Nez Perce-Clearwater National Forests
Attn: Zach Peterson, Forest Planner
903 3rd Street
Kamiah, ID 83536

April 20, 2020

Dear Mr. Peterson:

Attached, please find our comments on behalf of the Idaho Conservation League, The Wilderness Society, and the Great Burn Conservation Alliance regarding the Draft Forest Plan and Environmental Impact Statement for the Nez Perce-Clearwater National Forests.

The Idaho Conservation League has been Idaho's leading voice for conservation since 1973. As Idaho's largest state-based conservation organization, we represent over 25,000 supporters, many of whom have a deep personal interest in protecting human health and the environment. The Idaho Conservation League works to these values through public education, outreach, advocacy and policy development.

The mission of The Wilderness Society is to protect wilderness and inspire people to care for our wild places. We have worked for 85 years to maintain the integrity of our country's wilderness lands and public lands and ensure that land management practices are sustainable and based on sound science that protects and maintains the ecological integrity of the land. With more than half a million members and supporters nationwide, TWS represents a diverse range of citizens. TWS participated in the development of the first forest plans for the Clearwater and Nez Perce National Forests 35 years ago. Over the past three decades TWS has participated in many projects in the Clearwater Basin, including the defense of roadless areas, protection of bighorn sheep from disease-carrying domestic sheep, and development of travel plans.

For nearly 50 years, Great Burn Conservation Alliance has worked to permanently protect wildlands in the northern Bitterroot mountains in western Montana and northern Idaho through advocacy, collaboration, and on the ground stewardship. We are the only organization dedicated solely to the protection and stewardship of this area.

We first want to thank the Forest Service for considering our wilderness proposals in the Draft Forest Plan. Alternative Z includes boundaries that we suggested for the Mallard-Larkins, Meadow Creek-Upper North Fork, Great Burn, Selway Additions, East and West Meadow Creek, and Rapid River Recommended Wilderness Areas. We also encourage the Forest Service to recommend the portion of the Bighorn-Weitas Roadless Area within Cayuse Creek for wilderness and the portion of the North

Lochsa Slope Roadless Area within Fish Creek. The Bighorn-Weitas Roadless Area and the North Lochsa Slope Roadless Area are considered under Alternative W.

Of course, the management of recommended wilderness areas is also tantamount to the preservation of their wilderness characteristics and opportunities for future congressional action. History has shown that Congress generally refuses to act on agency recommendations for wilderness when the Forest Service permits incompatible uses of these areas to occur, as proposed in Alternative Z. Constituencies associated with incompatible user groups oppose wilderness designations, making congressional action challenging if not impossible. Where Congress has acted, areas with incompatible uses are carved out.

Despite a long, drawn out process leading to the 2012 Clearwater Travel Plan, the Forest Service is contemplating in Alternative Y the possibility of opening portions of the Great Burn to over-snow vehicles and mountain bikes. While this has largely been framed as a social struggle between wilderness preservationists and over-snow vehicle users, significant ecological values are at stake. Over-snow vehicle users most covet the terrain between Blacklead Mountain and Williams Peak. However, as our comments show, this territory encompasses critical winter range for mountain goats, maternal denning habitat for wolverine, and security habitat for grizzly bears. Opening any portion of the Great Burn to over-snow vehicles and other incompatible uses would be detrimental to these species. If for no other reason than the ecological implications, the Forest Service should reject alternatives that would open any part of the Great Burn to off-highway vehicles, over-snow vehicles, or mountain bikes.

We also oppose alternatives that suggest that worthy rivers and streams are unsuitable for wild and scenic rivers designation. Alternative X has no suitable wild and scenic rivers, and only Alternative Y includes the North Fork and South Fork Clearwater Rivers. Of the eligible rivers and streams in the planning area, the North Fork and the South Fork are most worthy of protection. Agency reports indicate that there are twenty-six potential dam sites on the North Fork and eleven on the South Fork. Moreover, the Forest Service identified more outstandingly remarkable values associated with the North Fork (7) and the South Fork (6) than any other rivers or streams in the planning area. Any suggestion that the North Fork and the South Fork are unsuitable calls into question the legitimacy of the suitability process as they are the worthiest of the waterways evaluated, and they are most at risk of being developed to harness their water resources. We must also note that state and local governments have no jurisdiction to prevent water developments on federal lands, and thus, state and local policies and plans are no substitute for wild and scenic rivers designation.

The lack of adequate plan components for at-risk species is a serious problem with the Draft Forest Plan. The Draft Plan's accommodations to motorized recreation, aggressive timber objectives, and inadequate wilderness recommendations make total reliance on ecosystem plan components an untenable conservation strategy for these species. Yet, there is not a single species-specific plan component for grizzly bear, wolverine, or mountain goat. The Forest Service must include adequate plan components for these species in the final Forest Plan if the agency is to ensure the recovery of grizzly bear within the Bitterroot Recovery Zone and the continued persistence of mountain goat and wolverine. All three species require plan components to limit displacement and indirect habitat loss caused by motorized access.

While many sections in the Draft Forest Plan should be significantly improved, we are pleased to see strong protections for riparian management zones along with establishment of a conservation watershed network for migratory salmonids. The Nez Perce-Clearwater National Forests is the only

administrative unit in the Northern Region with anadromous fish. Given the perilous state of Idaho's salmon and steelhead runs, it is important to protect fish habitat within the planning area. While the decline of salmon and steelhead is primarily a function of downstream sources of mortality, anadromous fish must still have access to high-quality habitat for spawning and rearing. The planning area encompasses many key habitats for anadromous fish.

We must preface our comments with the observation that the Nez Perce – Clearwater National Forest should have suspended the public comment period for its draft forest management plan and environmental impact statement in light of the statewide CORVID-19 pandemic and resulting statewide shutdown order issued by Governor Brad Little on March 25, 2020. Idahoans were told to cease unnecessary travel and shelter in place.

The following notice was posted on the Nez Perce – Clearwater National Forest website immediately after Governor Little's statewide shut down order:

> *Date(s): Mar 26, 2020*
>
> *All Nez Perce-Clearwater National Forests offices are operating virtually until further notice. This means most employees are teleworking and we are no longer doing any business in person. To protect the health and safety of our employees and customers, we are not scheduling face-to-face meetings at our offices.*
>
> *However, continuing our service to you during this time is very important. Our regular office receptionists are either operating with new phone numbers, or regularly calling in to check the voicemails at our offices. Please visit www.fs.usda.gov/detail/nezperceclearwater/about-forest/offices for the best way to reach your local ranger district. You may also submit an online inquiry at www.fs.usda.gov/contactus/nezperceclearwater/about-forest/contactus.*
>
> *We appreciate your patience and understanding as we all work together to minimize the impacts and spread of the COVID-19.*

The statewide closure order issued by Governor Little and the resulting closure of Forest Service offices immediately meant that hard copies of the draft forest plan and DEIS would not be available for public review. This meant that only online copies were available of these massive documents, putting individuals with poor, if any, access to broadband internet at a distinct disadvantage.

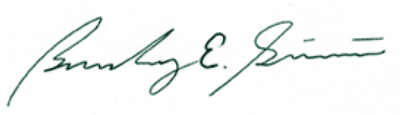
The National Forest Management Act requires that the Forest Service "shall provide for public participation in the development, review, and revision of land management plans including, but not limited to, making the plans or revisions available to the public at convenient locations in the vicinity of the affected unit for a period of at least three months before final adoption, during which period the Secretary shall publicize and hold public meetings or comparable processes at locations that foster public participation in the review of such plans or revisions" (16 U.S.C. § 1604(d)(1)). This statutory requirement to make plan documents available "at convenient locations" for at least three months has special significance to individuals who do not have broadband internet or computer access in their homes.

In order to comply with the National Forest Management Act's public participation requirements, the Forest Service should have suspended the ongoing public process for the Nez Perce – Clearwater draft

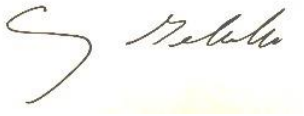
forest plan and DEIS, until the pandemic was well enough under control, to allow for appropriate public engagement and made hardcopies of the plan documents available at accessible locations for a period of at least three full months.

Please let us know if you have any questions about our enclosed comments. We look forward to the opportunity to discuss them with the planning team.

Sincerely,



Brad Smith
North Idaho Director
Idaho Conservation League
PO Box 2308
Sandpoint, ID 83864
(208) 265-9565
bsmith@idahoconservation.org



Craig Gehrke
Director, Idaho Office
The Wilderness Society
950 West Bannock Street, Suite 605
Boise, ID 83702
(208) 343-8153 x 2
craig_gehrke@tws.org

Hayley Newman
Interim Executive Director
Great Burn Conservation Alliance
2825 Stockyard Road Suite A7
Missoula, MT 59808
(406) 240-9901
hayley@greatburn.org

Comments on the Draft Forest Plan and Environmental Impact Statement for the Nez Perce-Clearwater National Forests

Contents

Nez Perce cultural and historical resources

For countless generations the land which is now managed by the Nez Perce-Clearwater National Forests was inhabited by the Nez Perce people, who call themselves the Nimiipuu. We begin our comments with an acknowledgement that the Nimiipuu were forcibly removed from this land. While we cannot undo the loss of life, the suffering, the grief, or the unconscionable atrocities committed against indigenous peoples, we must acknowledge that these atrocities occurred. We must also acknowledge that Nez Perce cultural and historical values and perspectives must be considered during the Forest Plan revision process.

Pilot Knob Geographic Area

The Draft Forest Plan identifies the Pilot Knob Geographic Area as "… a very important cultural and sacred site to the Nez Perce Tribe." (Page 117). The Draft states "Pilot Knob has a significant historic meaning with respect to the Nez Perce religious values and weyekin practices that have been used from time-immemorial and remains to be respected and used by Nez Perce tribal members" (Page 117). The Plan also acknowledges the incremental degradation that has occurred to Pilot Knob over the past several decades due to the growing use of Pilot Knob as a site to locate communication equipment. The degradation of Pilot Knob has reached the point where the Nez Perce Tribal Executive Committee described most the unique features of Pilot Knob as having been "altered, defaced, or destroyed by man-made devices." Under all of the action alternatives, plan components for the Pilot Knob Geographic Area include:

> ***GA-DC-PK-01.*** *Nez Perce tribal members are able to engage in religious practices undisturbed in the Pilot Knob Geographic Area.*
>
> ***GA-DC-PK-02.*** *The Pilot Knob Geographical Area is in a pristine and natural state that provides quiet solitude. Religious sites are undisturbed.*
>
> ***GA-GDL-PKK-01.*** *Activities, such as timber harvest, road building, and discretionary minerals actions regulated by the Idaho Roadless Rule but not precluded by the Roadless Rule, should not be authorized unless approved by the Nez Perce Tribal Executive Committee.*

An additional plan component is included in Alternative Y:

> ***GA-GDL-PK-01Y.*** *Communication site and facility leases should not be renewed and no new communication sites authorizations are approved in order to protect the prehistoric and historic integrity of the area to the Nez Perce people and to provide an undisturbed location for Nez Perce weyekin.*

(Draft Forest Plan, page 117).

The plan components for Pilot Knob are solid, important steps towards recognizing the importance of Pilot Knob to the Nez Perce Tribe and a path forward to restore the natural character of Pilot Knob. The guideline included in Alternative Y should have been included in all the alternatives and should be included in the Final Forest Plan.

Additionally, the Final Forest Plan should include a detailed plan of action and implementation schedule for how the Forest Service will achieve the desired conditions for Pilot Knob in the coming years. The

Forest Service should formally engage the Nez Perce Tribe for a leadership role in the development of an action plan and implementation schedule for restoring Pilot Knob. The Nez Perce Tribe is the only entity which can legitimately articulate a vision for the future of Pilot Knob. Other entities will need to be involved in this effort, such as local emergency services, county law enforcement, communities, and others.

The Forest Service needs to provide more information on the task ahead to restore Pilot Knob. A logical follow up to the Alternative Y guideline is for the Forest Service to provide complete documentation and inventory of the communication site equipment on Pilot Knob, ownership, the licenses in place, and when they expire. There must surely be ways in this era of modern communication to reduce the footprint of communication equipment on Pilot Knob through updating of equipment, sharing of facilities, and consolidating licenses.

Another effort the Forest Service should initiate as part of the planning process is an assessment of replacing the one extensive communication site on Pilot Knob with a series of smaller, line-of-sight communication sites located on other high elevation sites that lack the significant religious significance unique to Pilot Knob.

Southern Nez Perce Trail

The Southern Nez Perce Trail is an ancient route through the Bitterroot Mountains from Idaho's Clearwater River to the plains of Montana. Historians at the University of Idaho believe it to be among the longest, most intact indigenous travel routes in the world. The route largely follows the divide between the Clearwater and Salmon River drainages. Estimated as at least 11,000 years old, it is the oldest and most important trail used by the Nez Perce and some other western tribes to cross the Bitterroots. While the Lolo Trail to the north is better known because of its use by Lewis and Clark on their expedition to the Pacific and by the Nez Perce in their attempted escape to Canada during the War of 1877, the Southern Trail was considered by most to be the easier of the routes, offering more camping sites, one-day's walking distance apart, which was important to the Nez Perce prior to the introduction of horses to the Nez Perce culture.

Countless generations of use by the Nez Perce and others carved the tread of the Southern Trail deep into the earth, appearing much like a trench through the Bitterroots. The Nez Perce used the Southern Trail at least until 1897 when a large group traveled to Fort Hall in southeast Idaho. The Nez Perce used the Southern Trail to access buffalo hunting areas in Montana's Bitterroot Valley, the upper Salmon River drainage near the town of Salmon, and the Upper Snake River watershed in eastern Idaho. The Nez Perce, in addition to pursuing hunting opportunities, would carry their own specialty goods, including the famous Nez Perce bow made from the horn of a bighorn sheep, to trade with the Plains tribes for buffalo products such as robes. The Nez Perce would stay from one to five years on these trading forays.

Miners, trappers, and missionaries used the Southern Trail as part of the westward expansion of the United States. In 1936 the Civilian Conservation Corps constructed what became known as the Magruder Road, a narrow, one lane rough road along the divide between the Salmon and Clearwater Rivers generally over the same route as the Southern Trail.

Much of the Lolo Trail through the Bitterroots was obliterated by the U.S. Forest Service with the construction of the Lolo Motorway to facilitate fire fighting in the early 1900s. In contrast, the construction of the dirt road known as the Magruder Road by the Civilian Conservation Corps in the 1930s along the Clearwater/Salmon divide did not destroy the Southern Nez Perce Trail. Much of the remnant of the Southern Trail passes through the Selway-Bitterroot Wilderness Area and adjacent national forest lands.

A self-started multi-year volunteer effort is underway to locate, mark, and open the Southern Nez Perce Trail. The Southern Nez Perce Trail is unquestionably one of Idaho's most unique historical treasures. Because the most complete, remaining parts of the Southern Trail lie on national forest land within the planning area, it falls to the Nez Perce-Clearwater National Forests in full partnership with the Nez Perce Tribe to ultimately ensure that the Southern Trail receives the long-term protection it deserves.

The Final Forest Plan should put forward a schedule and implementation plan for the completion of the study of the Southern Nez Perce Trail for listing on the National Register of Historic Places. Much work has already been done towards this effort by the Forest Service. The existing work should be reviewed, updated, and the study completed. All work should be shared with and reviewed by the Nez Perce Tribe as well as the on-going volunteer effort that is underway to open and mark the Southern Nez Perce Trail.

The Draft Forest Plan makes only passing references to the Southern Nez Perce Trail (page 11). The Final Forest Plan should re-start and complete the apparently stalled effort to study the listing of the Southern Nez Perce Trail on the National Register of Historic Places. In the interim, the Nez Perce-Clearwater National Forests should put the Southern Nez Perce Trail back on its trail inventory as a non-mechanized, non-motorized trail.

Recommended wilderness

Non-conforming uses

One of the most important decisions to be made in the final version of the NPCNF forest plan will be the recommendations and management direction for recommended wilderness areas. The recommended wilderness areas will fulfill multiple valuable goals for protection of important fish and wildlife habitat, landscape connectivity across a broad swath of the forest, and play a key role in providing a diverse and rich mix of recreational opportunities on this unique national forest.

The 2012 Planning Rule requires the Forest Service to include plan components that provide for "management of areas recommended for wilderness designation to protect and maintain the ecological and social characteristics that provide the basis for their suitability for wilderness designation" (36 CFR 219.10(b)(1)(iv)). The preamble to the final rule also states, regarding this provision, "The Department believes the requirement in the final rule meets the Agency's intent to ensure that the types and levels of use allowed would maintain wilderness character and would not preclude future designation as wilderness" (77 Fed. Reg. 21224). Any alternative in the NPCNF planning effort that allows continued or new motorized or mechanized use, or charts a course to open recommended wilderness areas to motorized or mechanized use, will be in conflict with the Planning Rule's direction to maintain the "ecological and social characteristics that provide the basis for their suitability for wilderness designation."

The Forest Service Manual states, "Any area recommended for wilderness or wilderness study designation is not available for any use or activity that may reduce the wilderness potential of an area" (FSM 1923.03(3)). The Forest Service Handbook states, "[w]hen developing plan components for recommended wilderness areas, the responsible official has discretion to implement a range of management options. All plan components applicable to a recommended area must protect and maintain the social and ecological characteristics that provide the basis for wilderness recommendation" (FSH 1909.12, sec. 74.1).

The 2012 Planning Rule requires the Forest Service to protect and maintain the wilderness suitability and character of recommended wilderness areas. Likewise, Forest Service planning directives make recommended wilderness areas unavailable for any use that may reduce a recommended area's wilderness designation potential. As applied to areas in the Nez Perce-Clearwater National Forest and elsewhere in the Northern Rockies, these requirements leave very little room for uses that are not allowed under the Wilderness Act, including motorized and mechanized recreation uses.

Certainly, motorized and mechanized recreational uses can reduce both an area's "ecological and social [wilderness] characteristics" and its "wilderness potential." As the Ninth Circuit Court of Appeals stated in *Russell Country Sportsmen v. U.S. Forest Service*, 668 F.3d 1037, 1043 (9th Cir. 2011), the Forest Service maintains the wilderness potential of Wilderness Study Areas "when it either preserves against decline or enhances the wilderness protection of the area. Preserving motorized recreational uses, by contrast, does nothing to maintain the area's potential for wilderness designation."

Off-road vehicles, snowmobiles, snow bikes, and mountain bikes can compromise an area's "primeval character" and its "outstanding opportunities for solitude or a primitive and unconfined type of recreation," as defined in the Wilderness Act, 16 U.S.C. 1131(c). In *Montana Wilderness Association v. McAllister*, 666 F.3d 549 (9th Cir. 2011), the Ninth Circuit Court of Appeals held that the Forest Service illegally failed to maintain the wilderness character of Wilderness Study Areas by ignoring the impact of increased motorized and mechanized recreational use on opportunities for solitude.

There is ample evidence that motorized and mechanized recreational use has degraded the wilderness character of RWAs in the Northern Rockies. For example, the Montana Wilderness Association's comments on the Flathead National Forest Draft Forest Plan and DEIS described five examples of RWAs in Montana that have lost their wilderness character and eligibility due to impacts of non-conforming recreational uses subsequent to Forest Service recommendation. The Bitterroot National Forest's recent travel plan decision regarding motorized and mechanized recreational uses in Recommended Wilderness rightly concluded that such non-conforming uses are incompatible with protecting the area's wilderness attributes and potential. As explained in the Bitterroot Record of Decision, "allowing uses that do not conform to wilderness character creates a constituency that will have a strong propensity to oppose recommendations and any subsequent designation legislation." This is a fact of life regarding wilderness candidacy.

In other regions of the country, the Forest Service further acknowledges the incompatibility of allowing motorized and mechanized recreation in recommended wilderness areas in light of the 2012 Planning Rule. The draft environmental impact statement for the revision of the Inyo, Sequoia, and Sierra National Forests determined:

> *Although Forest Service policy does allow decision makers to consider allowing existing uses to continue, they can do so "only if such uses do not prevent the protection and maintenance of the social and ecological characteristics that provide the basis for wilderness designation."… The use of motorized and mechanized transportation in recommended wilderness areas affects the wilderness characteristics of undeveloped setting where wilderness is essentially without permanent improvements or modern human occupation. In addition, the use of motorized and mechanized transport if not compatible with the desired condition of a primitive recreation opportunity, which, specifically in designated wilderness, has largely been interpreted as travel by horse, foot, or canoe. … Also, the presence, volume, and type of other users and the sounds and smells associated with motorized vehicles have all been identified by the public as affecting the personal subjective sense of solitude.*

(Volume 1, pages 88-89).

Because of the "potential impacts to wilderness character, which may prevent the protection and maintenance of the social and ecological characteristics that provide the basis for future wilderness designation, and the difficulty of monitoring continued motorized and mechanized uses in recommended wilderness," the Inyo, Sequoia, and Sierra National Forests eliminated from detailed analysis alternatives which allowed motorized and mechanized uses in recommended wilderness.

But most telling, the Nez Perce – Clearwater National Forests recently addressed the issue of non-conforming uses in recommended wilderness in the Record of Decision ("ROD") for the Clearwater National Forest Travel Planning for Recommended Wilderness Areas (July 2016). Several of the findings made by the Forest Service in this ROD lead to the conclusion that allowing non-conforming uses within recommended wilderness thwarts the mandate to protect and maintain the wilderness suitability of recommended wilderness areas.

Following are relevant passages from the 2016 ROD, signed by Forest Supervisor Cheryl Probert:

> *Continuing to allow unregulated motorized recreation in RWAs (recommended wilderness areas) would negatively impact naturalness, primitive character, opportunities for solitude…. As motorized use continues to grow, such impacts would become more pronounced and the wilderness character of the areas… when they were recommended for designation, would not be maintained…. Impacts of such uses to wildlife (particularly wolverine) and trail resources would also be expected to increase. Because these areas are large and remote, the Forest Service does not have the ability to effectively regulate the amount of use if they remained open…*

(ROD, pages 9-10).

> *Motorized use can affect the naturalness of an area and the feeling of being undeveloped. Because it is a modern form of transportation it can affect the primitive character of the area. Noise associated with motorized use can affect the solitude of an area.*

(ROD, page 10).

> *Allowing motorized use in RWAs generally would not maintain wilderness qualities nor would it protect wilderness character. I believe that if I decided to allow motorized use in the RWAs it*

> *could preclude future wilderness designation or predetermine decisions that could be made in a wilderness bill.*

(ROD, page 11).

> *Eliminating motorized and bicycle travel in RWAs…will best protect wilderness attributes in RWAs.*

(ROD, page 11).

> *In the case of RWAs the management direction in the Forest Plan and Forest Service manual is clear: preserve the areas' wilderness potential and protect their wilderness character…. Closing the RWAs to motorized use… eliminates damage to soil and watershed, particularly from potential future increases in use…. Finally, my decision eliminates potential conflict between motorized recreationists and those seeking solitude or non-motorized recreation opportunity.*

(ROD, page 12).

> *Motorized and mechanized vehicles continue to increase in capability and popularity and given this trend, increased pressure on areas recommended for Wilderness seems inevitable unless those uses are restricted. I think that allowing motorized and mechanized use of vehicles in RWAs will reduce the future Wilderness potential of these areas.*

(ROD, page 17).

> *Until such time as the Forest Plan is revised or Congress makes a decision to either designate these areas as Wilderness or clearly reject them, management of those areas needs to protect the values that resulted in them being recommended for Wilderness designation in the first instance.*

(ROD, page 17).

A key factor in the Forest Supervisor's decision to close RWAs to motorized use was the management direction for these areas in the current forest plan, which is very similar to the management direction of the draft NPCNF plan:

> *The direction for RWAs in the Forest Plan is: "Manage recommended additions to the Wilderness system to prevent changes in character which would be inconsistent in wilderness until Congress makes classification decisions…." These increasing impacts (of motorized recreation) incrementally decrease wilderness character, possibly jeopardizing the areas' recommendations for future Wilderness designation. Therefore, they do not contribute to meeting the direction of the Forest Plan to protect wilderness character.*

(ROD, pages 14-15).

The Draft Forest Plan accurately captures the Forest Service's responsibility in the management of recommended wilderness:

> *The Forest Service preserves the opportunity for recommended wilderness areas to be included in the National Wilderness Preservation System by protecting and maintaining the ecological and social characteristics that provide the basis for their suitability for wilderness designation.*

(Draft Forest Plan, page 103).

The draft plan identifies several Desired Conditions for recommended wilderness areas, including:

> ***MA2-DC-RWILD-01.*** *Recommended wilderness areas maintain their existing wilderness characteristics to preserve opportunities for inclusion in the National Wilderness Preservation System.*
>
> ***MA2-DC-RWILD-03.*** *Recommended wilderness areas facilitate the connectivity and movement of wildlife species across the Nez Perce – Clearwater by remaining large areas with little human activity.*
>
> ***MA2-DC-RWILD-04.*** *Recommended wilderness areas provide opportunities for solitude or a primitive and unconfined type of recreation. Impacts from visitor use do not detract from the natural setting.*

The DEIS states, "National direction requires that areas recommended for wilderness avoid uses and management activities that might reduce their future potential to become designated wilderness" (DEIS, page 3.6.2-4).

However, the DEIS then offers draft management alternatives – particularly Alternative Z – that fail to meet the Draft Forest Plan's desired future conditions to "maintain their existing wilderness characteristics to preserve opportunities for inclusion in the National Wilderness Preservation System" (MA2-DC-RWILD-01) or "facilitate the connectivity and movement of wildlife species across the Nez Perce – Clearwater by remaining large areas with little human activity" (MA2-DC-RWILD-03). Instead, the alternatives degrade and reduce protections for significant areas of recommended wilderness to accommodate motorized and mechanized recreation, thereby reducing the practical function of recommended wilderness areas for connectivity and movement of wildlife species.

Both the No Action and Alternative W would manage recommended wilderness areas in a primitive or semi-primitive non-motorized recreation opportunity spectrum ("ROS"). To conform with national direction, the primitive and semi-primitive non-motorized ROS settings must also be off-limits to mountain bikes and mechanized recreation if the Forest Service is to fully maintain and protect the ecological and social characteristics that provided the basis for wilderness recommendations.

Alternative X recommends no wilderness areas for designation and therefore lacks key elements of a 21st century land management plan for the Nez Perce – Clearwater National Forest, including desired conditions articulated in MA2-DC-RWILD-03 and MA2-DC-RWILD-04: facilitating connectivity and movement of wildlife species by large areas with little human activity, and providing opportunities for solitude or a primitive and unconfined type of recreation where impacts from visitor use do not detract from the natural setting.

Alternative Y deletes about 51,000 acres of the Great Burn Wilderness to allow unrestricted over-snow vehicle ("OSV") use, impacting critical mountain goat winter habitat and wolverine denning habitat. This

dramatically decreases the potential for recommended wilderness to provide for connectivity and movement of wildlife species across the forest by retaining large areas with little human activity.

Alternative Z would allow motorized and mechanized recreation to occur in recommended wilderness areas, in flat contradiction to the agency's obligation to protect and maintain the ecological and social characteristics that provided the basis for the areas' suitability for wilderness designation. In fact, this alternative accomplishes the exact opposite outcome. It undermines the areas' suitability for wilderness designation by allowing non-conforming uses to continue and increase. Adopting this management approach sabotages every recommended wilderness in this alternative.

Any final plan must accomplish three important objectives: (1) make wilderness recommendations on a scale large enough to meaningfully contribute to landscape connectivity to facilitate movement of wildlife species across the NPCNF, (2) provide opportunities for solitude and primitive and unconfined recreation, and (3) implement management direction that maintains the wilderness characteristics of the recommended areas that preserve opportunities for inclusion in the National Wilderness Preservation System. To accomplish these objectives, recommended wilderness areas must be large in scale, connected to each other or other protected landscapes as much as possible, and free from non-conforming uses such as motorized and mechanized recreation in all seasons of the year.

Plan components for recommended wilderness areas

We support desired conditions MA2-DC-RWILD-01 through MA2-DC-RWILD-03 (Draft Forest Plan, page 104), which emphasize the protection of wilderness character, allowing natural ecological processes to play their role, and protecting wildlife habitat connectivity through RWA allocations. These desired conditions are consistent with the 2012 Planning Rule and the Wilderness Act.

Desired condition MA2-DC-RWILD-04 speaks to appropriate recreational opportunities in RWAs. However, we believe that desired condition MA2-DC-RWILD-04 is too vague and potentially leaves the door open to non-conforming recreational uses because through omission, it does not specifically address motorized and mechanized recreation. We recommend rewording this desired condition as follows:

- ***MA2-DC-RWILD-04.*** *Recommended wilderness areas provide opportunities for solitude and non-motorized and non-mechanized modes of recreation. Impacts from visitor use do not detract from the natural setting.*

There are two standards (Draft Forest Plan, page 104) that address summer motorized recreation (MA2-STD-RWILD-01) and winter motorized recreation (MA2-STD-RWILD-02). Standard MA2-STD-RWILD-01 does not vary by alternative. While standard MA2-STD-RWILD-01 would appear to prohibit motorized recreation in RWAs during the summer months, this standard uses seemingly obscure language that lacks necessary clarity on this matter. Rather than just saying motorized recreation is not allowed, standard MA2-STD-RWILD-01 states that "[s]ummer recreation opportunities are consistent with the recreation opportunity spectrum classification of primitive or semi-primitive non-motorized." Given differing interpretations of past forest plan components related to recommended wilderness, we believe that clarity regarding Forest Service intent is crucial. Terms like "consistent" or "suitable" are subject to interpretation because they are not explicit.

Standard MA2-STD-RWILD-02 varies by alternative. Under Alternatives W and Y, winter recreation opportunities would be "consistent with the recreation opportunity spectrum classification of primitive or semi-primitive non-motorized." In contrast, Alternative Z would allow recreation opportunities that are "consistent with the recreation opportunity spectrum classification of primitive, semi-primitive non-motorized, or semi-primitive motorized." Again, these standards are somewhat obscure and lack much needed clarity regarding what uses are allowed and what uses are not allowed. Clear, concise, and explicit standards regarding non-conforming uses are needed so that future Supervisors of the Nez Perce-Clearwater National Forests will have no doubt about how RWAs are supposed to be managed under the Forest Plan.

