouse Gasses (GHG) in the atmosphere and increased temperatures. In other words, a degraded human environment.

The correct NEPA process look like the flow chart in Figure 1 below. Clearly, use of the proper NEPA process is supposed to be decided AFTER scoping is completed, not before.

Diagram

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Figure 1 - The correct NEPA process[[3]](#footnote-3)

Please explain how it was determined that this proposed project would proceed using an EA before the public comment portion of scoping has been completed.

Please publish the process by which the Interdisciplinary Team (IDT) determined that none of the site-specific management actions are likely to have adverse impacts to the environment.

**Condition-based implementation approach violates National Environmental Policy Act (NEPA) and National Forest Management Act (NFMA)**

This proposal is not a “project.” It is a Condition-Based plan. True project planning includes the disclosing of specific activities proposed for specific locations, identifying the current conditions in those specific locations and project area—based upon current data gathering and analysis—and analyze the direct, indirect, and cumulative impacts of those proposed activities. Project planning also requires disclosing details on how the suggested management activities are consistent with all relevant management direction in the current (1987) Forest Plan.

NEPA is "’our basic national charter for protection of the environment.'" Center for Biological Diversity v. United States Forest Serv., 349 F.3d 1157 1166 (9th Cir. 2003); see also 40 C.F.R. § 1500.1 (same). There are two goals underlying the statute: "(1) to ensure that the agency will have detailed information on significant environmental impacts when it makes decisions; and (2) to guarantee that this information will be available to a larger audience." Neighbors of Cuddy Mt. v. Alexander, 303 F.3d 1059, 1063 (9th Cir. 2002) [hereinafter Alexander]; see also Earth Island, 351 F.3d at 1300 ("NEPA requires that a federal agency `consider every significant aspect of the environmental impact of a proposed action . . . [and] inform the public that it has indeed considered environmental concerns in its decision-making process.'"). *Environmental Protection Information Center v. Blackwell,* 389 F. Supp. 2d 1174, 1184 (N.D. Cal. 2004)

NEPA “promotes its sweeping commitment to ‘prevent or eliminate damage to the environment and biosphere’ by focusing Government and public attention on the environmental effects of proposed agency action. 42 U.S.C. § 4321. By so focusing agency attention, NEPA ensures that the agency will not act on incomplete information, only to regret its decision after it is too late to correct.” *Marsh v. Oregon Natural Resources Council,* 490 U.S. 360, 371 (1989)

Stated more directly, NEPA’s “‘action-forcing’ procedures . . . require the [Forest Service] to take a ‘hard look’ at environmental consequences” before the agency approves an action. *Metcalf v. Daley*, 214 F.3d 1135, 1141 (9th Cir. 2000) (quoting *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 348 (1989)).

To ensure that the agency has taken the required “hard look,” courts hold that the agency must utilize “public comment and the best available scientific information.” *Biodiversity Conservation Alliance v. Jiron* (In re in ... 762 F.3d 1036 (10th Cir. 2014)

“As we have observed on multiple occasions, ‘general statements about possible effects and some risk[s] do not constitute a hard look absent a justification regarding why more definitive information could not be provided." Klamath-Siskiyou, 387 F.3d at 993-94 (quoting Ocean Advocates, 361 F.3d at 1128). Even if the BLM was unable to indicate with any great degree of certainty the results of the Project, because the cumulative effects analysis requires an agency to predict future conditions, uncertainty is an inherent part of the process. Therefore, a general statement about uncertainty does not satisfy the procedural requirement that an agency take a hard look at the environmental effects of an action. The BLM can certainly explain specific projections with reference to uncertainty; however, it may not rely on a statement of uncertainty to avoid even attempting the requisite analysis.’” *Oregon Natural Resources Council Fund v. Brong,* 492 F.3d 1120, 1134 (9th Cir. 2007)

“The Forest Service attempts to distinguish Marble Mountain on the basis that any impact on the biological corridor would be minimal because MASA's expansion would impact less than thirty-seven acres of the biological corridor, whereas in Marble Mountain more than 3,000 acres of the biological corridor were at risk. We are not persuaded. While the number of acres at risk here is certainly less than that in Marble Mountain, the Forest Service has nonetheless failed to disclose the methodology it employed to determine that the expansion's impact on the fisher would be inconsequential. Merely disclosing the existence of a biological corridor is inadequate. Id. Where the Forest Service concludes that a project will not jeopardize a wildlife corridor, it must support that conclusion with at least some study or analysis of how the reduced corridor will affect the species at issue.” Id. *Oregon Natural Resources Council Fund v. Goodman,* 505 F.3d 884, 892 (9th Cir. 2007)

NEPA requires site-specificity to fulfill two basic purposes: 1) to ensure agencies are making informed decisions prior to acting and 2) to ensure the public is given a meaningful opportunity to participate in those decision-making processes. *Stein v. Barton,* 740 F. Supp. 743, 749 (D. Alaska 1990). Federal courts apply these touchstone criteria when evaluating whether a NEPA document is adequately site-specific.

"Without establishing the baseline conditions" before a project begins, "there is simply no way to determine what effect the project will have on the environment and, consequently, no way to comply with NEPA." Great Basin Res. Watch v. BLM, 844 F.3d 1095, 1101 (9th Cir. 2016) (brackets omitted) (quoting Half Moon Bay Fishermans' Mktg. Ass'n v. Carlucci, 857 F.2d 505, 510 (9th Cir. 1988)). *Oregon Natural Desert Association v. Rose,* 2019 WL 1855419 (9th Cir. 2019)

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.

“By arguing that a difference in the degree of habitat fragmentation did not require a fresh impacts analysis, BLM neglects the fundamental nature of the environmental problem at issue. As is well documented in the record before us, the location of development greatly influences the likelihood and extent of habitat preservation. Disturbances on the same total surface acreage may produce wildly different impacts on plants and wildlife depending on the amount of contiguous habitat between them.” *New Mexico ex rel. Richardson,* 565 F.3d at 706.

The Court used the example of “building a dirt road along the edge of an ecosystem” and “building a four-lane highway straight down the middle” to explain how those activities may have similar types of impacts, but the extent of those impacts—in particular on habitat disturbance—is different. Id. At 707. Indeed, “location, not merely total surface disturbance, affects habitat fragmentation,” id. and therefore, location data is critical to the site-specific analysis NEPA requires. Merely disclosing the existence of particular geographic or biological features is inadequate—agencies must discuss their importance and substantiate their findings as to the impacts.

Fundamentally, projects of this size and scope require authorization under an EIS. What the Agency proposes is similar to what one would expect in a programmatic EIS followed by site-specific EAs for specific treatments. The Forest Service fails to provide any project details or analysis that would satisfy the requirements under NEPA.

This approach is both a “black box” and a “blank check,” one that fundamentally undermines the requirement of NEPA to take a hard look at potential environmental consequences. To meet its obligations under NEPA the Forest Service must collect, disclose, and properly analyze resource conditions and potential environmental impacts of any proposed actions before it makes a decision. Simply listing vague sideboards which the agency intends to follow—after it determines site-specific conditions at some future time—over the unspecified life of the project is a fundamental violation of both the law and spirit of NEPA’s look-before-you-leap mandate. Such an approach is insufficient.

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

Here (The Bitterroot Front Project), the Agency offers no supporting information or studies to support its many assertions—possibly believing the science is settled and no controversy exists—makes this a condition-based approach. NEPA regulations state that:

NEPA procedures must ensure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA. [40 C.F.R. § 1500.1(b) (1978)]

This proposal involves delaying site-specific data gathering and analysis until after a decision has been reached—all under a predetermined assumption that there would be no significant impacts. The legality of Condition-Based projects has been litigated and found to be outside current laws and regulations.

Please conduct this project under a proper, non-condition-based process.

**Purpose and Need is narrowly crafted to reject reasonable alternatives, shun public concerns, and ignore best available science**

The April 20, 2022, Scoping Document states: (pp. 4-5)

1. **Reduce Fuels:** Decrease the quantity, and modify the arrangement, of hazardous forest fuels to reduce the current and future wildfire risk to people, private lands, and resource values

* There is a need to reduce crown fire hazard potential within the wildland-urban interface, adjacent community protection zone, and low and moderate severity fire regimes.

1. **Improve landscape resilience to disturbances (such as insects, diseases, and fire) by modifying forest structure, and composition.**

* There is a need to reduce stand densities, increase age class diversity, and favor shade intolerant species to promote resilience to stressors (for example, drought, insects, and diseases).

1. **Seek wildlife habitat improvement opportunities**
2. **Contribute to the local economy and forest products industry through fuels reduction activities and timber production**

* There is a need to provide sawtimber and other wood products to help sustain a viable local economy in accordance with the Forest Plan goals (p. 11-3), desired future conditions (pp. 11-14 and II-16), and management area direction for MA 1, 2, 3a, 3c, and 5.

