

Norton, Michelle - FS, HAMILTON, MT

From: Clint Nagel [REDACTED]
Sent: Thursday, May 19, 2022 9:10 PM
To: FS-comments-northern-bitterroot-stevensville
Subject: [External Email]Bitterroot Front Project
Attachments: 20220519.Bitterroot Front Project.docx

[External Email]

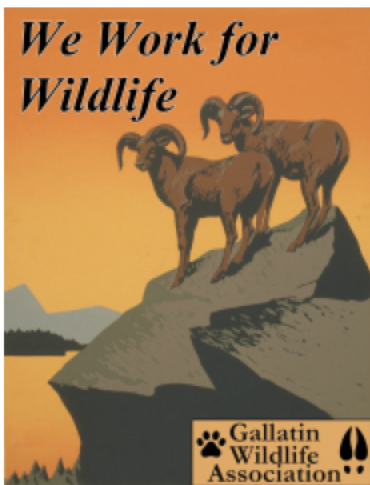
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Dear District Ranger, Steve Brown:

In the attached, please find comments on behalf of the Gallatin Wildlife Association, a nonprofit wildlife advocacy organization located in Bozeman, Montana. We have grave concerns over the design of this project as presented through this scoping process. Our rationale is provided.

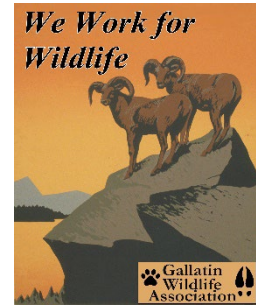
Thank you for providing this opportunity to comment.

Clinton Nagel, President
Gallatin Wildlife Association



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May 19, 2022

Steve Brown, District Ranger
U.S. Forest Service
Stevensville Ranger Station
88 Main Street
Stevensville, MT 59870

Dear Mr. Brown:

Our organization has recently become aware of the scoping notice by the Bitterroot National Forest (BNF) over their intent to conduct forest management activities, a project known as the Bitterroot Front, in extreme western Montana. The project area consists of 143,983 acres along the eastern face of the Bitterroot Range with a western border adjacent to the Selway-Bitterroot Wilderness Area with 97% of National Forest System (NFS) lands located in Ravalli County and 3% of NFS lands in Missoula County.

The map below indicates the project area.

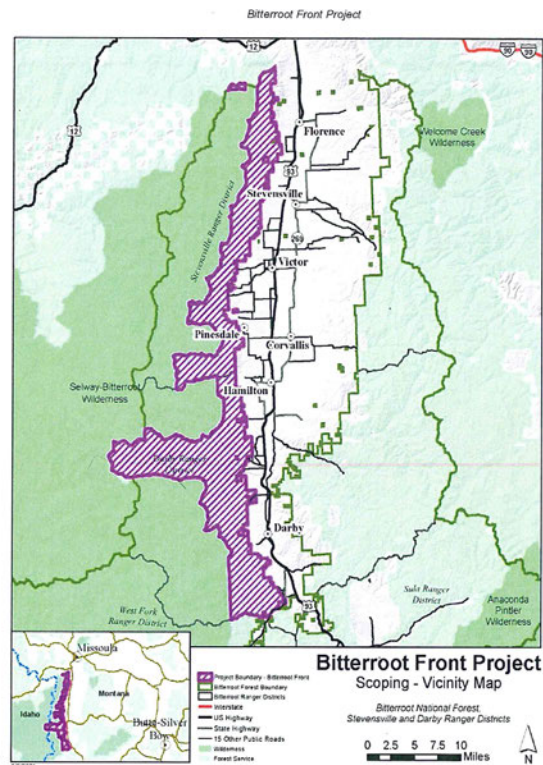


Figure 2. Bitterroot Front Project Focused vicinity map.

It would appear that the Bitterroot Front Project is guided by management standards as documented in the 1987 Forest Plan of the BNF. That fact will become more relevant later on in these discussions. Before we move there, we would like to inform the BNF about our organization.

The Gallatin Wildlife Association (GWA) is a local, all volunteer wildlife conservation organization dedicated to the preservation and restoration of wildlife, fisheries, habitat and migration corridors in Southwest Montana and the Greater Yellowstone Ecosystem, using science-based decision making. We are a nonprofit 501(c)(3) organization founded in 1976. GWA recognizes the intense pressures on our wildlife from habitat loss and climate change, and we advocate for science-based management of public lands for diverse public values, including but not limited to hunting and angling.

The Heavy Focus on Extraction:

It is evident in reading the scoping document that the main focus of this project is on timber harvesting and vegetative treatments. However, there is very little attention to detail on how these activities are going to affect wildlife or their respective habitat or how many miles of temporary or new roads are to be constructed. We understand the “*why and what*” of the project as laid out, even though we don’t agree with much of the rationale, but to ignore the impact of how these activities would befall upon our native wildlife is inexcusable.

As stated in the scoping document, there are five project objectives. They are as follows:

- 1.) Reduce fuels;
- 2.) Improve landscape resilience to disturbances (such as insects, diseases, and fire) by modifying forest structure and composition;
- 3.) Seek wildlife habitat improvement opportunities;
- 4.) Contribute to the local economy and forest products industry through fuel reduction activities and timber production;
- 5.) Other natural resource objectives we’d like to accomplish as opportunities become available such as recreation improvements, fish and rare plants, heritage resource management, grazing management, transportation/road management.

Objective 3 states the objective is to “*seek*” wildlife habitat improvement. What does that mean – to “*seek*” improvement? What does that look like? It appears the BNF may have some wishful thinking, hoping that some of these extraction actions on the ground may have an ancillary yet positive impact toward wildlife. But that isn’t how forest management based upon science is supposed to work. That isn’t a plan. That is simply wishful thinking.