We cannot overemphasize the importance of making clear in the revised Forest Plan that incompatible uses of RWAs must not be allowed at any time of the year. There is no need to make any distinction between incompatible uses that occur in the winter or the summer (which fails to address the fall and the spring). The issue is whether incompatible uses should occur at all. We recommend replacing standards MA2-STD-RWILD-01 and MA2-STD-RWILD-02 with a single standard that explicitly prohibits any form of motorized travel in recommended wilderness:

- ***Standard***. *Use of motor vehicles is not allowed in recommended wilderness areas.*

Also, there are no standards regarding mechanized uses of RWAs. In fact, all of the other potential uses of RWAs are listed in a suitability table (Draft Forest Plan, page 105). While we think it is fine to include a table that summarizes a collection of plan components, simply relying on Table 33 to fill the role of individual plan components results in two fundamental problems. As stated earlier, the term "suitable" is not explicit in its direction. Secondly, it's not clear that Table 33 is enforceable because it is not referenced by a standard. We highly encourage the Forest Service to create plan components that address each of the uses listed in Table 33. In addition to those suggested above, we recommend the following plan components for recommended wilderness:

- ***Standard.*** *Bicycles and other mechanical forms of transportation are not allowed.*
- ***Standard.*** *Wheeled carts (including game carts) are not allowed.*
- ***Standard.*** *The landing of recreational aircraft (manned or unmanned) is not allowed.*
- ***Standard****. Road construction and reconstruction may only be allowed to the extent permitted by the Idaho Roadless Rule (36 CFR 294.23—Road Construction and reconstruction in Idaho Roadless Areas).*
- ***Standard.*** *Timber cutting, sale, or removal may only be allowed to the extent permitted by the Idaho Roadless Rule (36 CFR 294.24—Timber cutting, sale, or removal in Idaho Roadless Areas).*
- ***Standard.*** *Mineral activities may only be allowed to the extent permitted by the Idaho Roadless Rule (36 CFR 294.25—Mineral activities in Idaho Roadless Areas).*
- ***Standard.*** *Construction of new buildings or structures is not allowed.*
- ***Guideline.*** *Natural, unplanned ignitions, as well as planned ignitions, may be used to meet resource objectives.*
- ***Guideline.*** *Maintenance of existing buildings and structures is allowed.*
- ***Guideline.*** *Commercial use of permanent structures (e.g., rental cabins, rental fire lookouts) is allowed.*

- ***Guideline.*** *Recreational special use permits (e.g., outfitter and guide, recreation event) may be authorized if consistent with wilderness characteristics.*
- ***Guideline.*** *Use of chainsaws or other hand-held motorized equipment for trail clearing or facilities maintenance may be authorized if the responsible official concludes that a motorized tool is the minimum tool needed to complete the work with the least adverse effects to the wilderness resource.*

Wilderness evaluation and analysis process

First, we wish to reiterate our appreciation of the considerable time and effort that the Forest Service has put into the NPCNF wilderness evaluation process required by the 2012 planning rule (36 CFR 219.7(c)(2)(v)) and by Chapter 70 of the planning directives (FSH 1909.12, Chap. 70). During that process, we have provided detailed input on multiple occasions, including comments on –

- the draft wilderness evaluation and preliminary alternatives (10/5/2018 letter)
- the proposed wilderness evaluation methodology and framework for alternative development (February 9, 2018)
- the effect of the Idaho Roadless Rule on the Chapter 70 process (7/31/2017 letter)
- The Wilderness Society's ecosystem representation information (4/7/2015 letter)
- the NPCNF proposed action (August 15, 2014)

In addition, The Wilderness Society contracted with two expert consultants to prepare studies of the wildlife values of the roadless areas in the NPCNF, which were submitted to the Forest Service in 2018:

- Moser, B.W., and K.B. Hutchison. 2017. Species-based analysis of Idaho Roadless Areas on the Nez Perce - Clearwater National Forest. Prepared for The Wilderness Society, Washington, D.C. Prepared by Western EcoSystems Technology, Inc. (WEST), Corvallis, Oregon.
- L. Robinson. 2018. Analysis of Distribution, Habitat, Threats from Over-Snow Vehicle Use, and Management Recommendations for Wolverine, Canada Lynx, and Mountain Goat in Idaho Roadless Areas of the Nez Perce-Clearwater National Forest. Prepared for The Wilderness Society, Washington, D.C. Prepared by Rainforest Ecological, Sandpoint, Idaho.

Our comments on the wilderness evaluation in the Draft Plan and DEIS build on those previous comments. Throughout the process, we have endeavored to ensure that the best available scientific information is being used and analyzed consistent with the requirements of the 2012 planning rule and Chapter 70 directives.

Inadequate range of alternatives in the DEIS

In our October 5, 2018 letter commenting on the preliminary alternatives and draft wilderness evaluation, we pointed out that the range of alternatives was inadequate because it did not include an alternative that considered wilderness designation for substantially all of the roadless areas in the wilderness evaluation. Specifically, we recommended that the DEIS consider an alternative that recommended wilderness for all roadless areas in the NPCNF with Idaho Roadless Rule themes of IRAs in the Wild Land Recreation, Primitive, Special Areas of Historic and Tribal Significant, and Backcountry Restoration, totaling 1,481,125 acres.

We are disappointed that the DEIS fails to include anything close to an all-inclusive wilderness alternative. While the DEIS considers one alternative (Alternative X) that contains zero acres of recommended wilderness, the alternative with the largest amount of recommended wilderness – Alternative W – contains 856,932 acres, or just 58 percent of all roadless land that was evaluated for wilderness. As our October 5, 2018 comment letter explains, the lack of an alternative that recommends all or nearly all of the wilderness-quality areas may violate the National Environmental Policy Act's requirement that the EIS must consider a wide range of reasonable alternatives.

Although the Forest Service may believe that Alternative W represents a reasonable upper limit on potential wilderness on the NPCNF, that belief does not square with the fact that the NPCNF is part of the largest complex of designated and de facto wilderness in the lower 48 states. As the Draft Plan acknowledges:

> *The Nez Perce-Clearwater serves a unique national role, providing vast, contiguous wildland areas, including the Selway-Bitterroot, Gospel-Hump, and Frank Church-River of No Return wilderness areas with regional linkages in the Hells Canyon Wilderness area and Idaho Roadless Rule areas, such as the Great Burn (Hoodoo) and Mallards-Larkin. Together, these areas comprise the largest complex of unroaded lands in the lower forty-eight states.*

(Draft Plan, page 10)

Thus, especially from a national perspective, it makes no sense for the Forest Service to foreclose the opportunity to support an alternative that protects substantially all of the NPCNF's uniquely superlative wilderness values.

In the DEIS, the Forest Service gives a wholly inadequate justification for not considering an alternative that recommended wilderness for all roadless areas: "This alternative would not meet the purpose and need for action and may not meet the multiple use mandate of the agency" (DEIS, page 2-16). To the contrary, providing statutory wilderness protection for substantially all roadless areas would be entirely consistent with both the purpose of forest planning and the agency's multiple-use mandate. Wilderness protection would help to achieve the 2012 Planning Rule's fundamental requirement to maintain or restore the ecological integrity or ecosystems and watersheds (36 CFR 219.8(a)(1)). Likewise, contrary to the DEIS's argument that a fuller wilderness alternative may not meet the agency's multiple-use mandate, the Multiple-Use Sustained-Yield Act specifically states that "[t]he establishment and maintenance of areas of wilderness are consistent with [multiple use and sustained yield]" (16 USC 529).

Furthermore, other recent forest plan revisions in the Northern Region have considered alternatives with much higher proportions of recommended wilderness. For example, the Flathead National Forest plan revision FEIS evaluated one alternative that recommended wilderness for 100 percent of the Flathead's Inventoried Roadless Areas. Do the NPCNF planners think that this Flathead DEIS alternative does not comply with the purpose of forest planning or the agency's multiple-use mandate?

Likewise, the Custer-Gallatin National Forest DEIS considered an alternative that recommended wilderness for 84 percent of the 847,420 acres of Inventoried Roadless Areas. The Custer-Gallatin DEIS explained that no alternative recommended wilderness for all Inventoried Roadless Areas because some of the areas contain roads and other developments that make them unsuitable for wilderness (Custer-

Gallatin NF Plan Revision DEIS, page 22). The NPCNF, on the other hand, provides no such reasonable explanation.

To the contrary, the NPCNF chose to consider only the "cream of the crop" of the roadless areas, rather than considering an alternative that recommended all or nearly all 33 areas that were evaluated. The agency's approach was to compare the NPC's wilderness inventory areas against each other, rather than determining whether they warranted consideration in the DEIS met the minimum requirements of the Wilderness Act. In explaining its methodology for selecting which roadless areas to carry forward into the DEIS alternatives, the DEIS acknowledges that "all of the areas have various strengths and weaknesses when compared to the factors and to each other" and that the agency chose to consider only "those areas that best exemplify wilderness character rather than simply moving all roadless areas forward for recommendation because they possess some level of a wilderness characteristic" (DEIS, Appendix E, page E-218).

We are especially disappointed that none of the alternatives considers a recommended wilderness designation for two of the areas that we specifically requested in our previous comments -- Lochsa Face (76,000 acres) and Rackliff-Gedney (90,000 acres). Simply based on their large size alone, it seems obvious that they should be considered for wilderness recommendation. If there are some portions of these or other areas that are clearly not suitable for wilderness, then they could be excised from the rest of the roadless areas, as required by the planning directives. The Chapter 70 directives state, "Based on the evaluation and input from public participation opportunities, the Responsible Official shall identify which specific areas, or portions thereof, from the evaluation to carry forward as recommended wilderness in one or more alternatives in the plan EIS" (FSH 1909.12, sec. 73, emphasis added). Apparently, no effort was made to carry forward highly suitable portions of wilderness inventory areas instead of entirely dropping those areas.

The inadequate range of alternatives for Recommended Wilderness Areas is a serious flaw in the DEIS. We recommend that the Forest Service issue a revised or supplemental DEIS that includes an additional alternative that recommends substantially all of the roadless areas that were evaluated as being suitable for wilderness designation in the Chapter 70 process. We also recommend that the Lochsa Face and Rackliff-Gedney areas be added to Alternative W or another intermediate alternative.

Biased analysis of recommended wilderness alternatives

For the DEIS analysis of alternatives for Recommended Wilderness, the Forest Service chose five "measurement indicators":

1. impacts on wheeled motorized opportunities
2. impacts on motorized over-snow vehicle opportunities (snowmobiles)
3. impacts on trails that allow mechanized transport
4. impacts on commercial use of permanent structures
5. amount of underrepresented ecosystems in the wilderness system

According to the DEIS, these indicators were based on "issue statements developed from the scoping comments and comments made to the draft wilderness evaluation" (DEIS, page 3.6.2-2).

Unfortunately, the DEIS analysis almost completely ignores the benefits associated with Recommended Wilderness. The only beneficial measurement indicator is the amount to underrepresented ecosystems that would be added to the wilderness system, which, while notable, is not associated with the fundamental wilderness characteristics of apparent naturalness and outstanding opportunities for solitude or primitive recreation. While we appreciate the Forest Service's use of ecosystem representation data provided by The Wilderness Society as a factor to evaluate each area's ecological/scientific value, we are very concerned that the DEIS's use of ecosystem representation as the sole measurement indicator of wilderness benefits inappropriately and illegally biases the DEIS analysis against wilderness recommendation and protection.

In fact, the Recommended Wilderness section of the DEIS has virtually nothing to say about the wilderness characteristics of any of the areas recommended in any of the alternatives. While the DEIS acknowledges that "[m]ost lands within recommended wilderness are within inventoried roadless areas that have high to outstanding wilderness characteristics," (DEIS, page 3.6.2-15), one has to look for the detailed descriptions of individual areas contained in Appendix E to get a sense of the wilderness values of areas recommended in each alternative.

Nor does the Recommended Wilderness section of the DEIS reference other sections of the DEIS that document the benefits of Recommended Wilderness. For example, the wildlife section of the DEIS includes extensive analysis of the effects of Recommended Wilderness on wolverines, including connectivity and denning habitat. Because Alternative W provides the greatest amount of Recommended Wilderness, the wildlife section of the DEIS concludes, "In terms of the ability to conserve wolverine habitat, Alternative W would provide for the conservation of wolverine more than any other alternative." (DEIS, page 3.2.3.3-72). Yet, the Recommended Wilderness section of the DEIS does not even mention this important advantage of Alternative W over other alternatives. The Forest Service obviously could and should have used effects on wolverine habitat as a measurement indicator in its analysis of Recommended Wilderness.

The measurement indicators in the DEIS analysis are also biased in favor of allowing non-conforming uses such as motorized vehicles and mountain biking in Recommended Wilderness Areas, as is proposed by Alternative Z. This bias is clearly evident in Table 18 – titled "Indicator by Alternative" – which gives mostly negative (-) marks to Alternatives W and Y and mostly positive (+) marks to Alternative Z (DEIS, page 3.6.2-16). This skewed analysis ignores other information in the DEIS that highlights the negative impacts of motorized recreation allowed under Alternative Z, such as the statement in the wildlife section that "the amount of protection [Alternative Z] affords female [wolverine] denning habitat is negated by the allowance of winter motorized recreation as a suitable use" (DEIS, page 3.2.3.3-73).

Thus, the DEIS analysis appears to be heavily biased toward alternatives with RWAs that minimize conflicts with motorized and mechanized recreation, rather than alternatives with RWAs that maximize wilderness characteristics and protection. The Forest Service should correct this serious problem by issuing a revised or supplemental draft EIS that uses a balanced set of measurement indicators to compare the effects of Recommended Wilderness alternatives.

Fish and wildlife values and impacts are ignored

In our comments on the draft wilderness evaluation, we requested that the Forest Service more thoroughly acknowledge the fisheries and wildlife values associated with each roadless area being considered for wilderness. The absence of information about fish and wildlife values in Recommended Wilderness Areas, and potential impacts of RWA alternatives on fish and wildlife, is even more starkly evident in the DEIS.

As noted above, The Wilderness Society commissioned and submitted two expert consultant reports on fish and wildlife values of each roadless area. First, a study prepared by Western EcoSystems - Technology, Inc. – "*Species-based analysis of Idaho Roadless Areas on the Nez Perce - Clearwater National Forest*" -- was submitted to the NPCNF on January 3, 2018. This study provides information about at-risk species, including federally listed threatened and endangered and proposed species of conservation concern, in all 34 roadless areas in the NPCNF. In our previous comments, we pointed out, based on this analysis, that the West Meadow Creek, Big Horn Weitas, and North Lochsa Slope Roadless Areas all rank in the top five IRAs in terms of their species richness, and the Lochsa Face Roadless Area – which was not included in any of the DEIS alternatives -- ranks eighth for species richness. Yet, none of this information about fish and wildlife values was included in the Recommended Wilderness section of the DEIS or in the wilderness evaluation in Appendix E.

The second commissioned study – "Analysis of Distribution, Habitat, Threats from Over-Snow Vehicle Use, and Management Recommendations for Wolverine, Canada Lynx, and Mountain Goat in Idaho Roadless Areas of the Nez Perce-Clearwater National Forest" – was submitted to the NPCNF on November 20, 2018. This study presented information about the distribution and modeled habitat of wolverine, Canada lynx, and mountain goat in all NPCNF roadless areas and analyzed how these species might be affected by over-snow vehicle (OSV) use under the four preliminary alternatives available at that time. The study concluded that all three of these focal species are significantly affected by motorized winter recreational use and recommended that the Forest Service should recommend areas for wilderness that include habitat for these species and include associated management direction in the forest plan that disallows OSV use within these areas. Again, none of the important information in this study was included in the Recommended Wilderness section of the DEIS or in the wilderness evaluation in Appendix E.

The Forest Service could and should have used the scientific information contained in these two reports, along with other fish and wildlife information, to analyze and compare the effects of the wilderness recommendations in the four DEIS alternatives. However, the Recommended Wilderness section of the DEIS never mentions any of the roadless areas' fish and wildlife values or how the alternatives would affect any species. The only discussion of wildlife in this section of the DEIS is in a single paragraph that is devoted to "wildlife management" but says nothing about any wildlife species or the effects of the alternatives on wildlife; instead it unhelpfully advises the reader to "[r]efer to the 'Wildlife' and 'Aquatic Ecosystems and Fisheries' sections for additional information" (DEIS, page 3.6.2-17).

We recommend that the Forest Service significantly revise the Recommended Wilderness section of the DEIS to utilize the information about fish and wildlife values and impacts provided by these scientific reports, consistent with the 2012 planning rule's requirement that the Forest Service "use the best available scientific information to inform the planning process" (36 CFR 219.4). The DEIS should also

incorporate the fish and wildlife information contained elsewhere in our comments about individual roadless areas and species.

Improper factors are used in evaluation of manageability

In our comments on the draft wilderness evaluation, we raised serious concerns about the use of improper factors to evaluate wilderness character of roadless areas, especially the NPCNF's approach for evaluating manageability. Chapter 70 of the wilderness evaluation directives lists five factors to consider when evaluating "the degree to which the area may be managed to preserve its wilderness characteristics": (a) shape and configuration of the area; (b) legally established rights or uses within the area; (c) specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics; (d) the presence and amount of non-Federal land in the area; and (e) management of adjacent lands (FSH 1909.12, Ch. 70, § 72.1(5)).

Our concern is that the NPCNF is using several factors in the manageability evaluation that are inconsistent with the direction in the Ch. 70 Handbook and do little to help evaluate an area's potential as wilderness. Among the inappropriate factors identified in our previous comments are the current Idaho Roadless Rule Theme, "history of motorized use," and "emerging mountain bike use." While these factors may be relevant and appropriate to consider in the trade-off analysis of alternatives, they are not relevant to the issue of whether and to what extent an area is manageable as wilderness.

The DEIS appears to acknowledge these concerns, but does not remove these inappropriate factors from the evaluation in Appendix E. Regarding the use of Idaho Roadless Rule themes, the DEIS states: "These themes are used in this evaluation only as a description of the existing condition and as a factor in the manageability of the area…. Idaho Roadless Rule themes do not constrain or pre-determine the evaluation other than being one of several factors in the manageability portion of the evaluation" (DEIS, p. E-3). The agency goes on to say, "Current Idaho Roadless Rule Themes are not weighted higher in the evaluation than any other factor" (DEIS, page E-26). While we appreciate this expression of intent to limit the influence of this factor on the evaluation, we remain convinced that the themes are irrelevant to and should not be considered in the manageability evaluation.

With respect to the consideration of "history of motorized use," and "emerging mountain bike use," the DEIS explains that "[t]hese factors were added by the forest based on [their] local importance. [They were] not listed in FSH 1909.12 chapter 70 in the suggested list of factors to consider" (DEIS, Appendix E, p. E-24, Table 9 footnote). However, we remain convinced that authorized motorized and mechanized uses, whether from recreation, grazing, or some other purpose, are not "[l]egally established . . . uses within the area." That Chapter 70 manageability factor should be interpreted to encompass uses established by law – not to agency planning or implementation decisions like designation of motorized trails in a travel management plan, much less to *unauthorized* and illegal motorized uses and activities that may have existed at some point in history.

Wilderness and connectivity

An important benefit of wilderness that is not fully, or at least consistently, documented in the NPCNF draft documents is the role wilderness and recommended wilderness play in maintaining and securing landscape connectivity on this forest. The NPCNF draft revised forest plan does recognize what is perhaps the most defining characteristic of the planning area:

> *The Nez Perce – Clearwater serves a unique national role, providing vast, contiguous wildland areas, including the Selway-Bitterroot, Gospel-Hump, and Frank Church-River of No Return wilderness areas with regional linkages in the Hells Canyon Wilderness area and Idaho Roadless Rule areas, such as the Great Burn (Hoodoo) and Mallard-Larkin. Together, these areas comprise the largest complex of unroaded lands in the lower forty-eight states.*

(Draft Forest Plan, page 10).

The DEIS documents the importance of wildlife connectivity:

> *Habitat connectivity is widely recognized as a crucial component for maintaining biodiversity and managing for sustainable populations of native species.*

(DEIS, page 3.2.3.1-4).

The Draft Forest Plan contains only a single goal – and unfortunately no enforceable standard – that addresses connectivity:

> *FW-GL-TE-01. The Nez Perce-Clearwater works with federal, state, tribal, and private land managers towards an all-lands approach to management and cooperation, including efforts to mitigate threats or stressors, provide for wildlife and fish habitat connectivity, and to provide social, economic, and ecological conditions that contribute to mutual objectives.*

While laudable on its face, we would not want an outcome of this goal to be the Forest Service unnecessarily compromising the connectivity values of lands under its administration to accommodate "mutual objectives" of state and private entities which too often have demonstrated little commitment to connectivity values.

The Forest Service acknowledges the "unique, national role (of) providing vast, contiguous wildland areas" of the Nez Perce – Clearwater. A more appropriate goal for this landscape would be to maintain the landscape connectivity provided by the wild lands on the NPCNF and take action to restore and enhance connectivity as fish and wildlife habitat needs change in the face of a changing climate. An appropriate standard would be that the Forest Service will take no action on the NPCNF that would degrade connectivity across the landscape for fish and wildlife populations.

The 2012 Planning Rule requires national forests to expressly address the impacts of climate change on public lands with a mandate to sustain connectivity and other ecosystem processes and wildlife species through a variety of land and habitat management and protection strategies that reduce risk to natural resource values (36 CFR 219.8 and 219.9). Protection of large, core areas that encompass high levels of ecological diversity across topographically complex landscapes, while simultaneously improving connectivity between these large core areas has been broadly characterized as "an essential strategy by which managers can improve species' resilience to climate change impacts" (e.g. Heller and Zavalete, 2009; Graumlich and Francis, 2010).

The NPCNF planning documents should have used recommended wilderness designations as a measure of providing landscape scale protection of core habitat areas as well as landscape connectivity. The public deserves to see how protection of wilderness areas enhances the long-term prospects to sustain and protect the "unique national role, providing vast, contiguous wildland areas" played by the NPCNF

landscape. As previously stated, the DEIS analysis appears to be heavily biased toward alternatives with RWAs that minimize conflicts with motorized and mechanized recreation, rather than alternatives with RWAs that maximize wilderness characteristics and protection. Similarly, the DEIS does not display for the public the benefits to landscape-scale connectivity of the various wilderness recommendations.

Scattered throughout the planning documents are passing references to the role that recommended wilderness areas play for the conservation of some species:

> *Alternatives in recommended wilderness could influence lynx habitat connectivity. Several recommended wilderness areas are identified as linkage areas for lynx…. In particular, the Hoodoo area, East Meadow Creek, and Sneakfoot areas are identified as linkage areas for lynx. Changes to the Hoodoo recommended wilderness areas in Alternative Y would reduce the amount of linkage area compared to the No Action Alternative.*

(DEIS, page 3.2.3.3-48).

> *Alternatives W, Y, and Z identify East Meadow Creek area as recommended wilderness. Were this area to become recommended wilderness, it would slightly increase protections for lynx connectivity…*

(DEIS, page 3.2.3.3-51).

> *In terms of the ability to conserve wolverine habitat, Alternative W would provide for the conservation of wolverine more than any other alternative.*

(DEIS, page 3.2.3.3-72).

> *Regardless of alternative, recommended wilderness areas that best provide for grizzly bear connectivity include Mallard-Larkin, Meadow Creek North – Upper North Fork, Rawhide, Hoodoo, Sneakfoot, and Northfork Spruces White Sand. These areas would provide opportunities for bears to travel from the north into the Bitterroot Ecosystem.*

(DEIS, page 3.2.3.3-87).

What is sorely needed is a comprehensive examination and subsequent public review of the role that designated wilderness and recommended wilderness, by alternative, plays in providing landscape scale protection of core habitat areas as well as landscape connectivity. Ultimately the protection and long-term stewardship of these values deserve their own goals, guidelines, and enforceable standards.

The NPCNF DEIS confusingly jumps back and forth between claims of the benefits of recommended wilderness versus protections of the Idaho Roadless Rule. The NPCNF DEIS and revised draft forest plan should have made, upfront, the clarification that the Idaho Roadless Rule make absolutely NO determinations or recommendations that address one of the largest threats to the protection of wildlife core habitat areas and connectivity linkages in Idaho's roadless areas: the growing, sprawling encroachment of motorized and mechanized vehicles. Over the past three decades more powerful snowmobiles, motorcycles, mountain bikes, "e-bikes," snowbikes or "sleds," four wheel all-terrain vehicles, "side-by-sides," utility task vehicles, and "razors" push every year farther and farther into Idaho's backcountry, putting at risk the security values of core wildlife habitat areas and the value of connective areas. Decades of research have documented the negative effects of motorized vehicles on various wildlife populations throughout the West and conflicts with other users.

The Idaho Roadless Rule provides no protection for roadless areas from motorized/mechanized impacts. The DEIS incorrectly states that "(t)he northern portion of the Nez Perce – Clearwater provides the ecological conditions to provide connectivity because it has low road densities and management areas, such as the Idaho Roadless Rule areas that restrict motorized development (page 3.2.3.3-90). Again, the Idaho Roadless Rule makes no determinations regarding "motorized development." Protection must come from the land management agencies through travel plans and efforts like the NPCNF forest plan revision. The Forest Service cannot dodge this responsibility by asserting adequate protection under the Idaho Roadless Rule:

> *The plan does not propose any connectivity areas because the Nez Perce – Clearwater is already a contiguous block of land containing many acres of land well preserved by management area direction, such as the Idaho Roadless Rule, designated wilderness and recommended wilderness.*

(DEIS, page 3.2.3.3-86).

This statement is particularly egregious because not only does it cite the Idaho Roadless Rule as adequate to preserve connectivity – it's not, see above – but it also seems to assert that connectivity values will be preserved without specific actions, goals, guidelines, and standards to protect them because those values are "already" there.

Assuming that connectivity will be protected in the coming decades from the growing threats of climate change and growing "mechanization" of the national forests because connectivity is already there is ludicrous. The authors of these comments are not aware of a single natural resource value that has ever "protected itself" because it's "already there" from the growing demands and threats to our public lands. Values that are important to the American public deserve pro-active measures to protect them.

There are certainly a number of geographic areas on the NPCNF that would emerge as key lands in terms of maintaining core habitat values and connectivity that would benefit by minimizing human disturbance. We recommend that the NPCNF undertake an analysis to identify lands important as core habitats and for maintaining connectivity across the planning landscape as well as with the Central Idaho wilderness complex and Northern Continental Divide, pursuant to the 2012 Planning Rule requirements to provide for connectivity using the best available scientific information. After those lands are identified the Forest Service should develop management actions with goals and standards to maintain their core habitat and connectivity values.

Recommended wilderness areas

Mallard-Larkins

The Mallard-Larkins is a key roadless area to consider for wilderness. The area spans portions of both the Idaho Panhandle and Nez Perce-Clearwater National Forests, encompassing approximately 255,700 acres. It is one of the largest roadless areas in northern Idaho and offers outstanding opportunities for primitive recreation and solitude. The 2004 Proposed Action for the Clearwater Forest Plan Revision rated the Mallard-Larkins Roadless Area second only to the Great Burn Roadless Area on the Clearwater side of the forest in terms of the area's wilderness capability. Favored destinations on the NPCNF-side of the area for hikers, backpackers and equestrians include the Pioneer Area and its mountain lakes, the Heritage Cedar Grove, Mallard Peak and Black Mountain Lookouts, and the Five Lakes Butte Area. Also noteworthy, but not often sought out due to their remoteness, are three dramatic waterfalls in Cliff Creek, Falls Creek, and Lost Pete Creek.

There are also notable wildlife in the Mallard-Larkins Roadless Area. Unlike many areas in the West, mountain goats are endemic to the area. This population appears to be stable, and Idaho Fish and Game has sourced mountain goats from the Black-Snow herd for translocation and augmentation efforts in other corners of the state (IDFG, 2019). Other ungulates in the area include elk, deer, and moose. Backcountry sportsmen visit this area in pursuit of prized game animals in a setting devoid of motorcycles, four-wheelers, side-by-sides, autos, and other motorized contraptions.

As the DEIS notes, the Mallard-Larkins Roadless Area is one of six roadless areas on the Nez Perce-Clearwater National Forests that provide secure opportunities for grizzly bears to travel to and from the Bitterroot Ecosystem (DEIS, page 3.2.3.3-87). In 2007, a black bear hunter shot a grizzly bear in the Kelly Creek area. DNA testing revealed that this bear was from the Selkirk Mountains in the Idaho Panhandle. It is possible that this grizzly traveled through the Mallard-Larkins to get to Kelly Creek before it was shot.

The Mallard-Larkins Roadless Area sits on a divide between three river systems--the St. Joe River, Little North Fork Clearwater River, and North Fork Clearwater River. Each of these rivers supports blue ribbon cutthroat trout fisheries. Tributary streams that originate in the Mallard-Larkins serve as important sources of clean, cold water for these rivers.

It is also worth noting that the Mallard-Larkins Roadless Area is not just another wilderness candidate full of rocks and ice. A report compiled by The Wilderness Society indicates that approximately 57% of the area consists of ecological types that are under-represented in the National Wilderness Preservation System (TWS, 2015). There are also populations of coastal disjunct plant species in Isabella Creek, Beaver Creek, Elmer Creek, lower North Fork Clearwater River, and the Little North Fork Clearwater River (DEIS, page E-117).

Alternatives

We would like to thank the Forest Service for including our boundary proposal for the Mallard-Larkins Recommended Wilderness Area in Alternative Z. Our wilderness proposals are illustrated in Figure 1. The Idaho Panhandle National Forests recommended approximately 80,200 acres of the portion of the Mallard-Larkins Roadless Area administered by the IPNF for wilderness in their 2015 Revised Forest Plan. The Alternative Z boundary lines up with the IPNF recommendation. The boundaries delineated in the No Action Alternative and Alternative W also align with the IPNF's recommendation. All three of these alternatives encompass key areas like the Pioneer Area, the Heritage Cedar Grove, the high mountain lakes, and the Black-Snow mountain goat population.

While the No Action Alternative encompasses the most critical portions of the Mallard-Larkins Roadless Area, the boundary on the southern end follows section lines. This boundary is difficult to locate on the ground. A boundary that follows geographic features would be easier to locate and administer. While Alternative W is most generous in terms of the percentage of the Mallard-Larkins Roadless Area that would be recommended for wilderness, the boundaries delineated in Alternative W would also be difficult to identify on the ground and administer.

A decision not to recommend any of the NPCNF-administered portion of the Mallard-Larkins Roadless Area for wilderness as proposed under Alternative X would create the incongruity of having

recommended wilderness on the IPNF side of the roadless area but not the NPCNF side of the roadless area.

We encourage the Forest Service to recommend the portion of the Mallard-Larkins Roadless Area delineated in Alternative Z for wilderness. The boundary in Alternative Z follows ridgelines, streams, road buffers, and elevation count lines. The boundary in Alternative Z encompasses the most critical areas and could easily be identified and administered.

It is also worth noting that there are presently no recreational uses occurring in the Mallard-Larkins Roadless Area that are incompatible with wilderness designation. Nevertheless, recommending the area for wilderness and prohibiting non-conforming uses is necessary to protect the ecological values and wilderness character of the area. A prohibition on non-conforming uses will also ensure that uses do not become established in the area that would be at odds with wilderness designation. This is essential to preserving the area's political potential to be designated as wilderness until Congress takes up the matter.

Meadow Creek-Upper North Fork

Approximately three-quarters of the Meadow Creek-Upper North Fork Roadless Area is managed by the Nez Perce-Clearwater National Forests (43,200 acres). There are another 6,000 acres managed by the Idaho Panhandle National Forests and another 7,200 acres managed by the Lolo National Forest.