1. **Other natural resource objectives we'd like to accomplish as opportunities become available:**

* Recreation improvements; Heritage resource management; Fish, rare plants; Grazing management; Watershed management; and Transportation/road management

And under **Project-Specific Forest Plan Amendments**:

Considering the purpose of the project is to improve landscape resilience to disturbances and reduce fuels, two of the likely directly related substantive requirements are found at 36 CFR 36 CFR 219.8(a)(l)(iv) and (v), which address ecological integrity through the requirement to maintain or restore structure, function, composition, and connectivity, taking into account: (iv) system drivers, including dominant ecological processes, disturbance regimes, and stressors, such as natural succession, wildland fire, invasive species, and climate change; and the ability of terrestrial and aquatic ecosystems on the plan area to adapt to change, and (v) wildland fire and opportunities to restore fire adapted ecosystems. (emphasis added) (Scoping Document, p.16)

CEQ’s, A Citizens Guide to NEPA, p. 13, states, “The purpose and need statement explains to the reader why an agency action is necessary and serves as the basis for identifying the reasonable alternatives that meet the purpose and need.” [[4]](#footnote-4) This project’s **Purpose** violates legal precedent and rules out all other alternatives for achieving the goal of “improving resilience” without providing justification.

Please offer alternatives for achieving the Purpose and Need.

The scoping documents do not define “resilience” in any objective, measurable terms nor do they cite data which supports the FS implication of “inadequate forest resilience in the proposed project area.”

Please supply the most recent scientific research that supports the scoping documentation’s implication that there is inadequate forest resilience in the proposed project area.

**Project is so Inadequately Defined the Public cannot understand the Intent or Consequences**

* The Scoping documents do not define “resilience” in any objective, measurable terms nor do they cite data that supports the FS implication of “inadequate resilience in the proposed project area.”

Without an objective way to measure “resilience,” it is impossible to know if the management activities proposed for this project (or past projects on the BNF) do in fact improve resilience.

No objectively measurable definition of resilience or proof of having improved resilience during past BNF management activities is offered, a fact which suggests the need for this proposed project is questionable and is, at the very least, debatable.

Please provide an objective way to measure resilience and a thorough, scientifically based explanation of the necessity for this proposed project.

* The Agency does not specify the length (in years) of this proposed project.

If, as is likely to be the case for such a large scheme, implementation will take place over decades even while on-the-ground conditions undergo significant change. In effect, the Agency is expecting the public to accept the notion that the FS’s implied assertion (based on current conditions) that “no significant impact” will occur even if on-the-ground conditions have drastically changed by the time later segments of the project are implemented.

Please provide a more exact estimate of the time frame this proposed project will require.

Please provide scientific evidence supporting the validity for the implied conclusion—based on current conditions—that “no significant change or impact” (will occur) during a decades-long project.

* The scoping letter for this proposed project suggests project-specific collaboration between the FS and the Confederated Salish & Kootenai Tribes (CSKT).

Please supply records of that collaboration and any agreements which were reached.

* There is at least one known, important American Indian site within the area of the proposed project area.

Please explain what measures will be taken during the project to protect that and other archaeological sites.

* The scoping documentation offers no science, let alone recent research, which supports the statement, “The desired outcome is to increase forest health and landscape resiliency, provide for public and firefighter safety, reduce fire risk to communities, improve wildlife habitat, contribute to community viability with forest products and jobs - all while restoring fire to our fire dependent ecosystems.” (Scoping Letter, p. 1)

Please supply recent scientific research which supports these multiple assertions.

Please reveal how the “desired outcome” was determined.

What exactly does a “desired outcome” look like and how is it measured?

* Several historical sites exist within the project area.

Please list what measures will be taken to ensure that historical sites will not be disturbed during the implementation of the proposed project.

* This proposed project is directly adjacent to Wilderness and covers not only Inventoried Roadless Areas (IRA) but Recommended Wilderness Areas (RWA) and Research Natural Areas (RNA).

The management activities included in the proposal will have a direct impact on the Wilderness and its inhabitants.

Please perform a systematic and thorough analysis of the effects on each of the above listed areas and make the results public.

* This proposed project includes no information regarding how the Proposed Wild and Scenic Rivers will be protected. Proposed Wild Rivers include Blodgett Creek and the North Fork of Lost Horse Creek. Lost Horse Creek is a Proposed Scenic River.

Please explain how those special water courses will be protected from degradation.

**The Forest Service Proposed Use of Roads and BMPs or Design Features is Inappropriate and does not comply with NEPA**

The best available science shows that roads cause significant adverse impacts to National Forest resources.[[5]](#footnote-5) WildEarth Guardians issued a 2020 report that provides a scientific literature review—including the Forest Service’s General Technical Report synthesizing the scientific information on forest roads (Gucinski 2001)—on a wide range of road-related impacts to ecosystem processes and integrity on National Forest lands.

Erosion, compaction, and other alterations in forest geomorphology and hydrology associated with roads seriously impair water quality and aquatic species viability. Roads disturb and fragment wildlife habitat, altering species distribution, interfering with critical life functions such as feeding, breeding, and nesting, and resulting in loss of biodiversity. Roads facilitate increased human intrusion into sensitive areas, resulting in poaching of rare plants and animals, human-ignited wildfires, introduction of exotic species, and damage to archaeological resources. The Forest Service must consider how the proposed actions may cause direct, indirect and further exacerbate cumulative impacts within the planning area as it relates to road maintenance, reconstruction and use, particularly in regard to unauthorized and closed roads.

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

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

In multiple previous projects, the Forest Service asserts in its decision memo that best management practices, project design features, and/or resource protection measures will effectively mitigate any resource concerns. Such assertions do not absolve the Forest Service from its responsibilities under NEPA or other applicable laws (e.g., the Clean Water Act).

The Agency must demonstrate a history of both proper implementation and effectiveness. When considering how effective BMPs or design features are at controlling nonpoint pollution on roads, both the rate of implementation, and their effectiveness should be considered. The Forest Service tracks the rate of implementation and the relative effectiveness of BMPs using in-house audits. This information is summarized in the National BMP Monitoring Summary Report with the most recent data being the fiscal years 2013-2014.[[6]](#footnote-6)

The rating categories for implementation are, “fully implemented,” “mostly implemented,” “marginally implemented,” “not implemented,” and “no BMPs.” “No BMPs” represents a failure to consider BMPs in the planning process. More than a hundred evaluations on roads were conducted in FY2014. Of these evaluations, approximately one third of the road BMPs were found to be “fully implemented.” (*Id.* at 12)

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

Further, a technical report by the Forest Service entitled, “Effectiveness of Best Management Practices that Have Application to Forest Roads: A Literature Synthesis,” summarized research and monitoring on the effectiveness of different BMP treatments for road construction, presence and use.[[7]](#footnote-7) The report found that while several studies have concluded some road BMPs are effective at reducing delivery of sediment to streams, the degree of each treatment as not been rigorously evaluated.

Few road BMPs have been evaluated under a variety of conditions, and much more research is needed to determine the site-specific suitability of different BMPs.[[8]](#footnote-8) Edwards et al (2016) cites several reasons why BMPs may not be as effective as commonly thought. Most watershed-scale studies are short-term and do not account for variation over time, sediment measurements taken at the mouth of a watershed do not account for in-channel sediment storage and lag times.

It is impossible to measure the impact of individual BMPs when taken at the watershed scale. When individual BMPs are examined, there is rarely broad-scale testing in different geologic, topographic, physiological, and climatic conditions. Edwards et al (2016) observe, “… the similarity of forest road BMPs used in many different states’ forestry BMP manuals and handbooks suggests a degree of confidence validation that may not be justified,” because they rely on just a single study. (*Id.* at 133). Therefore, ensuring BMP effectiveness would require matching the site conditions found in that single study, a factor land managers rarely consider.

Climate change will further put into question the effectiveness of many road BMPs (Edwards, 2016). While the impacts of climate will vary from region to region, more extreme weather is expected across the country which will increase the frequency of flooding, soil erosion, stream channel erosion, and variability of streamflow.[[9]](#footnote-9)

BMPs designed to limit erosion and stream sediment for current weather conditions may not be effective in the future. Edwards et al. (2016) states, “… more-intense events, more frequent events, and longer duration events that accompany climate change may demonstrate that BMPs perform even more poorly in these situations. Research is urgently needed to identify BMP weaknesses under extreme events so that refinements, modifications, and development of BMPs do not lag behind the need.” (*Id.* at 136)

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

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

F. Locate and design roads and trails to drain naturally by appropriate use of out-sloping or in-sloping with cross drainage and grade changes, where possible. Relief culverts and roadside ditches will be designed whenever reliance upon natural drainage would not protect the running surface, excavation, or embankment. Road and trail drainage should be channeled to effective buffer areas to maximize sediment deposition prior to entry into live water. (Westside Collaborative Vegetation Management Project Environmental Assessment (EA) - Appendix A – Best Management Practices at A-16)[[10]](#footnote-10)

Yet, Friends of the Bitterroot (FOB) documented inadequate drainage on a newly constructed road authorized under the Westside project decision notice. (Figure 2)

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Figure 2 - Inadequate drainage on newly constructed Westside project road

When implementing the Darby Lumber Lands Phase II Project, the Forest Service violated Montana’s Streamside Zone Management along a section of Roan Creek. Those rules are to ensure compliance with the Clean Water Act. The Montana’s Department of Natural Resources and Conservation sent a notice of violation to the Forest Service. The state later withdrew its “repair order” citing a September 2016 MOU, but the matter of the violation remains, which was raised and documented in several letters to the Forest Service and state of Montana. FOB documented other design feature violations including inadequate road drainage and damage, including pooling, rutting, haphazard straw bale placement, and ultimately a road failure. *Id.*

In sum, the Forest Service cannot rely on general, statewide BMP monitoring reports conducted by the state of Montana, or general Forest Plan monitoring reports to show successful BMP implementation and effectiveness rates. The Agency must show how the Bitterroot National Forest ensures its project design criteria and BMPs effectively mitigates harm to natural resources on the forest.