It does not state which species will be benefited or which species will be negatively impacted. The scoping notice does not seem to acknowledge that actions on the native

landscape may improve the habitat of some species, but it may also negatively impact the habitat of others. By the same token, the scoping notice does not seem to acknowledge that impacts of one objective could very well be counterproductive to the objectives of others. One good example of that is the added impact of temporary or permanent roads upon the landscape. We all know that roads, whether temporary or not, wreak havoc on habitat fragmentation.

GWA has long sought and argued that the United States Forest Service (USFS) should change their paradigm on timber harvest from one of extraction to one of protection in order maximize carbon sequestration, biodiversity and forest integrity. Our organization has even suggested that this paradigm change could be easily incorporated in with the Multiple Use – Sustained Yield Act. With global warming getting worse over time, it is long past time to ignore the consequences before us. We firmly believe our forests have more value to society by remaining intact than being cut for timber. In terms of the amount of carbon, even the dead trees have more value in storing carbon than being cut. More on this later on in the comments.

The Omission of Wildlife in Scoping:

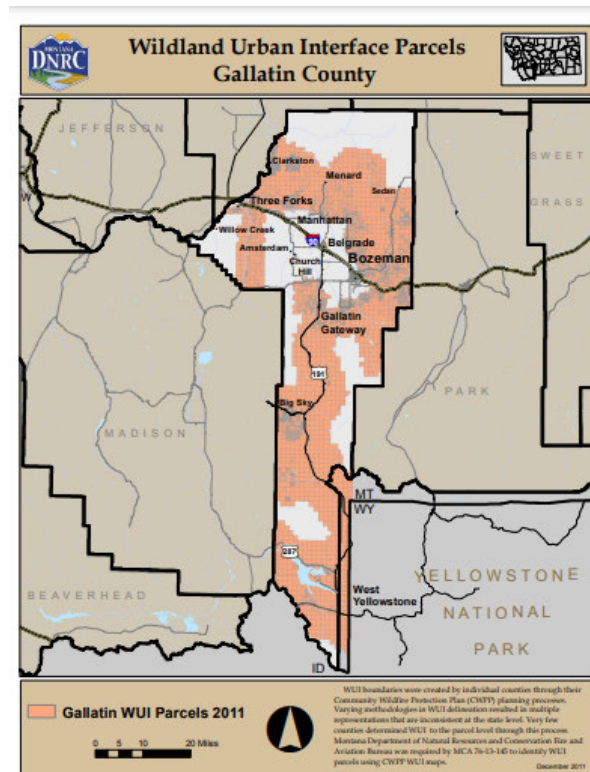
Before we move on to the discussion of what is in the scoping comments, let's talk about what isn't covered – and yes, that would be any discussion on wildlife, fisheries, or their respective habitat. Even though these are scoping comments and are focused on the project at hand, they should still contain some information as to the impacts these efforts will have on wildlife or other resources within the landscape. To say the agency “*seeks*” to have wildlife habitat improvement seems to be a half-hearted attempt not to place the focus on where it needs to be. We understand the main focus is on timber extraction and/or vegetative treatments, but there should also be an equal and opposite focus on wildlife and their habitat to offset those negative impacts. We don't see any evidence of that concern.

One of our organization's chief advocacies is the prevention of habitat fragmentation. Unfortunately, the habitat fragmentation resulting from this project is predictable and transparent. Tell us why we are wrong. By interfering with the natural management of the forest, the USFS actually is interfering with the biodiversity, ecological integrity, and the resilience of that forest.

An example of this can be found by the persistent call for the removal of fuels, ladder fuels and reducing stand densities. We understand the need for some of these actions to protect structures within the wildland-urban interface (WUI), but they need to be restricted to those specific areas, and only to those restricted areas, not applied to the open forest. We are finding many lands classified as being in a WUI are too inclusive, governments using that designation as an excuse for future extraction. Gallatin County is a prime example of this, whereby using one definition of a WUI nearly includes the majority of all forested lands within Gallatin County.

Such are the lands shown in the map below as declared by the Montana Department of Natural Resources¹ and the Aviation Bureau. The over designation of WUI lands is expensive and unnecessary. Attention needs to be focused on those lands centered around

manmade structures and infrastructure, not on lands such as inventoried roadless areas (IRA) or those lands far removed from development.



The necessity of wild fires on the landscape should not be minimized for it increases biodiversity, integrity and forest resilience. Forests resulting from fire events contain snags and deadwood that provide niches for a multitude of species. Benefits listed below are well supported by science and forest advocacy organizations:

1. They help birds and mammals with shelter to raise young. It provides a place for a variety of species to live.
2. They help with defensive mechanisms such as wildlife and raptors with unobstructed vantage points to spot predators.
3. Insectivorous birds such as woodpeckers and nuthatches depend heavily on snags as a source of food. They are a food source attracting insects, mosses, lichens, etc.
4. Larger snags can provide a great benefit to larger mammals and reptiles because they last longer and provide food and shelter.
5. Mosses, lichens and fungi are critical in returning nutrients to the soil.

To expand further on item 5, the importance of such action needs to be emphasized. In one of my old college textbooks, *“Ecology and Field Biology”* by Robert Smith² of West Virginia University, there is this statement on page 246:

“Of all the horizons of the soil, none is more important or ecologically more interesting than the forest floor or the organic horizon. A close relationship exists between litter and

humus, and the environmental conditions in the forest community – the internal microclimate of the soil, the moisture regime, its chemical composition, and its biological activity. The forest floor plays a dominant role in the life and distribution of many forest plants and animals, in maintenance of soil fertility, and in many of the soil-forming processes.”

Forest ecology is complex and intricate. We learn the smallest organisms can determine forest integrity, resilience and biodiversity and even the distribution of the smallest to the largest mammal species. When extractive actions are taken, not only is the main focus of that extraction taken from that specific environment, but it also disrupts, damages and causes destruction to micro-organisms and soil biota.