There are compelling ecological reasons to recommend the Meadow Creek-Upper North Fork Roadless Area for wilderness. As the DEIS notes, the Meadow Creek-Upper North Fork Roadless Area is one of six roadless areas on the Nez Perce-Clearwater National Forests that provide secure opportunities for grizzly bears to travel to and from the Bitterroot Ecosystem. (DEIS, page 3.2.3.3-87). Furthermore, the headwater reaches of the Upper North Fork Clearwater River and several tributaries within the roadless area provide important bull trout spawning habitat. There are hyporheic zones within some of the beds of these streams where cold, clean water flows into the stream channels from groundwater sources, creating ideal spawning sites for the bull trout population that inhabits the larger North Fork fishery.

According to The Wilderness Society (2015), approximately 41% of the area consists of ecological types that are currently underrepresented in the National Wilderness Preservation System. The vegetation in 71% of the roadless area is within the natural range of variation (Haugo and Benton, 2014).

While the Meadow Creek-Upper North Fork Roadless Area is not the most popular destination for recreation, there are significant opportunities for solitude and primitive recreation. The majority of the trails are closed to motorized use. Therefore, designation would not eliminate many incompatible uses.

Alternatives

We would like to thank the Forest Service for including the Meadow Creek-Upper North Fork Roadless Area as a recommended wilderness area in Alternative W, as we asked, but we are concerned that this is the only alternative that would recommend the area for wilderness. We encourage the Forest Service to recommend this area for wilderness given its significant ecological value both to fish and terrestrial wildlife species. Located along the Bitterroot Divide, the Meadow Creek-Upper North Fork Roadless Area provides critical habitat connectivity for a variety of wildlife species, such as grizzly bear and wolverine. The roadless area sits in a vital linkage zone between Lolo Pass and Lookout Pass. The rivers and streams within the roadless area will be critical to the maintenance of the North Fork Clearwater bull trout

population in the face of projected climate changes. The cold, clean ground water that flows into the beds of these headwater streams provides ideal bull trout spawning habitat that should remain available under a warmer climate. Recommending the area for wilderness would not substantially affect motorized or mechanized recreation opportunities. The area is also allocated to the Primitive Theme of the Idaho Roadless Rule. Road construction is not allowed in this theme, and only very limited exceptions are made for the cutting, sale, and removal of timber. Therefore, a wilderness recommendation would not affect the timber sale quantity for the forest.

Great Burn (Hoodoo)

The Great Burn Roadless Area is a regional centerpiece for potential additions to the National Wilderness Preservation System. The area spans the Bitterroot Divide, which separates Idaho and Montana and the Nez Perce-Clearwater and Lolo National Forests. The total size of the Great Burn Roadless Area is approximately 252,000 acres. Of this total, approximately 153,900 acres are administered by the Nez Perce-Clearwater National Forests. The majority of the roadless area is recommended for wilderness in both the existing Clearwater and Lolo National Forest Plans (1987 and 1986 respectively). A wilderness recommendation was first offered during the RARE II process of the 1970s. The 2004 Proposed Action for the Clearwater Forest Plan Revision rated the Great Burn higher for its wilderness potential than any other roadless area on the Clearwater side of the NPCNF. The 2004 Proposed Action included a draft wilderness recommendation for almost the entire Idaho side of the roadless area. Non-conforming uses were to be prohibited. The revision process stalled in 2006 when the forest planning regulations that were in effect at that time were challenged in court. However, in 2012, the Forest Service approved the Clearwater Travel Plan. The Travel Plan finally brought the Clearwater National Forest into compliance with its 1987 Forest Plan by officially ending incompatible use of over-snow vehicles and mountain bikes in the area.

Hikers, backpackers, equestrians, and sportsmen are drawn to the area. Extending from Hoodoo Pass to Schley Mountain, the Stateline Trail and its arterial trails offer access to beautiful high mountain lakes and ridgelines with views in all directions. Anglers use the Kelly Creek Trail from the bridge upstream to Hanson Meadows to enjoy more solitary pursuits of cutthroat trout than are available on the busier roaded stretch of lower Kelly Creek. Hunters arrive in the fall to bag elk and deer. The northern branch of the Nez Perce Trail passes through the southern tier of the area.

In addition to the sociological values of the Great Burn, the area ranks high ecologically. Approximately 42% of the area consists of ecological types that are currently underrepresented in the National Wilderness Preservation System (TWS, 2015). Although the area spans the Bitterroot Divide along the Idaho-Montana Border, it encompasses both low- and high-elevation habitat types; consequently, a diversity of plant and animal species inhabit the area.

Any reductions in the size of the Great Burn Recommended Wilderness or a decision to allow over-snow vehicle use in the area as a result of Forest Plan revision would jeopardize the mountain goat herds that live in the Great Burn. Unlike many other areas in the western United States, mountain goats are endemic to the planning area (DEIS, page 3.2.3.4 - 28). Idaho Fish and Game manages four mountain goat Population Management Units (“PMUs”) overlapping the planning area. The Great Burn is located in the Black-Snow PMU, which includes Game Management Units (“GMUs”) 7, 9, 10, 10A, and 12. The Black-Snow PMU consists primarily of lands administered by the Idaho Panhandle and NezPerce-

Clearwater National Forests, along with the Snow Peak Wildlife Management Area in GMU 9. According to the Idaho Fish and Game Mountain Goat Management Plan (2019), there are two meta populations in the Black-Snow PMU—one in the Mallard-Larkins Roadless Area and one in the Great Burn Roadless Area. While recent population counts (2017) suggest that mountain goat numbers in the Mallard-Larkins Roadless Area are stable, there has been a substantial decline in mountain goat numbers in the Great Burn Roadless Area. The Mountain Goat Management Plan (2019) notes that "[t]here are concerns with increasing snowmobile and snow bike access to mountain goat habitat in [the] eastern portion of GMU 10", which is a reference to the area between BlackLead Mountain and Rhodes Peak. This area is currently off-limits to over-snow vehicle use, but illegal use occurs frequently because the Clearwater Travel Plan is not well enforced. Idaho Fish and Game counted 56 mountain goats in the Great Burn in 2010 (Hickey 2020). In comparison, the Department counted only 7 goats in 2017. Over-snow vehicle use may be contributing to indirect habitat loss and observed declines in mountain goat numbers in this area.

Over-snow vehicle use in the vicinity of BlackLead Mountain and Hoodoo Pass does not bode well for wolverines either. Recent research (Heinemeyer et al. 2019) suggests that winter recreational activities may displace wolverines and result in indirect loss of habitat. The greatest concern is over-snow vehicle use in maternal denning habitat. A model developed by Copeland et al. (2010) was produced using satellite imagery from 2000 to 2006. The model illustrates the number of years during this timeframe when snowpack persisted until May 15 at any given location. May 15 encompasses the wolverine denning season, and areas where spring snow pack persisted until May 15 in at least five or more years are thought to be ideal locations for maternal denning. One-fifth of the wolverine maternal denning habitat on the Clearwater side of the forest is concentrated in the Great Burn Roadless Area, and if you subtract the denning habitat that is south of Highway 12, then the percentage jumps to 52 percent.

The Great Burn also appears to be an important area to manage for connectivity between the Bitterroot Grizzly Bear Recovery Zone and other recovery zones. In 2007, a grizzly bear was mistakenly shot by a black bear hunter in Kelly Creek. DNA testing revealed that this bear was from the Selkirk Recovery Zone in the Idaho Panhandle. In the summer of 2019, a collared grizzly bear from the Cabinet Mountains of northwest Montana wandered down into the Selway-Bitterroot Wilderness by way of the Great Burn.

Finally, we would be remiss not to identify the Great Burn's fisheries values. We already noted the existence of the blue-ribbon cutthroat fishery in Kelly Creek, but we must also note that anadromous fish spawning habitat is found in the Crooked Fork and its tributaries in the southeast corner of the roadless area. One of the only adfluvial bull trout populations live in Fish Lake. And of course, the persistent spring snowpack that occurs in the high peaks of the Great Burn ensures that cold, clean water flows down into these streams during snowmelt, which is essential to sustaining cold water salmonids.

Alternatives

Alternative X is clearly unacceptable, as no portion of the Great Burn or any other roadless area on the Nez Perce-Clearwater National Forests would be recommended for wilderness. That would be an unforgivable disservice to the people that enjoy recommended wilderness areas for primitive recreation and solitude as well as the fish and wildlife that inhabit these intact, backcountry areas. Presumably the Forest Service would open up the entire Great Burn to over-snow vehicle use and some of the trails to

off-road vehicles and mountain bikes. These activities would displace mountain goats, wolverines, and other species, and cause indirect habitat loss. Alternative X would not stand up politically or legally.

Alternative Y would reduce the Great Burn Recommended Wilderness to 100,680 acres by chopping out two large chunks—one off of Hoodoo Pass on the north end and one on the south end encompassing Blacklead Mountain, Williams Peak, and the portion of Toboggan Ridge between the top of the ridge and Kelly Creek. Even if the remaining recommended wilderness acreage were left off-limits to non-conforming uses, the areas that would be eliminated and opened to over-snow vehicle use would result in adverse consequences to wildlife. Figure 2 illustrates mountain goat observations made by Idaho Fish and Game and the Great Burn Conservation Alliance relative to Alternative Y. The recommended wilderness boundary for Alternative Y would exclude a significant amount of suitable mountain goat habitat between Blacklead Mountain and Kellys Finger where the majority of mountain goats in the southern corner of the Great Burn are observed (See Table 1 for GBCA mountain goat observations). Both zones would allow the entry of OSV users into areas of wolverine maternal denning habitat. A decision to allow OSV use in these areas could affect the ability of the Forest Service to maintain persistent populations of mountain goats and wolverine within the planning area.

Alternative Y also further exacerbates the already difficult problem of enforcing travel management closures. The proposed OSV play area off of Hoodoo Pass is completely untenable. It would result in a deep, narrow cherry stem into the northern end of the Great Burn Recommended Wilderness, and it would be totally unenforceable. Although there would be a clear boundary along the crest of the Bitterroot Divide, over-snow vehicle users simply would not be able to resist the urge to pop over the stateline onto the Lolo National Forest and its recommended wilderness acreage. We don't even know how OSV users would locate the boundary along the western edge of this play area because it doesn't follow any geographic features that could be recognized on the ground.

With respect to the acreage that would be eliminated on the southern end of the Great Burn under Alternative Y, we again must balk. First of all, the acreage that OSV users have asked to be eliminated on the southern end just continues to grow and grow. In the 2012 Proposed Action, there was only a small area (1,788 acres) between the Lolo Motorway and Williams Peak that would be eliminated. When the Forest Service was putting together the 2018 Framework for Alternative Development, the acreage grew in an internal draft to about 20,615 acres. But before the Framework was released publicly, the acreage on the southern end ballooned to 45,349 acres. Owing to its densely-forested condition, most of the acreage off of Toboggan Ridge isn't even rideable. OSV users are simply hopeful that it will burn and open up. Then there is the problem that the southern boundary of the recommended wilderness under Alternative Y is set at a uniform distance from Kelly Creek, which would be totally unidentifiable on the ground during the winter without a GPS unit.

While the No Action Alternative would not be our first choice for the Great Burn, it at least includes most of the key areas and preserves the status quo. OSV users would not be legally allowed in the Blacklead and Hoodoo areas where they would disrupt wildlife and cause indirect habitat loss.

Assuming that recommended wilderness areas would remain off-limits to incompatible uses, Alternatives W and Z represent the best boundaries for the Great Burn Recommended Wilderness. The boundaries for the two alternatives vary only slightly in that Alternative Z better aligns with geographic features and would be a little easier to administer. Either alternative, if coupled with a prohibition on

non-conforming uses, would achieve the objectives of protecting key wildlife and their habitats from disturbance and preserving opportunities for primitive recreation and solitude.

In summary, we recommend thatthe Forest Service adopt the boundary delineated in Alternative Z simply because it aligns with geographic features that are easy to identify and administer. A prohibition on non-conforming uses is also critical for the reasons stated above. The only change that we would recommend is to correct the boundary along the Landmark Corridor (Lolo Motorway). The Forest Service appears to have clipped out the Landmark Corridor from the boundary proposal that we submitted. Where the corridor and the roadless area overlap, the roadless theme is allocated to Special Areas of Historic or Tribal Significance. An overlapping wilderness recommendation would be consistent with this roadless theme because road construction and timber harvest are not allowed in this theme.

Bighorn-Weitas

At 254,900 acres, the Bighorn-Weitas Roadless Area is the largest roadless area on the Nez Perce-Clearwater National Forests. If the area were designated as wilderness, it would not be a classic wilderness area consisting of high peaks and ice. As noted by The Wilderness Society (2015), approximately 63% of the area consists of ecological types that are currently underrepresented in the National Wilderness Preservation System.

Due to the large size of the area and the limited amount of motorized access, the Bighorn-Weitas Roadless Area provides high quality, secure habitat for elk and suitable habitat for grizzly bears. Grizzly bears may recolonize the planning area during the life of the revised Forest Plan, and protecting areas with low motorized route densities or non-motorized routes will contribute to the recolonization of the Bitterroot Recovery Zone and adjacent areas.

The eastern portion of the Bighorn-Weitas Roadless Area encompasses most of Cayuse Creek, a tributary to Kelly Creek. Cayuse Creek is recognized as a blue-ribbon cutthroat trout fishery.

Alternatives

We would like to thank the Forest Service for including the Bighorn-Weitas Roadless Area as a recommended wilderness area under Alternative W. We especially encourage the Forest Service to recommended the Cayuse Creek portion of the Roadless Area for wilderness. Recommending the Cayuse Creek portion of the roadless area for wilderness would protect the water quality and cutthroat trout fishery of Cayuse Creek. Furthermore, recommending Cayuse Creek for wilderness and restricting off-road vehicles would improve the suitability of the area to support grizzly bears.

North Lochsa Slope

The North Lochsa-Slope Roadless Area encompasses 117,659 acres of national forest lands sandwiched in between Highway 12 and the Lolo Motorway. Most of the roadless area consists of breaklands above the Lochsa River, transected by short steep tributaries. However, Fish Creek is a significant tributary of the Lochsa that provides critical habitat for steelhead and chinook salmon. A portion of the route traveled by the Corps of Discovery (Lewis and Clark Expedition) passes through the Fish Creek Drainage.

In addition to the area's fisheries values, the North Lochsa Slope Roadless Area also harbors plant species that are rarely found east of the Cascade Mountains. In fact, in 1977, the Forest Service established a 1,300-acre Research Natural Area ("RNA") to protect and study the unique coastal disjunct plants found in the RNA (DEIS, page E-143). Flowering dogwood and 14 other plant species that are not

normally found east of the Cascades Mountains or further east in the Continental U.S. grow in this area. As noted by The Wilderness Society (2015), approximately 73% of the area consists of ecological types that are currently underrepresented in the National Wilderness Preservation System.

The North Lochsa Slope Roadless Area also provides habitat connectivity for wildlife between the Bighorn-Weitas Roadless Area to the north and the Rackcliff-Gedney and Lochsa Face Roadless Areas and the Selway-Bitterroot Wilderness to the south.

The unique historic and cultural values of Fish and Hungery Creeks are of particular importance, containing the longest and only remaining undisturbed section of the Lewis and Clark Trail in the United States. Lewis and Clark traveled through thousands of miles of wilderness, but it is only Fish and Hungery Creeks that have retained that same wilderness character today. The opportunity exists to permanently protect the wilderness that Lewis and Clark saw over 200 years ago. On July 22, 1984, the Lewiston Tribune reported:

> *…during 1984 a field reconnaissance was made of the roughly twelve miles of the Hungery Creek drainage. This section of the Lewis and Clark Trails is widely considered to be the least disturbed section of the entire 3,700-mile route and the one most closely approximating conditions similar to those viewed by Lewis and Clark.*

Forest Service planning documents also describe the significance of this section of the Lewis and Clark Trail:

> *The Lewis and Clark Trail parallels (Hungery Creek) for 10 miles with 5 of the campsites associated with the expedition located in the (Hungery Creek) corridor. This segment of trail is considered the last remaining segment of the entire route that is in a relatively unchanged condition from when Lewis and Clark traveled through the area in 1805-1806.*

(North Lochsa Face SEIS, January 2002).

Of course, this area is also of cultural and historical significance to the Nez Perce Tribe:

> *(Excavations) suggest that Native Americans may have been using this area as much as 7000-9000 years ago. The Nez Perce Tribe used this area for subsistence practices and traveling to and from the buffalo lands of the Northern Plains, and the Plains tribes used the area to gain access to the various drainages for fishing activities.*

(North Lochsa Face DEIS, May 1997).

Idaho has the opportunity to secure permanent protection as wilderness the only place that still remains today much as Lewis and Clark saw it over 200 years ago. An expedition that opened up much of the West for the young United States traveled through millions of acres of wilderness. Idaho can protect, for all future generations, one of the last remaining vestiges of wilderness that Lewis and Clark traveled through. Alternatives

We would like to thank the Forest Service for including the North Lochsa Slope Roadless Area as a recommended wilderness under Alternative W. We especially encourage the Forest Service to recommend the approximately 60,000-acre Fish Creek watershed for wilderness. Fish Creek is the

largest block of roadless land within the North Lochsa Face Roadless Area. Fish Creek is designated critical habitat for steelhead and chinook salmon, and the watershed harbors rare species of coastal disjunct plants. Fish Creek is where visitors are most likely to find solitude, and this portion of the roadless area was traveled by the Corps of Discovery. A wilderness recommendation would protect these values. The Fish Creek portion of the North Lochsa Slope Roadless Area is designated as Primitive in the Idaho Roadless Rule. A wilderness recommendation would not affect the annual timber sale quantity.

Selway Additions (Sneakfoot Meadows and North Fork Spruce-White Sand)

Collectively, the Sneakfoot Meadows and North Fork Spruce-White Sand Roadless Areas encompasses approximately 59,100 acres adjacent to the Selway-Bitterroot Wilderness near Elk Summit. Portions of these two roadless areas are often referred to as the "Selway Additions" because the Forest Service recommended adding these areas (about 26,630 acres) to the adjacent wilderness in the 1987 Clearwater Forest Plan. These areas were not included in the original Selway-Bitterroot Wilderness boundary because the Forest Service had plans to log most of the acreage in the 1960s. However, these plans were canceled when the Forest Service determined that the landscape is simply too sensitive for road building and logging. Prior timber sales resulted in large sediment loads in the headwater tributaries of the Lochsa River, which buried spawning sites for anadromous fish. These roadless areas are also very important from a wildlife standpoint. Grizzly bears were exterminated from the Bitterroots in the first half of the twentieth century. The last grizzly bear was sighted in this area in 1946. Fortunately, it appears that grizzly bears may naturally recolonize the Bitterroot Ecosystem. A collared grizzly bear migrated from the Cabinet Mountains in northwest Montana to the north end of the Selway-Bitterroot Wilderness in the summer of 2019. This bear traveled through North Fork Spruce-White Sand Roadless Area to get there, and then it passed back through when it returned to the Cabinet Mountains in the early fall. As the DEIS notes, the Sneakfoot Meadows and North Fork Spruce-White Sand Roadless Areas are two of six roadless areas on the Nez Perce-Clearwater National Forests that provide secure opportunities for grizzly bears to travel to and from the Bitterroot Ecosystem (DEIS, page 3.2.3.3-87). Protecting these two roadless areas and the connectivity that they provide to wildlife should be a key priority of the Nez Perce-Clearwater Forest Plan Revision.

The most popular recreational destination within these roadless areas is Walton Lakes. Trails originating near Elk Summit and Colt Creek serve as portals to access the Selway-Bitterroot Wilderness beyond. Colt Creek Trail 50 is also popular for anglers that hike the creek to access fishing holes along the waterway. These areas are off limits to motorized and mechanized vehicles under the Clearwater Travel Plan, and opportunities for solitude and primitive recreation are high.

Alternatives

As mentioned earlier, the Forest Service recommended about 26,630 acres of the Sneakfoot and North Fork Spruce-White Sand Roadless Areas for wilderness in 1987. These boundaries are represented in the No Action Alternative. The 1987 boundaries appear to have been drawn with a magic marker on a map with no contour lines because the boundaries would be nearly impossible to locate and administer. The 1987 boundaries do not align with geographic features.

While Alternative W is the most generous in terms of the acreage that could be recommended for wilderness, we encourage the Forest Service to recommend the boundaries represented in Alternative

Z. The Alternative Z boundaries are aligned with geographic features that could be located on the ground and easily administered. Alternative Z encompasses Walton Lakes and trails that serve as access portals to the Selway-Bitterroot Wilderness.

Meadow Creek

It is a regrettable aberration that the Meadow Creek Roadless Area was split by the Forest Service between east and west. It is the only example that we are aware of where the agency has delineated two different roadless areas despite the fact that there are no roads, past timber harvest units, or other developments that separate them. The East and West Meadow Creek Roadless Areas are immediately contiguous to one another, and combined, the two areas encompass 212,400 continuous roadless acres.

This obsolete bureaucratic aberration is the result of the Forest Service's intention to log the west side of the Meadow Creek Roadless Area in the 1970s and defer development of the east side. Fortunately, the west side of the Meadow Creek Drainage has never been logged. Logging one side of the watershed while "preserving" the other would be like splitting a baby. From a fisheries standpoint, the two sides of the watershed are inseparable.

In every wilderness suitability study completed by the agency, both the East and West Meadow Creek Roadless Areas were found to have some of the highest wilderness capability ratings of any of the roadless areas in Idaho. Both areas scored "high" in 2004 when the Nez Perce-Clearwater National Forests first kicked off the Forest Plan revision process. East Meadow Creek and West Meadow Creek were the only two roadless areas on the Nez Perce side of the forest to receive a "high" rating, and West Meadow Creek scored even higher than the Great Burn or Hoodoo Roadless Area on the Clearwater side of the forest.

Meadow Creek is also part of the aboriginal territory of the Nez Perce Tribe, as defined by the Indian Claims Commission. Meadow Creek is among the lands that have important hunting and fishing areas for the tribe today. The present-day Green Mountain Trail is believed to be one of the original routes of the Southern Nez Perce Trail as well as trails 502 and 581 in the Bargamin Creek drainage. A Nez Perce Tribe member, Allen Slickpoo, describes one route that goes right up Red River to the hot spring, over the ridge, across the meadow portion of Meadow Creek, to Green Mountain, and then down into Bargamin Creek.

This information can now be complemented by some very important cartographic information found in the long-missing manuscript set of the 1907-1911 Forest Atlas. The maps in the atlas locate many trails, almost all of which, given the date of the maps, predate most Forest Service trail construction on the Nez Perce and Clearwater National Forests. The map for the Nez Perce National Forest illustrates the presence on the map of a feature in the meadows to the east of the hot springs called "Camp Grounds." Since the Forest Service was not building campgrounds in 1907 (particularly in such a remote location inaccessible by roads to this very day), this would have to have been a Nez Perce camping spot—right in the meadow where resource damage resulting from ATV use was observed in 2008. As far as we are aware, the Forest Service has never inventoried and catalogued the cultural resources of Meadow Creek. This is an important omission in the Forest Service's evaluation of West Meadow Creek's wilderness characteristics that should be corrected and taken into account in the final EIS and revised Forest Plan.

From a fisheries standpoint, Meadow Creek is also one of the most important watersheds on the Nez Perce-Clearwater National Forest. The watershed is inhabited by spring/summer Chinook, steelhead, bull trout, red band trout, and westslope cutthroat trout. Katherine Thompson, a retired fish biologist for the Nez Perce-Clearwater National Forests, concluded in a peer-reviewed study that westslope cutthroat trout in Meadow Creek exhibit some of the highest genetic heterogeneity of any known westslope cutthroat trout population in the United States. During RARE II, the Idaho Fish and Game Commission insisted that protecting Meadow Creek was critical to the management and enhancement of Idaho's fish and game resources, writing, "Wilderness classification for this roadless area … is paramount to the protection of water quality and aquatic ecosystems in the Selway River through the entire Selway-Bitterroot Wilderness." East Meadow Creek was recommended for wilderness designation in RARE II in 1979 (but not West Meadow Creek, for the logging-related reasons explained above).

Conservationists through the years have challenged timber sales proposed in the Meadow Creek area. For example, in 1982 conservationists successfully appealed three timber sales planned for the headwaters and upper east side of Meadow Creek which called for 20 miles of new road construction. In 1981, the Division of Environment, Department of Health and Welfare for the State of Idaho raised concerns with the Forest Service over the Soda Point – Fourmile timber sale, where timber sales were proposed for the west side of Meadow Creek, stating that the proposed reduction in anadromous fishery potential in Meadow Creek violated state water quality standards. The resulting controversy triggered a several-year effort by the State of Idaho to revise and update its program of non-point source water pollution, leading to the adoption of an anti-degradation policy that complies with the national Clean Water Act.

The FEIS for the existing Nez Perce Forest Plan recognizes the uniqueness of the Meadow Creek drainage, stating "… a full range of aspects, elevations, and vegetative types is represented; and opportunities for solitude and primitive recreation are outstanding" (page C-75). The 1987 FEIS also documented that "Meadow Creek has more miles of significant fishery than any other roadless area on the Forest" (C-92), and "(o)ne of the key attractions of this area is the extremely high water quality of Meadow Creek. It is one of the very few streams left on the Forest with very excellent water quality and a productive anadromous fishery" (C-78). The 2004 Proposed Action for the Nez Perce Forest Plan Revision observes that "Meadow Creek continues to be a stronghold for aquatic species due to high water quality and high quality fish habitat" (page 50).

The Meadow Creek drainage has long been considered a top candidate for wilderness, primarily owing to its high fisheries values. The area's sheer size, elevational relief, fish and wildlife assemblages, habitat types, and the intact state of drainage are all qualities befitting of a truly watershed wilderness. Protecting the entire watershed as recommended wilderness would also fully comply with the 2012 planning rule's requirement to "maintain … the ecological integrity of … watersheds" (36 CFR 219.8(a)(1)). For these reasons, we believe that Meadow Creek is worthy of wilderness.

Alternatives

No portion of the Meadow Creek Roadless Area would be recommended for wilderness under the No Action Alternative or Alternative X. The east side of the roadless area would remain allocated to the Primitive Theme in the Idaho Roadless Rule, while the west side would remain allocated to the Backcountry Restoration Theme. Under the Idaho Roadless Rule, road construction and reconstruction

are prohibited in roadless areas designated as Primitive. In contrast, temporary road construction may be authorized in roadless areas designated as Backcountry Restoration to accomplish fuels reduction within a community protection zone, fuels reduction outside of a community protection zone where there is a significant risk to a community, restoration of forest composition, structure, and function, and restoration of habitat for listed species (see 36 CFR 294.23(b) and 36 CFR 294.24(c)). While there may be a need for fuels reduction near the Elk City Township (this portion of the roadless area is actually in the American River drainage), we cannot foresee the need for road construction or fuels reduction within the portion of the roadless area that is actually within the Meadow Creek watershed. And of course, the Idaho Roadless Rule is silent on travel management. So neither of these alternatives prohibit the use of off-road vehicles or over-snow vehicles in Meadow Creek. The No Action Alternative and Alternative X would not result in the highest level of protection of the Meadow Creek watershed and its fisheries because road construction and reconstruction and the cutting, sale and removal of timber would still be allowed under certain circumstances described in the Idaho Roadless Rule. The Roadless Area would also remain available for off-road vehicle and over-snow vehicle use. A temporary order was issued in 2008 to curtail resource damage caused by the use of off-road vehicles in upper Meadow Creek. The order remains effective until the Nez Perce Travel Plan is completed.

Alternatives W and Y take the split-the-baby approach by recommending the east side of the Meadow Creek Roadless Area for wilderness but not the west. The Forest Service would modify the Idaho Roadless Rule and change the designation of the east side from Primitive to Wildland Recreation. Depending on the decision regarding non-conforming uses of recommended wilderness, the east side may also be placed off-limits to off-road vehicles and over-snow vehicles, which would result in a meaningful increase in protection of the east side. In contrast, the west side would not enjoy any improved protections. The Idaho Roadless Rule permissions regarding road construction and reconstruction and the cutting, sale and removal of timber would still apply, and the west side would remain available for off-road vehicle and over-snow vehicle use. As stated earlier, preservation of Meadow Creek's watershed and fisheries values really cannot occur without protecting both the east and the west side of the watershed. Neither Alternative W nor Alternative Y would achieve the desired level of protection for the Meadow Creek Watershed as a whole.

In conclusion, we encourage the Forest Service to recommend the portion of the Meadow Creek Roadless Area delineated in Alternative Z for wilderness. We appreciate that the Forest Service has included both the east and west side in Alternative Z. The Alternative Z boundary takes a holistic approach to the preservation of Meadow Creek and its special fisheries values because it encompasses nearly the whole watershed. Under Alternative Z, the roadless area themes would be upgraded from Primitive on the east side and from Backcountry on most of the west side to Wildland Recreation. This change would protect the watershed from road construction and reconstruction and the cutting, sale, and removal of timber. We also advocate for a prohibition on non-conforming uses in recommended wilderness, which would further protect Meadow Creek from damage caused by off-road vehicle use. In fact, given that the Forest Service has still not approved the Nez Perce Travel Plan, we believe that it is even more imperative to recommend the watershed for wilderness and prohibit non-conforming uses. As organizations that objected to the travel plan and negotiated a resolution in good faith that involved the exclusion of off-road vehicles from the interior of the watershed, we believe that the Forest Service should honor that resolution through recommendation of Meadow Creek for wilderness.

Rapid River

The 78,700-acre Rapid River Roadless Area would make a logical addition to the Hells Canyon Wilderness. Management of the roadless area is split between three national forests, including the Payette, Wallowa-Whitman, and Nez Perce-Clearwater National Forests. The area is also split between three different regions of the Forest Service. Management of the roadless area is often challenged by the administrative puzzle that overlays Rapid River. Perhaps it also explains why the Forest Service has never recommended the area for wilderness. It is as if each forest passes on the opportunity to recommend their portion of the roadless area for wilderness as each forest waits on another to make the first move. The Nez Perce-Clearwater National Forests should not deny Rapid River the consideration it is due simply because the Payette and the Wallowa-Whitman have not recommended their portions of the Rapid River Roadless Area for wilderness.

There is perhaps no roadless area fully or partially administered by the Nez Perce-Clearwater National Forest that exhibits the degree of ecological diversity found with the Rapid River Roadless Area. The Wilderness Society (2015) reports that approximately 75% of the Rapid River Roadless Area (Nez Perce-Clearwater portion) consists of ecological types that are currently underrepresented in the National Wilderness Preservation System. Sagebrush steppe habitat is found at the bottom of the drainage at the north end of the roadless area. Remarkably, hikers traveling the Rapid River Trail can observe Pacific yew, mountain mahogany, sagebrush, and bitterbrush within the same viewshed. The higher elevation habitat types found in the upstream (southern end) of the roadless area are more subalpine.

Rapid River is also important from an aquatic habitat perspective. Idaho Fish and Game operates an anadromous fish hatchery just downstream of the roadless area. This hatchery was constructed as mitigation for the Hells Canyon complex of hydropower dams, which are owned and operated by Idaho Power. Rapid River was chosen because it is a source of clean, cold water, which is ideal for aquaculture of salmonids.