**The Agency Systematically Exempts Projects from Forest Plan Standards**

The scoping documentation states:

In order to achieve the Bitterroot Front project objectives, a project-specific amendment to remove or modify plan standards is needed. This includes plan content for Elk Habitat Objectives (elk habitat effectiveness, thermal cover, and hiding cover), old growth, coarse woody debris, and snag retention. This amendment applies to this project only and does not change the plan for other projects. The objection process at 36 CFR 218 will apply.

…

Based on the likely effects of the amendment, two additional requirements are likely directly related.

* Modification or removal of plan components for elk habitat effectiveness, thermal cover, and hiding cover are likely directly related to the requirements for the integrated resource management for multiple use considering habitat conditions for wildlife commonly enjoyed and used by the public at 36 CFR 219.1 O(a)(5).
* Modification or removal of plan components for old growth, coarse woody debris, and snags are likely directly related to the requirements to provide for habitat diversity by maintaining or restoring key characteristics associated with terrestrial ecosystem types at 36 CFR 219. 9(a)(2)(i). (Scoping Document, p. 16)

The FS asserts this group of Forest Plan amendments applies only to this project and does not change the plan for other projects; however, the Agency has a long history of using similar site-specific amendments for projects.

The term “Forest Plan Amendment” is a misleading use of the singular form. In fact, there are multiple Forest Plan standards that are proposed for amendment: EHE, thermal cover, snag retention, coarse woody debris (CWD), and old growth.

As Table 1 (below) shows, the BNF has a decades-long history of using site-specific amendments to allow it to ignore Forest Plan (1987) standards. The serial use of amendments that cumulatively include a large area is significant and runs afoul of NFMA.

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Table 1 - List of past BNF Projects that Include Site-Specific FP Amendments

The Agency has not explained which characteristics of this proposed project area are different from other portions of the BNF. It is possible, if not likely, the reason for these amendments is not because the project area is different but that the Agency wishes to circumvent the existing Forest Plan requirements.

The serial use of project-specific amendments causes a “significant change” to the Forest Plan. Individual project-specific amendments in conjunction with previous and future site-specific amendments, effectively invalidate standards as seen with the EHE example below. Accounting from all from past, current, and foreseeable future project-specific amendments for cumulative effects should be performed and publicized.

In League of Wilderness Defenders v. Connaughton (Case No. 3:12-cv-02271-HZ), a U.S District Court (Oregon) declared:

“…, a close reading of Lands Council v. Martin indicates there must be at least some characteristics unique to a site to support a site-specific amendment. Lands Council v. Martin, 529 F.3d at 1228. Here, Defendants and Intervenors fail to point to any characteristics unique to the Project area to support the site-specific amendment. Similarly, at oral argument, when asked specifically to explain what conditions existed within the Project area that supported the selection of a site-specific amendment, the parties were unable to provide any explanation other than the fact that the amendment was tailored and applicable only for the Project area.

Simply explaining the purpose of the Project, the desired conditions for the Forest, or stating that the amendment is site-specific because it was designed for a specific site, does not satisfy the rational connection between the facts found and the choice made required by Lands Council. Because the Forest Service failed to explain why it chose a site-specific amendment, the Court finds that the decision to enact a site-specific amendment was arbitrary and capricious and grants summary judgment to Plaintiffs on this claim.”

In a December 13, 2020, Court Order and Opinion by the U.S. District Court of Montana, the Judge found,

“While the Forest Service effectively shows a maintenance of elk populations, the Plan requires maintenance of habitat and cover. That tension is only made more apparent when one considers that the Forest Service has actively avoided complying with any metric related to elk habitat or cover.” (Alliance for the Wild Rockies, et al. v. Leanne Martin, et al. – Case 9:20-cv-000179-DWM)

Here, the judge found that the Forest Service did not conduct a cumulative-effects analysis which included “past, present, and reasonably foreseeable future actions” that are part of other projects.

“NEPA always requires that an environmental analysis for a single project consider the cumulative impacts of that project together with ‘past, present, and reasonably foreseeable future actions.’” Native Ecosystems Council, 304 F.3d at 895 (citing 40 CFR § 1508.7 (2019)). This applies to reasonably foreseeable forest plan amendments. Id. at 896. “Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.” 40 C.F.R. § 1508.7 (2019).

Therefore, the judge ruled:

…, it was arbitrary and capricious for the Forest Service to not consider the site-specific amendment in the Middleman Project in its cumulative effects analysis. (Alliance for the Wild Rockies, et al. vs. Leanne Martin, et al. – Case 9:20-cv-000179-DWM)

Please explain conclusively and in detail what differentiates this project’s area from the rest of the BNF.

Please analyze and report (to the public) the cumulative effects caused by past, present, and foreseeable future project-specific amendments.

**After-Project Monitoring of Forest Service Projects is Missing or Inadequate**

* The stated objectives of this proposed project are to reduce fuels, improve landscape resilience to disturbance, improve wildlife habitat, contribute to the local economy, and a short list of other goals “if opportunities become available.” (Scoping Document, pp. 4-5)

According to the Agency, each of those goals can and will be met by using logging, thinning, and/or prescribed fire.

The Scoping document claims, without providing evidence, that there is a “need” for these management activities.

Although the same management activities proposed for this project have been implemented for decades on the Bitterroot National Forest (BNF), the Agency offers no proof the suggested activities accomplish the asserted results. There have been ample opportunities for the FS to monitor the results of past projects. Unfortunately, the Agency has a history of not completing the monitoring it promised as part of those projects. The lack of project monitoring makes the FS’s projected results from management actions highly suspect.

Please provide monitoring results of past projects that “prove” the proposed management actions are effective.

* No monitoring records of past projects are offered to confirm that the proposed management actions included in the Bitterroot Front Project “would improve big game and other wildlife habitat quality.” [[11]](#footnote-11)

No data is offered to indicate that habitat quality even needs improvement.

Please provide scientific studies and on-the-ground research that indicates habitat quality and quantity is lacking in the area being proposed for this project.

Please provide after-project records, generated by the monitoring of previous BNF projects, which confirm that habitat quality is improved by management actions.

* No monitoring of previous management actions is offered to confirm that, “Removing ladder fuels reduces the potential for a surface fire to transition to the canopy. Desired tree spacing in ponderosa pine and Douglas-fir should minimize the potential for active crown fire in these fire resilient vegetation types. Prescribed fire decreases surface fuel loads. Many of these stands will require future prescribed fire to maintain the desired conditions in the high frequency, low severity fire regime.” (Scoping Document, p. 4)

Please supply records from after-project monitoring of past BNF projects and the results of same that confirms those assertions.

Please supply scientific evidence that “… increasing crown spacing, raising canopy base heights…” improves, not just “timber stands” but “overall forest ecosystem health, carbon sequestration, and biodiversity.”

* Scoping documentation, though limited, declares this project will “Improve landscape resilience to disturbances (such as insects, diseases, and fire) by modifying forest structure, and composition.” (Scoping Document, p. 4)

However, without monitoring records from past projects, this claim is without merit, especially given recent research which contradicts that unsubstantiated assumption.[[12]](#footnote-12) [[13]](#footnote-13) [[14]](#footnote-14)

Please provide the most recent scientific research and after-project monitoring (project-specific) records which support the Agency’s assertion that establishing historic stand structure characteristics improves resilience or the assertion that projects which modify forest structure and composition “improve landscape resilience.”

**Proposed Project Does Not Include Adequate Protection for Old-Growth Stands**

The scoping documentation provides no information about how project-area old growth will be impacted by the proposed management actions nor does it indicate how old growth or the diverse ecosystems and species that depend on that increasingly rare habitat will be protected.[[15]](#footnote-15)

On April 22, 2022, President Biden signed an Executive Order to strengthen American forests, boost wildfire resilience, and combat global deforestation. That order incorporates a commitment to safeguards mature and old-growth forests on federal lands.[[16]](#footnote-16)

Please explain how this project will follow that and other Biden Administration directives to save our forest’s abilities to sequester carbon.

Please explain how old growth and the interconnected ecosystems and dependent species will be protected during the duration of this proposed project.

**Proposed Project Does Not Include Adequate Protection for Soil or Water**

Most management activities, especially road construction and use, cause the degradation and compaction of forest soils and worsen the quality of surface water.

During the second phase of the Darby Lumber Lands project the Agency was found to be in violation of Montana’s regulations for roads near streams.

Please explain exactly how that breach of regulations will not be repeated during the Bitterroot Front Project.

Please explain how soils will be protected during the duration of this proposed multi-decade project.

Please explain what mitigation measures will be implemented and monitored to ensure that streams will not be impaired (for example, sedimentation, water temperatures, impediments to natural stream flow, etc.) in any way during project implementation.

**The Forest Service is knowingly intensifying global warming and reducing carbon sequestration**

Most management activities associated with Agency projects contribute to the increasing accumulation of Greenhouse Gases (GHG) in the atmosphere. For example, logging, thinning, prescribed fire, pile burning, travel to and from project sites, etc. all release GHG into the atmosphere.

Issued on August 1, 2016, this directive from Executive Office of the President, Council on Environmental Quality has been reimplemented as national direction. [*See* 86 Fed Reg. 10252 (Feb. 19, 2021).]