On page 4 of the scoping notice, Objective 3 states the following:

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 towards the desired conditions for certain forest species.*
- *The types of prescribed burning/managed 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.*

We find no proof whatsoever that these methods will improve desired conditions on a forest. With climate change a harbinger of warming and drying conditions to a forest, the science is beginning to show and scientific results have already shown that the forests as we now know them will not return because of climate change. Bullet point number one may be more or less wishful thinking.

Bullet point number two may indeed generate some forage for elk and other big game animals, but this is a common management tool used in North America to justify various objectives. The trouble is, it may sound good on paper, but like many things, all is not what it is cracked up to be. We mentioned it above on page 2 of these comments. In referring to the Executive Summary of Technical Review 16-01 dated October 2016 by the Wildlife Society³ entitled “*Effects of Prescribed Fire on Wildlife and Wildlife Habitat in Selected Ecosystems of North America*”, there is this statement:

“Prescribed fire affects wildlife in various ways. Population responses by species can be positive, negative, or neutral, short-term or long-term, and they often vary across spatial scales. Whereas prescribed fire can create or maintain habitats for some species, it can also remove or alter conditions in ways that render it unsuitable for other species. Furthermore, a species may benefit from fire in one situation but not another. Given the variations in fire and in species responses, the only real generalization one can make is that exceptions occur. Fire does not occur uniformly across a landscape, instead manifesting as a heterogeneous mosaic that provides habitats for different species, thereby influencing wildlife diversity.”

The moral of this story is that success from a common management tool is not a given. Success could very well be site dependent. What harm could come to the various species of wildlife from this practice at this time? The justification for this project based upon Objective 3 is weak in our opinion. There needs to be more thought to the process and to the impacts of such usage of management tools. It seems as if this is just a habitual tool thrown out there for the public's consumption in order to justify the project, without any real expectation of success.

Sensitive, Threatened and Endangered Species:

Because the current Forest Management Plan originated prior to the implementation of the 2012 Planning Rule, the BNF relies on criterion of the Sensitive Species designation. The list below is based upon known species which occur on the BNF as of February of 2011⁴. We want to highlight the fact again that these were *known* species which were designated as *sensitive* at that time.

American Peregrine Falcon
Flammulated Owl

Bald Eagle

Black-backed Woodpecker

Bighorn Sheep
Long-eared Myotis

Fisher

Long-legged Myotis

Gray wolf

North American Wolverine

Northern-bog Lemming

Townsend's big-eared bat

Coeur d' Alene salamander

Western toad

Wolverine: Before we move away from this list, we would like to highlight a few species, one being the wolverine. Even though the wolverine is not listed as endangered or threatened under the Endangered Species Act (ESA), we know that has not always been the case. The wolverine had been considered for listing according to the Federal Register in 2013, but the decision to consider the wolverine was withdrawn in October of 2020. That decision was then met with considerable disagreement by advocacy groups and scientists alike.

Shortly thereafter, on Dec. 14, 2020, a claim⁵ was filed by several conservation groups for declaratory and injunctive relief in Federal Court. As far as we know, there has not been a decision in that case. GWA believes this makes the case for the wolverine still in play as far as preserving habitat and connectivity corridors.

As stated in paragraph 4 on page 3 of the complaint filed on December 14, 2020:

"The few wolverines occupying the lower-48 states face a significant threat of habitat loss in a warming climate. This threat of habitat loss is compounded by other threats facing the wolverine population in the lower-48 states, including highly isolated and fragmented habitat, extremely low population numbers, incidental trapping, and disturbance from winter recreation activities that disrupt wolverine habitat use."

That is the rationale of GWA and, for those reasons, why we strongly urge protections be awarded the wolverine in this project. In addition, the IUCN⁶ (International Union of Conservation and Nature) Red List classifies the wolverine as vulnerable, which means

the species may not be endangered or critically endangered, but can still face a high-risk of extinction in the wild and in the medium-term future.

With that history in mind, and realizing that the species is known to reside in the project area, we strongly recommend no action at all until a full accounting and analysis of wolverine presence is completed.

Fisher: As stated, the fisher is classified as a “*sensitive species*” by the USFS in both the USFS Northern Region⁷ (western Montana and Idaho) and Intermountain Region (central to southern Idaho). And as stated above, the species is known to exist in the project area. In fact, reintroduction of fishers in the Bitterroot took place from populations in British Columbia in the latter part of the 20th century. In the same reference used above, the USDA Forest Service website, there is this disclaimer:

“Fisher habitat needs have not been as well studied in the northern Rockies as they have in the Pacific Northwest and California. According to Barry Bollenbacher, the Regional Silviculturist for the USFS Northern Region, “The fisher are currently considered a ‘sensitive species’ here, and will be considered for ‘species of conservation status’ under the new Planning Rule as forest plans are revised, and so are pretty high profile in terms of management. We are still in the early stages of trying to understand their requirements.””

“In 2012, the USFS developed new planning regulations, in accordance with the National Forest Management Act, that represent a significant change in Federal forest policy, with implications for wildlife populations that are still being sorted out. Under the 2012 Planning Rule, the Regional Foresters are responsible for identifying and listing “species of conservation concern” for their forests. Managers then have to define the “desired conditions” in the forest plan that provide the habitat conditions that can enable these species to persist. To do this effectively for small, elusive carnivores like the fisher, managers need the best and most current information available, both at the stand/site and the landscape level.”