Rapid River is also prized for its recreational and sporting opportunities. Notably, the Rapid River Trail is one of the few trails in the region that is accessible at all times of the year. Other trails extend up into draws, where they access high mountain lakes, ridgelines, hunting areas, and the Hells Canyon Wilderness beyond. All of the trails on the Nez Perce-Clearwater side of the roadless area are open to non-motorized recreation opportunities.

Alternatives

As mentioned earlier, Rapid River is not currently recommended for wilderness (under the No Action Alternative). This is perhaps due to the fact that the Roadless Area is administered by three different national forests and three different regions of the Forest Service, none of which have simultaneously revised their Forest Plans. The Nez Perce-Clearwater should give Rapid River the consideration it is due and not pass up a wilderness recommendation for the portion of the roadless area administered by the forest simply because the Payette and the Wallowa-Whitman haven't made the first move.

Including Rapid River as a recommended wilderness area under Alternatives W, Y, and Z is a good first step. Nearly the entire roadless area is allocated to the Wild Land Recreation Theme of the Idaho Roadless Rule. While road construction and timber harvest are prohibited in the Wildland Recreation Theme, the Idaho Roadless Rule is silent on the issue of travel management. Recommending Rapid River for Wilderness, if coupled with a prohibition on non-conforming uses, would add the additional

protection of the area from off-highway vehicles, over-snow vehicles, and mountain bikes. We support the wilderness recommendations delineated in Alternatives W, Y, and Z, all of which encompass the key areas within the roadless area that we would like to see protected.

Wild and scenic rivers

Plan components for designated wild and scenic rivers

The Draft Forest Plan contains few plan components for designated wild and scenic rivers, perhaps because the Draft Forest Plan is largely deferential to Comprehensive River Management Plans ("CRMPs") for the existing designated rivers. This is problematic because revision of the CRMP for the Lochsa, Selway, and Middle Fork Clearwater Rivers is past due. This CRMP was approved in 1969. The Wild and Scenic Rivers Act was amended in 1986 to include new requirements for CRMPs (see Section 3(d)). This amendment also required the CRMPs that were in effect at the time to be updated within ten years of the amendment if they did not meet the new requirements. CRMPs for new designations are to be prepared within three fiscal years of designation. While the CRMP for the Lochsa, Selway, and Middle Fork Clearwater Rivers should have already been updated well before now, the Forest Service should at least include an objective in the final Forest Plan to update the CRMP within three years of the Record of Decision. Although the Lochsa, Selway, and Middle Fork Clearwater Wild and Scenic Rivers are not new designations, we chose three years because this is the length of time specified in the Act for preparation of CRMPs for new designations, and this seems like a reasonable amount of time. The Forest Service must be held accountable for updating the CRMP as required under the law. We suggest the following Forest Plan objective:

> ***Objective.*** *Comprehensive river management plans for the designated Middle Fork Clearwater, Selway, and Lochsa Wild and Scenic Rivers will be updated and approved within three years of the approval of the Record of Decision for the Revised Forest Plan.*

Insofar as the Draft Forest Plan sets out any management direction for designated wild and scenic rivers, the Draft relies heavily on Table 30 (page 100), which describes management action suitability for designated wild and scenic rivers by alternative. We have a few concerns with the use of suitability tables to supplant enumerated, narrative forest plan components. First of all, it is not clear that suitability tables are enforceable because the suitability tables presented in the Draft Forest Plan, including Table 30, are not incorporated into any standards or guidelines by reference.

Secondly, use of the term suitable is potentially problematic because it is not explicit with regard to whether uses are allowed are not. We believe clarity is important as illustrated by differing interpretations of forest plan direction by Forest Service officials over the years. The Final Forest Plan should clearly state which uses of a particular management area are "allowed" or "not allowed" as was done in the Revised Forest Plan for the Idaho Panhandle National Forests. Being explicit will ensure that there can be no misinterpretation.

Another problem with the suitability table is that it essentially applies the same plan components to all designated wild and scenic river segments. Depending on the outstandingly remarkable values ("ORVs") for which these rivers were designated, forest plan components may need to be tailored to specific rivers in order to best protect their unique ORVs. A great example is Rapid River, which was designated as a "wild" river by Section 3(a)(11) of the Hells Canyon National Recreation Area Act ("HCNRA Act").

Section 3(b) of HCNRA Act provides that the Forest Service "may not undertake or permit to be undertaken any activities on adjacent public lands which would impair the water quality of the Rapid River segment." The Conference Report for the HCNRA Act reflects the special attention paid to the Rapid River's water quality and the Forest Service's obligation to carefully manage adjacent public lands. As explained in the Committee on Interior and Insular Affairs, House Report No. 94-607 (October 31, 1975):

> *A specific provision is included which prohibits the Secretary from undertaking or allowing any activities on Federal lands which would impair the water quality of the Rapid River. Although the National Forest lands outside of the wild river corridor along the main stem and portions of the west fork of the Rapid River are not included in the recreation area, the Committee intends through this section that the Secretary exercise particular care in the management of the lands of this drainage. The salmon hatchery located along the river is vital to the management of this fisheries resource, and the water quality of the river must be assured.*

Forest Service regulations promulgated pursuant to Section 10(c) of the HCNRA Act protect the River's outstandingly remarkable values, including water quality, by specifically prohibiting the use of motorized and mechanical equipment. The regulation states, in full:

> *The use of motorized and mechanical equipment on designated Forest Service roads, trails, and airstrips is prohibited on wild and scenic river segments classified "wild" except as provided for by the authorized officer upon a determination that such use is necessary for the administration of the river or to protect and enhance the values for which [the] river was designated.*

36 CFR 292.44(b)(2).

Table 30 indicates that all designated wild and scenic river corridors are "suitable" for mechanized travel. As described above, regulations implementing the HCNRA Act explicitly prohibit the use of both motorized and mechanized equipment in the Rapid River Corridor. This example illustrates how a "one-size-fits-all" approach to plan components for designated wild and scenic rivers is not the right answer. In some cases, forest plan components should be tailored to individual river corridors in order to protect their unique ORVs and comply with the statutes and implementing regulations associated with these rivers. For example, the following standard should be included for the Rapid River:

> ***Standard.*** *The use of motorized and mechanical equipment is prohibited within the designated Rapid Wild and Scenic River Corridor except as provided for by the authorized officer upon a determination that such use is necessary for the administration of the river or to protect and enhance the values for which the river was designated.*

We also noticed in footnote 4 that the Forest Service mistakenly suggests that "[o]ver-snow vehicle use and motorized travel are allowed in the Salmon River designated wild and scenic river." This is not correct. The Central Idaho Wilderness Act grandfathered jet boat use on the main Salmon River through the Frank Church-River of No Return Wilderness (See Section 9(c)). However, over-snow vehicles, off-highway vehicles, and mountain bikes are not allowed in the portion of the designated wild and scenic river corridor that overlaps the wilderness area.

Eligible wild and scenic rivers

A river or stream is eligible for inclusion in the National Wild and Scenic Rivers System if it is (1) free flowing, and (2) exhibits one or more outstandingly remarkable values (See Section 2(a) of the Wild and Scenic Rivers Act). The Forest Service evaluated all of the named streams and rivers within the Nez Perce-Clearwater National Forests to determine their eligibility for inclusion in the System. Eighty-nine of the 1,460 named rivers and streams were found eligible based on their free-flowing condition and an assessment of river-related values within the region of comparison. We appreciate the Forest Service's thorough review and agree with the agency's eligibility determinations.

Suitable wild and scenic rivers

We are distressed that none of the eligible rivers would be classified as suitable under Alternative X, and, consequently, there would be no interim plan components to protect suitable rivers and their ORVs. This alternative evidently was created in response to state and local governments who oppose any additional wild and scenic rivers. They incorrectly argue that the rivers and streams in the planning area are protected by other laws and regulations, including Idaho Comprehensive State Water Plans for the North Fork Clearwater River and South Fork Clearwater River Subbasins. The primary purpose of the Wild and Scenic Rivers Act is to protect free-flowing rivers from dams and water diversions. The DEIS misleadingly states that Comprehensive Water Plans generally prohibit the construction or expansion of dams or impoundments, hydropower projects, and water diversion works (DEIS, page 3.6.2-23). This alternative should be tossed out because neither the State of Idaho nor local county governments can be relied on to protect rivers and streams in a free-flowing condition as envisioned under the Wild and Scenic Rivers Act. The Idaho Legislature does have the authority under Section 2(a)(ii) of the Wild and Scenic Rivers Act to designate wild and scenic rivers within the State of Idaho. However, the Idaho Legislature has never exercised its right to do so and likely never will.

In refusing to exercise its right to designate wild and scenic rivers, the State of Idaho has relinquished any authority that it has to block the construction of dams on federal lands. Congress has the authority to authorize federal water projects, and the Federal Energy Regulatory Commission ("FERC") retains the authority to issue licenses to non-federal entities:

> *...for the purpose of constructing, operating, and maintaining dams, water conduits, reservoirs, power houses, transmission lines, or other project works necessary or convenient for the development and improvement of navigation and for the development, transmission, and utilization of power across, along, from, or in any of the streams or other bodies of water over which Congress has jurisdiction...or upon any part of the public lands and reservations of the United States…*

16 USC 797(e).

Therefore, to say that the Comprehensive State Water Plans protect eligible rivers and streams from dams and water diversions is simply inaccurate. A non-federal entity could merely bypass the state and apply for a license from FERC to construct a dam or other project works on federal lands.

Furthermore, the Comprehensive State Water Plans can be easily changed at any time. These plans are not subject to NEPA, and the State of Idaho does not have an equivalent statute. The process to change a Comprehensive State Water Plan requires only a simple majority vote of the Idaho Water Resources

Board and either house of the Idaho Legislature (but not both). A signature of the governor is not required. In conclusion, Alternative X should be rejected because State and local governments lack the authority to protect free-flowing rivers and streams from dams and water diversions. Only wild and scenic rivers designation would accomplish this objective.

North Fork Clearwater River

The Forest Service identified more ORVs associated with the North Fork than any other stream or river evaluated by the planning team. Identified river-related values include recreation, scenic, cultural resources, cultural importance to the Nez Perce Tribe, fish, wildlife, and botany (DEIS, page F-41). The North Fork is a remarkably scenic river. As noted by the Forest Service, the North Fork is a distinctive river canyon with "cliffs, large boulders forming rapids, the juxtaposition of white water and smooth, reflective water, and a variety of vegetation, trees, shrubs and grasslands along their length" (DEIS, page F-9). The Black Canyon reach with its granite boulders, pools, cedar trees, diverse mountain-side vegetation patterns, and recreational opportunities is particularly exceptional.

The North Fork provides numerous and diverse recreational opportunities. At least 79 miles of the river can be boated, ranging from flat water to class IV rapids. Both the North Fork and the tributary of Kelly Creek are regionally renowned blue-ribbon cutthroat trout fisheries. There are also numerous developed and dispersed campsites along the river, and there is a network of wonderful trails associated with the river corridor and its tributaries.

The river corridor also has a rich historical and archeological history. The 1910 fire, which burned much of the North Fork country, shaped the Forest Service's policy of fire suppression for nearly a century before the agency began to accept the management of planned and unplanned ignitions to accomplish resource objectives.

The most fascinating river-related value pre-dates the Forest Service by millennia. Archaeologists identified one of the oldest archaeological sites in the southern Columbia Plateau (amongst other outstanding archaeological resources) (DEIS, page F-18). Humans and nature have coexisted in this landscape since time immemorial.

Alternatives

Of all the eligible rivers and streams within the planning area, the North Fork is the worthiest candidate of designation. As mentioned earlier, the planning team identified more outstandingly remarkable values (7) associated with the North Fork than any other river or stream in the Forest. Moreover, the North Fork is the largest of the undesignated rivers within the planning area. Federal agencies have identified twenty-six potential dam sites above Dworshak Reservoir (Heitz et al. 1980). As the Forest Service is aware, the primary purpose of the Wild and Scenic Rivers Act is to protect free-flowing rivers and their associated ORVs from dams and water diversions. While other laws, policies, and regulations may protect the river's water quality, only wild and scenic rivers designation would protect the North Fork from dams and water diversions.

The North Fork is one of twenty-nine eligible rivers identified in the existing Forest Plans for the Clearwater and Nez Perce National Forests. A determination that the river is both eligible and suitable as proposed under Alternative Y would not change existing management practices within or adjacent to

the river corridor. However, Alternative Y would serve as an acknowledgement that the North Fork remains worthy of congressional attention and protection.

Alternative X would classify all eligible rivers and streams evaluated by the planning team as unsuitable. This alternative relies on state and subbasin comprehensive water management plans authored by the Idaho Department of Water Resources for the protection of rivers, streams, and their associated values. This alternative placates the State of Idaho, which discourages the Forest Service from pursuing federal protection of waterways. As explained above, even if the State intended to, it has no authority to prohibit the construction of dams on federal lands. State and subbasin water plans can also be repealed or changed at any time by a vote of the Idaho Water Resource Board and either house of the State Legislature. Therefore, state plans and policies provide no certainty that the North Fork will remain free-flowing.

While Alternative Z names twelve suitable rivers, neither the North nor the South Fork are among the ranks. Any decision to not classify the North or the South Fork as suitable would call into question the legitimacy of the suitability process. Of all the eligible rivers and streams in the planning area, the North and the South Fork have the most ORVs, the most potential for water use and development, and consequently, are the most ideal candidates for wild and scenic rivers designation. The Forest Service must classify the North Fork as suitable if this process is to withstand the laugh test.

Classification of the North Fork as suitable, in conjunction with Weitas Creek, Kelly Creek, and Cayuse Creek, would also contribute to the integrity of the North Fork Drainage through a systems approach.

South Fork Clearwater River

The South Fork is second only to the North Fork in terms of the number of ORVs identified by the planning team. ORV categories include scenery, fish, recreation, culture, Nez Perce culture, and wildlife (DEIS, pages F-218 through F-221). Although there is a state highway next to the South Fork, there is a particularly scenic stretch located between Blackerby and Tenmile Creek where you can see dramatic cliff faces and rock formations such as Huddleston Bluff. The juxtaposition of cliffs, large boulders,rapids, white water, smooth reflective water, and a variety of vegetation, tree, shrubs, and grasslands mixed with rock features along the river creates a visually intriguing viewshed.

Outstandingly remarkable fisheries values include a diversity and abundance of fish species. The South Fork provides migration, spawning and rearing habitat for B-run steelhead, chinook salmon, westslope cutthroat trout, and bull trout. The river is designated as critical habitat for steelhead and bull trout, which are protected under the Endangered Species Act. Pacific lamprey (a candidate species) are also found in the South Fork. The South Fork's fisheries were also identified as culturally important to the Nez Perce Tribe.

The South Fork is also a popular B-run steelhead fishery, which resulted in the identification of the recreation ORV. B-run steelhead fisheries are limited in the region of comparison. Moreover, most of the other B-run steelhead fisheries require anglers to use boats. In contrast, anglers can fish for B-run on the South Fork from the bank or while wading out into the river.

There are two wildlife ORVs associated with the South Fork. The first is Harlequin ducks. Harlequin ducks have been observed between Blackerby and the confluence with Mill Creek. They have also been observed between the confluence with Dutch Oven Creek and the confluence with Crooked River. Only

four observations have been made on the South Fork Clearwater River. As noted in the DEIS, Harlequin ducks are rare in Idaho. Approximately 50 pairs of Harlequin ducks breed along a limited number of high-quality streams within the Priest River, Kootenai River, Clark Fork, Lake Pend Oreille, St. Joe River, Clearwater River, and the South Fork Snake River, and approximately 38 percent of the Harlequin duck observations within the State of Idaho occurred on the Nez Perce-Clearwater National Forests.

The second wildlife ORV is the Selway forestsnail. This Idaho endemic snail occurs in Idaho County in isolated colonies along the lower Lochsa River, the Selway River, the South Fork Clearwater River, the lower Salmon River, and their tributaries.

Alternatives

The South Fork Clearwater River is one of the twenty-nine eligible rivers and streams identified in the existing forest plans for the Clearwater and Nez Perce National Forests. Existing plan components provide for the interim protection of the river and its associated ORVs to the extent allowed under the Forest Service's legal authority.

The South Fork would be classified as suitable for wild and scenic rivers designation under Alternative Y. Plan components for suitable wild and scenic rivers would protect identified ORVs in the interim to the extent allowed under the Forest Service's authority. Congress would be more likely to add the South Fork to the National Wild and Scenic Rivers System if the river is classified as suitable for designation. Wild and scenic rivers designation would protect the South Fork from dams and water diversions.

None of the eligible rivers and streams in the planning area would be classified as suitable for wild and scenic rivers designation under Alternative X. Alternative X was created in response to comments from state and local governments, who have asked the Forest Service to reject additional federal protections. The Idaho Department of Water Resources and county governments point to the Comprehensive Water Management Plans for the State of Idaho and the North Fork and South Fork Clearwater Subbasins, which they claim provide sufficient protection of eligible rivers and streams. Unfortunately, the State of Idaho has no legal authority to prevent the construction of dams on federal lands. Furthermore, the State of Idaho's general philosophy toward water is to allocate water rights for consumptive uses. Under state law, water rights cannot be reserved for the purpose of ensuring in-stream flows for fish, ecological, or other non-consumptive values. Only the Wild and Scenic Rivers Act would provide the certainty that the South Fork Clearwater River would remain free-flowing.

Congress is more likely to add the river to the National Wild and Scenic Rivers System as a result. There are at least eleven potential dam sites on the South Fork (Heitz et al. 1980). As stated earlier, designation would protect the river and its ORVs from dams and water diversions. Designation of the South Fork in conjunction with the Johns Creek would contribute to the protection of the integrity of the South Fork subbasin through a systems approach. Existing laws and regulations at the federal, state, and local level do not ensure that Johns Creek will remain in a free-flowing condition. Classification of the river as suitable would not change current management of the river corridor because it is already managed as an eligible river segment under the 1987 Nez Perce Forest Plan. Because designation would not appreciably change management of the corridor but would protect the river and its ORVs from dams and diversions, we believe that the South Fork should be classified as suitable for designation.

Little North Fork Clearwater River

The Little North Fork extends upstream of the boundary of the Nez Perce-Clearwater National Forests to the Idaho Panhandle National Forests. There is also a small reach of the river near its headwaters that is managed by the Bureau of Land Management. Both the IPNF and the BLM found their reaches eligible for wild and scenic rivers designation. A determination that the segment managed by the Nez Perce-Clearwater National Forests is eligible and suitable would complement the determinations of the IPNF and the BLM.

There are four ORVs associated with the segment that is located within the planning area. The planning team identified a fish ORV that is based on fish abundance and diversity, natural reproduction, and habitat quality (DEIS, page F-82). The westslope cutthroat trout population in the Little North Fork is "one of three extremely important fluvial westslope cutthroat populations in the North Fork Clearwater basin, and one of a half a dozen in the region of comparison." There may also be an adfluvial population that migrates up the river from Dworshak. The Little North Fork is also designated as critical habitat for bull trout. The presence of a fluvial bull trout population has been confirmed.

Both the IPNF and the Nez Perce-Clearwater identified a recreation ORV. The Little North Fork provides a multi-day whitewater boating opportunity that is accessible by roads at both ends and does not require a competitive permit. This is a rare opportunity within the region of comparison.

Another ORV identified by the planning team is botany. There are disjunct populations of coastal plant species that occur along the Little North Fork. Although there are other populations of coast disjuncts within the planning area, the Little North Fork is one of only six streams within the planning area where coastal disjunct plant species may be found.

Finally, the Forest Service identified a scenic ORV associated with the Little North Fork. The scenic qualities include a diversity of water, vegetation, and rock features. There are also several rapids that provide a dramatic contrast of whitewater and rocks and steep canyon slopes. The IPNF also identified scenery as an ORV.

Alternatives

The Little North Fork is one of the twenty-nine rivers and streams within the planning area that were identified as eligible for wild and scenic rivers designation in the existing Forest Plans for the Clearwater and Nez Perce National Forests. As mentioned earlier, the segments of the Little North Fork that are managed by the IPNF and the BLM were also found eligible in their latest management plans.

Under Alternatives W, Y, and Z, the segment of the Little North Fork that is managed by the Nez Perce-Clearwater National Forests would be classified as suitable for wild and scenic rivers designation. Designation would protect the Little North Fork from dams and water diversions.

None of the eligible rivers and streams in the planning area would be classified as suitable for wild and scenic rivers designation under Alternative X. Alternative X was created in response to comments from state and local governments, who have asked the Forest Service to reject additional federal protections. The Idaho Department of Water Resources and county governments point to the Comprehensive Water Management Plans for the State of Idaho and the North Fork and South Fork Clearwater Subbasins, which they claim provide sufficient protection of eligible rivers and streams. Unfortunately, the State of Idaho has no legal authority to prevent the construction of dams on federal lands even if it intended to.

According to Heitz et al. (1980), there are three potential dam sites on the Little North Fork Clearwater River. Existing laws, rules, and regulations do not protect the river from water developments or restrict instream mining. As one of the large tributaries to the North Fork Clearwater River, a wild and scenic designation would protect the river from these kinds of water developments. As such, we encourage the Forest Service to classify the Little North Fork as suitable for designation. It would be odd if the segment managed by the Nez Perce-Clearwater were classified as unsuitable while the IPNF and the BLM segments are eligible.

Cayuse Creek, Kelly Creek, North Fork Kelly Creek, Middle Fork Kelly Creek, and South Fork Kelly Creek

Not surprisingly, the Forest Service identified the diversity and abundance of native fish as an ORV for Cayuse Creek, Kelly Creek, North Fork Kelly Creek, Middle Fork Kelly Creek, and South Fork Kelly Creek. Fish diversity and abundance is defined as presence of two or more native fish species with high known genetic integrity, known high numbers of juvenile fish and adult fish, multiple life history strategies present, and higher fish densities than others in the region of comparison (DEIS, page F-75). Kelly and Cayuse Creeks are inhabited by one of "three extremely important fluvial westslope cutthroat populations in the North Fork Clearwater River Basin, and one of a half dozen in the region of comparison." Kelly Creek and Cayuse Creek are designated as critical habitat for bull trout. These watersheds provide habitat for fluvial bull trout stocks. The quality of habitat is high due to limited human development, and models suggest that Kelly and Cayuse Creeks will continue to provide cold water refugia despite projected climate changes. Finally, it is worth noting that the stocks of fish in these streams exhibit a high level of genetic diversity and integrity.

The planning team also identified a recreational ORV that is related to the fish ORV. Kelly Creek and Cayuse Creek are regionally renowned blue-ribbon cutthroat fisheries. There are opportunities for anglers to easily access fishing holes along the roaded reach of Kelly Creek, but there are also opportunities for anglers to get away from crowds and find backcountry fishing opportunities along the roadless reaches of Kelly and Cayuse Creeks, which can be accessed by trail.

A description in the DEIS of the scenery ORV associated with Kelly Creek is intriguingly poetic:

> *...a harmonious relationship of rock, water, and a variety of vegetation. Kelly Creek is a clear, swift stream flowing through a variety of terrain, including high country meadows, forests, and rocky canyons. It includes fast moving water forming rapids and still pools. The upper reaches of several of its forks (North Fork, Middle Fork, and South Fork) originate near the State line divide and include distinctive cliffs.*

(DEIS, page F-75).

We couldn't have painted a better picture of Kelly Creek's scenic qualities.

The Harlequin duck population in Kelly Creek was identified as a wildlife ORV. As noted in the DEIS, Harlequin ducks are rare in Idaho (page F-75). Approximately 50 pairs of Harlequin ducks breed along a limited number of high-quality streams within the Priest River, Kootenai River, Clark Fork, Lake Pend Oreille, St. Joe River, Clearwater River, and the South Fork Snake River, and approximately 38 percent of the Harlequin duck observations within the State of Idaho occurred on the Nez Perce-Clearwater National Forests.

Finally, the planning team identified a historical and a cultural ORV associated with Kelly Creek. The historical ORV is related to the Forest Service's history of administration in the area. The cultural ORV was identified by the Nez Perce Tribe.

Alternatives

Kelly Creek ranks up there with the North Fork and South Fork Clearwater Rivers in terms of the number of outstandingly remarkable values. Both Kelly Creek and Cayuse Creek are among the twenty-nine rivers and streams that were identified as eligible for wild and scenic rivers designation in the existing Forest Plans for the Clearwater and Nez Perce National Forests. Additionally, Cayuse Creek, Kelly Creek, and its forks would be classified as suitable for designation under Alternatives W, Y, and Z. Designation would protect these segments from dams and water diversions. Wild reaches would also be off-limits to in-stream mining.

Under Alternative X, none of the eligible rivers and streams in the planning area would be classified as suitable. There would be no plan components to provide interim protections of river related values. Instead, the Forest Service suggests that Comprehensive Water Management Plans authored by the Idaho Department of Water Resources could be relied upon to protect river related values. Unfortunately, the state water plans provide no certainty that eligible rivers and streams will be protected from dams because the State of Idaho lacks the authority to prevent the construction of dams on federal lands. Furthermore,while it is true that the State of Idaho has the authority to allocate water rights within its borders, Idaho water laws do not provide for the reservation of water rights for the purpose of maintaining in-stream flows for fish and other ecological purposes.

Kelly Creek and its tributaries should be classified as suitable for wild and scenic designation as they are truly remarkable when compared to many other waterways within the region of comparison. There is at least one potential dam site on Kelly Creek (Heitz et al. 1980). Designation of Cayuse Creek, Kelly Creek, and its forks in conjunction with The North Fork Clearwater River and Weitas Creek would contribute to the integrity of the basin above Dworshak Reservoir through a systems approach to river conservation. Designation also is the only way to ensure that these rivers and streams are truly protected from dams and water diversions.

Weitas Creek

Weitas Creek is a significant tributary of the North Fork Clearwater River. The planning team identified a Nez Perce cultural ORV during the preliminary evaluation process. Two additional ORVs were identified in response to public comments on the Draft Framework for Alternative Development. The two additional ORVs include fish and recreation.

The fish ORV is based on the abundance and diversity of fish populations that inhabit Weitas Creek for all or a portion of the year. For example, Weitas Creek provides habitat to one of three "extremely important fluvial westslope cutthroat populations" in the North Fork Clearwater River Drainage (DEIS, page F-56). Weitas Creek is also designated as critical habitat for bull trout. A fluvial population of bull trout occurs in Weitas Creek.

The recreation ORV is related to the fish ORV. Weitas Creek provides a unique, trail-accessible fishing opportunity for much of its length. Since most of the creek is within the Bighorn-Weitas Roadless Area, anglers can use the trail to access the creek for fishing, but the roadless reaches also offer the

opportunity to get away from the busier fishing holes on the North Fork and Kelly Creek where anglers can easily access fishing sites from a road.

Alternatives

Weitas Creek was not identified as an eligible river in the 1987 Forest Plan for the Clearwater National Forest. However, the Forest Service did not undertake a systematic inventory of eligible rivers at that time as required by the 2012 Planning Rule. Under Alternative X, no eligible rivers or streams would be classified as suitable. Consequently, under both the No Action Alternative and Alternative X, Weitas Creek would not be managed according to interim protections for eligible rivers. Furthermore, a Forest Service decision that Weitas Creek is unsuitable for wild and scenic river designation would likely mean that Congress would not give any serious consideration to adding the stream to the National Wild and Scenic Rivers System. Without designation, Weitas Creek would remain available for dams, water diversions, and in-stream mining.

Under Alternatives W, Y, and Z, Weitas Creek would be classified as suitable for wild and scenic rivers designation. Weitas Creek would be managed according to plan components for suitable wild and scenic rivers, which would result in a higher level of administrative protection than the No Action Alternative. More importantly, Congress would be more likely to add Weitas Creek to the National Wild and Scenic Rivers System. Designation would protect the creek from dams and water diversions. Designated wild reaches would also be off-limits to mining. Designation of Weitas Creek in conjunction with the North Fork Clearwater River and potentially other tributaries would contribute to the integrity of the North Fork drainage through a systems approach. Classification would not curtail any forest management activities as the majority of the watershed is within the Bighorn-Weitas Roadless Area.

We encourage the Forest Service to classify Weitas Creek, the North Fork, Kelly Creek, and Cayuse Creek as suitable as part of a systems approach to protecting the integrity of the North Fork Drainage above Dworshak Reservoir.

Fish and Hungery Creeks

The planning team identified two ORVs associated with Fish and Hungery Creeks. The wildlife ORV applies to Fish Creek and its Harlequin duck population. As noted in the DEIS, Harlequin ducks are rare in Idaho (page F-121). Approximately 50 pairs of Harlequin ducks breed along a limited number of high-quality streams within the Priest River, Kootenai River, Clark Fork, Lake Pend Oreille, St. Joe River, Clearwater River, and the South Fork Snake River, and approximately 38 percent of the Harlequin duck observations within the State of Idaho occurred on the Nez Perce-Clearwater National Forests.

There is also a fish ORV that applies to both Fish and Hungery Creeks for its diversity, abundance, and natural reproduction of native salmonids. B-run steelhead return to Fish and Hungery Creeks to spawn. Both streams are designated as critical habitat for steelhead and bull trout. Other fish species include chinook salmon and westslope cutthroat trout. The habitat quality in Fish and Hungery Creeks is high, owing to the limited amount of human development.

We were surprised to see that the Forest Service did not identify a historical ORV for Fish and Hungery Creeks. As the Forest Service is aware, the Corps of Discovery (Lewis and Clark Expedition) traveled through Fish and Hungery Creeks during their journey to the Pacific Ocean. In fact, the name of Hungery Creek reflects their dire situation in the fall of 1803 as the Corps traveled through the drainage. While

adding a historical ORV likely wouldn't change administration of the river corridor, we thought we would at least raise this observation.

Alternatives

None of the eligible rivers and streams in the planning area would be classified as suitable for wild and scenic rivers designation under Alternative X. Alternative X was created in response to comments from state and local governments, who have asked the Forest Service to reject additional federal protections. The Idaho Department of Water Resources and county governments point to the Comprehensive Water Management Plans for the State of Idaho and the North Fork and South Fork Clearwater Subbasins, which they claim provide sufficient protection of eligible rivers and streams. Unfortunately, the State of Idaho has no legal authority to prevent the construction of dams on federal lands. Furthermore, the State of Idaho's generally philosophy toward water is to allocate water rights for consumptive uses. Under state law, water rights cannot be reserved for the purpose of ensuring in-stream flows for fish, ecological, or other non-consumptive values. Only the Wild and Scenic Rivers Act would provide the certainty that these streams would remain free-flowing.

Both Fish and Hungery Creeks would be classified as suitable under Alternatives W, Y, and Z. Plan components for suitable wild and scenic rivers would provide interim protection of ORVs to the extent allowed under the Forest Service's authority. Congress would be more likely to add Fish and Hungery Creeks to the National Wild and Scenic Rivers System if the two streams are classified as suitable. Designation would protect these streams from dams and water diversions. Wild reaches would also be off-limits to in-stream mining.