The 2016 CEQ guidance acknowledges, “changes in our climate caused by elevated concentrations of greenhouse gases in the atmosphere are reasonably anticipated to endanger the public health and public welfare of current and future generations.” It directs federal agencies to consider the extent to which a proposed action such as this Bitterroot Front Project would contribute to climate change. It rejects as inappropriate any notion that this project is of too small a scale for such consideration:

“Climate change results from the incremental addition of GHG emissions from millions of individual sources, which collectively have a large impact on a global scale. CEQ recognizes that the totality of climate change impacts is not attributable to any single action, but is exacerbated by a series of actions including actions taken pursuant to decisions of the Federal Government. Therefore, a statement that emissions from a proposed Federal action represent only a small fraction of global emissions is essentially a statement about the nature of the climate change challenge, and is not an appropriate basis for deciding whether or to what extent to consider climate change impacts under NEPA. Moreover, these comparisons are also not an appropriate method for characterizing the potential impacts associated with a proposed action and its alternatives and mitigations because this approach does not reveal anything beyond the nature of the climate change challenge itself: the fact that diverse individual sources of emissions each make a relatively small addition to global atmospheric GHG concentrations that collectively have a large impact.”[[17]](#footnote-17)

The FS must quantify GHG emissions. The agency can only use a qualitative method if tools, methodologies, or data inputs are not reasonably available, and if that is the case, there needs to be rationale as to why a quantitative analysis is not warranted. Quantitative tools are available, so the FS must comply.[[18]](#footnote-18)

Judging by its actions, the Agency is a huge global-warming denier.

The scoping documentation includes absolutely no analysis of climate change. That omission is unacceptable.

Given the urgency of preventing additional greenhouse gas emissions to the atmosphere and continuing carbon sequestration to protect the climate system, it would be best to protect trees for their carbon stores and for their co-benefits of habitat for biodiversity, resilience to drought and fire, and microclimate buffering under future climate extremes.

According to a 2021 article, “Keeping trees in the ground where they are already growing is an effective low-tech way to slow climate change.”[[19]](#footnote-19)

“Compared with other terrestrial ecosystems, forests store some of the largest quantities of carbon per surface area of land.” Much of the carbon stored is within the soils, with a smaller part in the vegetation.Forest management can modify soil organic carbon stocks. For example, conventional harvests like clearcutting or shelterwood cutting cause soils to lose organic carbon which is not the case for soils in unharvested forests. Not only does it lose the carbon stored in the soils, but cutting trees eliminates the trees’ potential to continue to sequester carbon.[[20]](#footnote-20)

“Our study showed that, compared with conventional stem-only harvest, removing the stem plus the harvesting residues generally increases nutrient outputs thereby leading to reduced amounts of total and available nutrients in soils and soil acidification, particularly when foliage is harvested along with the branches. Losses of available nutrients in soils could also be explained by reduced microbial activity and mineralization fluxes, which in turn, may be affected by changes in organic matter quality and environmental conditions (soil compaction, temperature, and moisture). Soil fertility losses were shown to have consequences for the subsequent forest ecosystem: tree growth was reduced by 3–7% in the short or medium term (up to 33 years after harvest) in the most intensive harvests (e.g., when branches are exported with foliage). Combining all the results showed that, overall, whole-tree harvesting has negative impacts on soil properties and trees that may have an impact on the functioning of forest ecosystems.”[[21]](#footnote-21)

The scoping documentation provides no analysis of the interaction between management actions and global warming.

Vegetation management efforts that attempt to replicate how the FS theorizes forests looked pre-European influence, ignores the larger pattern of climate, global warming, and disregards natural succession. The scoping documentation for this project clearly reveals that the Agency continues its attempts to replicate the past and exposes its refusal to accept that global warming has made such an endeavor impossible.

Please provide the most recent scientific research that supports the Agency’s belief that the FS should continue its (completely unsuccessful) attempts to replicate pre-European forest conditions and how the resulting conditions are more resilient and healthier than current forest conditions.

Please provide scientific research which shows how removing trees from the forest contributes to carbon sequestration.

Please explain exactly how GHG emissions will be minimized and monitored during the duration of this proposed project.

**Agency Makes Unsubstantiated Claims of Wildfire History**

* Current research refutes your claim that, “The primary historical fire regimes within the project area had short to moderately short fire-free intervals and did not typically experience stand-replacing fires.” (Scoping Document, p. 6)

Recent research confirms that is not universally true, especially for forests as diverse and varied as the BNF.[[22]](#footnote-22) [[23]](#footnote-23) [[24]](#footnote-24) [[25]](#footnote-25)

Please provide more recent scientific research than Arno 1976 which supports the Agency’s assertion that, “These forest types were historically characterized by frequent low-intensity fire, fire resistant and shade intolerant species and lower stem densities.”

* This project proposal is based on the assumption that active forest management is required because “Over the past 129 years, only 7 percent of the acres that should have experienced multiple fires have even burned once. This departure from natural disturbance patterns has led to major changes in fuels and vegetation composition.” (Scoping Document, p. 6)

Please justify why management activities are required when naturally occurring disturbances—insects, disease, and wildfire—achieve the same result (as they have always done) without human intervention.[[26]](#footnote-26)

* Scoping documentation does not include adequate visuals for the public to fully understand the scope and possible consequences of this proposed project.

Please provide a map of wildfire potential for the area of this proposed project. The map must indicate the different wildfire potential for ground, passive crown, and active crown fires along with the names of the authors and the date of creation. The “standard” fire-risk map is not a substitute for the map being requested.

Please provide a wildfire history map for the area of this proposed project. Please include all wildfires which occurred after 1900.

Please provide a map of the proposed project area which shows each “opportunity area,” the WUI, and all private-property structures.

Please provide a map for this proposed project area which shows the community protection zone (CPZ).

Please provide a map for this proposed project area which shows the Home Ignition Zone (HIZ) sometimes referred to as the Structure Ignition Zone (SIZ).

Please provide a map showing areas that have already been logged/thinned (including treatment dates) for the area of this proposed project.

**Project Lacks Adequate Protection for Wildlife and Wildlife Habitat**

* The FS hired a group of experts, headed by Martin Nie, to research who had the ultimate responsibility for managing and protecting wildlife—the states or the federal government—on federally managed lands. Through research of U.S legal documents and case law, the group unequivocally established that, federal agencies have the ultimate responsibility for managing and protecting wildlife.[[27]](#footnote-27)

Please provide a list of species-specific measures which will be implemented to ensure that all wildlife and their respective habitats in the area proposed for this project will be protected during and after management activities.

* No mention of lynx or their habitat is included in the scoping documentation.

The Forest Service project webpage states that potential treatment activities will not occur in lynx habitat.[[28]](#footnote-28) Scoping documentation does not confirm this statement and stopping activities at the edge of lynx habitat does not take into consideration connectivity between areas of habitat on the forest. The Biological Assessment (BA) for Canada lynx documents the importance of peripheral areas as:

Peripheral populations may contain valuable genetic, physiological or behavioral adaptations that are unique to their ecological success. Because suitable habitats in areas where populations act as metapopulations are spatially separated, the persistence of a metapopulation is dependent on the efficiency and success of dispersing animals in reaching isolated patches of suitable habitat. When patches are fragmented and connections between patches do not exist, recolonization becomes problematic and the metapopulation may be unable to persist, even though patches of suitable habitat remain (Meffe and Carroll 1997). Additional fragmentation and isolation of suitable habitat occurring as a result of land management activities can not only affect small, isolated habitat patches supporting smaller populations but also large contiguous patches supporting higher population levels.[[29]](#footnote-29) [[30]](#footnote-30)

The historical lynx habitat map (Figure 3) shows that the Bitterroot National Forest area has housed lynx in the past and the referenced link of currently occupied and unoccupied habitat shows the project area borders areas of current occupation.[[31]](#footnote-31) There are core and peripheral or linkage areas. Ruggierio et al, 1999 also discuss the effects of fragmentation on competition with lynx by other carnivores and the loss of connectivity. The linkage areas and peripheral areas of lynx habitat will be affected by the project.[[32]](#footnote-32)

[continued on next page]

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Figure 3- Historical Canada lynx habitat

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

Synthesis and applications. Previous static connectivity models seriously underestimate the importance of stepping-stone patches in sustaining rare but crucial dispersal events. We provide a conceptually broader model that shows that stepping-stones (i) must be of sufficient size to be of conservation value, (ii) are particularly crucial for the spread of species (either native or invasive or genotypes over long distances and (iii) can effectively reduce the isolation of the largest habitat blocks in reserves, therefore largely contributing to species persistence across wide spatial and temporal scales.[[33]](#footnote-33)

As shown in the Western Wildway Map (Figure 4), the project area is a part of the Continental Corridor connecting Mexico to Alaska, and the regions of that corridor being addressed by scientists and advocates of connectivity for wildlife. This represents a conservation biology approach to landscape conservation which emphasizes linkage zones and connectivity for Canada lynx and other species. The complete lack of analysis of the Eastside Project, in addition to inadequate analysis on most if not all other projects on the BNF, seem to abandon conservation biology principles and connectivity linkage zones. Even though project activities will not be in designated lynx habitat, the project will most certainly affect important peripheral and connectivity areas.