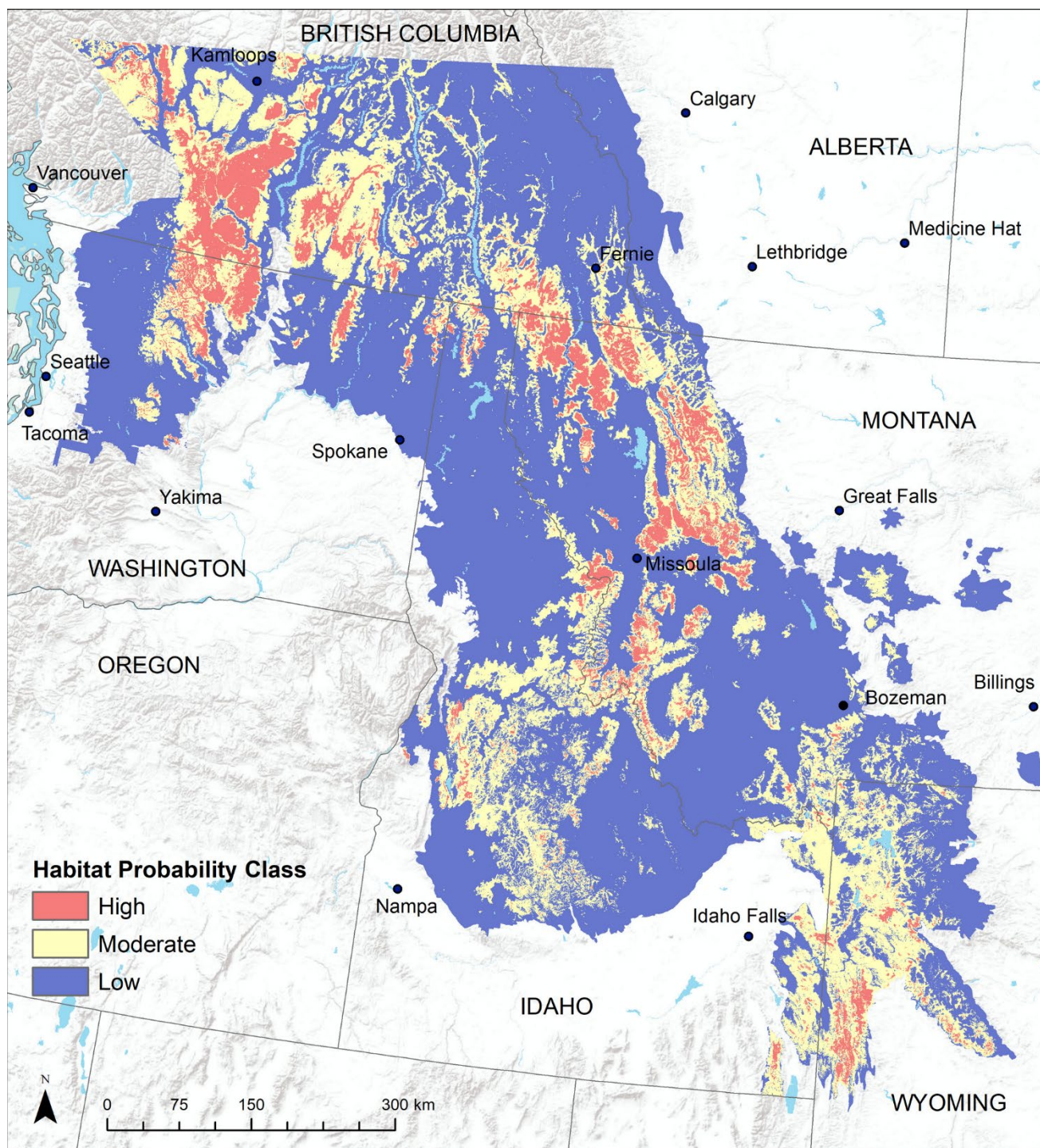
Upon BNF implementing a new forest management plan, this USDA website states that the fisher should be considered for “species of conservation concern”. This needs to happen. Due to habitat fragmentation, incidental trapping, climate change and more, this species is facing the same pitfalls as the wolverine. Its elusive behavior and isolation make studying the fisher a challenge for scientists, but that should be no reason to ignore the plight of this member of the weasel family. This is a must-do action and there must be oversight in this effort to make sure consideration of the fisher is given a proper hearing.

Once again, realizing that the species is known to reside in the project area, we strongly recommend no action at all be taken until a full accounting and analysis of the fisher presence is completed. To double down, we will say we don’t know how the BNF can proceed ahead with the Bitterroot Front Project knowing that some of that same habitat of the fisher could very well be destroyed or disturbed by that same project. You literally could be destroying the same habitat that you need to preserve for the fisher.

Canadian Lynx: The Canadian Lynx is listed as a threatened species under the ESA, and it is known to inhabit the Project area making it a species of interest in these comments. If one were to look at the map below, one can see that the Bitterroot Front Project consists

of mostly moderate potential, but some areas of high habitat potential, the latter being mostly in the northernmost part of the Project area.

The following map is listed as Figure 8 in an article entitled *“Improved prediction of Canada lynx distribution through regional model transferability and data efficiency”*, authors Olsen, Lucretia⁸, et al.



Referring to the map on the previous page:

“Categorical spatial predictions of Canada lynx relative habitat probability across the study region in the northwest United States, as generated by the top-performing species distribution model. Model thresholds are based on correctly assigning 90% of Canada lynx withheld GPS locations for the “High” category and 85% of independent lynx locations for the “Moderate” category. Background image sources ESRI, USGS, NOAA.”

Again, Canadian lynx is another species who has suffered from over trapping, habitat loss and fragmentation, and climate change. It is imperative to keep functioning landscapes alive with biodiversity for food, cover, and connectivity. The amount of land-surface disruption that is planned within the Project area could be devastating for the recoverability of the Canadian lynx.

The online webpage of the Endangered Species Coalition⁹ states it this way:

“Thus, protecting habitat at higher elevations as well as important corridors linking those areas is just as critical as protecting current Canada lynx habitat in order to ensure the long-term survival of the species.”

The BNF and the USFS have an obligation to preserve and protect the species and their habitat. Before any land-surface disruptions are underway, a full Environmental Impact Statement and a Biological Opinion must be completed.