Another important consideration is whether to classify certain segments as recreational, scenic, or wild as provided by the Wild and Scenic Rivers Act. As presented in the DEIS, it looks like the Forest Service is proposing to classify the lower two-thirds or so of Hungery Creek as wild. The remainder of Hungery Creek and all but the first mile or so of Fish Creek would be classified as scenic. The first file of Fish Creek would be classified as recreational. While it is appropriate to classify river segments adjacent to roads as recreational or scenic, the Forest Service should consider classifying the roadless stretches of these streams as wild. As described in the Forest Service Handbook, wild segments are "[g]enerally inaccessible except by trail. No roads, railroads, or other provision for vehicular travel within the river area. A few existing roads leading to the boundary of the area are acceptable" (FSH 1909.12, page 15). The benefit of wild classification is that designated wild segments are off-limits to in-stream mining, which in the case of Fish and Hungery Creeks, may be a more significant threat than dams or diversions. In summary, we encourage the Forest Service to classify Fish and Hungery Creeks as suitable and roadless reaches as suitable wild segments.

Johns Creek

Identified ORVs for Johns Creek include scenery and fish. Johns Creek stands out from a scenic perspective because it flows through a deeply incised canyon (DEIS, page F-9). Distant views are available at certain vantage points.

Fish are listed as an ORV due to fish diversity, abundance, and habitat quality. Fish species include cutthroat trout, B-run steelhead, chinook salmon, and bull trout. Johns Creek is designated as critical habitat for steelhead and bull trout, which are listed under the Endangered Species Act. Spawning and early rearing habitat for wild B-run steelhead is limited within the region of comparison. The headwaters

of Johns Creek are included in the modeled 2040 climate shield for bull trout and westslope cutthroat trout (Isaak et al. 2015) with moderate probability.

Alternatives

Johns Creek would be classified as suitable for wild and scenic rivers designation under Alternatives W, Y, and Z. Plan components for suitable wild and scenic rivers would protect identified ORVs in the interim to the extent allowed under the Forest Service's authority. Congress would be more likely to add Johns Creek to the National Wild and Scenic Rivers System if the stream is classified as suitable for designation. Wild and scenic rivers designation would protect Johns Creek from dams and water diversions. If the river were designated as a wild segment as proposed under these alternatives, then an added benefit would be the protection of Johns Creek from in-stream mining.

None of the eligible rivers and streams in the planning area would be classified as suitable for wild and scenic rivers designation under Alternative X. Alternative X was created in response to comments from state and local governments, who have asked the Forest Service to reject additional federal protections. The Idaho Department of Water Resources and county governments point to the Comprehensive Water Management Plans for the State of Idaho and the North Fork and South Fork Clearwater Subbasins, which they claim provide sufficient protection of eligible rivers and streams. Unfortunately, the State of Idaho has no legal authority to prevent the construction of dams on federal lands. Furthermore, the State of Idaho's generally philosophy toward water is to allocate water rights for consumptive uses. Under state law, water rights cannot be reserved for the purpose of ensuring in-stream flows for fish, ecological, or other non-consumptive values. Only the Wild and Scenic Rivers Act would provide the certainty that Johns Creek would remain free-flowing.

We encourage the Forest Service to classify Johns Creek as suitable for wild and scenic rivers designation. Congress is more likely to add Johns Creek to the National Wild and Scenic Rivers System as a result. There is at least one potential dam site on Johns Creek (Heitz et al. 1980). As stated earlier, designation would serve to protect Johns Creek and its ORVs from dams and water diversions. The wild segment would also be off-limits to instream mining. Designation of Johns Creek in conjunction with the South Fork Clearwater River would contribute to the protection of the integrity of the South Fork subbasin through a systems approach. Existing laws and regulations at the federal, state, and local level do not ensure that Johns Creek will remain in a free-flowing condition. Therefore, designation would be advantageous.

Meadow Creek (tributary of the Selway River)

The planning team identified recreational, cultural, Nez Perce Tribe cultural, fish, and wildlife ORVs associated with Meadow Creek. The Meadow Creek National Recreation Trail is one of two National Recreation Trails in the planning area where the experience is closely tied to a waterway (DEIS, page F-12). This trail begins near the mouth of the stream and follows Meadow Creek upstream for many miles, past the Meadow Creek Guard Station. The Guard Station is part of the rental program, which is enjoyed by many members of the public.

There are a number of archaeological sites situated along Meadow Creek. In fact, the DEIS notes that the number of sites and the significance of this drainage from a cultural standpoint is unprecedented for a 5th order stream (page F-18). Thus, the Nez Perce Cultural ORV.

Fish abundance, diversity, reproduction and habitat quality are listed as an ORV. Native salmonids include bull trout, steelhead, chinook salmon, interior redband trout, and cutthroat trout. Meadow Creek is designated as critical habitat for steelhead and bull trout, which are listed under the Endangered Species Act. The steelhead are wild B-run fish that are critical to the overall population within the region of comparison, as there is no record that hatchery supplementation has ever occurred (DEIS, page 165). It is thus likely the population has high genetic integrity. Genetic analysis that has been conducted on westslope cutthroat trout in upper Meadow Creek indicates extremely high genetic diversity when compared to other populations within the region of comparison and across the range of the species. The westslope cutthroat trout population in higher elevation reaches exhibits high genetic integrity with no evidence of introgression. The absence of non-native fish species contributes to the significance of Meadow Creek and its native fisheries.

The wildlife ORV is a population of Selway forestsnail which inhabits the lower portions of Meadow Creek from the mouth upstream to approximately the confluence with Squirrel Creek (DEIS, page F-166). It is known to occur only at about a dozen sites across its entire range, including Meadow Creek, the Selway River, the South Fork Clearwater River, and the lower Salmon River and their tributaries.

Alternatives

Meadow Creek is one of the twenty-nine eligible rivers that are identified in the existing Forest Plans for the Clearwater and Nez Perce National Forests. Meadow Creek would be classified as suitable for wild and scenic rivers designation under Alternative W. Plan components for eligible and suitable wild and scenic rivers would protect identified ORVs in the interim to the extent allowed under the Forest Service's authority under both of these alternatives. Congress would be more likely to add Meadow Creek to the National Wild and Scenic Rivers System if the stream is classified as suitable for designation. Wild and scenic rivers designation would protect Meadow Creek from dams and water diversions. Wild segments would be off-limits to in-stream mining.

None of the eligible rivers and streams in the planning area would be classified as suitable for wild and scenic rivers designation under Alternative X. Alternative X was created in response to comments from state and local governments, who have asked the Forest Service to reject additional federal protections. The Idaho Department of Water Resources and county governments point to the Comprehensive Water Management Plans for the State of Idaho and the North Fork and South Fork Clearwater Subbasins, which they claim provide sufficient protection of eligible rivers and streams. Unfortunately, the State of Idaho has no legal authority to prevent the construction of dams on federal lands. Furthermore, the State of Idaho's generally philosophy toward water is to allocate water rights for consumptive uses. Under state law, water rights cannot be served for the purpose of ensuring in-stream flows for fish, ecological, or other non-consumptive values. Only the Wild and Scenic Rivers Act would provide the certainty that these streams would remain free-flowing.

We encourage the Forest Service to classify Meadow Creek as suitable for wild and scenic rivers designation as proposed under Alternative W. Congress is more likely to add Meadow Creek to the National Wild and Scenic Rivers System as a result. There are at least two potential dam sites on Meadow Creek (Heitz et al. 1980). As stated earlier, designation would serve to protect Meadow Creek and its ORVs from dams and water diversions. The wild segment would also be off-limits to instream mining. Designation of Meadow Creek would also contribute to the integrity of the Middle Fork

Clearwater River Basin through a systems approach because the Selway, Lochsa, and Middle Fork Clearwater Rivers are protected under the Wild and Scenic Rivers Act. Existing laws and regulations at the federal, state, and local level do not ensure that Meadow Creek will remain in a free-flowing condition. Therefore, designation would be advantageous.

Salmon River

As noted in the DEIS, a suitability study for the Salmon River was completed in 1973, which found the segment from Long Tom Bar to the confluence with the Snake River suitable for designation based on the river's scenic qualities (DEIS, page F-253). The planning team's evaluation of the segment of the river within the boundary of the Nez Perce-Clearwater National Forests affirms prior findings.

In addition to the Salmon River's scenic qualities, the planning team identified a recreation ORV. The Salmon River is popular for boating, fishing, and swimming. Boaters use a variety of watercraft to travel the river including kayaks, rafts, canoes, drift boats, and jet boats. Boaters use the river to enjoy the scenery, camp, and catch steelhead and salmon. There are a number of sites along the river that support these activities, including campgrounds and boat ramps. Steelhead fishing routinely draws numerous visitors from within and beyond the region of comparison from southwest Montana, Spokane, and Boise.

The planning team also identified a wildlife related ORV. There are four species of rare, endemic snails that occur in the river corridor and one freshwater mussel (DEIS, page F-254). Although the western ridged mussel occurs throughout the northwestern United States, the population is declining due to the degradation of water quality and quantity through impoundments, channel modification, reduced streamflow, contamination, sedimentation, nutrient enrichment, and thermal pollution.

Alternatives

The Salmon River is one of the twenty-nine eligible rivers that are identified in the existing Forest Plans for the Clearwater and Nez Perce National Forests, and the river was found suitable for designation as part of a congressionally mandated study process that culminated in 1973. Existing plan components for eligible and suitable wild and scenic rivers protect the river and its ORVs to the extent allowed under the Forest Service's authority. However, these plan components do not prevent the construction of impoundments or the diversion of water for consumptive uses.

None of the eligible rivers and streams in the planning area would be classified as suitable for wild and scenic rivers designation under Alternative X. Alternative X was created in response to comments from state and local governments, who have asked the Forest Service to reject additional federal protections. The Idaho Department of Water Resources and county governments point to the Comprehensive Water Management Plans, which they claim provide sufficient protection of eligible rivers and streams. Unfortunately, the State of Idaho has no legal authority to prevent the construction of dams on federal lands. Furthermore, the State of Idaho's generally philosophy toward water is to allocate water rights for consumptive uses. Under state law, water rights cannot be served for the purpose of ensuring in-stream flows for fish, ecological, or other non-consumptive values. Only the Wild and Scenic Rivers Act would provide the certainty that the Salmon River would remain free-flowing.

The Salmon River is the longest unimpounded river in the western United State with the exception of some rivers in Alaska. This is truly remarkable given our country's past history of building major

hydropower and storage facilities. As such, we encourage the Forest Service to classify this segment of the Salmon River as suitable for wild and scenic rivers designation, which would complement the existing designation that is upstream of this segment. Congress is more likely to add unprotected segments of the Salmon River to the National Wild and Scenic Rivers System if they are classified as suitable. As documented by Heitz et al. (1980), there are numerous potential dam sites on the Salmon River that, if ever built, would dramatically affect the river, its anadromous fish runs, and its existing recreational opportunities. It would be a terrible tragedy. As stated earlier, designation would protect the Salmon River and its ORVs from dams and water diversions. Existing laws and regulations at the federal, state, and local level do not ensure that unprotected segments will remain in a free-flowing condition. Therefore, we encourage the Forest Service to classify this segment of the Salmon River as suitable for designation.

Recreation

Recreation opportunity spectrum (ROS)

The ROS is often used for analysis purposes. It is less commonly used as a travel management tool as proposed in the Draft Forest Plan. Standard FW-STD-REC-01 states that "[r]ecreation facilities and trails shall be consistent with the recreation opportunity spectrum class designations and specialized plans (e.g., wilderness, recreation corridor, river management, scenic byway, and trail management plans)" (Draft Forest Plan, page 74). If the Nez Perce-Clearwater National Forests are going to use the ROS to designate areas for different types of recreational travel, then the planning team must ensure that the final ROS designations do not conflict with other management objectives. For example, the Forest Service should not designate areas for Semi-Primitive Motorized, Roaded Natural, or Rural ROS settings where there is a need to limit or restrict motorized use to meet wildlife habitat security objectives for grizzly bear, elk, wolverine, mountain goat, and other species that are impacted by motorized travel.

It is also essential that the ROS address mechanized travel (e.g. mountain bikes). Admittedly, the planning team has not ignored the issue. The definitions for Semi-Primitive Nonmotorized (SPNM) and Semi-Primitive Motorized (SPM) found in the DEIS (page 3.4.2-10) acknowledge that mountain bike use may occur in these settings. Unfortunately, the definition of the Primitive (P) ROS setting does not explicitly prohibit mountain bikes or mechanized travel, which is desirable in some locations. The definition should be modified to ensure that at least one of the ROS settings is off-limits to both motorized and mechanized travel. We suggest modifying the definition of the Primitive (P) ROS setting as follows:

> *This setting supports large, remote, wild, and predominantly unmodified landscapes. There is no motorized or mechanized activity and little probability of seeing other people. Primitive settings are managed for quiet solitude away from roads, people, and development. There are few, if any, facilities or developments. Most of the primitive settings coincide with designated wilderness boundaries and recommended wilderness areas.*

We also recommend modifying the definition for the Semi-Primitive Nonmotorized classification to make it clear that e-bikes are not present.

Summer ROS classifications

The summer ROS settings for Alternatives W and Y need to be corrected to reflect suitable uses of recommended wilderness areas under each of these alternatives. Draft management direction for Alternatives W and Y states that RWAs are not suitable for off-highway vehicle use or mechanized travel (Draft Forest Plan, page 105). Classification of RWAs as SPNM is in conflict with this direction because mountain biking is allowed in a SPNM setting. RWAs should be classified as Primitive instead of SPNM under Alternatives W and Y to correct this oversight.

The classification of RWAs as SPNM under Alternative Z accurately reflects draft management direction for this alternative, which would allow mountain bikes in RWAs but not off-highway vehicles. However, Rapid River is an important exception. As we pointed out earlier, the Hells Canyon National Recreation Act and its implementing regulations do not allow motorized or mechanized travel in Rapid River. As such, the Rapid River RWA should be classified as Primitive under all of the Alternatives.

We are also concerned that the ROS allocations for the Bighorn-Weitas Roadless Area under Alternative Y would negatively affect wildlife. The ROS classifications under Alternative Y reflect the requests of off-highway vehicles users to have even more trails designated for motorized use in the Bighorn-Weitas Roadless Area. We are concerned that designating more motorized trails in this roadless area would negatively affect elk, grizzly bears, and other wildlife. The Clearwater Travel Plan was approved in 2012, and off-highway vehicle users are trying to take another bite of the apple. We oppose additional motorized trails in roadless areas due to the effect that additional motorized trail designations would have on wildlife. We would, however, support new motorized trail designations in the western side of the Bighorn-Weitas Roadless Area if existing motorized trails in the east side of the roadless area are closed, specifically in and around Cayuse Creek.

The ROS classification of the West Meadow Creek Roadless Area is also of particular interest to us. Nearly all of the West Meadow Creek Roadless Area would be classified as Semi-Primitive Motorized under Alternatives W and Y. This classification would allow motorized trail use in West Meadow Creek. ICL and TWS have been deeply involved in the travel planning process for the Nez Perce National Forest since 2007. ICL and TWS worked with motorized users and the Forest Service to resolve objections to motorized trail use within the interior of Meadow Creek. Unfortunately, the Forest Service has yet to render a decision on the Nez Perce Travel Plan. We feel that it is important to uphold this resolution during the Forest Planning Process. The preferred approach is for the Forest Service to recommend East and West Meadow Creek for wilderness as delineated in Alternative Z and to prohibit non-conforming motorized and mechanized travel. If the Forest Service is not going to recommend East and West Meadow Creek for wilderness, then we request that these areas be classified as Primitive under the ROS. Our proposed summer ROS classifications are illustrated in Figure 3.

Winter ROS classifications

The winter ROS settings for Alternatives W and Y need to be corrected to reflect suitable uses of recommended wilderness areas under each of these alternatives. Draft management direction for Alternatives W and Y states that RWAs are not suitable for over-snow vehicle use or mechanized travel (Draft Forest Plan, page 105). Classification of RWAs as SPNM is in conflict with this direction because bicycles are allowed in a SPNM setting. While this may seem inconsequential, the use of “fat bikes”

(mountain bikes with fat tires for traveling over snow) is growing. RWAs should be classified as Primitive instead of SPNM under Alternatives W and Y to correct this inconsistency.

The Forest Service should also correct the winter ROS setting for Rapid River. The Hells Canyon National Recreation Act and its implementing regulations prohibit motorized and mechanized travel in Rapid River at all times of the year. Therefore, Rapid River should be classified as Primitive across all alternatives. Our proposed winter ROS classifications are illustrated in Figure 4.

Plan components for recreation

In addition to the narrative plan components for recreation found on pages 71-76 of the Draft Forest Plan, we encourage the Forest Service to include objectives for the completion of travel plans for both off-highway vehicle and over-snow vehicle use. The Nez Perce National Forest began a travel management process for off-highway vehicle use in 2007, but this process has been placed on hold until the Forest Plan is revised. Provided by direction from the Washington Office and relevant court cases, travel plans for off-highway vehicles and over-snow vehicles should have been completed several years ago. The Forest Service must be held accountable for completing travel management plans on the Nez Perce side of the Forest.

We would also like to see objectives for the installation of bear-resistant food storage lockers and sanitation dumpsters at developed campgrounds and work centers. As noted in our comments about grizzly bears, there have been at least three confirmed grizzly bear sightings within the plan area since 2007. The Nez Perce-Clearwater National Forests must take steps to reduce potential conflicts between forest users and grizzly bears as grizzly bears begin to recolonize the forest. Among other things, the Forest should install bear-resistant food storage lockers and sanitation dumpsters to minimize the potential for conflicts and improve public safety.

Another recreation issue that the Nez Perce-Clearwater National Forests need to address is the use of e-bikes. The Final Forest Plan should make it clear how e-bikes will be managed. Specifically, the Plan should define e-bikes as a class of motorized vehicles. E-bikes should not be allowed on non-motorized trails, and e-bikes should not be allowed in recommended wilderness areas, designated wild river segments, or suitable wild river segments.

Here are suggested plan components to address these recreation issues:

- ***Objective.*** *A travel management plan for off-highway vehicle use on the Nez Perce National Forest will be completed within three years of the Record of Decision for the Revised Forest Plan.*
- ***Objective.*** *A travel management plan for over-snow vehicle use on the Nez Perce National Forest will be completed within five years of the Record of Decision for the Revised Forest Plan.*
- ***Objective.*** *Bear-proof food storage lockers and sanitation dumpsters will be installed at all Forest Service campgrounds and work centers in the plan area within ten years of the Record of Decision for the Revised Forest Plan.*
- ***Standard.*** *E-bikes, which consist of bicycles with integrated electric motors that can be used for propulsion, are not allowed on trails designated for non-motorized use.*

Wildlife

Grizzly bear

We are aware of at least three confirmed occurrences of grizzly bears on the Nez Perce-Clearwater National Forests in the last thirteen years, two of which occurred in 2019. The first confirmed incident involved a male grizzly bear that was mistakenly shot by a black bear hunter in Kelly Creek in 2007. In 2019 a collared male traveled from the Cabinet Mountains to the Selway-Bitterroot Wilderness, then the bear returned back to the Cabinet Mountains to den for the winter of 2019-2020. A photo of a third grizzly bear was captured on a wildlife camera in Newsome Creek in the fall of 2019. Given these occurrences, it was proper to prepare an effects analysis for grizzly bear.

For an effects indicator, the Forest Service calculated motorized route densities (including open roads and motorized trails) for the North Fork and Lochsa HUC 08 watersheds. The DEIS notes that motorized route densities were not calculated at the bear management unit (BMU) scale because there are no BMUs delineated on the forest (DEIS, page 3.2.3.3 - 84). While it is true that there are no designated BMUs on the Nez Perce-Clearwater National Forests, calculating motorized route densities at the HUC 8 scale produces results that apply to vast areas. At this scale, areas of high motorized route densities are effectively diluted by areas of low motorized route densities or areas with no motorized routes at all.

Furthermore, the best available science regarding the effects of motorized access to grizzly bears are not applied at a HUC 8 scale. Limits on motorized access are applied at a scale that is equivalent to the average home range size of a female grizzly bear. Site-specific project effects analyses are also performed at this scale. Consequently, there is virtually no utility in calculating motorized route densities at the HUC 8 scale and then attempting to draw conclusions about the effects of those densities to grizzly bears.

While there are no BMUs delineated on the Nez Perce-Clearwater National Forests, we believe that it is reasonable to delineate them now because the Bitterroot Recovery Zone will likely be declared 'occupied' during the life of the plan. BMUs are approximately equivalent to the average home range size of a female grizzly bear. Because grizzly bears were extirpated from central Idaho decades ago, there have been no studies conducted to determine an average home range size for the planning area. Nevertheless, we believe that it is reasonable to assume that the habitat on the Nez Perce-Clearwater National Forests is similar to the Selkirk and Cabinet-Yaak Ecosystems, where the average home range size is approximately 100 square miles (USDA, Forest Service 2011a). Operating under this assumption, the Forest Service should delineate BMUs of this size in the planning area and calculate values for open motorized route densities (OMRD), total motorized route densities (TMRD), and core habitat. OMRD includes all open roads and motorized trails. TMRD includes open roads and motorized trails, restricted roads, and roads that are due to be reclaimed but which have not. Core habitat is defined as an area of secure habitat that is at least 500 meters away from an open motorized road or trail. The Forest Service uses a 'moving windows' analysis process to calculate these values at the BMU scale (USDA, Forest Service 2020). In the FEIS, values for OMRD, TMRD, and core habitat for each BMU should be compared to research recommended levels:

1. OMRD greater than 1 mile/square mile must comprise 33 percent or less of the BMU;
2. TMRD greater than 2 miles /square mile must comprise 26 percent or less of the BMU; and
3. Core habitat must comprise at least 55 percent of the BMU.

(Wakkinen and Kasworm 1997).

The location and distribution of BMUs within the planning area is critical. The Bitterroot Recovery Area is almost exclusively designated as wilderness where there is essentially no motorized access. It is much more critical to consider delineation of BMUs adjacent to the recovery zone as well as in locations that provide connectivity between the Bitterroot Recovery Zone and other recovery zones. Without adequate effective grizzly bear habitat in the locations between recovery zones, natural recolonization of the Bitterroot Recovery Zone will be impeded or slowed.

The Draft Forest Plan contains no plan components for grizzly bear. Although the planning area is currently considered 'unoccupied' relative to the Grizzly Bear Recovery Plan criteria (USDI, Fish and Wildlife Service 1993), it is reasonable to expect that the criteria will be triggered during the life of the plan, given increasing occurrences of grizzly bears in the plan area. Consequently, we believe that the Forest Service should include plan components for grizzly bear while the Nez Perce-Clearwater National Forests are in the process of revision. We also believe that the 2012 planning rule necessitates it:

> *The responsible official shall determine whether or not the [ecosystem plan components] provide the ecological conditions necessary to: contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, and maintain a viable population of each species of conservation concern within the plan area. If the responsible official determines that the [ecosystem plan components] are insufficient to provide such ecological conditions, then additional, species-specific plan components, including standards or guidelines, must be included in the plan to provide such ecological conditions in the plan area.*

36 CFR 219.9(b)(1).

Grizzly bears are habitat generalists. Grizzlies occupy low elevation riparian areas, snow chutes, meadows, and big game winter ranges in the spring and late fall, and they move up to higher sub-alpine forests in the summer, early fall, and winter (Kasworm et al. 2009, Mace et al. 1996). Natural caves or excavated dens are used for hibernation after the first snowfall and occupied for four to five months. A majority of their diet is composed of vegetation (forbs, sedges, grasses, roots, berries, pine nuts), but also includes fish, rodents, insects, ungulates and carrion. Habitat is generally dictated by food availability and distribution, as well as security from human disturbance and mortality. Because grizzly bears have large home ranges, large areas of habitat are required.

Because grizzly bears are habitat generalists, one might imagine that the ecosystem plan components envisioned by 36 CFR 219.9(a) would be sufficient to provide for the needs of grizzly bears across the plan area. However, as the Grizzly Bear Recovery Plan notes, effective habitat is a reflection of an area's ability to support grizzly bears based on the quality of the habitat and the type and amount of human disturbance imposed on it. Security habitat allows for sufficient space for grizzly bears to roam and effectively use available habitats. By definition, security habitat is an area or space outside or beyond the influence of high levels of human activity. Open roads, vegetation and fuel projects, and high-use recreational areas such as trails or campgrounds are examples of activities that reduce the amount of secure habitat that is available and may result in displacement of bears.

In summary, the available science would suggest that it is not enough to rely on ecosystem plan components to provide for grizzly bears in the plan area. Species-specific plan components are needed

to address the effects of motor vehicle access to grizzly bears. Specifically, we believe that the Nez Perce-Clearwater National Forests should delineate BMUs and assign standards for core habitat, TMRD, and OMRD. BMUs should be delineated in locations that provide connectivity between the Bitterroot Recovery Zone and other recovery zones as well as in key peripheral areas. BMUs should be approximately 100 square miles in size (64,000 acres) and should align with watershed boundaries or other natural features where possible. Related narrative plan components should include the following:

- ***Desired condition.*** *Human-caused disturbances do not affect species such as mountain goat, wolverine, and grizzly bear at a frequency or scale that prevents wildlife populations from attaining desired distribution and abundance in the planning area.*
- ***Desired condition.*** *Recovery of grizzly bear in the Bitterroot Recovery Zone occurs through natural recolonization. Motorized access is managed in bear management units (BMUs) outside the recovery zone to facilitate movement of grizzly bears between the Bitterroot Recovery Zone and other recovery zones.*
- ***Desired condition.*** *Conflicts between grizzly bears and people are minimized through proper storage of food and other wildlife attractants, proper sanitation and increased public education and awareness.*
- ***Objective.*** *Within two years of the record of decision, the Nez Perce-Clearwater National Forest will adopt a forest-wide order that describes acceptable methods for storing food and other wildlife attractants on public lands administered by the forest.*
- ***Objective.*** *Bear-proof food storage lockers and sanitation dumpsters will be installed at all Forest Service campgrounds and work centers in the plan area within ten years of the Record of Decision for the Revised Forest Plan.*
- ***Standard.*** *Open motorized road and trail densities greater than 1 mile per square mile must comprise no more than 33 percent of each BMU.*
- ***Standard.*** *Total motorized road and trail densities greater than 2 miles per square mile must comprise no more than 26 percent of each BMU. Total motorized road and trail densities include open roads, motorized trails, restricted roads, and roads that are scheduled for reclamation but which have not yet been fully reclaimed.*
- ***Standard.*** *Core habitat, defined as areas of secure habitat that are at least 500 meters from an open motorized road or trail, comprise at least 55 percent of each BMU.*
- ***Standard.*** *Over-snow vehicle use is prohibited in core habitat from April 1st to June 15th.*
- ***Guideline.*** *Management activities should avoid or minimize disturbance in areas of predicted denning habitat during spring emergence (April 1 through May 1).*

Wolverine

For the wolverine effects analysis, the Forest Service utilized a composite habitat model created by Idaho Fish and Game (2014). The composite is a merger of models authored by Copeland et al (2010) and Inman et al (2012). The model by Copeland et al. used coarse-scale satellite data collected over a seven-year time period from 2000 to 2006 to classify areas of persistent spring snow in the northern hemisphere. Each pixel within the model is classified according to the number of years during the seven-year period where spring snow cover persisted until May 15th, which encompasses the end of the wolverine denning season. They found that wolverine dens in Scandinavia were most likely to be located in areas where spring snow persisted through May 15th in at least five years during the seven-year period.

The model created by Inman et al. (2012) is a finer-scale model for the western United States. They delineated areas predicted to be maternal wolverine habitat suitable for use by reproductive females, primary wolverine habitat suitable for survival and use by resident adults, female dispersal habitat suitable for relatively brief female dispersal movements, and male dispersal habitat suitable for relatively brief male dispersal movements. This model is based on a resource selection function developed with wolverine telemetry locations from 2001 to 2010 in the Yellowstone area.

The area modeled by Inman et al. (2012) as providing primary habitat encompasses a broader range of high elevation areas on the Nez Perce-Clearwater National Forests. In contrast, the areas modeled by Copeland et al (2010) as having persistent spring snow in at least five years out of seven, which are most associated with denning, are limited to only the highest elevations along the Idaho-Montana border, the Gospel-Hump Wilderness, and the Selway-Bitterroot Wilderness. The areas of persistent spring snow modeled by Copeland et al are within the primary wolverine habitat modeled by Inman et al, which in turn is within the dispersal habitat modeled by Inman et al.

The composite model identifies about 1,832,393 acres of wolverine habitat on the Nez Perce-Clearwater National Forests (DEIS, page 3.2.3.3 - 66). Approximately 39.6 percent of the modeled wolverine habitat on the forest occurs in designated wilderness areas, and another 42.3 percent occurs in Idaho Roadless Areas (DEIS, page 3.2.3.3 - 65).

Table 18 lists recommended wilderness areas by alternative and the amount of wolverine habitat within each area (DEIS, page 3.2.3.3 - 66). If recommended for wilderness under Alternative W, the Bighorn-Weitas Roadless Area would encompass the most wolverine habitat (147,618 acres), followed by the "Great Burn" or Hoodoo Roadless Area (127,267 acres), and the Mallard-Larkins Roadless Area (55,187 acres), all of which are on the Clearwater side of the forest.

As noted earlier, the wolverine habitat identified in the composite model includes a much broader range of habitat types and elevations than the maternal denning habitat identified by Copeland et al (2010). The much more limited distribution of maternal denning habitat on the forest is evident in Table 22 (DEIS, page 3.2.3.3 - 72), which lists recommended wilderness areas by alternative. While the Bighorn-Weitas Roadless Area encompasses the most overall wolverine habitat (see Table 18), the "Great Burn" or Hoodoo Roadless Area encompasses the most maternal denning habitat by far (35,727 acres). In comparison, all of the other potential recommended wilderness areas encompass a combined total of 22,853 acres of maternal denning habitat, and no single area other than the Great Burn encompasses more than 6,800 acres of maternal denning habitat.

The DEIS also includes a discussion about wolverine habitat connectivity. Both Idaho Fish and Game (2014) and Schwartz et al. (2009) identify areas on the Nez Perce-Clearwater National Forests that are important for wolverine habitat connectivity and gene flow. The most important areas for connectivity in the plan area are along the Idaho-Montana border, including the "Great Burn" or Hoodoo Roadless Area, Meadow Creek-Upper North Fork Roadless Area, and Rawhide Roadless Area (DEIS, page 3.2.3.3 - 70). Other areas that are important for connectivity are along the ridges above the Salmon River between Sabe Creek and MacKay Bar, which are in designated wilderness areas.