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

During April 2022, a Montana Federal District Court (Judge Dana Christensen) accepted a settlement between the U.S. Fish and Wildlife Service (USFWS) and Friends of the Wild Swan et al. where the USFWS would reevaluate its 2014 critical lynx habitat rule and write a draft recovery plan for lynx by the end of 2023.

Please explain how lynx and lynx habitat and linkage zones will be protected during the execution of this proposed project.

Please provide lynx habitat maps, including their dates of publication.

Map

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Figure 4 - Western Wildway Map: Connecting and Restoring the Spine of the Continent

* The scoping documentation does not include information about grizzly bear in the project area.

The Forest Service must demonstrate how the cause-effect relationship does not constitute extraordinary circumstances in relation to “… federally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species, 36 C.F.R. 220.6(b)(1)(i). The agency seeks to authorize thinning and burning over an unspecified period of time that could stretch 10-15 years or more. Therefore, it is crucial to carefully consider how the proposed actions will affect grizzly bear recovery.

On January 21, 2020, USFWS sent a letter to the four national forests that manage parts of the Bitterroot Ecosystem confirming that Section 10(j) does not apply to grizzly bears that have dispersed into the Bitterroot on their own, and that in fact such dispersal is occurring. Accompanying this letter was a map displaying where grizzly bears may be present.

Given the ongoing natural recolonization, the Forest Service must consider how it is going to facilitate connectivity, establishment, and recovery of this essential, non-experimental natural population of grizzly bears. The return of grizzly bears to the Bitterroot Ecosystem must be considered at the project-level, especially where a proposed action has the potential to affect habitat security and the ability of grizzly bears to use areas of connectivity that are crucial for their recovery.

There is solid documentation of recent and ongoing grizzly bear occupancy in the Bitterroot National Forest.[[34]](#footnote-34)

The Forest Service must demonstrate using a robust environmental analysis how the potential project treatments will not hinder grizzly bear recovery or result in a take as defined by the Endangered Species Act.

It is reasonable to expect use of off-road equipment and road use—closed, stored or unauthorized roads—will increase disturbance and affect the ability of grizzly bears to use areas where they may be present. Forest Service suggestions that such treatments would adhere to the screens for the R1 programmatic grizzly bear biological assessment (BA) are insufficient to comply with NEPA’s hard look mandate. So, the agency must demonstrate in an environmental analysis how treatments which are consistent with those screens provide for grizzly bear recovery, especially given the indefinite increase in motorized disturbance that will result from those treatments. Further, we question the sufficiency of the Forest Service’s R1 programmatic grizzly bear BA as it fails to provide the necessary direction to provide for secure habitat conditions within areas of connectivity in the project area. The need to conduct proper environmental analysis and demonstrate the sufficiency of the programmatic grizzly bear BA in the project area is evident when looking at the potential for significant impacts to grizzly bears.

A new report titled, *Grizzly Bear Denning Habitat and Demographic Connectivity in Northern Idaho and Western Montana*, authored by independent wildlife consultants Mike Bader and Paul Sieracki, geospatial analyst and wildlife biologist, identify areas where female grizzly bears can reside year-round between the Northern Continental Divide, Cabinet-Yaak, and Bitterroot Grizzly Bear Recovery Areas.

The aforementioned report demonstrates the urgent need to not only protect suitable grizzly bear denning habitat and areas of connectivity, but to restore areas that can facilitate the species’ recovery. Those lands within the project area which are identified as low-quality grizzly bear denning habitat by Bader & Sieracki, 2021 should be prioritized for improving current levels of habitat security.

The area covered by the Bitterroot Front Project encompasses almost the entire Bitterroot Range. That area has been shown to contain suitable grizzly bear denning habitat and provides an area of demographic connectivity, something necessary for the continued genetic health of the grizzly bear population.[[35]](#footnote-35)

As a result of its precipitous decline, FWS listed the grizzly bear as a threatened species in the lower 48 states under the Endangered Species Act in 1975.  Today scientists estimate there are approximately 1,800 grizzly bears left in the lower 48 states, occupying five isolated populations. The Grizzly Bear was listed partially due to isolation and populations in the contiguous U.S. remain isolated (USFWS 2021).  None of the Recovery Areas are large enough to independently support a viable population. Therefore, linkage of the isolated grizzly bear populations into a genetically-diverse metapopulation (as defined by Hanski and Gilpin 1991) would increase the probability of long-term survival (Allendorf et al. 2019; Boyce et al. 2001; Servheen et al. 2001; Craighead and Vyse 1996).

The recent history of verified and likely observations of grizzly bears within and near the Project Area requires in-depth analysis. Recent verified observations have been confirmed in the eastern and northern sections of the Bitterroot National Forest and in adjacent areas including Lolo, Lolo Hot Springs, Lolo Pass and many within the Sapphire Mountains within known dispersal distances to the Bitterroot Face for female grizzly bears (Jonkel 2022; Bader and Sieracki 2022). Likely visual observations from qualified observers including a former Forest Service District Ranger have come from St. Mary Peak and the head of Bass Creek. These are just the verified and likely observations, which certainly underrepresent actual presence. No DNA hair traps or wildlife camera surveys have been done in this area, so the information on residential occupancy is incomplete (Fortin-Noreus 2022). The Bitterroot National Forest (BNF) through its capacity as a member of the IGBC Bitterroot Subcommittee has made an erroneous assumption that these bears either have all died or left the area, resulting in no resident grizzly bears. This faulty assumption cannot be part of the analysis. The assumption must be that grizzly bears are present on the Bitterroot Face and adjacent areas and that more are likely in the near future.

The BNF must take a hard look and fully analyze potential impacts to grizzly bears, both resident and transient. This includes temporary displacement that could hinder or prevent natural recolonization.

The Action Area, as defined by the Endangered Species Act, is the entire area to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action. The Forest Service must consider the cumulative effects of past, present, and reasonably foreseeable actions that in sum will lower the probability of female grizzly bear immigration into the Bitterroot Ecosystem. This is an important aspect of the issue before the agency required by the APA, NEPA, and the ESA.

The BNF must also fully analyze impacts on grizzly bear denning habitat based on the best available scientific information accepted for publication in a scientific journal through a peer-review process (Bader and Sieracki 2022).

The proposed thinning and timber harvest is also likely to negatively impact grizzly bears in the short-term and long-term. Areas that receive the regeneration harvest treatment will appear as openings in the forest and will “not likely provide sufficient hiding cover until the vegetation regrows to a point that it would conceal a bear (about 15 years)” (Redd-Bull EA at 87). Grizzly bears are likely to avoid these areas in the long-term because grizzly bears select regenerating cut-blocks significantly less often than other habitats during all seasons (McLellan & Hovey 2001). When grizzlies do use these areas, they may be more susceptible to poaching because they will not be easily concealed. The Forest Service must analyze the increased risk of poaching on new roads or on areas where timber and hiding cover will be removed. This project, as proposed, will degrade grizzly bear use and movement. The Agency must fully analyze how this project is likely to impede and significantly delay grizzly bear recovery.

These complex issues, combined with the immense Action Area can only be properly addressed through completion of a full Environmental Impact Statement and substantive Section 7 consultation with the U.S. Fish & Wildlife Service.

Please explain exactly how this proposed project will proceed without harming grizzly bear, their habitat, and/or demographic connectivity.

* Black bear over-winter (den) within the area encompassed by this proposed project.

Disturbance of bears while denning has been shown to be detrimental, especially to females with cubs.[[36]](#footnote-36)

Please provide a list of the exact measures that will be taken to ensure that those den sites and their inhabitants will not be disturbed by management activities.

* The status of wolverine is currently being litigated.

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

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

The study by Copeland, 2010 cited in the ruling, analyzed spring snow cover to determine overlap with known den sites, finding 97.9% overlap. They concluded that if reductions in snow cover continue to occur, “habitat conditions for the wolverine along the southern extent of its circumboreal range will likely be diminished through reductions in the size of habitat patches and an associated loss of connectivity, leading to a reduction of occupied habitat in a significant portion of the species range.” [[37]](#footnote-37)

A second analysis by McKelvey, 2011, used Global Climate Models to predict the change in distribution of persistent spring snow cover so that “for conservation planning, predicting the future extent and distribution of persistent spring snow cover can help identify likely areas of range loss and persistence, and resulting patterns of connectivity.” McKelvey concluded: “We expect that the geographic extent and connectivity of suitable wolverine habitat in western North America to decline with continued global warming . . . conservation efforts should focus on maintaining wolverine populations in the largest remaining areas of contiguous habitat and, to the extent possible, facilitating connectivity among habitat patches.” [[38]](#footnote-38)

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

Robert Inman, PhD, a biologist and Director of the Greater Yellowstone Wolverine Program at the Hornocker Institute/Wildlife Society, noted that the FWS singled out a particular activity, fur trapping, that can cause mortality, while ignoring the full range of human activities such as roadkill, before records were kept. So delineating habitat based on these records can understate actual range for wolverines. He also provides evidence that wolverines can den in areas lacking the presumed snow cover and that conditions suitable for competing for food are also a limiting factor. He further argues that road density was found to be a factor in an earlier telemetry-based habitat analysis, particularly at higher elevations.[[39]](#footnote-39)

He also pointed out the extensive trapping that occurred in the US and wolverine may well have been eliminated from suitable places prior to records being kept.

So, while the USFWS emphasizes the role of connectivity and genetic exchange in maintaining meta-populations and genetic diversity, it avoids the identification of the connections vital to maintenance and recovery of species.