Bull Trout and Westslope Cutthroat Trout: Fisheries in Montana have not been immune from the effects of anthropogenic sources of habitat destruction, crossbreeding with different species, etc. These two species of fish are examples of species that have lost their viability in population numbers and distribution, placing them on the list of species sensitive to their surroundings. Bull Trout, due to declining population numbers, have even been listed as a sensitive species and as a threatened species. Again, Bull Trout is an example where they do not tolerate high levels of sediment in their spawning streams.

Westslope Cutthroat Trout is nearly in the same situation. However, this species has been special to Montana as it is known as Montana’s state fish. But once again between hybridization, loss of habitat, and degradation, this species has also suffered in numbers across the normal distribution pattern of the state.

Both of these fish are known to exist and have habitat that exist within the project area. GWA can’t stress enough the number and variety of species of wildlife and fisheries that are part of this ecosystem. The scope, size and work of this project almost cries out that the BNF is taking the entirety and complexity of this ecological niche for granted. The value of this many species precious to our natural heritage is unfathomable, and yet they are all here, still intact ecosystems to a large degree. But there is more.

Grizzly bear: Until recently, it was thought that the Bitterroot Grizzly Bear Recovery Area was perhaps the only recovery area for grizzlies without any actual population of grizzly bears. Designated in 1982 as the Selway-Bitterroot Ecosystem Recovery Area, it was thought the area was potentially rich for grizzly bear habitat, and that it also occupied a geographical area critical for connectivity for bear movement between the Greater

Yellowstone, Northern Continental Divide, Cabinet-Yaak and Selkirk Ecosystems¹⁰. Such was stated in the reference below by Mattson's Report gbrp-2021-1 on page 30:

"This self-evident potential led the U.S. Fish & Wildlife Service to designate the Selway-Bitterroot Wilderness Area and its neighborhood as the only grizzly bear Recovery Area in the contiguous United States without resident grizzly bears (U.S. Fish & Wildlife Service 1982)."

By the looks of it, it appears that the grizzly bear may be finally taking root as reported in a local paper, The Lewiston Tribune.¹¹ As reported by Eric Barker in his July 11, 2019 article, a grizzly bear was caught on camera in the Kelly Creek Drainage in the summer of 2019. This bear was released in the Cabinet Mountains in 2018 and had continued to drift southward until this time.

Since then there have been other reportings of grizzlies, whether or not it is the same bear is unknown to us. But the other recent sightings or trackings of grizzly bears were near St. Mary's Lookout and near Miller Creek, the former sighting near landscapes impacted by this project.

The grizzly bear, a threatened species, is still listed under the ESA, in spite of some officials and politicians trying to get the species delisted. But the argument is that we need to establish connectivity routes for the bears. The Selway-Bitterroot Grizzly Bear Recovery Area plays a vital purpose in that role. The story above contends that the potential is not fictional; it is real and it is being utilized as intended. But one bear's travels will not tell us how this story plays out. We cannot derive from a single story a conclusion of success. It highlights the potential of success, and that the lands as wild as they are, are necessary for the re-establishment of the grizzly bear in the Pacific Northwest and Northern Rockies.

Once again in David Mattson's book referenced above states it best on page 75:

"Natural colonization of north-central Idaho by grizzly bears will clearly depend on successful immigration of grizzly bears from the Selkirk, Cabinet-Yaak, and Northern Continental Divide Ecosystems. However, this on-going process will predictably proceed at a slow pace because of hazards created by I-90 to the north and human settlements in the Bitterroot Valley to the east. As much as natural colonization will depend on creation of in situ conditions that foster survival of newly-arrived grizzlies, it will also depend on making I-90 and the Bitterroot Valley more permeable to migrants. Fortunately, there is no shortage of knowledge and experience about how to do this, whether related to highway crossing structures or human-grizzly bear coexistence."

The Gray Wolf:

The gray wolf is about as iconic as they come when discussing wildlife of the west. We're going to cut our discussion short on this subject simply because we're not sure much can be said that hasn't already been done so. They occur in the project area and perhaps they have as much right to exist on the landscape as any other species simply because they are an apex predator. They need to exist to keep the balance upon the landscape and they need large landscapes for movement. Although they are listed as a sensitive species by Region 1 of the USFS, they are not currently listed as threatened or endangered by

USFWS. There are movements afoot, however, to regain that listing and with good reason. The constant hammering and wantonness of killing the gray wolf by certain elements of society is inconsistent with good wildlife management. But this by no means should lessen the need for providing good habitat for its survival.

The lack of good open habitat without fragmentation is critical for the wolf's survival. This project area would open the door further for fragmentation thereby diminishing the availability of landscapes to support connectivity.

Concluding remarks on wildlife: These are species which we believe deserve the utmost consideration by the USFS before implementation of any project. Of course, the scoping notice does not address these species or their respective habitat at all. Yet it is hard to imagine that the intensity of this project will not harm either the habitat or particular individuals themselves due to the wide-range scope and intensity of this project upon the landscape.

The BNF must do a full and complete biological analysis of the projects impact upon these species. However, BNF seems to take the opposite approach. Their acknowledgment that there is a project-specific amendment to remove or modify plan standards is deeply concerning to GWA. For as is stated on page 16 of the scoping document, there is this statement:

"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.

At the bottom of page 16 of the scoping document, there is this:

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 219.10(a)(5).

Modification or removal of plan components for old growth, coarse woody debris, and snags are likely 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).

GWA is not sure what the amendment(s) would look like or to what degree the negative impacts would have on the landscape and wildlife. Removal or modifications of these plan components, even though they may be temporary for the life of this project, could be harmful to populations and habitat of sensitive species and others on the BNF. Those species (sensitive and otherwise) whose life dependency is based upon thermal and hiding cover, old growth, woody debris and snag forests could be severely harmed by this temporary removal. It is arrogant to think otherwise.