The Forest Service likely chose to quantify acres of wolverine habitat in roadless areas and potential recommended wilderness areas because depending on how these areas are managed, human

disturbance of wolverines could be minimized. Recent research suggests that winter recreational activities displace wolverines and result in indirect loss of habitat. For example, over six winters (2010–2015) and four study areas in Idaho, Wyoming, and Montana, Heinemeyer et al. (2019) studied the responses of wolverines to backcountry winter recreation. They fitted GPS collars to 24 individual wolverines and acquired more than 54,000 GPS locations over 39 animal-years during winter (January–April). Simultaneously, they monitored winter recreation, collecting approximately 6,000 GPS tracks from over-snow vehicle users and backcountry skiers within the study areas. Wolverine and backcountry recreation data were integrated to assess patterns of wolverine habitat selection and evaluate the effect of backcountry recreation on wolverine habitat relationships. Heinemeyer at al. found that wolverines avoided areas of both motorized and non-motorized winter recreation with off-road recreation eliciting a stronger response than road-based recreation. Moreover, female wolverines exhibited stronger avoidance of off-road motorized recreation and experienced higher indirect habitat loss than male wolverines. They also speculated that the potential for winter reaction to affect wolverines may increase under climate change as reduced snowpack concentrates wolverines and winter recreationists into smaller and smaller areas of persistent snow cover. The Forest Service notes, and we agree, that "[t]hese findings suggest that the amount of female wolverine denning habitat affected by the alternatives could have meaningful consequences to the conservation of the wolverine on the Nez Perce-Clearwater." (DEIS, page 3.2.3.3 - 71).

The Forest Service utilized remote-sensing techniques described by Olson et al. (2017), including topography, vegetation, climate, and road access to model potential winter recreation use areas on the Nez Perce-Clearwater National Forests. Planning team staff then met with other Forest Service personnel with knowledge of over-snow vehicle use areas and representatives of over-snow vehicle users to validate the model. Areas identified in the model apparently align well with areas that are actually used by over-snow vehicle users. Areas that had a higher probability of over-snow vehicle use in modeled wolverine habitat include the Great Burn and areas near the Gospel-Hump Wilderness. Indeed, illegal over-snow vehicle use in the Great Burn is an on-going problem. Most other areas had a low probability of use by snowmobilers. The model did not include motorized snow-bikes, which are more powerful and versatile than traditional snowmobiles, and these vehicles are growing in popularity.

Given the wolverines' candidacy for listing under the Endangered Species Act, we are discouraged to find that there are no species-specific plan components to ensure the continued persistence of wolverine in the plan area. In explaining the decision not to adopt plan components for wolverine, the Nez Perce-Clearwater National Forests state:

> *Coarse-filter plan components provide for habitat diversity that benefits wolverines...Most of the wolverine habitat already falls within either designated wilderness or Idaho Roadless Rule areas. Alternatives affect the amount of recommended wilderness and the uses allowed within recommended wilderness, which can affect the amount of wolverine habitat that would be affected by a number of activities common on Forest Service lands.*

(DEIS, pages 3.2.3.3 - 64 and - 65).

The Forest Service goes on to add:

> *The Nez Perce-Clearwater does not anticipate substantial changes to wolverine maternal or natal denning habitat over the anticipated life of the plan but, if conditions change in the future, or if research or monitoring indicates there is a need to address specific threats that are within Forest Service authority or capability to manage, the forest plan may be amended or revised in the future if necessary.*

(DEIS, page 3.2.3.3 - 75).

We find the explanation for the lack of plan components for wolverine unmoving. First of all, we believe that the Forest Service downplays the significance of habitat loss due to climate change. McKelvey et al. (2011) predict that sometime between 2030 and 2059 suitable wolverine habitat in the contiguous U.S. will decrease by 31 percent, and during that same timeframe suitable wolverine habitat in Idaho will decrease by 43 percent. They also estimate that sometime between 2070 and 2099 suitable wolverine habitat in the contiguous U.S. and Idaho will decrease by 63 percent and 78 percent respectively. As Heinemeyer at al. (2019) speculate, the projected effects of climate change will likely confine wolverines and winter recreationists to smaller and smaller areas of persistent snow pack. Consequently, we can likely expect the loss of maternal habitat due to climate change to be further compounded by indirect habitat loss due to winter recreation.

As noted in available scientific research and the DEIS, persistent snow is the single greatest predictor of wolverine habitat. Given this observation, one would reasonably conclude that the ecosystem plan components envisioned in the 2012 Planning Rule would provide the ecological conditions that are necessary to ensure the persistence of wolverine across the plan area. However, one must also consider that the primary threats to the species are not controlled, influenced, or mitigated by ecosystem plan components. Instead, the combination of the projected effects of climate change and indirect habitat loss due to winter recreation demands species-specific plan components for wolverine. Without species-specific plan components for wolverine, we can expect winter recreational activities (primarily over-snow vehicle use) to result in the indirect loss of habitat across increasingly smaller and smaller areas of persistent snow. This would be particularly problematic in maternal denning habitat, but also in connective corridors like the Bitterroot Mountains, which in this case, is the only corridor linking wolverine habitat in central Idaho to wolverine habitat along the Continental Divide in Montana.

The Forest Service has two options to ensure the persistence of wolverine across the planning area. One option is to recommend wilderness designation for roadless areas that encompass maternal denning habitat and connecting corridors. This approach will only benefit wolverines if recommended wilderness areas are off-limits to over-snow vehicle use. A second option is to adopt plan components that limit indirect loss of maternal denning habitat through prohibitions or restrictions on winter recreation activities in maternal denning habitat. Here are some possible plan components to address this issue:

- ***Desired condition.*** *Human-caused disturbances do not affect species such as mountain goat, wolverine, and grizzly bear at a frequency or scale that prevents wildlife populations from attaining desired distribution and abundance in the planning area.*
- ***Desired condition.*** *Winter recreation activities are managed to avoid or minimize indirect loss of wolverine maternal denning habitat. Wolverine habitat connectivity along the Bitterroot Divide is maintained to ensure genetic interchange with neighboring populations.*

- ***Standard.*** *Over-snow vehicle use is prohibited in wolverine maternal denning habitat from February 15th to May 15th.*
- ***Guideline.*** *Winter recreation activities along the Bitterroot Divide should be limited to designated routes to minimize displacement of wolverines.*

Lynx

We are pleased to see that the Northern Rockies Lynx Management Direction (NRLMD) is incorporated into the Draft Forest Plan by reference. The effects analysis for lynx, however, should be updated to address one critical gap. Guideline HU G11 requires that:

> *Designated over-the-snow routes or designated play areas should not expand outside baseline areas of consistent snow compaction, unless designation serves to consolidate use and improve lynx habitat. This may be calculated on [a lynx analysis unit ("LAU")] basis, or on a combination of immediately adjacent LAUs.*

(NRLMD Record of Decision, Attachment 1, page 7).

"Areas of consistent snow compaction" are defined as:

> *An area of consistent snow compaction is an area of land or water that during winter is generally covered with snow and gets enough human use that individual tracks are indistinguishable. In such places, compacted snow is evident most of the time, except immediately after (within 48 hours) snowfall. These can be areas or linear routes, and are generally found in or near snowmobile or cross-country ski routes, in adjacent openings, parks and meadows, near ski huts or plowed roads, or in winter parking areas. Areas of consistent snow compaction will be determined based on the acreage or miles used during the period 1998 to 2000.*

(NRLMD Record of Decision, Attachment 1, page 10).

There are just a couple of references to Guideline HU G11 in the DEIS. On page 3.2.3.3 - 10 the Forest Service simply acknowledges that it exists. Then on page 3.2.3.3 - 20 the guideline is quoted in full. There is a brief discussion about the Clearwater Travel Plan. The Forest Service notes that when the Record of Decision for the Clearwater Travel Plan was signed in 2012 "there were 115 miles of groomed over-snow vehicle baseline routes in lynx habitat within the Clearwater side of the Forest and no additional groomed routes were proposed in lynx habitat." Without any further discussion or analysis, the Forest Service concludes that the Clearwater Winter Travel Plan complies with Guideline HU G11. The DEIS also notes that the Forest Service has never prepared a winter travel plan for the Nez Perce National Forest, and all of the lands on the Nez Perce National Forest outside of designated wilderness are open to snowmobiles.

In establishing the baseline areas of consistent snow compaction, the Nez Perce-Clearwater National Forests are required to:

> *Map the location and intensity of snow compacting activities and designated and groomed routes that occurred inside LAUs during the period of 1998 to 2000. The mapping is to be completed within one year of [the Record of Decision for the Northern Rockies Lynx Management*

> *Direction], and changes in activities and routes are to be monitored every five years after the decision.*

(NRLMD Record of Decision, Attachment 1, page 9).

It's not clear that the Nez Perce-Clearwater National Forests have ever mapped baseline areas of consistent snow compaction as required by the NRLMD Record of Decision. Furthermore, the Forest Service is cutting corners by concluding that the Forest Plan complies with Guideline HU G11 because of the Record of Decision for the Clearwater Travel Plan. First of all, having been approved in 2012, the Clearwater Travel Plan may not represent the baseline years (1998-2000) specified in the NRLMD Record of Decision. Secondly, depending on the selection of the final alternative, it is possible that the Forest Service will open areas to over-snow vehicle use. Any decision to expand over-snow vehicle use on the forest will require a comparison of the alternatives to the baseline areas of consistent snow compaction mapped between the years 1998 and 2000. The FEIS must disclose the baseline areas of consistent snow compaction mapped between the years 1998 and 2000, compare the amount of over-snow vehicle use allowed under each alternative to the 1998-2000 baseline, and then describe if the alternatives comply with Guideline HU G11.

Bighorn sheep

Grazing of domestic sheep

Bighorn sheep are a uniquely iconic western species. It has been said that bighorn sheep personify the rugged character of the Rocky Mountains. Rocky Mountain bighorn sheep (bighorn sheep) were historically abundant throughout the State of Idaho (Smith 1954, Toweill and Geist 1999). Bighorn sheep populations in Idaho began to decline precipitously in the late 1800s. With the exception of the Salmon River herds, bighorns were extirpated from the remainder of Idaho by the 1940s (Smith 1954, Toweill and Geist 1999). One of the primary reasons for this dramatic statewide decline is attributed to disease transmission from domestic to bighorn sheep (Smith 1954, Toweill and Geist 1999, Hells Canyon Bighorn Sheep Restoration Committee 2005). Today, the state-wide bighorn sheep population is only a fraction of what once existed. Exposure to domestic sheep has nearly completely wiped out Idaho's bighorn sheep population.

The Draft Forest Plan contains the following standard:

> ***FW-STD-WL-02.*** *In order to prevent disease transmission between wild and domestic sheep, domestic sheep or goat grazing shall not be authorized in or within 16 miles of bighorn sheep occupied core herd home ranges.*

(Draft Forest Plan, page 64).

There is an extensive discussion of bighorn sheep populations and the work done by the agency to assess the various risks to bighorns in the planning area (DEIS, pages 3.2.3.4-11 through 2.3.3.4-13). The discussion closes with two actions proposed to address the threats to the lower Salmon River bighorn sheep populations – the currently vacant former domestic sheep allotment (the Allison Berg Allotment) located within the heart of the Lower Salmon River bighorn sheep home range area is proposed to be deemed unsuitable for sheep grazing and closed under the forest plan, and the adoption of a standard

that any new sheep allotments initiated under the forest plan within 16 miles of core bighorn herd home ranges be disallowed. Both these actions should be adopted in the final forest plan for the NPCF.

The adequacy of the existing core bighorn home ranges identified in the draft plan should be reviewed on an annual basis. With good fortune, bighorn populations will someday begin to rebound and expand from the ravages of diseases transmitted by domestic sheep. An annual review by the agency of the core home ranges will head off and resolve any conflicts that might arise as the bighorn population hopefully starts to recover. Core home ranges identified now may not be adequate as bighorns pioneer and expand into former occupied habitat.

The discussion on bighorn sheep does not adequately address the threat to bighorns posed by recreational pack goat use. Those concerns are addressed in the following section.

Use of recreational pack goats

The DEIS correctly notes that one of the most important factors for the persistence of bighorn sheep is countering the threat from disease transmission from domestic sheep (DEIS, page 3.2.3.2-82). However domestic sheep are only one vector for fatal disease transmission to bighorns. Domestic goats also transmit fatal diseases to bighorns, and any final management plan for the NPCNF needs to provide strict standards that eliminate the risk of disease transmission from domestic goats such as pack goats to bighorns.

Draft Forest Plan components for bighorn sheep state:

> ***FW-STD-WL-02.*** *In order to prevent disease transmission between wild and domestic sheep, domestic sheep or goat grazing shall not be authorized in or within 16 miles of bighorn sheep occupied core herd home ranges.*
>
> ***FW-GDL-WL-05.*** *New authorizations and permit reauthorizations for domestic goat packing should include provisions to prevent disease transmission between domestic goats and bighorn sheep.*

While standard FW-STD-WL-02 is a good step towards preventing disease transmission from grazing domestic sheep and goats to bighorn, guideline FW-GDL-WL-05 is inadequate to protect bighorns from disease-carrying pack goats. The undefined "provisions to prevent disease transmission" provide no meaningful protection for bighorns. At the very least, pack goat use should not be authorized in or within 16 miles of bighorn sheep occupied core herd home ranges.

There is precedent in Idaho for area closures to pack goat use to protect bighorns. The *Owyhee Canyonlands Wilderness and Wild and Scenic Rivers Management Plan and Environmental Assessment*, Bureau of Land Management, April 2015, states:

> *Goats are not permitted as pack stock and domestic sheep grazing is prohibited in the wilderness areas to reduce the potential for disease transmission to bighorn sheep populations.*

(page 59).

The risk of disease transmission from pack goats to bighorns is too significant to rely solely on the implementation of undefined "provisions," often eventually dubbed best management practices,

particularly when the Forest Service itself has provided no documentation of their effectiveness to prevent disease transmission from pack goats to bighorns.

The risk of disease transmission from goats to bighorn sheep was recently documented in the *Risk of Disease Transmission between Domestic Sheep and Goats and Rocky Mountain Bighorn Sheep,* Shoshone National Forest, April 6, 2017. This analysis provided extensive coverage of the risk that pack goats pose to bighorn populations. Key findings from this analysis:

> *…the susceptibility of bighorn sheep to population declines or extirpation due to respiratory diseases, which can be transmitted by domestic sheep or goats… is the greatest concern.*

(page 1).

> *…in order to maintain viable populations of bighorn sheep…there must be sufficient habitat where there is not a substantial risk for disease transmission from domestic sheep and goats. In effect, areas of domestic sheep and goat use can create 'sink' habitats – habitats that are otherwise suitable for bighorn sheep but in which bighorn sheep populations may be subject to disease transmission from domestics. In addition, once disease is introduced into bighorn sheep populations, they can transmit these diseases to other wild sheep populations.*

(page 1).

> *The central role of domestic sheep and goats in bighorn sheep exposure to pathogens is well documented; pathogen transmission from domestics to bighorn sheep is the only supported hypothesis in experimental trials. The literature includes both circumstantial evidence linking bighorn die-offs in the wild to contact with domestic animals, and controlled experiments where healthy bighorn sheep exposed to domestic sheep and goats subsequently displayed high mortality rates.*

(page 6).

> *Bighorn sheep and domestic sheep and goats are attracted to each other, particularly during rut, which increases the probability that they will make the close contact necessary for disease transmission.*

(page 6).

> *…domestic sheep and goats carry different suites of pathogens. As a result, any time contact occurs between domestics and bighorn sheep populations, the potential for transmission of novel agents to native bighorns exists.*

(page 6).

> *…there is an abundance of…evidence that leads to a reasonable conclusion that domestic goats are a vector (of infectious pathogens). Domestic goats are physiologically capable of carrying and spreading several of the bacteria that are implicated in wild sheep die-offs. Domestic goats may approach bighorn sheep as stray animals from…supporting back-country recreation.*

(page 8).

> *The literature that does exist indicates a connection between contact between domestic goats and bighorn sheep and disease transmission. For example, the cause of a bighorn die-off in the winter of 1995-96 in Hells Canyon was traced by DNA fingerprinting to a domestic goat that had been recently released in the wild…The subsequent die-off resulted in the death of more than 260 bighorn sheep in an 8-week period. The disease spread more than 30 air miles and affected six bighorn sheep herds.*

(page 8).

> *…the introduction of a new genotype of (pneumonia) into a chronically infected bighorn sheep population in Hells Canyon was accompanied by adult morbidity (100%) and pneumonia-induced mortality (33%) …[A]nalysis showed that the strain associated with the outbreak was likely of domestic goat origin. The lack of cross-strain immunity in the face of recurrent spillovers from reservoir hosts may account for a significant proportion of the disease outbreaks in bighorn sheep that continue to happen regularly despite a century of exposure to domestic sheep and goats.*

(page 9).

> *Domestic goats can also carry other disease organisms with serious consequences for bighorn sheep…The Silver Bell bighorn herd in Arizona was infected with keratoconjunctivitis…a highly contagious eye infection common in domestic sheep and goats.*

(page 9).

> *…lungworms from co-pastured domestic goats infected bighorn sheep. Lungworm larvae deposited in animal feces are hosted by several species of land snails and remain in the snail until accidently ingested by bighorn sheep. Lungworms inhabit the air passages of the lungs and can make wild sheep more susceptible to bacterial pneumonia…Bighorn sheep that occupy habitat with domestic goats are at potential risk of acquiring (lungworm) infections, thus increasing the potential risk of pneumonia.*

(page 9).

> *When bighorn sheep experience a pneumonia episode, all-age die-off normally occurs…As a result, full population recovery following a die-off may require decades. Loss of genetic diversity and herd memory of historical migration routes may be irreplaceable.*

(page 10).

> *Bighorn sheep make occasional long-distance exploratory movements beyond their core home ranges…called forays…this life-history trait places bighorn sheep at risk for contact with domestic sheep and goats…The foray behavior of wild sheep where individuals can travel up to 50 km facilitates the spread of disease…for other animals in the same herd or other populations through natural movements.*

(page 11).

> *On November 14, 2011 a temporary area closure order was signed and implemented restricting domestic goat use on the Clarks Fork, Wapiti, Greybull and Wind River Ranger Districts…This closure was implemented to reduce the risk of disease transmission from pack goats to core native bighorn herds. The pack goat closure order was issued again in June 2016 and will remain in effect until December 31, 2019.*

(page 12).

> *…the most effective means of reducing the risk of disease transmission is to minimize the potential for contact through effective separation (of domestics and bighorns).*

(page 29).

In its risk analysis, the Shoshone National Forest found that in several of the forest's bighorn sheep herds, the risk of contact was "High" if pack goats were allowed in native bighorn sheep populations, putting bighorn at risk of disease infection. If pack goats were prohibited, there would be a "Low" risk of contact and reduced risk of disease transmission.

In its risk of contact analysis, the Shoshone National Forest evaluated certain best management practices offered regarding the management of pack goats in bighorn habitat. Potential deficiencies in the practices were identified:

> *…pack goat users may be disinclined to report contact between their goats and bighorn sheep, or even lost goats, for fear of incurring additional restrictions on their use.*

(page 30).

> *…users may not always be able to control their pack goats despite implementation of (suggested practices). Pack goat use occurs in remote, rugged settings where circumstances cannot always be controlled, and pack goats occasionally are lost for a variety of reasons…Even conscientious pack goat users may not always be successful controlling their goats…It is perceived as dangerous to have goats tied together by leads when traveling through difficult terrain and users typically disconnect them from each other in such settings. Uncontrolled or lost goats within bighorn sheep habitat could have direct contact with bighorn sheep.*

(page 30).

> *In addition, the movements of bighorn sheep cannot be controlled. Wild sheep are unpredictable in their movements and have been shown to travel great distances, which can bring them into contact with pack goats as well as other wild sheep. Bighorn sheep and domestic sheep and goats are attracted to each other, particularly during rut, which increases the probability that they will make the close contact necessary for disease transmission. This could occur even under a scenario where pack goats were under close control…*

(page30).

> *To be effective, these measures (or best management practices) would depend on the diligence of the pack goat user…If mitigation measures are perceived by pack goat users as restrictive and difficult to implement…noncompliance with them could be substantial. Compliance checks by the*

> *Forest Service would be infrequent due to the very remote and rugged environments that goat packing takes place in.*

(page 30).

> *…without a pack goat closure order, the likelihood of direct contact and risk of disease transmission as a result of pack goat activities is High for all bighorn sheep herds on the (Shoshone National Forest).*

(page 32).

> *It is important that separation of (domestic sheep, goats, and bighorns) is maintained at all times…*

(page 32).

> *…the majority of literature supports the potential for disease transmission between the species, documents bighorn die-offs near domestic sheep and goats, and supports the management option of keeping these species separate to prevent disease transmission.*

(page 33).

> *The natural behavioral attraction between the species also makes it more likely that straying domestic sheep or goats may seek out and comingle with bighorn sheep. For this reason, straying domestic sheep or goats increase the likelihood of physical contact occurring between the species…Overall…the effect of mutual attraction likely results in increased potential for physical contact between the species…*

(page 34).

Simply relying on undefined "provisions" or subsequent best management practices as the only way to keep pack goats away from bighorns is not defensible. Geographic separation is the most reliable way to protect bighorns from disease transmission. A letter from Dr. Ben Gonzales, California Department of Fish and Game, to the Payette National Forest addresses the use of best management practices and found them ineffective to ensure separation between sheep and bighorns:

> *We know enough now (about disease transmission) to take the necessary action: that is to provide geographic separation between domestic sheep grazing and bighorn habitat. Half measures like fencing, temporal separation, and the use of guard dogs to chase bighorns away from domestic sheep herds will always leave open the risk for devastating disease outbreaks in bighorn sheep…Geographic separation of domestic sheep grazing allotments and bighorn habitat is the only effective method of prevention of these devastating bighorn mortality events.*

The effectiveness of best management practices was dismissed in the*Western Watersheds* case *4:09-cv-00507-BLW, Memorandum Decision and Order*. That decision cited conclusions by wildlife experts from the Nez Perce Tribe and Oregon Department of Fish and Wildlife experts that such best management practices would not be effective in keeping bighorn sheep and domestics separate. Similarly, the Forest Service itself concluded that best management practices would be unlikely to keep bighorns and domestics separate.

In his declaration in *Idaho Woolgrowers Assn. v. Vilsack, case no. 1:12-cv-469-BLW, Dkt. 48 (D. Idaho, filed Oct. 28, 2013*, Dr. Thomas Besser, faculty with Animal Disease Diagnostic Laboratory's Molecular Diagnostic Section, Washington State University, stated:

> *…domestic sheep pose a significant risk to bighorn sheep due to the threat of disease transmission. At present, I am not aware of any available means to reduce or eliminate the risk of pneumonia in bighorn sheep that come into contact with domestic sheep. Therefore, physical separation of these species is the only known way to protect bighorns from this disease transmission.*

In *Western Watersheds et al. v. U.S. Forest Service*, Tim Schommer, whose long career with the Forest Service dealt with disease transmission from domestic sheep to bighorns, stated:

> *The Forest Service had also implemented a full range of (best management practices). Unfortunately, these actions did not keep the two species apart and the result was a bighorn die-off.*

In the same case, Vic Coggins, long-time biologist for the Oregon Department of Fish and Wildlife, included in his declaration a determination that best management practices are of unproven effectiveness:

> *To the best of our knowledge, these (best management practices) were not peer reviewed by any bighorn sheep experts.*

Schommer later recounted how a host of best management practices and a physical separation of over 20 air miles still failed to keep domestics apart from bighorns in Hells Canyon, and "large, catastrophic bighorn sheep die-offs" still occurred.

The final management plan for the NPCNF must include the standard that pack goat use will not be authorized in or within 16 miles of bighorn sheep occupied core herd home ranges. Specifically, we recommend the following:

> ***Standard.*** *Use of pack goats is prohibited within 16 miles of bighorn sheep occupied core herd home ranges.*

Fisher

Fisher is a proposed species of conservation concern (SCC) within the plan area. The rationale for including fisher in the SCC list for the Nez Perce-Clearwater National Forests is documented in a Microsoft Excel spreadsheet that is posted to the Northern Region website. This spreadsheet notes that current population trends in the planning area are unknown. Wildlife managers used to believe that fishers were extirpated from the Northern Rockies Mountains in the early twentieth century due to over harvest. Idaho Fish and Game translocated fishers to the Cabinet and northern Bitterroot Mountains in the 1960s from the upper Midwest and British Columbia as part of an effort to 'reintroduce' fishers to the region. However, recent genetic testing of fishers within the planning area have revealed a unique genetic haplotype found nowhere else (Schwartz 2007, Boyd et al. 2017). This discovery disproves the theory that fishers were extirpated from the Nez Perce-Clearwater National Forests and surrounding areas. Conservation of this unique haplotype is therefore important.

The available scientific literature describes the importance of diverse, mature forests to fisher:

> *Fishers are a low-density predator found in mature to late-successional forests with high canopy closure and both live and dead large tree structure. They appear to select areas with higher amounts of coarse woody debris and den in large diameter trees or snags with cavities (Heinemeyer, 1993; Jeffrey L. Jones, 1991; J. L. Jones & E. O. Garton, 1994; Weir &Harestad, 2003; Weir, Lofroth, & Phinney, 2011). Female fishers use large diameter snags with cavities for denning and have been reported to use a wide variety of tree species. They have been reported to den in black cottonwood, Douglas fir, grand fir, western hemlock, redcedar, trembling aspen, and balsam poplar. A key feature of these trees is that they are large diameter dead or partially dead trees often reported to have cavities and heart rot, suggesting that damage and decay play critical roles in the suitability of habitat for reproduction. Thus, retaining and promoting ecological processes that result in the recruitment of trees with these features is important to the conservation of reproductive habitat for fishers. Within the plan area, tree species with these characteristics include Douglas fir, grand fir, western hemlock, and western redcedar.*
>
> *Natal dens have been located in pileated woodpecker cavities (Aubry&Raley, 2002) and other forest structures. Fishers are found in forested habitats that display extensive physical structure, including snags for dens, multilayered canopies to protect against predation, down logs for denning and resting (Aubry, McKelvey, & Copeland, 2007; Powell & Zielinski, 1994; Wisdom et al., 2000), and coarse woody debris to provide prey (Ruggiero, Aubry, Buskirk, Lyon, & Zielinski, 1994). Moist forested habitats with continuous overhead cover and riparian zones are frequently utilized (Vinkey, 2003) and stream courses may be used as travel corridors (J. L. Jones, 1991). Fishers hunt for prey on the forest floor and in trees and snags (Spahr et al, 1991)...Vegetation management and fire suppression have influenced the habitat of this species and its prey by altering composition and structure.*

(DEIS, page 3.2.3.2-83 and 3.2.3.2-84).

A habitat model produced by Sauder (2014) indicates that there are about 700,000 acres of high-quality fisher habitat within the planning area, mostly at mid elevations in the roaded front country (Management Area 3). Schwartz et al. (2013) note that large diameter western redcedar may be particularly important because it is capable of providing cavities large enough for denning. Large western white pine snags may have been historically important prior to the introduction of white pine blister rust.

The evaluation of threats is a key part of the process to identify species of conservation concern. While the available scientific literature and the spreadsheet hint at timber harvest and a potential lack of large diameter trees for denning, the Forest Service appears to have mistakenly omitted information regarding threats to fisher within the plan area because the applicable cell in the spreadsheet describes the threat of white-nose syndrome to bats. The Forest Service will obviously need to correct this error by describing threats in the plan area to fisher both in the spreadsheet and the FEIS. The Forest Service's rationale for including fisher in the SCC list for the Nez Perce-Clearwater National Forests concludes:

> *This is a low density species with low dispersal capabilities and multiple stressors. This species requires very large diameter trees, which have been reduced on the landscape and require long time periods to develop.*

Fishers are not well distributed throughout their historic range in the Northern Rocky Mountains, but the planning area appears to be a key local population within the region owing to (1) it being the largest of the local populations in the region and (2) the presence of a unique haplotype within the gene pool. Given these facts and the apparent departure from the natural range of habitat conditions that were available to fisher historically, we agree that it is appropriate to include fisher in the SCC list.

The 2012 Planning Rule directs the responsible official to develop plan components for species of conservation concern if the ecosystem plan components are insufficient to "provide the ecological conditions necessary to [...] maintain a viable population of [a] species of conservation concern within the plan area" (36 CFR 219.9(b)(1)). There is one species-specific plan component for fisher in the Draft Forest Plan:

> ***FW-DC-WL-04.*** *The Nez Perce-Clearwater provides the ecological conditions for the long-term persistence of fisher, whose habitat generally follows the distribution of the warm moist potential vegetation type, although fishers sometimes use other potential vegetation types. Fisher habitat is composed of large patches of tall forest with trees greater than or equal to 25 meters tall arranged in complex, highly connected patterns at the 20-40 square mile landscape scale. Patches of tall forest cover an extent of approximately 50 percent across the warm moist potential vegetation type group forestwide consistent with the desired conditions found in Table 6 in the warm moist potential vegetation type section. At the eight square mile home range scale, fishers benefit from variety in successional stages resulting from a patchy mosaic of stand heights that occur in patterns that reflects natural disturbance (see Warm Moist Potential Vegetation Type). The shapes, sizes, distribution, density, and height of forest patches vary by topography, slope, aspect, and topographic position, such as ridge, mid-slope, toe slope, and valley bottom to provide variety in seasonal habitats, denning, and foraging fisher habitat. Some stands of tall forests, distributed across the warm moist potential vegetation type, provide a high prevalence of large trees and snags of 20 or greater inches diameter at breast height, abundant coarse woody debris, and multiple denning and resting habitat canopy layers (Sauder, 2014; Sauder &Rachlow, 2014).*

(Draft Plan, page 64).

While we appreciate and support the desired condition FW-DC-WL-04, this plan component on its own will not ensure that the fisher population within the planning area remains viable. As noted in the available literature, the spreadsheet that documents the rationale for designating fisher as a species of conservation concern, and the DEIS, there is a lack of large-diameter trees and coarse woody debris within fisher habitat, and most of the suitable habitat is located within the roaded front country where timber harvest is emphasized. Accordingly, we suggest that the Forest Service create a plan component that mandates the retention of large diameter trees in timber harvest units, particularly western red cedar and white pine. Retention of western red cedar and white pine of 20 inches in diameter or greater may be the right size, but whatever the right diameter is, it should be supported by the best available science. A possible plan component is:

- ***Standard.*** *Retain all western red cedar and western white pine of 20 inches dbh or greater to provide structural habitat components for fisher.*

Finally, the Forest Service should compare Draft Forest Plan components for live tree retention (MA3-GDL-FOR-06), snag retention (MA2 and MA3-GDL-FOR-05) and coarse woody debris retention (MA2 and MA3-GDL-FOR-01) to determine if the minimum live tree and snag retention guidelines and coarse woody debris loads are sufficient to meet the needs of fisher. If these plan components are insufficient to meet the needs of fisher, then these plan components should be adjusted in accordance with the available scientific literature.

Elk

The plan components for elk are based on two key concepts: nutrition and habitat use (DEIS, page 3.2.3.4 - 39). Recent research conducted in the planning area (Cook et al. 2018) suggests that the availability of nutritious summer forage is more important to elk survival and recruitment than previously thought. The availability of high-quality forage in summer is correlated to faster calf growth, better winter survival, increased calf production, earlier breeding phenology, and better calf survival. A spatial model was produced as part of this research, which identifies areas on the Nez Perce-Clearwater National Forest that are capable of producing nutritious summer elk forage. These findings are the basis for plan components for Management Areas 2 and 3 (MA2-DC-ELK-01, MA2-OBJ-ELK-01, MA2-OBJ-ELK-02, MA2-GDL-ELK-02, MA3-DC-ELK-01, MA3-OBJ-ELK-01, and MA3-GDL-ELK-01), which seek to ensure that somewhere between 10 to 20 percent of each HUC12 watershed provides high quality elk forage.