Please indicate how wolverine, wolverine habitat, and connectivity zones will be protected during the course of this proposed project.

* Boreal toads, lynx, bull trout, Westslope Cutthroat Trout, and numerous other Sensitive Species are known to live and breed in the project area.

Please provide a list of the exact measures that will be taken to assure project activities will not disturb them or destroy the habitat on which they currently depend.

* Pileated woodpeckers, Pine marten, and elk are indicator species.

Please analyze how these species will be protected during this multi-year project.

* Prescribed fire has recently been shown to be less effective than wildfire at maintaining highly nutritious ungulate forage. [[40]](#footnote-40)

Given that one of the project’s advertised objectives is the desire to “restore and increase forage and nutritional value …” the proposed project’s focus on the use of prescribed fire is especially concerning. (Scoping Document, p. 4)

Please justify, using the most recent scientific research, why this proposed project includes using prescribed fire as a major treatment.

* There is a long record of cattle trespassing (illegal grazing) into some portions of the BNF.

Please provide a map showing places within the project area that are available for grazing.

Please list which measures the Agency will implement to eliminate cattle encroachment into the project area.

Grazing has been repeatedly shown to degrade wildlife habitat.[[41]](#footnote-41)

Please explain why grazing continues to be allowed in the proposed project area and what measures will be implemented to minimize grazing impact in the project area.

* Most on-the-ground management activities have been shown to spread invasive plants and weeds into previously uninfected areas.[[42]](#footnote-42)

Please list the measures that will be used to eliminate the spread of invasive plants and weeds during this project and which of those measures have been verified (by post-project monitoring) as successful in the past.

* The scoping document states, “Meadow habitats are experiencing a reduction in size through conifer encroachment and quality, due to the lack of fire necessary to stimulate growth of forbs and grasses.” (Scoping Document, p. 4)

The scoping documentation offers no data to show that conifer encroachment is occurring in the proposed project area or that, if it does exist, such encroachment is not a naturally occurring process.

Given the current scarcity of tree seedlings in grassy areas of the project area, one would expect the scoping documentation to have included data which shows conifer encroachment is occurring. Based on recent research conducted at UM, it is likely that climatic conditions are the reason tree seedlings have a low survival rate and brings into question the need to include this goal as part of the proposed project.[[43]](#footnote-43)

Please explain why the proposed project includes the apparently unnecessary need to reduce conifer encroachment into meadows and grasslands.

* The short list of References attached to the scoping documentation includes, “Cook, J. G., L. L. Irwin, L. D. Bryant, R. A. Riggs, and J. W. Thomas. 1998. Relations of forest cover and condition of elk: a test of the thermal cover hypothesis in summer and winter. Wildlife Monographs 141:1-61.”

This study stands alone among many thermal cover studies that have been completed. Unlike the vast majority of the scientific research establishing the importance of thermal cover for elk and other big game, Cook, et al. 1998 asserts their study of captive elk shows a conflicting result.

Please explain why the FS relies on this singular study as a reason for ignoring the Forest Plan’s requirements.

* No mention of protection for bird species is included in the scoping documentation. The Migratory Bird Act (1918) prohibits the “taking” of migratory birds. Several listed species are known to nest in the area of this proposed project. Courts have determined that “taking” does not have to be intentional. Therefore, destruction of migratory bird habitat, though unintended, is illegal.

The Bald and Golden Eagle Protection Act (1940) offers similar protection for eagles. Both Bald and Golden Eagles are known to nest in the area covered by this proposed project.

Please explain how the drastic changes to the existing habitat for bird species proposed by this project do not conflict with the Migratory Bird and Bald and Golden Eagle Protection Acts.

**The current (1987) Forest Plan states that beavers will be introduced in the BNF**

The East Fork Bitterroot Research Natural Area (RNA) appears to have been established by a Forest Plan (FP) amendment.

**The FP indicates that RNA would “serve as a reference for ecological monitoring, especially the short- and long-term vegetation dynamics associated with a beaver-influenced river system.”**

**Please provide all the results regarding beaver impact that have been gathered from the East Fork RNA.**

**A different section of the current FP states that “**Beaver will be introduced into suitable riparian habitat.” (FP at II-20)

Recent research indicates that the presence of beavers increases the landscape health, improves biodiversity, controls water flow, reduces downstream water temperatures, and provides increased breeding habitat for of native fish.[[44]](#footnote-44) [[45]](#footnote-45) [[46]](#footnote-46) [[47]](#footnote-47) [[48]](#footnote-48)

**Given the FP directive, the substantial number of suitable areas in the proposed project area, and a preponderance of recent research that confirms beavers benefit the environment in many ways, please explain why beaver introduction is not included as one of the goals for this proposed project.**

**Please explain the Agency’s lack of effort to introduce beavers into the many suitable riparian habitats in the area covered by this proposed project.**

**The Agency Ignores Cumulative Impacts from Multiple Projects**

Given the gigantic size of this proposed project and the large size and number of other (past, current, and foreseeable future) projects within the BNF and close proximity, it is unacceptable there is no mention of the project’s cumulative impact

The scoping documentation includes absolutely no information about the cumulative impact this proposed project would have on the environment or its contribution to global warming.

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

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

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

As it considered taking action that ultimately resulted in NEPA’s enactment, the United States Congress hosted a joint House-Senate Colloquium on a “National Policy for the Environment” on July 17, 1968. *See* Congressional White Paper on a National Policy for the Environment, U.S. Gov’t Printing Office (Oct. 1968). Invited to participate in the Colloquium were “interested members with executive branch heads and leaders of industrial, commercial, academic, and scientific organizations,” with the purpose of “focus[ing] on the evolving task the Congress faces in finding more adequate means to manage the quality of the American environment.” *Id*. at III, 1.

The outcome of the day-long discussion was a Congressional White Paper on a National Policy for the Environment, published in October 1968. *Id*. Noting the near-consensus views expressed by those participating in the Colloquium, the Congressional White Paper explained that “in the recent past, a good deal of public interest in the environment has shifted from its preoccupation with the extraction of natural resources to the more compelling problems of deterioration on natural systems of air, land, and water. The essential policy issue of conflicting demands has become well recognized.” Id. at 1. The Congressional White Paper highlighted additional issues that stakeholders agreed were essential and ripe for Congressional consideration in its development of a national environmental policy. For example, Dr. Walter Orr Roberts, an atmospheric physicist and founder of the National Center for Atmospheric Research, explained the importance of considering climate change due to “… subtle alterations of the chemical constitution of the atmosphere, through pollutants added in the form of trace gases, liquids, or solids, result from industrial activity or urbanization. This is an area of biometeorology that has significance in every living person and yet we have not yet seen even the first beginnings of an adequately sustained research effort in this area.” Id. at 5-6. Subtle alterations from multiple projects, including the type of projects at issue here, could also have significant impacts when viewed cumulatively.

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

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

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

Within a few months of its establishment, CEQ reinforced the need to address all environmental impacts, including cumulative effects. “The statutory clause ‘major Federal actions significantly affecting the quality of the human environment’ is to be construed by agencies with a view to the overall, cumulative impacts of the action proposed (and of further actions contemplated).” Council on Environmental Quality: Statements on Proposed Federal Actions Affecting the Environment; Interim Guidelines, April 30, 1970, Section 5(b) (filed with Fed. Reg. May 11, 1970), at 288.[[49]](#footnote-49) The CEQ published interim guidance in 1971 that confirmed this mandate. CEQ, Statements On Proposed Federal Actions Affecting The Environment Guidelines, 36 Fed. Reg. 7,724 (April 23, 1971). The guidance explained that the requirement in Section 102(2)(C) of NEPA to identify “the relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity” in the detailed statement (now known as an EIS) required the agency “to assess the action for cumulative and long-term effects from the perspective that each generation is trustee of the environment for succeeding generations.” Id. at 7,725 (interpreting 42 U.S.C. 4332(2)(C)(iv)).

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

In the absence of any Congressional or administrative interpretation of the term, we are persuaded that in deciding whether a major federal action will “significantly” affect the quality of the human environment the agency in charge, although vested with broad discretion, should normally be required to review the proposed action in the light of at least two relevant factors: (1) the extent to which the action will cause adverse environmental effects in excess of those created by existing uses in the area affected by it, and (2) the absolute quantitative adverse environmental effects of the action itself, including the cumulative harm that results from its contribution to existing adverse conditions or uses in the affected area. [Hanly v. Kleindienst, 471 F.2d 823, 830-31 (2nd Cir. 1972)].

Following Hanly, the Second Circuit reiterated the importance of disclosing cumulative impacts.

As was recognized by Congress at the time of passage of NEPA, a good deal of our present air and water pollution has resulted from the accumulation of small amounts of pollutants added to the air and water by a great number of individual, unrelated sources. ‘Important decisions concerning the use and the shape of man’s future environment continue to be made in small but steady increments which perpetuate rather than avoid the recognized mistakes of previous decades.’ S. Rep. No. 91-296, 91 Cong., 1st Sess. 5 (1969). NEPA was, in large measure, an attempt by Congress to instill in the environmental decision-making process a more comprehensive approach so that long term and cumulative effects of small and unrelated decisions could be recognized, evaluated and either avoided, mitigated, or accepted as the price to be paid for the major federal action under consideration. [Natural Resources Defense Council v. Callaway, 524 F.2d 79, 88-89 (2nd Cir. 1975)].