Road System Management:

Scoping letter indicates there are 443.7 miles of existing roads in the project area, 371.4 miles of those are existing National Forest System Roads. The breakdown on existing roads is located in Table 2 of the scoping document and is shown here:

Table 2. Existing roads within the project area.	
Road Jurisdiction	Miles
Existing National Forest System Roads	371.4
Existing Undetermined Roads (currently not NFS Roads)	21.8
Not needed and previously decommissioned	31.4
County Roads	6.3
Private Roads	12.8
Grand Total	443.7

What is concerning to GWA is the FS doesn't seem to have any qualms at all about the need to build more roads, temporary or otherwise. On page 11, there is this statement concerning the need to construct more roads.

“Like other projects on the Bitterroot National Forest, the transportation system’s existing conditions in the project area contain various items the team will be approaching such as slope and drainage issues; road repair needs; and increased recreation and motorized/nonmotorized use. Based on opportunity areas in the project area, there is potential need to build temporary or new roads to meet the project objectives.”

Where is the concern of the impact of roads on wildlife, their habitat, fragmentation, the ability of species to maintain connectivity? We see multiple problems with the focus of this project. One of them is what seems to be the willingness to “do whatever it takes approach to make the project successful”. This is dangerous on many grounds for wildlife, for the forest integrity, biodiversity and forest resilience of the BNF. One of the greatest sources of habitat fragmentation is that of roadways, and this project seems to have no qualms of adding more.

The scoping document doesn't even present the location or miles of new roads, temporary or otherwise, that officials contemplate in building. Therefore, we have to nearly assume the worst-case scenario. Due to the lack of information, the location of the project area near the Selway-Bitterroot Wilderness Area, and the strong corridor tendencies of wildlife to move from the Greater Yellowstone Ecosystem to the Northern Continental Divide Ecosystem and vice-versa, we find this project does not contribute to the welfare of the forest or its inhabitants. This corridor is just as important, if not more so for wildlife, than it is for man's societal improvements upon the forest.

Amount of Commercial Logging is Extreme:

The scoping document discloses on page 9 those lands where commercial timber harvesting is not applicable. Even with that, however, the document also discloses that 55,133 acres will be subject to harvest. That amounts to 38.3% of timbered lands within the Project Area being commercially logged. We at GWA believe this amount of logging is extreme, excessive and dangerous. And we believe this to be the case for the integrity, health and resiliency of the forests itself and for the inhabitants within. Further down in the discussion of commercial timber harvesting, the BNF also states 13,000 of those acres are going to occur within the inventoried roadless area (IRA) lands. And it states this as if BNF is proud of the fact they are taking only 13,000 acres. Yet we ask, why are you taking any?

Please note Table 3 from scoping below.

Bitterroot Front Project

Table 3. Commercial timber harvest potential outside and within inventoried roadless areas on the Stevensville and Darby-Sula Ranger Districts.

Opportunity Area	Outside of Roadless areas	Within Inventoried Roadless Areas	Total acres of treatment opportunity
Lolo-Carlton	77	2	79
Sweeney	3,155	1,203	4,358
Brooks		1,125	1,125
McCalla-Sharrott	3,812	1,308	5,120
Big Creek	1,586	100	1,685
Smith	2,184	10	2,194
Gash	1,813	15	1,828
Bear Creek	797		797
Fred Burr	274	2,060	2,335
Cow Creek	321		321
Tamarack	216	55	271
Blodgett Trailhead	29		29
Canyon Creek South	140	640	779
Roaring Lion-Camas-Hayes	3,579	719	4,297
Lost Horse	2,000	5,212	7,212
Como North	4,605	78	4,683
Como South	2,344		2,344
Como		320	320
Spoon McCoy	6,632	184	6,816
Trapper Bunkhouse	8,077	214	8,291
Total	41638	13245	54883

The existing forest and fuels conditions within these areas will determine the intensity and specific types of vegetation management that occurs, and, in some cases, commercial timber harvesting may be followed by post-harvest fuels management activities to meet project objectives.

The application of Inventoried Roadless Areas seems to have had a troubling past from its point of inception, trouble especially in terms of litigation. The USFS issued the first roadless rule in 2001. A new rule was put in place during the Bush Administration in 2005, but that met several legal challenges. Legal action went back and forth until 2011

when the 10th Circuit of Appeals reinstated the 2001 Roadless Rule, which to this day is legally applied. They are lands as defined below as occurred in Forest Service document¹²:

https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsbdev3_000250.pdf

“Inventoried Roadless Areas refer to those areas identified and mapped in accordance with the Roadless Area Conservation Final Rule (the ‘2001 Roadless Rule’).”

“The definition of a roadless area for the 2001 Roadless Rule included: undeveloped areas typically exceeding 5,000 acres that met the minimum criteria for wilderness consideration under the Wilderness Act and that were inventoried during the Forest Service’s Roadless Area Review and Evaluation (RARE II) process, subsequent assessments, or forest planning.”

It is interesting that the definition and criteria used initially for a roadless area prohibited road construction and timber harvesting, even though both actions had a laundry list of exceptions for each. On page 9 of scoping, there are these statements:

“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.....

Please note that this proposal does not include any road construction or reconstruction in inventoried roadless area.”