Of course, elk must select and use habitat with nutritious forage. Cook et al. (2018) note that motorized access, slope, and cover-forage edges affect elk habitat selection and use of nutritional resources. Numerous studies (Frair et al. 2008, Sawyer et al. 2007, Rowland et al. 2005, Christensen et al. 1993, Lyon 1983, Lyon and Jensen 1980, Thomas 1979) show that elk avoid areas near open motorized routes. Elk are more likely to take flight, at a greater rate of movement and duration and at a greater distance, from motorized than non-motorized off-road recreation (Naylor et al. 2009; Preisler et al. 2009). Elk disturbed by human activity typically move to denser cover or beyond a topographic barrier (Lyan and Canfield 1991, Hurley and Sargeant 1991). When exposed to repeated disturbance from traffic, elk are known to travel farther and continue to avoid areas near motorized trails or roads (Czech 1991). Elk strongly selected habitat increasingly distant from roads open to motorized traffic at the Starkey Experimental Forest and Range in northeast Oregon (Rowland et al. 2000, 2004). Similarly, Christensen et al. (1993) noted that motorized access can reduce elk use of summer range.

Most of Management Area 1 is off-limits to motorized access. Therefore, motorized access has little or no effect on the ability of elk to utilize high quality forage effectively. In Management Area 2 where motorized trails are allowed, desired condition MA2-DC-ELK-02 and guideline MA2-GDL-ELK-01 require secure areas of at least 5,000 acres, greater than one-half mile from open motorized routes (MA2-DC-ELK-02 and MA2-GDL-ELK-01). These plan components also discourage the designation of new motorized routes in locations with high and moderate nutrition potential. Decision makers that want to close an existing motorized route should not be hand-cuffed if the route is located in an area that is capable of producing high quality summer forage.

Plan components for Management Area 3 fall short of available scientific recommendations. Rowland et al. (2005) found that substantial reductions in elk habitat use are typically confined to less than one-half

mile from an open motorized route. Lyon and Christensen (2002) reported reductions in elk habitat use within 0.25–1.8 miles of motorized roads and trails. Elk appear to need more space where more roads exist. Hillis et al. (1991) defined secure elk habitat as areas that are at least one-half mile from an open motorized route with a minimum size of 250 acres. They also recommend that at least 30 percent of a landscape should be dedicated to security where elk management objectives are a priority. Desired condition MA3-DC-ELK-01 and objective MA3-OBJ-ELK-01 fall short of the scientific recommendations because these plan components call for no more than 20 percent of MA 3 to be managed as secure elk habitat. Consistent with the best available science, these plan components should be modified so that at least 30 percent of Management Area 3 provides secure elk habitat, and the minimum size of security areas should be 250 acres.

Perhaps the most troubling insufficiency of the plan components for elk is the lack of any plan components that limit disturbance of elk during winter and during calving. Geist (1982) and Skovlin (1982) found that reproductive success of elk could be compromised where human disturbance displaces elk from calving areas and restricted winter ranges. Several sources (Leege 1984, Phillips 1998, Shively et al. 2005) recommend closing calving areas to motorized use. The 2014 Forest Plan Assessment notes that Idaho Fish and Game encouraged at least a "marginally protective" seasonal closure from May 1 to August 1 in elk calving habitat, while Hershey (2011), who was commissioned to prepare an independent literature review by the Clearwater National Forest for travel management planning, recommended permanent closure of elk calving areas to motorized use.

According to the 2014 Forest Plan Assessment, there are approximately 58,171 acres of elk calving areas in the planning area. Only 17,107 acres (approximately 30%) are located within elk security areas. Approximately 243 miles of road and motorized trails transect mapped calving habitat on the Forest. The Final Forest Plan should include plan components to protect elk calving areas and winter range. We recommend the following new plan components for elk:

- ***Standard.*** *Motorized travel is not allowed in elk calving areas from May 1 to August 1.*
- ***Standard.*** *Motorized travel is not allowed in elk winter range.*

Mountain goat

SCC determination for mountain goat

The 2012 Planning Rule employs a "complementary ecosystem and species-specific approach to maintaining the diversity of plant and animal communities and the persistence of native species in the plan area" (36 CFR 219.9). This approach consists of "coarse filter" and "fine filter" plan components. Coarse filter plan components are ecosystem plan components designed to "to maintain or restore the ecological integrity of terrestrial and aquatic ecosystems and watersheds in the plan area" (36 CFR 219.9(a)). The Rule assumes that managing for the natural range of ecological conditions within a planning area will meet the needs of most species in the planning area:

> *The planning rule makes the assumption that natural systems will provide the ecological conditions for most native species in the plan area if they are operating within their natural range of variability and have ecological integrity. This framework is identified by the planning rule as the coarse filter. The coarse filter concept has not been subject to rigorous scientific testing. However, the coarse filter approach is much more practical from a management*

> *standpoint in providing for the diversity and abundance of wildlife, which moves away from single species management.*

(DEIS, page 3.2.3.1- 15).

Sometimes managing for the natural range of ecological conditions will not meet the needs of an individual species. Threats or stressors may exist that are not tied to the natural physical conditions of their habitat. For example, species may be displaced or experience indirect habitat loss due to motorized access. When the ecosystem plan components are insufficient to "provide the ecological conditions necessary to…maintain a viable population of each species of conservation concern within the plan area", then the responsible official is required to develop species-specific plan components (36 CFR 219.9(b)). Species-specific plan components are fine filter plan components:

> *The companion approach to the coarse filter of ecosystem diversity is the "fine filter" approach in which conservation strategies are used for individual species or groups of species to contribute to species diversity. The fine filter approach narrows the focus to those species that require ecological conditions that may not be provided through coarse filter plan components. This fine filter approach is reflected in the species-specific plan components for wildlife found in the draft Forest Plan.*

(DEIS, page 3.2.3.1- 17).

Species of conservation concern ("SCC") are defined as:

> *…a species, other than federally recognized threatened, endangered, proposed, or candidate species, that is known to occur in the plan area and for which the regional forester has determined that the best available scientific information indicates substantial concern about the species' capability to persist over the long-term in the plan area.*

36 CFR 219.9(c).

There is very little information about SCC determinations for the Nez Perce-Clearwater National Forests in the DEIS. For information about the process to determine SCC, a list of species evaluated, and the rationale for including a species in or excluding a species from the SCC list, we had to download documents from the Forest Service Northern Region Website. The document on the regional website that describes the process is titled, "*Species of Conservation Concern Identification Process for the Nez Perce - Clearwater National Forest Plan Revision*". The following paragraph describes how the Forest Service determines whether or not there is a "substantial concern about the species' capability to persist over the long-term" in a planning area:

> *In general, substantial concern is best demonstrated by some combination of a decreasing population (abundance or distribution), decreasing habitat, or significant threats, particularly when greater than expected under natural variation and the population in the plan area is very small. Other factors considered during this evaluation included abundance, geographic distribution, reproductive potential, dispersal capabilities, and other demographic and life history characteristics of the species that could influence long-term persistence in the plan area. This*

> *approach is based on best available scientific information in conjunction with professional expertise of Regional Office biologists.*

Not surprisingly, population trends are a key consideration. The best available scientific information used to evaluate potential species of conservation concern is documented in a Microsoft Excel spreadsheet, which is also posted to the Northern Region website. As noted in this spreadsheet, Idaho Fish and Game manages three mountain goat population management units (PMUs) in the planning area, including the Black Snow, Lochsa-Selway, and Lower Salmon PMUs. In this spreadsheet, the Forest Service suggests that the mountain goat population trend in the planning area is "unclear". We disagree and believe that there is enough available information to make an informed conclusion about the trend of mountain goat populations in the planning area.

For example, while the mountain goat population on the western side of the Black Snow PMU is considered stable, the most recent Idaho Fish and Game survey (2018) revealed a significant drop of about 85 percent in population numbers since 2010 on eastern side of the PMU, indicating a population decline. IDFG counted 56 mountain goats in the eastern portion of the PMU in 2010 (Hickey 2020). Only 7 mountain goats were counted during a 2017 survey in the eastern portion of the PMU.

The mountain goat population in the Lochsa Selway PMU is also considered declining. The latest population survey occurred in 2014. This PMU was last surveyed in 1996. The latest survey encompassed the southern half of the PMU and revealed a significant drop of about 88 percent in population numbers since 1996. Mountain goat hunting has been closed in this PMU since 1983 due to concerns about population declines.

Despite the introduction of 70 goats into the Lower Salmon PMU over the last 55 years from the Black Snow and Seven Devils PMUs, mountain goat hunting has been closed here since 1983 due to declining population numbers. The northern portion of this PMU has not been surveyed since 1993, but a 2003 survey of the southern portion of the PMU revealed a significant drop of about 91 percent in population numbers since 1990 (IDFG 2019).

In summary, Idaho Fish and Game has determined that populations in all three PMUs are declining. Perhaps the most recent data was unavailable to the Forest Service when the agency documented its SCC rationale for the Nez Perce-Clearwater National Forests. In any case, currently available plans and reports do clearly indicate that the overall mountain goat population in the planning area is declining. The Forest Service must therefore update its SCC documentation for mountain goats to reflect the fact that the best available scientific information indicates a population decline in the planning area. It is inaccurate to say that "reliable population estimates are lacking" as evidenced by information discussed above.

We agree with the Forest Service's assessment that mountain goat habitat within the planning area is within the natural range of variation. However, it is important to keep in mind that mountain goats tend to inhabit areas that are limited in distribution. Mountain goats live in rugged alpine terrain in close proximity to steep rock outcrops, and they exhibit seasonal elevation migrations (Festa-Bianchet and Coté 2008). Mountain goat populations in Idaho are generally confined to mountain ranges with limited dispersal opportunities across intervening valleys resulting in isolation and reduced gene flow between herds (Shafer et al. 2011). Indeed, a habitat model developed by Idaho Fish and Game (DEIS, page

3.2.3.4 – 31) illustrates the limited distribution of habitat and mountain goat observations in the planning area. Consequently, there is limited opportunity for mountain goats to escape from human disturbances that occur within their limited habitat.

In addition to the Forest Service's mischaracterization of population trends, the agency also suggests that mountain goats are not at risk in the planning area because most of the habitat is located in roadless areas and wilderness where threats are "removed". While habitats located in wilderness areas are clearly off-limits to over-snow vehicle use, the Idaho Roadless Rule is silent on travel management. It is within the Forest Service's legal discretion to allow, restrict, or prohibit the use of off-highway vehicles and over-snow vehicles within any Idaho Roadless Area theme.

Furthermore, the Forest Service downplays the significance of the threat of over-snow vehicle use to mountain goats. Specifically, with regard to the eastern portion of the Black Snow PMU, the Forest Service states that "[t]here is some concern about unauthorized snowmobile use in the Black Snow PMU, but this is unstudied." Winter is a critical seasonal time period for mountain goat survival. Goats experience significant nutritional deprivation during the winter (Fox et al. 1989). Deep snow reduces the availability of food and increases energy expenditures (Dailey and Hobbs 1989). To conserve energy, mountain goats try to limit their movements to small winter ranges (Keim 2004, Schoen and Kirkoff 1982, Smith 1982). Displacement due to over-snow vehicle use and helicopter-supported backcountry skiing operations will cause mountain goats to expend critical energy reserves. As illustrated in Figure 2, there is a limited amount of winter range in the Great Burn Roadless Area, which comprises the eastern portion of the Black Snow PMU. Illegal over-snow vehicle use regularly occurs near Blacklead Mountain and Williams Peak where a significant portion of the winter range occurs. In 2010, Idaho Fish and Game counted 56 mountain goats in this area (Hickey 2020). In 2017, only 6 goats were counted. The IDFG (2018) reported that during the latest survey "extensive tracks from illegal snowmobiles and snow bikes were observed all over the mountain goat winter range." The best professional judgement of biologists is that the observed declines are likely a result of illegal OSV use.

Available scientific information clearly indicates that the mountain goat population in the planning area is declining. Most nannies do not produce their first kid until age 4 or 5, and recruitment rates are low (IDFG 2019). These biological realities make it difficult to grow mountain goat herds whose populations have been suppressed. Achieving mountain goat population objectives requires stringent management approaches. In addition to limiting or restricting harvest where number are below objective, it is important for managers of mountain goat habitat to limit stressors. Over-snow vehicle use in mountain goat winter ranges can result in expenditure of critical energy reserves, trigger avalanches that bury goats, and indirect habitat loss. Because populations in all three PMUs are declining and in the professional judgement of agency biologists, over-snow vehicle use is likely contributing to these declines, the Forest Service should list mountain goats as an SCC and develop species-specific plan components that contribute to the persistence of goats in the planning area.

Plan components for mountain goat

The omission of species-specific plan components for mountain goats in the Draft Forest Plan is presumably a result of the Forest Service's determination that mountain goats are not a species of conservation concern. In so doing, the NPCNF is dodging the responsibility that it shares with Idaho Fish and Game to ensure the persistence of mountain goats in the planning area. As the manager of

mountain goat habitat within the planning area, the Nez Perce-Clearwater National Forests must adopt strong, proactive measures to address threats to the species in the planning area. In particular, the NPCNF must protect mountain goat winter range from disturbance by over-snow vehicles. One of the most necessary steps to protect mountain goats from disturbance by over-snow vehicles is to include their winter ranges in recommended wilderness areas and maintain and enforce the current closures of recommended wilderness areas to non-conforming uses. The Nez Perce-Clearwater National Forests should drop from further consideration any deletions from the Great Burn Recommended Wilderness as proposed in Alternative Y, which would open up lands around Kellys Finger, Williams Peak, Blacklead Mountain, and Hoodoo Pass to over-snow vehicle use. All of these areas have documented observations of mountain goats made by the Idaho Department of Fish and Game and the Great Burn Conservation Alliance (see Figure 1).

In preparation for comments on the Draft Forest Plan, The Wilderness Society commissioned a literature review, *Impacts of Human Recreational Land Use on Mountain Goats (Oreamnos Americanus)*. This document is attached. Key findings from this report include:

- In Idaho many mountain goat populations have declined by 10% - 30% over the past several decades. Consequently, mountain goat conservation status in Idaho is considered vulnerable (state rank S3) and they are a species of greatest conservation need (Tier 3, IDFG 2017).
- Black Snow Population Management Unit: Goat populations in this PMU have long served as sources for transplantations into other areas of the state, such as the Palisades PMU along the Snake River range, as well as into Colorado and Oregon. A total of 137 goats have been relocated out of this PMU since 1960. The population on the western side of the PMU is considered stable. However, the most recent IDFG population survey revealed a significant drop of about 85% in population numbers since 2010 on eastern side of the PMU, indicating a population decline.
- Snowmobile recreation in goat habitat during the energetically taxing seasons of winter and spring would elicit vigilance and flight behavior, add to goats' energetic burden, and ultimately lead to declines in herd health and productivity.
- The gestalt of available research indicates that the cumulative effects of recreational land use within goat habitat can have detrimental effects on goat populations by:
    - Decreasing the availability of high-quality habitat,
    - Increasing energetic loads during biologically taxing seasons and life phases,
    - Transmuting positive behaviors such as grazing and maternal care into negative behaviors such as vigilance and flight,
    - Increasing vulnerability to human or carnivore predation, and
    - Causing direct mortality.
- Idaho Department of Fish and Game reported a significant decline in mountain goat numbers on the eastern side of the Black Snow PMU between 2010 and 2017. The report noted that in the area of the survey, "extensive tracks from illegal snowmobiles and snow bikes were observed all over the mountain goat winter range." In response to this observation, IDFG identified a specific strategy to collaborate with the Nez Perce-Clearwater National Forests, "to minimize potential impact of motorized and non-motorized recreation on mountain goats." Indeed, this strategy is

identified in 3 out of the 4 PMUs highlighted in this report, due to circumstances unique to each PMU.

Background

It is widely accepted that winter is a difficult time for ungulate survival. Wintering ungulates often face marginal food resources in restricted areas and experience physiological stress from the harsh winter conditions of the Northern Rockies. For mountain goats in particular, winter range is a highly restricted in area and thus critical for them, as they require both protection from predators and access to food resources. They occupy the highest, coldest, most rugged regions of any ungulate in North America (Chadwick 1983). Mountain goats uniquely display seasonal altitudinal migrations over short distances (White 2006; Rice 2008), with all mountain goat habitat generally characterized as areas close to escape terrain (steep slopes, usually ≥40°) such as cliffs and away from valleys (Festa-Bianchet and Côté 2008, Shafer et al. 2012). Mountain goats thus are limited to relatively small areas of suitable habitat (Canfield et al. 1999). Winter is a particularly crucial season for mountain goats and is characterized by high juvenile mortality (Poole et al. 2009) and restricted, shorter movements (Chadwick 1983; White 2006) that are influenced by snow depth and snowpack (Richard et al. 2014). Winter range is considered critical habitat for mountain goats (Côté and Festa-Bianchet 2003), and their winter ranges are much smaller than summer ranges, ranging from 2 to 50 percent of the size of summer ranges (Taylor et al. 2006, Poole et al. 2009). For mountain goats, winter range is a highly restricted area, as they spend most of their time close to escape terrain (Poole et al. 2009). The advancing technology of both snowmobiles and snowbikes will increase human access to areas crucial to wintering mountain goats. In general, mountain goats are at risk from snowmobile and snowbike activity, with their high sensitivity to disturbance and with the ensuing behavioral responses and energetic costs that can negatively impact population dynamics.

The tendency of wintering mountain goats to move away from disturbance is energetically taxing at the very time when, to survive, they cannot afford unnecessary expenditures of energy. Living in harsh winter habitat, mountain goats have a low margin for unnecessary energy costs without impacts on survival and reproduction (Harris et al. 2014). As Montana Fish Wildlife & Parks has noted, at winter's end, goats have nearly depleted all their fat reserves, and "goats are right on the survival line in late winter and early spring…That's also when snow is hardest and snowmobilers like to 'high-mark' [climb snow-covered mountainsides]" (Koeth 2008).

Mountain goats have been shown to be sensitive to human disturbances. Their responses to disturbance can change mountain goat population dynamics. Restricting the inevitable disturbance from motorized recreational use in or near mountain goat winter range is an important proactive step to minimize impacts while mountain goats are enduring the stress of winter.Simply put, mountain goats on winter ranges have few options for survival. They must be protected from human disturbances in their winter range. They simply have nowhere else to go if chronic human disturbances occur.

Many agency administrators within the region recognize the threat of human-caused disturbance to mountain goats during the winter. Revised Forest Plans for the Kootenai and Idaho Panhandle National Forests (2015) restrict over-snow vehicle use in mountain goat winter range in the Scotchman Peaks, which was supported by Montana Fish Wildlife & Parks.

The DEIS does not adequately address the likely combination of impacts to mountain goats on winter range due to continuing and growing use of over-snow vehicles in conjunction with snowpack declines due to climate change. Recent warming trends have already led to substantial reductions in spring snow cover in the mountains of western North America (Mote et al. 2005, Pederson et al. 2010). Declining snowpack will concentrate motorized winter recreation into the smaller amounts of available, sufficiently snowy areas and will bring these users into direct conflict with wintering mountain goats. Mountain goats will essentially be competing for the same remaining snowy habitat as over-snow vehicle users. This leads to increasing concern for wildlife and their ability to find winter habitat free from motorized disturbances.

Any disturbance, such as that from over-snow vehicle use, during this important winter period can negatively affect productivity and other vital rates (May et al. 2006, Krebs et al. 2007). Over-snow vehicle use can cause harassment, habitat loss, and mortality of wildlife such as ungulates (Dorrance et al. 1975, McLaren and Green 1985, Freddy et al. 1986, Tyler 1991, Olliff et al. 1999a, Olliff et al. 1999b, Seip et al. 2007, Harris et al. 2014, Switalski 2016).

There are documented broad concerns regarding the current threats to the long-term persistence of mountain goats in Idaho and there are specific concerns identified regarding the NPCNF mountain goat population. The Idaho Mountain Goat Management Plan identifies the following issues regarding mountain goat conservation in Idaho:

> *Availability of high-quality habitat limits mountain goat distribution in Idaho. Most threats impacting mountain goats are direct threats to their habitat or indirect threats that cause them to leave preferred habitat…Mountain goats are susceptible to disturbance by recreational activities, both motorized and non-motorized, and may abandon preferred, high quality areas because of disturbance.*

(page iv).

> *The mountain goat is recognized as a Species of Greatest Conservation Need, priority Tier 3, in the Idaho State Wildlife Action Plan. The Action Plan is the state's guiding document for managing and conserving wildlife before they become too rare and costly to protect.*

(page 2).

> *Winter ranges are composed of cliffs and high alpine ridges where deep snow does not accumulate, thus providing access to winter forage. Because physical characteristics are more important than vegetative characteristics, habitat generally cannot be treated to produce quality winter habitat. This situation makes management and conservation of quality winter range crucial to maintaining current populations and distribution of mountain goats in Idaho.*

(page 5).

> *Most mountain goat habitat in Idaho occurs on lands managed by the United States Forest Service (USFS). Management of USFS lands provides opportunities for multiple uses where appropriate. However, conflicting interests compete for land that currently provides quality*

> *habitat for mountain goat populations. Disturbance and development of mountain goat habitat will result in fewer mountain goats in Idaho.*

(page 5).

> *Winter habitat is most vulnerable (in terms of carrying capacity and food resources) because mountain goats concentrate into smaller areas during winter.*

(page 5).

> *High-quality mountain goat habitat includes a combination of cliffs, steep slopes, and alpine ridges. Additionally, to support healthy mountain goat populations, this terrain must also be remote, in suitable climates, and relatively free from disturbance. Conservation of existing quality mountain goat habitat should be one of the highest priorities for managers. Specifically, proactively managing access and travel will be critical to protecting mountain goat populations…Because mountain goat habitats are scattered throughout Idaho, migration and dispersal corridors should be documented and conserved.*

(page 12).

> *Maintaining migration corridors and landscapes permeable to individual movements increases effective population size, genetic diversity, and adaptive potential, while providing movement routes for mountain goats to respond to climate change.*

(page 19).

Regarding the Black Snow Population Management Unit which lies within the NPCNF, IDFG documents:

> *…however, the eastern portion of the PMU showed a substantial decline (in mountain goat numbers) from the previous survey.*

(page 34).

> *There are concerns with increasing snowmobile and snow bike access to mountain goat habitat in both the western part of GMU 9 and the eastern portion of GMU 10.*

(page 34).

> *Strategy – Work with Idaho Panhandle and Nez Perce – Clearwater national forests to minimize potential impact of motorized and non-motorized recreation on mountain goats.*

(page 34).

The IDFG's Statewide Mountain Goat FY2018 report included the following findings relating to the Clearwater Region:

> *Additionally, in 2010, a survey was conducted in the old Blacklead hunt area (S.F. Kelly Creek to Williams Creek (GMU 10) and Boulder Creek/Crooked Fork (GMU 12)) where 47 goats were observed. This was repeated in 2017 as well. Only 7 mountain goats were observed but extensive tracks from illegal snowmobiles and snow bikes were observed all over the mountain goat winter range.*

(page 16).

> *Additional effort needs to be put into figuring out where the upper Kelly Creek mountain goat population is wintering. Currently the Department is asking the USFS to put more effort in enforcing the winter off road travel in Kelly Creek. This needs to include an effort on the Montana side of the State line as that is where most of these winter travelers are coming from. Failure to get a handle on this issue might jeopardize this population.*

(page 17).

The mountain goat population on the Bitterroot Divide is documented as declining and a key concern is the disturbance of goats on their winter range by snowmobiles and snow bikes. The NPCNF must take strong actions to protect wintering mountain goats from disturbance. It is recognized that mountain goat habitat must be protected so that mountain goats may continue to use available habitat. In *Mountain Goats: Ecology, Behavior, and Conservation of an Alpine Ungulate*, Marco Festa-Bianchet and Steeve D. Cote (2008) write:

> *Conservation of mountain goats faces two related challenges: their habitat must be protected and they must continue to use available habitat. Because mountain goats are highly intolerant of human activities, their conservation requires protection from human intrusions. Otherwise, goats may not use available habitat…forms of motorized access can also affect their behavior, increasing movement rate, decreasing foraging time, and in extreme cases lead to habitat abandonment. Intense recreational use of their habitat, especially with motorized access, is incompatible with mountain goat conservation…The expansion of industrial activities and motorized recreation…into mountain goat habitat is a major concern for the conservation of this species.*

(page 216).

> *The conservation of mountain goats rests on the protection of their habitat and on the prevention of harassment, particularly from helicopters and motorized vehicles.*

(page 218).

Other national forest units recognize the need to protect mountain goat populations and have acted by closing winter ranges to motorized vehicles. The Environmental Assessment (EA) for Over-snow Vehicle Travel Management in the Northern Portion of the Fairfield Ranger District, Sawtooth National Forest (2017) closed areas to over-snow vehicle use based on the expected impacts of such use on mountain goats, lynx and wolverine. The EA stated:

> *In order to lessen the increase of potential disturbance effects to mountain goats, lynx, and wolverine denning in the upper headwaters of the upper South Fork Boise River and Big Smoky Creek areas resulting from…increased over-snow vehicle recreation, the District would implement a new over-snow vehicle closure in those areas.*

(page 3).

> *Add protection from disturbance for wintering mountain goats, lynx, and wolverine denning in a portion of the headwater area of the South Fork of the Boise River and Big Smoky Creek drainages by closing the area to over-snow vehicle use.*

(page 18).

> *Based on discussions with personnel from the Idaho Department of Fish and Game…it was determined that it would be important to add the headwaters areas of Big Smoky Creek to the proposed new closure in order to protect wintering mountain goats.*

(page 24).

> *Disturbances that cause mountain goats to flee in the wintertime can have negative consequences to individuals, and repeated disturbances to small populations…can have negative effects to the population.*

(page 36).

> *While mountain goats can become habituated to predictable, continuous noise, they are disturbed by sudden, unpredictable stimuli…[B]oth snowmobiles and helicopters can affect mountain goat behavior, depending upon the proximity and duration of the disturbance. Due to increases in technology of over-snow vehicles, their increasing popularity and increasing over-snow vehicle users seeking extreme terrain, it is foreseeable that the use of the upper South Fork area would likely increase.*

(page 37).

> *[Forest Plan] Objectives 0640 (and 0834) – Provide winter habitat security for mountain goats and reproductive denning habitat security for wolverine in the headwaters area (and headwater tributary areas) of the South Fork Boise River by minimizing disturbance from winter recreation activities.*
>
> *[Forest Plan] Standards 0667 (and 0867) – Restrict or modify winter recreation activities where conflicts exist with mountain goats and/or wolverine.*

(page 38).

> *The new proposed over-snow vehicle closure area was developed to protect mountain goats from disturbance by over-snow vehicles.*

(page 39).

> *Technology is permitting over-snow vehicles to access areas previously not possible, and this trend is expected to continue…[T]he proximity with which over-snow vehicles can go to … habitats puts mountain goats at risk of disturbance.*

(page 42).

The DEIS for the Draft Forest Plan does acknowledge the vulnerability of the mountain goat population and the concerns over status of the population:

> *Because mountain goats occur on the periphery of their range and in isolated areas with small population sizes, they have lower levels of genetic diversity compared to their counterparts in the core of their range…Maintaining migration corridors and landscapes that are permeable to individual movements increases effective population size, genetic diversity, and adaptive potential while providing movement routes for mountain goats to respond to climate change.*
>
> *Mountain goats are susceptible to disturbance, both motorized and non-motorized, and may abandon preferred high quality areas because of disturbance. Several modes of backcountry recreation, including snowmobiling and heli-skiing, have the potential to disturb goats…There is local concern for impacts of winter recreation on mountain goat populations in the plan area.*

(DEIS, page 3.2.4-29).

> *Winter is a time of profound nutritional deprivation for mountain goats…Deep snow reduces food availability and increases energy expenditure…Mountain goats often constrain their movements and occupy small home ranges during winter…Winter range is important to the long-term survival of mountain goats and should be identified and managed to reduce disturbance to mountain goats.*
>
> *The most acute decline (in mountain goat populations) is within the Blacklead population within the Hoodoo Recommended Wilderness Area, where the Idaho Fish and Game has documented sharp declines in mountain goat numbers.*

(DEIS, page 3.2.3.4- 30).

Mountain goats are sensitive to disturbance and tend to leave suitable habitats if disturbed. The effects are particularly acute during the winter when mountain goats may not be able to travel through deep snow. Alternatives for recommended wilderness in the Hoodoo area, the Mallard-Larkins area, Moose Mountain, and Bighorn-Weitas would include several mountain goat herds, including some of the largest herds in the plan area. Allowing these areas to be open to motorized over snow travel could potentially expose mountain goats to this disturbance (DEIS, page 3.2.4-44).

While the DEIS lays out concerns regarding motorized over snow vehicle use and the threat it poses to wintering resident mountain goat populations, alternatives offered do not do enough to address these concerns. In particular, it appears the model used by the Forest Service to assess the risk of motorized over snow recreation to the mountain goat population severely underestimates that risk. The DEIS acknowledges that the "model did not perform well predicting use by highly skilled snowmobilers because it shows areas known to be used by advanced snowmobilers as not preferred by snowmobilers" (DEIS, page 3.4.3.4-44). This is exactly the kind of motorized over-snow vehicle use that must be considered to protect the resident mountain goat population. Snowmobilers, highly skilled or not, are using the remote areas in the Hoodoo area and that precise use is what the Idaho Fish and Game has identified as a concern.

Of even greater concern, however, is the fact that the Forest Service acknowledges the model used to predict overlap between snowmobiles and mountain goats does not predict snow bike use, which will have different use patterns than snowmobiles (DEIS, page 3.2.3.4-44). Snow bike use is exploding, with its proponents and manufacturers touting the machine's capability to travel to areas inaccessible by

traditional snowmobiles (Snowbikes Are the Next Big Thing, Billings Gazette Dec. 19, 2019; Higher onthe Mountain, Big Sky Journal, Winter 2019). Snow bikes take riders into steep, less accessible terrain and pose the exact kind of threat to wintering mountain goats that has been identified as a concern to the populations on the NPCNF.