The Ninth Circuit in 1975 further explained:

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

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

. . . .

While the analysis of secondary effects is often more difficult than defining the first-order physical effects, it is also indispensable. If impact statements are to be useful, they must address the major environmental problems likely to be created by a project. Statements that do not address themselves to these major problems are increasingly likely to be viewed as inadequate. As experience is gained in defining and understanding these secondary effects, new methodologies are likely to develop for forecasting them, and the usefulness of impact statements will increase. City of Davis v. Coleman, 521 F.2d 661, 676-77 (9th Cir. 1975) (quoting Scientists’ Institute for Public Information v. A. E.C., 481 F.2d 1079, 1092 (D.C. Cir. 1973) and CEQ, Fifth Annual Report of the Council on Environmental Quality, 410-11 (Dec. 1974).[[50]](#footnote-50)

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

[W]hen several proposals for coal-related actions that will have cumulative or synergistic environmental impact upon a region are pending concurrently before an agency, their environmental consequence must be considered together. Only through comprehensive consideration of pending proposals can the agency evaluate different courses of action. Kleppe v. Sierra Club, 427 U.S. 390, 410 (1976).

As a result, CEQ’s attempt in its 2020 regulations to eliminate an agency’s duty to consider cumulative effects is contrary to legislative intent, statutory language, 40 years of case law, and consistent CEQ interpretation. Therefore, the Forest Service must continue to disclose the cumulative effect of federal actions, including those associated with the Eastside Project and others occurring within or near the project areas including the Gold Butterfly,[[51]](#footnote-51) Darby Lumber Lands Phase II,[[52]](#footnote-52) and any others.

1. Even Under the 2020 NEPA Regulations, the Forest Service Must Disclose Environmental Impacts that Occur at the Same Time and Place.

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

changes to the human environment from the proposed action or alternatives that are reasonably foreseeable and have a reasonably close causal relationship to the proposed action or alternatives, including those effects that occur at the same time and place as the proposed action or alternatives and may include effects that are later in time or farther removed in distance from the proposed action or alternatives. [40 C.F.R. § 1508.1(g) (2020)].

On October 7, 2021, the Federal Register published CEQ’s intent to restore regulatory provisions which were in effect for decades before being modified in 2020.

Please provide thorough and complete research that reveals the cumulative impact from this proposed project and, given the recent (2021) Presidential Directive, justify why ignoring that impact should be acceptable to the public.

**The Agency Asserts the Bitterroot Front Project Will Protect the Area from Natural Disturbance**

The Agency’s assumes, without evidence, that the proposed project will improve landscape resilience to natural disturbance.

First, insects. The Forest Service (FS) has insisted for years that when insects begin damaging a patch of forest they must be stopped because infestations increase the risk of more insect invasions and promote catastrophic wildfire. The FS’s recommended tools are always logging, thinning, and prescribed fire. Recent research contradicts FS claims that those tools work. A study by Meigs, G.W. et al. (2016) indicates that not only do insect infestations not increase the likelihood of wildfire but that in the event of wildfire the severity is not increased.[[53]](#footnote-53)

Other research by Hart, S.J. et al. (2015) revealed that widespread and severe insect infestation restrict subsequent invasions.[[54]](#footnote-54) This conclusion conflicts with current FS claims.

Later research by Six, D.L. et al (2018) suggests that Hart’s finding of infestations restricting subsequent invasions may be the result of beetle choice and may result in a strong selection of trees for greater resistance to attack.[[55]](#footnote-55)

The most recent research by Six, D.L. et al (2021) strongly suggests that thinning—the standard FS prescription for insects—has, at least for whitebark pine, “little-to-no effect on enhancing constitutive defense against the insect” and that, “… results also indicate thinning prescriptions aimed at increasing tree growth in whitebark pine should be applied with considerable caution.”[[56]](#footnote-56)

Contrary to repeated FS assertions that a mountain pine beetle outbreak increases wildfire risk, spatial overlay analysis shows no effect from outbreaks on subsequent area burned during years of extreme burning across the West. These results refute the assumption that increased bark beetle activity increased the area burned.[[57]](#footnote-57) [[58]](#footnote-58)

Weather, not insects, is what determines wildfire behavior.[[59]](#footnote-59)

Using the most recent scientific research, please justify the declaration that insects can and must be controlled by management activities to improve forest resilience.

Second, disease. Mistletoe is the disease which seems to be the most troubling to the FS.   
Reduction or eradication is given as a goal in almost every Agency project on the BNF. Interestingly, a FS leaflet explains that “It is a pest ONLY (emphasis added) where it interferes with management objectives, such as timber production.” [[60]](#footnote-60)

That same pamphlet points out that dwarf mistletoe is important to wildlife.

“Some rodents, such as porcupines and squirrels, feed on bark tissues at infection sites because of the accumulations of starch and nutrients at these locations. The large witches’ brooms caused by the parasite are used for hiding, thermal cover, and nesting sites by grouse, hawks, owls, squirrels, porcupines, martens, and other wildlife. Northern spotted owls east of the Cascades show an attraction to Douglas-fir witches’ brooms for nest sites.”[[61]](#footnote-61)

A study by Watson, D.M. and Herring, M. (2012) confirmed mistletoe as a keystone resource that when removed by management treatments, significantly reduces species richness of both birds and other wood-land dependent residents.[[62]](#footnote-62)

The fact that the FS continually insists on reducing/eradicating dwarf mistletoe gives substance to the widely held belief that the focus of this project (and most others) is timber production even when detrimental to certain wildlife species.

Please explain why mistletoe should be “controlled” when it provides vital habitat and the likelihood it is a keystone resource needed to ensure species richness.

Third, wildfire. In project after project, the FS claims the forest is primed for catastrophic wildfire. The oft-repeated assertion is made that the forest is too thick, overstocked with small trees, and contains an overabundance of ladder fuels. Those issues are blamed on long-term wildfire suppression by previous FS management actions that, ironically, must now be overcome using current FS management activities.

Those FS claims related to the history of wildfire rely heavily on research performed by Arno (1976) more than 45 years ago. That study focused on an extremely small portion of the Bitterroot Forest and findings extrapolated to the entire Bitterroot National Forest (BNF). The assumption was made that approximately 4% of the BNF, which should have experienced multiple fires over the past 129 years, even burned once. That postulation is problematic and statistically unsound. Arno’s sample was too small to support such an hypothesis.[[63]](#footnote-63)

The fact is ignored that over the past 129 years ~4% of the BNF burned one or more times was mainly determined by climatic conditions that existed during that period. Claiming that a larger percentage of the BNF “should have burned one or more times” during that period is subjective and not based upon the body of research which reached a different conclusion.

As shown by numerable studies, the frequency and severity of wildfire is driven mostly by climate (high temperature, drought, and wind) and not by the availability of fuels.[[64]](#footnote-64) [[65]](#footnote-65)

It is not logical to presume that thinning will reduce the possibility of catastrophic wildfire.[[66]](#footnote-66) Nor is the assertion by the scoping documents that the thinning proposed as part of this project will produce a more desirable forest. That belief is outdated and not based upon the latest research.[[67]](#footnote-67) [[68]](#footnote-68) [[69]](#footnote-69)

Please provide the most recent research that justifies how thinning, the removal of ladder fuels, and the use of prescribed fire reduces catastrophic wildfire and how the reduction of wildfire of any intensity is better for forest health and resilience than allowing nature to take its course.

**Inventoried Roadless Areas (IRA)**

The Roadless Rule (36 CFR Part 294), published on January 12, 2001, states:

The Department of Agriculture is adopting this final rule to establish prohibitions on road construction, road reconstruction, and timber harvesting in inventoried roadless areas on National Forest System lands. The intent of this final rule is to provide lasting protection for inventoried roadless areas within the National Forest System in the context of multiple-use management. (emphasis added)

This final rule prohibits road construction, reconstruction, and timber harvest in inventoried roadless areas because they have the greatest likelihood of altering and fragmenting landscapes, resulting in immediate, long-term loss of roadless area values and characteristics. (Federal Register, Vol. 66, No. 9, p. 3244)

At the national level, Forest Service officials have the responsibility to consider the ‘‘whole picture’’ regarding the management of the National Forest System, including inventoried roadless areas. Local land management planning efforts may not always recognize the national significance of inventoried roadless areas and the values they represent in an increasingly developed landscape. If management decisions for these areas were made on a case-by-case basis at a forest or regional level, inventoried roadless areas and their ecological characteristics and social values could be incrementally reduced through road construction and certain forms of timber harvest. Added together, the nation-wide results of these reductions could be a substantial loss of quality and quantity of roadless area values and characteristics over time. (Federal Register, Vol. 66, No. 9, p. 3246)

The scoping document for this proposed project states:

Of the 55,133 acres of commercial harvesting across the project area, just over 13,000 acres falls in inventoried roadless areas. Commercial harvesting in roadless areas focuses on thinning small diameter timber and vegetation to maintain or restore desirable forest species composition and stand structure while reducing risks of uncharacteristic wildfire effects. These activities would mimic what would be expected under natural disturbance regimes of the current climatic period. Please note that this proposal does not include any road construction or reconstruction in inventoried roadless area. (Scoping Document, p. 9)

The Forest Service fails to explain, let alone analyze, how performing commercial harvest on “just over 13,000 acres of IRAs falls under the Roadless Rule exemptions. The Agency also fails to demonstrate how such actions do not constitute extraordinary circumstances, especially since the proposed action will last an unspecified number of years and certainly affect several roadless characteristics. Nor does the Forest Service describe how commercial logging proposals would maintain or improve one or more of the roadless area characteristics, as the regulations require. Given the undefined duration the Agency seeks for treatments, any claim they would occur infrequently is arbitrary and a violation of the Roadless Rule.