The language found on page 9 of scoping is nearly identical to the original language found in the exception paragraphs of the 2001 Roadless Rule. With the 2001 Roadless Rule being intact in 48 out of the 50 states, we have guidance as to what is permissible. According to the Congressional Research Service¹³ document entitled “*Forest Service Inventoried Roadless Areas*” dated August 28, 2020, the following is the list of characteristics of IRAs:

- *High-quality or undisturbed soil, water, or air*
- *Sources of public drinking water*
- *Diversity of plant and animal communities*
- *Habitat for threatened, endangered, proposed, candidate, and sensitive species and for species dependent on large, undisturbed areas of land*
- *Primitive, semi-primitive nonmotorized, and semi-primitive motorized classes of dispersed recreation*
- *Reference landscapes*
- *Natural appearing landscapes with high scenic quality*
- *Traditional cultural properties and sacred sites*
- *Other locally identified unique characteristics*

We already know that one or more of these characteristics are found within IRA lands of the Project Area. These are characteristics which should overrule any BNF administrative exception. The wilderness or wild value of IRAs cannot be made better by man’s manipulation of natural processes. We question the need for any such drastic action as to

undergo timber thinning within any IRA. We also question the removal of debris of that material without road construction. How is that removal to be managed?

Either way, lands within these IRAs have a greater purpose than being relegated to logging and thinning. This amount of logging will lead to habitat fragmentation, interruptions in corridor connectivity, wildlife displacement and more. Some IRA lands do border those lands of the Selway Bitterroot Wilderness Area. The disruption, the interruption of ongoing wildlife movement, will have long-term consequences in this major wildlife corridor. Yet this is not the full extent of timber harvesting or vegetation treatments.

Non-commercial Vegetation and Forest Fuels Treatment:

The scoping document identifies two types of vegetation management, one for areas of commercial extraction and the other for areas which might be more conducive to vegetative treatments. Examples of those latter areas are given as having experienced wildfire events or other designated areas which aren't conducive to commercial harvest, areas of regeneration after the 1980 harvest, or simply other areas which just may be inaccessible.

Vegetative treatments in those scenarios may include such activities as hand-felling of individual trees to increase stand improvements, mechanical treatments to decrease stand density, and prescribed fire activities to reduce fuel loadings. Descriptions of this methodology is explained on pages 10 and 11 of the scoping document.

We have already explained the benefits of a snag forest, downed timber and dead trees on the landscape, and the important benefits for wildlife and birds. On page 11 of the document, there is talk about using chainsaws to slash ladder fuels, piled and burned prior to the prescribed burning to reduce fire intensity and minimize mortality of large ponderosa pine.

What could go wrong? Once again, we have man inserting himself onto the forest, a forest whereby natural processes should determine the outcome of the landscape, but whereby man's arrogance thinks he knows best. We've been down this road before, but it seems as if we've learned very little. We don't know which trees have better genetics to fight off intense fires, disease, or drought. We are playing God, and it isn't healthy in trying to reach a resilient forest.

Any intrusion into the forest for one purpose may very well render harm to another. A forest is an intricate balance of so many things, yet we still act as if we are a "*bull in a china shop*". Have we learned nothing?

Climate Change:

It has often been said that there is no greater existential threat to life as we know it as that resulting from a warming world – climate change. That is especially true of the natural world, flora and fauna. And we've seen much of that evidence in the forests around us and the BNF is no exception. Climate change has exacerbated normal periods of drought,

causing less snowpack in the winter and earlier snowmelt in the spring, and that has caused intensity of wildfires, less forage for wildlife and so on and so on.

Disease and pests can be attributed directly or indirectly to climate change. The changes not only affect the persistence of wild things to exist, but weaken the overall structural integrity and resilience of the forest.

According to the Montana Climate Assessment (MCA) of 2017 by Cathy Whitlock¹⁴, et al., pages 164-166:

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

In this report, the MCA lists both the direct and indirect effects on forests resulting from climate change as well as the positive and negative effects. The bullet points below highlight some of the direct effects:

- *Higher temperatures and reduced water availability could reduce seedling survival.*
- *Warming temperatures, increased atmospheric CO₂ and longer growing seasons provide opportunities for increased photosynthesis, thereby improving forest growth and productivity (Ehleringer and Cerling 1995; Joyce and Birdsey 1995; Waring and Running 2007; NPS 2010). However, these same changes can also reduce forest productivity, particularly in water-limited systems. Thus, net forest response is uncertain, but likely negative under extreme temperature increases.*
- *The expected increase in drought severity will increase tree mortality in forests. Already, widespread, catastrophic forest die-off events throughout the western US have been directly or indirectly related to drought (Breshears et al. 2005; Allen et al. 2010; Ganey and Vojta 2011; Worrall et al. 2013). Multiple researchers have shown that extended drought correlates with declining tree growth and increased risk of mortality.*
- *Climate conditions and disturbance regimes largely control plant distributions (ranges). Over the millennia, the main responses of species to climate change has been to adapt to changing conditions, move to a new site (range shift), or go extinct (Davis and Shaw 2001).*

Indirect effects:

- *An increase in fire risk including an increase in size and possible frequency and/or severity (i.e., tree mortality) is expected in the coming century as a result of a) prolonged fire seasons due to increased temperatures, and b) increased fuel loads from past fire suppression. Spatial patterns of fire activity will be complex and dependent on disturbance history and current stand condition. Fire risk may increase in all forests; fire severity may increase the most in lower elevation forests.*
- *Rising temperatures are likely to increase bark beetle survival [high agreement, strong evidence], but climate-induced changes to other insect and forest pathogens are more*

varied and less certain [medium agreement, moderate evidence. Climate change effects are difficult to forecast because of the interplay between climate-driven changes in insect or pathogen behavior and changes in host tree susceptibility.

- *There may be a reduction in the amount of carbon stored in forests. Rising temperatures and increased atmospheric CO₂ can increase forest productivity and thus the carbon stored in organic matter. However, warmer temperatures can also reduce soil carbon through increased decomposition rates. Overall, increased tree mortality from increased forest disturbance may cause a reduction in forest carbon storage. [low agreement, limited evidence]*

Other imports from this climate change document are below:

On page 171:

“The direct effects of increasing temperature and precipitation may result in the expansion and/or contraction of certain forest types in certain regions of Montana. However, the indirect effects of climate change on forests, such as changing wildfire and beetle outbreak severity, are already having a large impact on the health of Montana’s forests and in some instances these impacts are easier to predict. These direct and indirect impacts of climate on forests may be exacerbated or ameliorated by human land-use activities in the past and moving forward.”

And finally on page 167, we want to end with this thought:

The Importance of Genetic Diversity

Forest genetics – the genetic variation and inheritance of various genes of forest trees – will primarily determine a forest’s ability to adapt to climate change over the long term. Genetic diversity largely determines a species’ ability to survive extreme events and adapt to changing conditions (Ledig and Kitzmiller 1992).

That final statement is key when talking about climate change, forest resiliency and vegetative treatments. How does the USFS, BNF or any other entity know that in the process of commercial logging or simply vegetative treatments, you are not removing from the population of trees in a forest those trees that may be more resilient to climate change, drought, pests and disease? This is what GWA has been saying for years now. How do we know that our society isn’t actually doing more harm than good by being arrogant enough to play God? We could actually be removing from the population those trees that have the healthy genes to resist those impacts of climate change.

It is Time to change the Paradigm:

GWA has been repeating this mantra for several years now; it is time for the USFS to change the paradigm in forest management. For generations, a century no less, the USFS has been practicing the policy of forest extraction. Our country used that paradigm to build this Nation from a wilderness land to one of infrastructure, homes and an economic power. It became engrained in our forest management policy. And it is still alive and well into the 21st century, but perhaps it is time to retire that mindset.

GWA contends, and we believe the science is beginning to bear this out, there is a greater need for our forests than just commercial use for construction materials. Perhaps the greater purpose is in the fight for carbon sequestration, biodiversity, forest integrity and resilience. Perhaps the greater purpose is to mitigate the negative impacts of climate change.

According to the Climate Forests Coalition¹⁵ webpage, 17.2 billion metric tons of carbon are stored in U.S. federal forests. There are 35 million metric tons of carbon sequestered from the atmosphere by federal forestlands. It is time to realize that our forests are more valuable to our society by remaining intact rather than being cut for timber.

We need a commitment to conserve America's mature and old-growth forests on federal lands and that commitment needs to be applied everywhere. And we must not forget that the younger forests of today will be the old growth forest of tomorrow (if we allow them to live that long). The science is out there that old growth forests are a greater source of carbon than originally thought.

In another science article found in the [Newscientist.com](https://www.newscientist.com), there is this statement in the September 10, 2019 edition entitled "*Logging study reveals huge hidden emissions of the forestry industry*" by Michael Le Page:¹⁶

"His life-cycle analysis takes account of factors such as the carbon released as the roots of cut trees rot in the ground and the fertilizers, herbicides and pesticides applied to tree plantations. The conclusion: logging in North Carolina emits 44 million tonnes of carbon dioxide a year.

That makes it the third largest source in the state, just behind electricity generation and transportation, and far ahead of farming and other industries.

Talberth has carried out a study like this before. In 2017, he found that logging was the single biggest source of carbon emissions in Oregon. And an independent study by Oregon State University came to the same conclusion in 2018."

"But such comprehensive studies have never been done for other states and the rest of the world. If they were, Talberth says logging would turn out to be one of the top three or four sources of carbon emissions globally. The life-cycle approach should be adopted nationally and internationally to provide a full picture of emissions, he says."

This is why we need to change our paradigm. Old growth forests and mature forests are something to be preserved and relished rather than looked upon as just another source of revenue. The amount of carbon that can be stored in these mature forests far exceed the monetary benefit they provide in terms of timber income.

Conclusion:

We've said all of this to say that the Bitterroot National Forest has a huge role to play in the outcome of this planet's health. The common thinking (we'll call it an excuse) that we're just a small cog on the wheel and our actions will have no consequence on the larger stage is simply a copout. Every forest has a part just like every tree has a part in the forest.

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There is a greater part to be played on the larger stage and we, supposedly as guardians of this planet, need to recognize our appropriate role in that process.

We've learned in the field of environmental biology/ecology that small things have an important role in the larger dynamic picture of what we see on the ground. It is an intricate and balanced world, but many times it is "*man*" that has placed his thumb, and sometimes his hand, upon that scale to make the natural world out of balance.

The many varieties and species of wildlife present in this section of the world is unfathomable. We have a chance to preserve that for ecological diversity, to prevent extirpation of those species. We also have a chance to preserve the forest dynamics, the forest ecology and integrity, but we will not do that by recklessly cutting and thinning trees because we think we know better. The genetics of our forests is nearly an unexplained science. But it is perhaps where we need to focus our attention in order to understand which trees are genetically engineered to better fight climate change, drought, pests and disease.

The Bitterroot Front Project is a largescale timber project which seems to have given very little thought to anything else, other than just practicing the same old timber practices of the past. It is from an old playbook that has run its course.

Therefore, based upon the science and the reality on the ground, GWA believes the Bitterroot Front Project is most assuredly going to do more harm than good. Based upon the biodiversity of the landscape, the protection of species from extirpation, the connectivity potential for wildlife, and the potential for that connectivity to be disrupted based upon the salvation of the forest integrity and resilience, GWA believes this project should not move forward with the provided rationale. The landscape has a greater importance by remaining intact than cut asunder.

If by any rationale it is decided to move forward on this project, we fully and strongly urge the FS to complete a full Environmental Impact Statement and analysis, and a Biological Opinion on each of the sensitive species found within the project area.

As an organization pertaining to the welfare of wildlife and their respective habitat, we must speak out and against projects that are counter to our mission. We find concerns with this project beyond our capability to incorporate them all here at this time. But by no means do we think they're less crucial in the overall analysis. We are truly disappointed in the context of this scoping notice and believe it falls short of the responsibility we as stewards need to have in the 21st century. We need to do better.

Sincerely,

A handwritten signature in cursive script, reading "Clinton Nagel".

Clinton Nagel, President
Gallatin Wildlife Association

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