Timber stand improvement treatments are not appropriate within IRAs. Assertions by the Forest Service that the proposed treatments will “reduce the risk of uncharacteristic wildfire effects, within the range of variability that would be expected to occur under natural disturbance regimes of the current climatic period” are equally arbitrary.

The Agency fails to provide any supporting analysis or evidence that its proposed treatments will effectively reduce wildfire effects under the current climatic period, especially since the Forest Service continues to rely on historic ranges of variability to determine its proposed actions. The agency must acknowledge that persistent drought, higher temperatures, and windy conditions are the determining factors for wildfire severity, and no amount of fuel reduction is going to overcome those factors. In other words, the agency cannot thin and burn its way out of the climate crisis. More effective strategies would be to create cooler micro-climates through road removal and reforestation and preserving mature, intact forests that serve as a natural climate change solution

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

Given the clearly stated “intent” of the roadless rule and the limitations it imposes on roads, timber harvesting, and other activities, it is difficult to imagine how commercial harvesting in an Inventoried Roadless Area (IRA) can occur without running afoul of the Roadless Rule.

For example, will existing roads that are overgrown with trees and shrubs be “bladed” to allow for the passage of logging traffic? If so, that could easily be determined to be “road reconstruction.” To clarify, any action that would open overgrown closed roads, or bring unauthorized roads to even a low-standard would constitute road reconstruction thereby violating the Roadless Rule.

The Roadless Rule also defines “improvement” to mean an increase of the existingroad’s traffic service level and expansion of route capacity. By opening closed roads, especially roads with an operational ML 1 classification, both the traffic service level and route capacity will increase. Similarly, treating unauthorized roads to provide access for high-clearance vehicles would also constitute road reconstruction that the Roadless Rule defines as applying to only classified roads (redefined as Forest Service System Roads in the 2005 Travel Management Rule, 70 FR 68288). As such, the Roadless Rule precludes the agency from using unauthorized roads, especially untreated or partially treated decommissioned roads, remnants of temporary roads, and those created through illegal use.

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

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

Please explain how commercial harvesting will be restricted so that it does not disregard the Roadless Rule.

Please explain why non-commercial activities were not assigned to the IRAs within the project area.

Please explain how any treatment in IRAs will not be detrimental to roadless characteristics to such an extent that the areas will no longer qualify as IRAs.

**Management Activities**

There is no suggestion in the scoping documentation for the possibility that performing no management activities in the current forest and allowing natural forest succession to occur is likely to produce a more natural forest.[[70]](#footnote-70) Whether by oversight or design, this proposed project is sacrificing natural forest succession.

A forest and its multiple ecosystems can never reach a natural equilibrium if not left alone. Any management activities will disrupt naturally occurring processes and certainly cause unwished-for and unintended consequences.[[71]](#footnote-71) Far too many ecosystem components and their interconnectivity exist in a forest for anyone to gain a complete understanding. It is best to observe and study with the only intent being to gain knowledge. Interference with nature by humans has yet to produces positive results. Assuming that “this time will be different” is presumptuous, short sighted, and displays an amazingly high level of hubris.

Given the preponderance of recent, contradictory research, it is difficult to believe any forest treatment is necessary to prevent catastrophic wildfire or increase forest health by removing understory plants, opening the canopy, or removing certain tree species for the benefit of “preferred” trees. All suggested treatments are designed to “hopefully” produce a forest that represents an unproven, unrealistic historical condition, a silviculturist-imagined, perfect-world forest which yields an endless supply of readily marketable timber to industry.

Please justify, using the most recent scientific research, why any management activities are required in the area covered by this proposed project.

As suggested in an April 2021 article, “A better handle on all processes that affect microbial biodiversity and their net balance is needed. Lack of insight into the dynamics of evolution of microbial biodiversity is arguably the single most profound and consequential unknown with regard to human knowledge of the biosphere.” [[72]](#footnote-72) Although focused on microbial biodiversity, the article points out that humans lack insight into the impact of their actions on the planet’s ecosystems. That insight is certainly applicable to the management actions contained in the scoping documentation.

Please explain, given the Agency’s inability to identify and understand all of the consequences resulting from this proposed project, how BNF management reached the conclusion that this proposal should move forward.

Available from a USDA/FS website is an article, Wildfire and Salvage Logging (Beschta, R. L., 1995) which contains specific recommendations from a group of experts—mostly PhDs—for forest managers to follow.[[73]](#footnote-73) The authors concluded that:

“Land management practices in the interior Columbia and upper Missouri basins have profoundly impacted forest, grassland, and aquatic ecosystems. Watersheds and forests have been degraded (e.g., ecosystems fragmented, habitats simplified or lost, disturbance regimes altered). At every level of biological organization - within populations, within assemblages, within species, and across the landscape--the integrity of biological systems has been severely degraded. This degradation is best seen in the marked reduction in the biological diversity in the region.

“The entire range of land management practices is implicated in this regionwide decline. Streamside development, logging, grazing, mining, fire suppression, removal of beaver and large predators, water withdrawals, introduction of exotic species, and chronic effects of roadbuilding have cumulatively altered landscapes to the point where local extirpation of sensitive species is widespread and likely to continue. Areas dominated by healthy populations of native species of vertebrates are exceptional. Many of these changes began long before the establishment of wilderness areas and other protections, and therefore, the majority of the region has been impacted.”

The authors’ findings and advice included:

* Ongoing human activity and the residual effect of past activity continue to threaten watershed ecosystem integrity.
* Fires are an inherent part of the disturbance and recovery patterns to which  
  native species have adapted.
* There is no ecological need for immediate intervention on the post-fire landscape.
* Existing condition should not be used as "baseline" or "desired" conditions upon which to base management objectives.
* Fire suppression throughout forest ecosystems should not automatically be a management goal of the highest priority. The overall management goal must be to preserve (and reestablish) the fire and other disturbance regimes that maintain ecological systems and processes, while protecting human life and property.
* Fire suppression activities should be conducted only when absolutely necessary and with utmost care for the long-term integrity of the ecosystem and the protection of natural recovery processes.
* The region's ecosystems, not just forests, are under severe strain.

In relation to post-fire principles, the authors advise:

* Allow natural recovery and recognize the temporal scales involved with ecosystem evolution. Human intervention should not be permitted unless and until it is determined that natural recovery processes are not occurring.
* Protect soils. No management activity should be undertaken which does not  
  protect soil integrity.
* Preserve capabilities of species to naturally regenerate.
* Do not take actions which impede natural recovery of disturbed systems.
* Salvage logging should be prohibited in sensitive areas.
* On portions of the post-fire landscape determined to be suitable for salvage logging, limitations aimed at maintaining species and natural recovery processes should apply.
* Because of the wide range of chronic ecological effects associated with roadbuilding, the building of new roads in the burned landscape should be prohibited.
* Active reseeding and replanting should be conducted only under limited conditions.
* Structural post-fire restoration is generally to be discouraged.

That paper, which offered a clear, well-defined scientific framework of principles and practices, was published in 1995 and has been available to FS personnel for more than 25 years. Yet, as is readily apparent from this project proposal, the Agency refuses to accept the guidance of its own experts. Forest Service management remains stuck in the distant past, pursuing the singular objective of extracting timber from forested, public lands. To continue chasing a goal which has caused the degradation of public lands and contributed to global warming is outrageous.

Please explain in detail why Agency management continues to ignore the best available science, much of it produced by FS specialists, as it proposes this project which is likely to cause harm on many levels.

**Conclusion**

**The initial documentation for this proposed project consisted of a two-page scoping letter plus documentation dated April 20, 2022, and 10 project-area maps which included limited explanations or definitions for the abbreviations used in the legends.**

**The scoping documentation contains no mention of how this area was defined as a “priority landscape,” an unacceptable omission.**

**Although the available documentation contains a short list of 9 references, it mentions no recent scientific research to justify a need for the proposed project.**

**Despite its extremely large size, the proposed project is intended to move forward using a conditions-based analysis under an Environmental Analysis (EA).**

**The possible, even likely, negative impacts to the forest, its many interconnected ecosystems, and to the human environment are completely ignored in the currently available scoping documentation.**

**Without proper justification, which must be based on the most recent scientific research, this proposed project should not move forward.**

**If the Agency insists on implementing a project on the proposed area, it must be done under an Environmental Impact Statement (EIS) including adequate documentation and the support of the most recent scientific research.**

**Respectfully,**

**/s/ M L Hoyt**

**Michael Hoyt**

1. <https://bitterrootstar.com/2019/11/forest-supervisor-addresses-confusion-over-bitterroot-front-project/> [↑](#footnote-ref-1)
2. Fleischman, F. et al. (2020) US Forest Service implementation of NEPA - fast, variable, rarely litigated and declining - <https://academic.oup.com/jof/article/118/4/403/5825558?login=true> [↑](#footnote-ref-2)
3. A Citizen’s Guide to NEPA 2021 - <https://ceq.doe.gov/docs/get-involved/citizens-guide-to-nepa-2021.pdf> [↑](#footnote-ref-3)
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