Too often the Forest Service has found itself playing "catch up" in dealing with the latest motorized and mechanized toys accessing national forests. It is simply imperative that the NPCNF get out in front and take steps to protect wintering wildlife populations from snow bikes and snowmobiles. All alternatives for the NPCNF must close extensive areas to motorized and mechanized travel to protect mountain goat populations. We recommend the following plan components:

- ***Desired condition.*** *Human-caused disturbances do not affect species such as mountain goat, wolverine, and grizzly bear at a frequency or scale that prevents wildlife populations from attaining desired distribution and abundance in the planning area.*
- ***Desired condition.*** *Mountain goats are not harassed or displaced from known winter concentration areas or kidding areas due to human activities.*
- ***Standard.*** *Over-snow vehicle use is prohibited in mountain goat winter range.*
- ***Standard.*** *Helicopter-supported guiding operations are prohibited in mountain goat winter range.*

Water quality and aquatic ecosystems

The sustainability section of 2012 Planning Rule requires the Forest Service to provide strong, comprehensive protection of water quality and aquatic resources in forest plan revisions. Specifically, the rule requires plan components that –

- "maintain or restore the ecological integrity of … aquatic ecosystems and watersheds" (36 CFR 219.19(a)(1))
- "maintain or restore … water quality (36 CFR 219.19(a)(2)(iii))
- "maintain or restore … water resources in the plan area, including lakes, streams, and wetlands; ground water; public water supplies; sole source aquifers; source water protection areas; and other sources of drinking water" (36 CFR 219.19(a)(2)(iv))
- "maintain or restore the ecological integrity of riparian areas in the plan area, including … structure, function, composition, and connectivity" (36 CFR 219.19(a)(3))

Nowhere in the National Forest System are these requirements more important than in the Nez Perce - Clearwater National Forests, which are the headwaters of the Salmon, Clearwater, and Snake Rivers, with tributaries that provide habitat for bull trout, steelhead, westslope cutthroat trout, and Chinook salmon. These aquatic resources face serious challenges from climate change and other stressors, including a large network of erosive roads and pressure to increase timber outputs.

We appreciate the Draft Plan's efforts to ensure a sustainable future for the Nez Perce – Clearwater's aquatic resources, including desired conditions for watersheds that "retain their inherent resilience to respond and adjust to … climate change" (FW-DC-WTR-01), provide spatial connectivity and "intact habitat refugia" (FW-DC-WTR-02), and support the presence of beavers (FW-DC-WTR-09), whose water-storing structures are increasingly recognized as valuable tools in making watersheds more resilient to climate change, diminishing snowpack, and drought. However, there does not appear to be a monitoring

question or indicator for beaver presence in the draft monitoring program in Appendix C; if so, then we request that you remedy that omission, perhaps by designating beaver as a focal species for monitoring.

We also appreciate the Draft Plan's objectives for watershed and stream restoration work, including decommissioning of system and non-system roads (FW-OBJ-WTR-02 and -03). In addition, we strongly support the inclusion of standard FW-STD-WTR-04: "Where aquatic and riparian desired conditions are being achieved, projects shall maintain those conditions." This plan direction helps ensure compliance with the Planning Rule's requirement to maintain or restore the ecological integrity of aquatic ecosystems and watersheds.

Riparian management zones (RMZs)

The Draft Forest Plan defines four categories of RMZs, which are similar to the interim riparian habitat conservation areas defined in PACFISH and INFISH (Forest Plan, page 54). However, there are a couple of key improvements. For example, Category 1 RMZs would apply to any stream that is used by any species of fish at any point in the year, whether perennial or intermittent (DEIS, page 3.2.2.2-33), whereas, Category 1 buffers were applied only to perennial fish bearing streams under PACFISH and INFISH. This is a very important improvement over the interim PACFISH and INFISH definition of Category 1 streams because many intermittent streams on the forest are used for spawning and rearing, refuge areas during flood events in larger down streams rivers and creeks, or for migration routes by fish emerging from lakes.

Another key improvement applies to intermittent non-fish bearing streams. The RMZ minimum width for all intermittent streams would be 100 feet under the action alternatives, instead of varying from 50 to 100 feet as they do for some subwatersheds under PACIFISH and INFISH. This is an important improvement because it will ensure that sediment yields in intermittent streams are consistent with background or natural yields, and thus, management activities in intermittent watersheds will not yield and deliver unnatural sediment loads to downstream fish bearing waterways.

RMZs are classified as not suitable for timber production, based on the determination that a scheduled flow of commercial timber products using a rotation age would not be expected to occur in RMZs. Vegetation management in the RMZ would occur only for the purposes of restoring or enhancing riparian, fish, and aquatic resources (DEIS, page 3.2.2.2-34). Some exceptions apply in wildland urban interface areas where the Forest Service may want to reduce fuel loads adjacent to structures or at-risk communities. While these exceptions are contained in the Draft Forest Plan, the Forest Service expects to apply them in only limited situations. Where they are applied, the Forest Service must show that reducing fuels loads in RMZs adjacent to structures and at-risk communities will not prevent the attainment of desired conditions for RMZs.

We support plan components for RMZs as proposed in the Draft Forest Plan. The plan components for RMZs are critically important, particularly in watersheds inhabited or used by candidate, threatened, and endangered fish. Many streams and rivers in the plan area are inhabited yearlong or seasonally by bull trout, salmon, steelhead, and lamprey. The Nez Perce-Clearwater National Forests are the only forests in the Northern Region with anadromous fish habitat. Idaho's salmon and steelhead populations are critically low and face the very real possibility of extinction within the plan area. For these reasons, we believe that extreme caution is warranted. The proposed plan components for RMZs will ensure that habitat for these species within the plan area is protected or enhanced.

Priority watersheds

The 2012 Planning Rule requires the Forest Service to "[i]dentify watershed(s) that are a priority for maintenance or restoration" (36 CFR 219.7(f)(1)). The identification of priority watersheds is supposed to be informed by the Watershed Condition Framework (FSH 1909.12, page 46). The Watershed Condition Framework (USDA, 2011b) is a consistent, nationwide approach to the classification of watershed conditions and the prioritization of watershed restoration needs at the subwatershed (HUC12) scale (DEIS, page 3.2.2.1-8). The Framework ranks subwatersheds as follows:

- **Class 1** - functioning properly: watersheds exhibit high geomorphic, hydrologic, and biotic integrity relative to their natural potential condition.
- **Class 2** - functioning-at-risk: watersheds exhibit moderate geomorphic, hydrologic, and biotic integrity relative to their natural potential condition.
- **Class 3** - impaired: watersheds exhibit low geomorphic, hydrologic, and biotic integrity relative to their natural potential condition.

The Nez Perce-Clearwater National Forests completed a watershed condition classification process in 2011. Two-hundred and twenty subwatersheds were evaluated within the planning area. Of those, 140 subwatersheds were rated as 'Functioning Properly', 73 were rated as 'Functioning at Risk', and 7 were rated as 'Impaired' (DEIS, page 3.2.2.1-8).

Identification of priority watersheds is also supposed to be based on:

1. *Agency watershed restoration policies and priorities that have been established at other scales, including national and regional scale restoration strategies.*
2. *The importance of water and watershed resources (ecological, social, and economic resource value), the urgency of management action to address conditions and threats, and the ability of management actions to maintain or improve conditions or address threats.*
3. *Alignment of watershed objectives with other Forest Service strategic objectives and priorities.*
4. *Alignment of watershed objectives with the strategies and priorities of other Federal and State agencies, Tribes, community and collaborative efforts, nongovernmental conservation organizations, and public desires.*
5. *Considering watersheds that have important ecological values, such as those with designations of Outstanding Natural Resource waters, Class A/Blue Ribbon fisheries, Class I Airsheds, or biodiversity hotspots.*
6. *Considering impaired ecosystems, such as those with Clean Water Act 303(d) listed waters, threatened or endangered species, poor air quality, invasive species, or degraded vegetation conditions, and those where improvement or restoration activities are necessary to meet regulatory requirements or meet desired condition objectives.*

(FSH 1909.12, pages 46 and 47).

Finally, the Planning Directives require the responsible official to identify the number of watersheds that can reasonably be maintained or improved within a five-year period, given personnel and budgetary constraints (FSH 1909.12, page 46).

The Draft Forest Plan lists three priority watersheds, including Upper Elk Creek, Upper Clear Creek, and Upper Little Slate Creek (page 17). While this number is underwhelmingly low, the Forest Service notes

that priority watersheds are considered 'plan content' under the 2012 Planning Rule, and additional priority watersheds may be identified in the future without necessitating a forest plan amendment.

One source of confusion, however, comes from Objective FW-OBJ-WTR-01, where the number of priority watersheds that would be maintained or restored every fifteen years could range anywhere from ten to twenty depending on the selected alternative (Page 46). This range is not consistent with the number of priority watersheds that were actually listed by name (3). This leaves the reader wondering whether the number of priority watersheds is actually supposed to range from three to twenty instead of ten to twenty. The Forest Service should clarify this source of confusion in the Final Forest Plan and FEIS.

It is also unclear why the number of priority watersheds that would be maintained or restored varies at all. Do the number of priority watersheds vary because of constraints related to Forest Service personnel and budgets? Do the number of priority watersheds vary because of competing resource management priorities? Do they vary because of potentially unforeseeable changes to current watershed conditions? The range in the number of priority watersheds represented by alternatives appears to be arbitrary because there is no information in the Draft Forest Plan or the DEIS that describes where the range of ten to twenty came from.

Adding to the uncertainty is the relationship, if any, between priority watersheds, the Conservation Watershed Network, and the Idaho Department of Environmental Quality 303(d)/305(b) Integrated Report. The Draft Forest Plan indicates that the Conservation Watershed Network is:

> *...intended to provide a pattern of protection across the landscape in which the habitat of migratory salmonids receives special attention and treatment. Hydrologic Unit Code 12 (HUC12) watersheds with stream habitat meeting desired conditions, and with strong local populations, are expected to function as refugia and a source of colonizing fish for adjacent HUC12 watersheds with habitat not meeting desired conditions. Adjacent HUC12 watersheds with habitat not meeting desired conditions and with high potential for restoration and fish production are included in the network and are expected to offer future habitat suitable for population expansion after desired conditions are met.*

(Page 48).

While the description of the Conservation Watershed Network clearly indicates a focus on native salmonid fish, it is not clear which of the subwatersheds included in the Network are meeting desired conditions and which subwatersheds are not meeting desired conditions. Furthermore, it is unclear whether subwatersheds included in the network that do not meet desired conditions influenced the identification of the priority watersheds.

It is similarly unclear if the planning team's selection of priority watersheds for the planning area was informed by the Idaho Department of Environmental Quality 303(d)/305(b) Integrated Report (2016). As noted in the DEIS, approximately 18.2 percent of the waterways assessed within the planning area are not meeting beneficial uses (DEIS, page 3.2.2.1-9). While Total Maximum Daily Loads (TMDLs) have been assigned to many of these waterways, the Idaho Department of Environmental Quality has not assigned TMDLs to all of them.

In any case, the Forest Service should clarify in the FEIS whether or not the Conservation Watershed Network and the Idaho Department of Environmental Quality 303(d)/305(b) Integrated Report were used to inform the selection of priority watersheds. It would seem that these are valuable sources of information that should be used in the selection of priority watersheds if they were not.

In the Final Forest Plan, we recommend identifying any watershed that is not meeting desired conditions as a priority watershed. We see no need to place an arbitrary limit on the number of watersheds to be restored during the life of the plan. Priority watersheds should then be ranked in terms of the urgency with which restoration needs to occur. Consistent with the Forest Service Handbook, the planning team should identify which watersheds would be restored within the first five years of the plan. We also recommend identification of watersheds to be restored in years five through ten and years ten through fifteen.

Conservation Watershed Network

We applaud the planning team for developing and including the Conservation Watershed Network. As stated above, the purpose of the Network is "to provide a pattern of protection across the landscape where the habitat of migratory salmonids receives special attention and treatment" (Forest Plan, page A-6). Criteria used for the selection of watersheds that are part of the network include:

1. *Designated critical habitat for one or more Endangered Species Act listed species over large portions of the stream network. Examples include the Columbia River bull trout, Snake River steelhead trout, and Snake River spring and summer Chinook salmon.*
2. *A local bull trout population identified in the final Columbia River Bull Trout Recovery Plan (USDI-FWS 2016).*
3. *A major or minor spawning area for Snake River steelhead trout or Snake River spring and summer chinook salmon or both identified in the draft Snake River Recovery Plan (NOAA 2016).*
4. *1980/2040 Climate Shield modeled reaches for bull trout (Isaak et al, 2015)*
5. *Municipal watershed*
6. *Important spawning and rearing habitat for one or more aquatic species*
7. *Isolated allopatric westslope cutthroat trout population with high genetic integrity*
8. *Important spawning habitat for kokanee within the Lower North Fork Clearwater subbasin only*

(Forest Plan, pages a-6 and A-7).

The network includes watersheds that are meeting desired conditions, and the Network also includes watersheds that are in need of restoration. This is important because watersheds that are meeting desired conditions and have strong salmonid populations serve as refugia for fish that have the potential to recolonize adjacent watersheds that are not currently meeting desired conditions but could through restoration.

While we support the inclusion of the Network in the Final Forest Plan, it is not clear from reading the Draft Plan or the DEIS which watersheds in the Network are meeting desired conditions and which watersheds are not. We recommend that the planning team include both a list and a map that make this distinction.

Effects analysis

The annual timber sale quantities and thus, the annual acreage treated vary significantly across the alternatives. Annual timber sale quantities for Alternatives W, X, Y, and Z are 220-240 million board feet (mmbf), 240-261 mmbf, 120-140 mmbf, and 60-80 mmbf, respectively (Forest Plan, page 90). Translating these volumes into acres treated, the Forest Service estimates that 128,607 acres, 137,020 acres, 67,387 acres, and 38,736 acres would be treated annually in alternatives W, X, Y, and Z, respectively, during the first decade (DEIS, page 3.5.1-33). More than three and one-half times as many acres would be treated annually on the high end than on the low end. These differences have implications for watersheds and aquatic species. As the Forest Service suggests:

> *…the differences between the action alternatives in terms of their allowable levels of harvest and anticipated acres treated should be considered. The action alternatives vary in terms of projected timber sale quantity and the acres anticipated to be treated in Management Areas 2 and 3, in some cases widely like when Alternative X is compared to Alternative Z. Management Area 3 contains lands most departed from desired conditions in terms of vegetation composition but also contains streams most departed from aquatic desired conditions. It contains watersheds with the highest priorities for restoration to support recovery goals for listed anadromous fish in the Clearwater basin.*

(DEIS, page 3.2.2.2-58).

Unfortunately, it does not appear that the Forest Service attempted to quantify these watershed effects. The Forest Service acknowledges that watershed conditions are closely related to the extent of the road network, but there is no discussion in the DEIS about the existing road system, relative to the road system that would be needed to achieve the proposed timber sale quantities. The DEIS only provides estimates of the number of existing road miles in riparian management zones:

> *High levels of deposited sediment and simplified habitat conditions are correlated with roaded development in watersheds, particularly in riparian areas. System roads cover an estimated 2,400 acres, or 600 road miles, within riparian management zones on the Nez Perce National Forest and an estimated 4,000 acres, or 1,000 road miles, within riparian management zones on the Clearwater National Forest.*

(DEIS, pages 3.2.2.2-9 and 3.2.2.2-10).

In order for the public and the responsible official to fully understand the consequences of projected timber sale quantities to watersheds and aquatic species, the Forest Service must attempt to quantify water quality impacts. Estimated sediment yields in watersheds with lands identified as suitable for timber production would be most useful. Projected sediment yields across alternatives should then be compared to existing and desired aquatic conditions. The FEIS should also discuss whether or not projected sediment yields will degrade water quality and aquatic habitat. Vegetative desired conditions should not take priority over aquatic desired conditions.

Estimating sediment yields will likely require the Forest Service to consider the extent of the existing road network across lands identified as suitable for timber production, relative to the road network that would be required to achieve projected increases in annual timber sale quantities. GIS software could be

used to identify lands that are suitable for timber production that are not accessible by the current road network. Based on the size and topography of these areas and prior timber sale NEPA documents, the Forest Service should be able to generate rough estimates of the road construction (miles) that would be needed in each watershed to achieve annual timber sales quantities. Sediment models available to the Forest Service could then be used to estimate potential sediment yields in watersheds with lands identified as suitable for timber production. Such an exercise would enable the public and the responsible official to make informed comparisons of the effects of the alternatives to water quality and aquatic habitats. More importantly, it would enable the public and the responsible official to determine if vegetative desired conditions would come at the expense of aquatic desired conditions.

Soils

Draft Forest Plan components for soils are found on pages 43 and 44. Objective FW-OBJ-SOIL-01 would set an annual target for the restoration of impaired soils in timber harvest units. This target varies by alternative from 600 to 2,100 acres annually. While we appreciate the fact that the Forest Service is setting a goal for soil restoration, it is not clear where these numbers come from and if they are sufficient. For context, the Forest Service might consider providing any available information regarding (1) the extent of impaired soils across the forest and (2) how much soil restoration has typically occurred on an annual basis. This information would help the reader and the responsible official understand the significance of these alternatives. In any case, we certainly encourage the Forest Service to restore impaired soils whenever and wherever possible. If the Forest Service is planning a forest or watershed restoration project, then the agency should also restore impaired soils in the project area.

Guidelines MA2 and MA3-GDL-SOIL-01 limits the use of ground-based equipment used for vegetation management to slopes less than 45 percent and tractor skidding of logs to slopes less than 35 percent. The purpose of this guideline is to limit detrimental soil disturbance. Exceptions allowed where soil, slope, and equipment are determined appropriate to maintain soil functions. After reading the DEIS, it is not clear if the 45 and 35 percent slope limitations are based on available scientific information regarding the effects of logging equipment to soils or the physical limitations of logging equipment. It is our belief that slope limitations should be based on effects--not the physical limitations of logging equipment. Available scientific information should be used to determine slope limitations that are designed to protect the soil resource and limit soil erosion and sediment delivery to streams. It is possible that effects may vary by soil type, and thus, the maximum slope should perhaps vary according to soil type.

We also noted that there are no Forest Plan standards that limit detrimental soil disturbance. In the past, detrimental soil disturbance was limited to no more than 15 percent of an activity area by a Northern Region soil policy. It is not clear if the regional policy is still in effect. In any case, we recommend including a standard that limits detrimental soil disturbance to no more than 15 percent of an activity area without the implementation of restoration activities that are designed to result in a net reduction of detrimental soil disturbance. In fact, the effects analysis makes a good point that supports the inclusion of a limit on detrimental soil disturbance:

> *Nez Perce-Clearwater soil monitoring [...] found that logging systems result in detrimental soil disturbance on a percent area basis of 8 to 29 percent for ground-based harvest systems, 1 to 10*

> *percent for skyline, and less than 2 percent for helicopter yarding (Archer, 2008; Bergstrom, 2018; Reeves et al., 2011).*

(DEIS, page 3.2.1.6-23).

As noted, in the DEIS, monitoring has shown that some ground-based logging activities result in up to 29 percent of an activity area having detrimental soil disturbance. Therefore, we believe that a limit is necessary to protect the soil resource.

In addition to the suggestions above regarding soil restoration objectives and slope limits for logging equipment, we recommend the following specific forest plan component for detrimental disturbance:

- ***Standard.*** *Detrimental soil conditions shall not exceed more than 15 percent of an activity area. In areas where less than 15 percent detrimental soil conditions exist from prior activities, the cumulative detrimental effect of the current activity following project implementation and restoration must not exceed 15 percent. In areas where more than 15 percent detrimental soil conditions exist from prior activities, the cumulative detrimental effects from project implementation and restoration should not exceed the conditions prior to the planned activity and should move toward a net improvement in soil quality.*

Forest management

Timber harvest

The planning team calculated a Sustained Yield Limit ("SYL") of 241 million board feet annually (Draft Forest Plan, page 89). The annual projected timber sale quantity ("PTSQ") varies among the alternatives. PTSQs for the No Action Alternative and Alternatives W, X, Y, and Z are 55 million board feet ("MMBF"), 220-241 MMBF, 241-261 MMBF, 120-140 MMBF, and 60-80 MMBF respectively. PTSQs for Alternatives W and X are overly optimistic and potentially at odds with the 2012 Planning Rule's guidance that the PTSQ is supposed to be "based on the planning unit's fiscal capability and organizational capacity"(FSH 1902.12, Section 60.5). Similarly, the Planning Rule cautions that plan objectives "should be based on reasonably foreseeable budgets" (36 CFR 219.7(e)(1)(ii)). The DEIS claims that "[u]nder all alternatives the amount of harvest that occurs would be limited by the budget and workforce capacity, which are not expected to increase" (DEIS, page 3.5.1-19). We do not understand how budgetary and workforce constraints were factored into the PTSQ values for Alternatives W and X, and even Alternative Y may be unachievable under current budgetary and staffing constraints.

The Forest Service should also consider the capacity of current milling infrastructure. Achieving the PTSQs associated with Alternatives W and X would require the timber industry to make a substantial investment in new infrastructure. The PTSQ under Alternative Y may be possible with multiple shifts at existing area mills, but certainly not the PTSQs under Alternatives W and X. Even if industry invested in additional infrastructure, you have to question whether or not it would be the right move. Flooding local mills with a glut of logs would drive down prices and call into question whether or not industry could sustain additional infrastructure in the long run.

Notwithstanding the financial and practical realities, one must also question the ecological sustainability of the PTSQs associated with Alternatives W and X. In fact, the 2012 Planning Rule requires the Forest Service to consider ecological sustainability. Specifically, the Rule states:

> *The plan must include plan components, including standards or guidelines, to maintain or restore the ecological integrity of terrestrial and aquatic ecosystems and watersheds in the plan area, including plan components to maintain or restore structure, function, composition, and connectivity, taking into account [the interdependence] of terrestrial and aquatic ecosystems in the plan area.*

36 CFR 219.8(a)(i).

The DEIS fails to disclose estimates of the additional new road construction that would be required to attain the PTSQs under the action alternatives, but presumably, thousands of miles of new roads would be required to achieve radically higher PTSQs. Ramping up road construction and timber harvest would compromise water quality and fish and wildlife habitat. As identified in the Watershed Condition Framework (USDA 2011), the majority of the watersheds within the planning area that are classified as "impaired" or "functioning at risk" are located in Management Area 3. We cannot support the PTSQs under Alternatives W and X or a departure from the SYL due to the effects to water quality and fish and wildlife that would result. The PTSQ under Alternative Y may be acceptable under current budgetary, workforce (agency and industry), and ecological constraints, but it would require a more thorough analysis in the FEIS to demonstrate that it is possible to protect water quality and fish and wildlife at a PTSQ of 120-140 MMBF.

We also oppose standard FW-STD-TBR-11, which not only codifies a departure from the SYL but also broadly exempts salvage harvest from the PTSQ and the SYL:

> *The quantity of timber that may be sold per decade will be less than or equal to ten times the annual sustained yield limit departure limits (See opening paragraph above). Salvage and/or sanitation harvest of trees substantially damaged by fire, windthrow, or other catastrophe or in imminent danger from insect or disease attack may be harvested over and above the sustained yield limit.*

(Draft Forest Plan, page 92).

Again, we question the ecological sustainability of the PTSQs associated with Alternatives W and X because these volumes would require significant new road construction that would compromise water quality and fish and wildlife habitat. Approving a departure from the SYL and treating salvage logging as an additional bonus would only further escalate timber harvest and cause even more environmental degradation.

Retention of live trees and snags

The Draft Forest Plan contains two plan components related to the retention of snags for wildlife. Guideline MA3-GDL-FOR-07 essentially provides that any non-merchantable snag that does not pose a risk to logging operators should be retained for wildlife purposes (Draft Forest Plan, page 36). We recommend striking the qualifier "non-merchantable" from this plan component. Whether merchantable or non-merchantable, snags are critical ecosystem components for a variety of wildlife species. Even if these snags fall on the ground shortly after a stand has been treated, snags serve as a source of coarse woody debris. Coarse woody debris provides cover, denning sites, and other types of habitat to a variety of wildlife species. Coarse woody debris also provides favorable microclimates for

the regeneration of trees and vegetation, which can otherwise be inhibited by increased solar radiation following timber harvest.

Guideline MA2 and MA3-GDL-FOR-05 is intended to ensure that an adequate number of snags remain available to wildlife at a project scale. This guideline specifies the minimum number of snags per 100 acres across a project area. Under Alternatives W, X, and Y, a minimum of 100 to 300 snags greater than 15 inches dbh and 100 to 300 snags greater than 20 inches dbh would be retained depending on the potential vegetation type group (Draft Forest Plan, page 38). Alternative Y would also require retention of 100 to 400 snags greater than 10 inches dbh per 100 acres depending on the potential vegetation type group. While well intended, in practice, guideline MA2 and MA3-GDL-FOR-05 would enable the removal of all snags from a timber harvest unit provided that the minimum snag densities described in this guideline are satisfied at the project scale. In other words, you could essentially rely on the snags in untreated stands to fulfil this guideline and consequently, you could get away with the removal of all snags from the treatment units.

There is an opportunity to simplify plan components for snag retention and best meet the needs of wildlife. Again, while well intended, MA2 and MA3-GDL-FOR-05 would essentially enable the removal of all snags from timber harvest units because the minimum snag densities described in this guideline could be satisfied by the adjacent, uncut stands. It's also hard to imagine that the Forest Service is really going to calculate snag densities at a project scale because of the extra work that would be required to cruise stands that are not slated for treatment. We think a more practical approach that would also best provide for the needs of wildlife is to just retain any snag that does not pose a safety hazard. We would remove guideline MA2 and MA3-GDL-FOR-05 and reword guideline MA3-GDL-FOR-07 as follows:

- ***MA3-GDL-FOR-07.*** *Retain all snags for wildlife benefit unless a snag poses a risk to human life or safety. Hazardous snags should be felled and left on site where appropriate to provide coarse woody debris.*

The Draft Forest Plan also includes a guideline (MA3-GDL-FOR-06) that is intended to provide for the recruitment of future snags (Draft Forest Plan, page 36). Under Alternatives W, X, and Y, a minimum of three live trees greater than 15 inches dbh would be retained in timber harvest units to act as future snags. Under Alternative Z, at least seven live trees per acre would be retained to act as future snags, though there are no specifications regarding the minimum diameter of live trees to be retained. It's not clear where the minimum of three to seven live trees with a minimum diameter of 15 inches dbh came from, but a minimum of three to seven live trees seems too low. In any case, the Forest Service should come up with a minimum number of live trees and a minimum diameter that is based on scientific rationale. In any case, the Forest Service should explain its rationale for its final live tree retention requirements in the FEIS.

Old growth

Plan components for old growth are found on pages 36 and 37 of the Draft Forest Plan. These standards and guidelines are based on the definitions of old growth types described by Green et al. (2011). These old growth definitions are broadly accepted as the best available science for the planning area.

Standard MA3-STD-FOR-01 prohibits management activities in ponderosa pine, western larch, western white pine, Pacific yew, western red cedar, western hemlock, and whitebark pine old growth types if the

"activities would likely modify the characteristics of the stand to the extent that the stand would no longer meet the definition of old growth ten years post activity." Guideline MA2 and MA3-GDL-FOR-02 is the flip side of the coin. This guideline permits the authorization of management activities in these old growth types if "the activities are designed to increase the resistance and resiliency of the stand to disturbances or stressors and if the activities are not likely to immediately modify stand characteristics to the extent that the stand would no longer meet the definition of old growth over the long-term."

Guideline MA2 and MA3-GDL-FOR-03 prohibits permanent road construction in ponderosa pine, western larch, western white pine, Pacific yew, western red cedar, western hemlock, and whitebark pine old growth types "unless a site specific analysis determines the route through old growth to be the optimum location and no other alternative location is feasible."

Standard MA3-STD-FOR-01 and guidelines MA2 and MA3-GDL-FOR-02 and MA2 and MA3-GDL-FOR-03 notably do not apply to Douglas-fir, lodgepole pine, grand fir, Engelmann spruce/subalpine fir, and mountain hemlock/subalpine fir old growth types. The Draft Forest Plan considers these old growth types to be "non-desired old growth type[s]" (Draft Forest Plan, page 37). We assume that the Nez Perce-Clearwater National Forests consider these old growth types to be undesirable because they consist predominately of shade-intolerant species that are prone to insects and disease. Some of these old growth types are also in excess of the natural range of variation.

Douglas-fir, lodgepole pine, grand fir, Engelmann spruce/subalpine fir, and mountain hemlock/subalpine fir old growth types are not entirely unprotected in the Draft Forest Plan. Guideline MA2 and MA3-GDL-FOR-04 states that regeneration silviculture should not be applied to these old growth types if the stand "can be converted to a desired old growth type".

We appreciate the fact that the planning team has acknowledged the ecological significance of old growth types that exist within the planning area, and that, accordingly, the planning team has included plan components for old growth in the Draft Forest Plan. After reviewing these plan components, we believe that the planning team needs to address the lack of justification for active management of intermediate and moist old growth types. Forest types within the planning area exist along a gradient from hot, dry sites to moist, cool sites. The hot, dry sites were historically influenced by frequent, low-intensity fires that reduced fuel loads and fire-intolerant species in the understory. Franklin et al. (2008) advocate for active management of dry old growth types in eastern Washington, which are very similar to dry old growth sites in the planning area. Due to fire suppression, many dry old growth stands have developed uncharacteristic structure and fuel loadings. They argue that uncharacteristic conditions on dry sites have greatly increased the risk of stand replacing fires and insect epidemics, and therefore, setting them aside as old growth preserves could actually be detrimental. In contrast, moist, cool sites are naturally characterized by infrequent, high-severity (stand replacement) fires. Mixed disturbance regimes occur on intermediate sites. The structure and composition of moist and intermediate old growth stands within the planning area are not unnatural.

Accordingly, we recommend that the planning team consider drafting old growth plan components that distinguish between dry sites and intermediate and moist sites. While the available scientific information supports active management in dry old growth types, the literature does not demonstrate a need for active management of intermediate and moist old growth types. In lieu of standard MA3-STD-

FOR-01 and guidelines MA2 and MA3-GDL-FOR-02 and MA2 and MA3-GDL-FOR-04, we recommend the following old growth plan components:

- ***Standard.*** *Vegetation management activities are not allowed in in old growth type codes 2, 3, 4, 5, 7, 8 and 9 for the North Idaho Zone as described by Green at al. (2011). Exceptions are allowed if the amount of a particular old growth type within the Nez Perce-Clearwater National Forests is in excess of the natural range of variation.*
- ***Guideline.*** *Vegetation management activities may be authorized in old growth type codes 1 and 6 for the North Idaho Zone as described by Green et al. (2011), which include ponderosa pine, Douglas-fir, and western larch old growth stands occurring in warm, dry environments and whitebark pine old growth stands. Vegetation management activities in these stands should be designed to increase the resistance and resiliency of the stand to disturbances or stressors. Vegetation management activities should also not immediately modify stand characteristics to the extent that the stand would no longer meet the definition of old growth over the long-term. See the glossary for the definitions of resistance and resilience.*

We also recommend modifying guideline MA2 and MA3-GDL-FOR-03 as follows:

- ***MA2 and MA3-GDL-FOR-03.*** *To prevent fragmentation, permanent road construction should be avoided in old growth stands unless a site-specific analysis determines the route through old growth to be the optimum location and no alternative location is feasible.*

Fire management

We agree with the Forest Service that "[f]ire is a necessary and critical ecological function across the Nez Perce-Clearwater that plays a critical role in providing quality habitat for both plant and wildlife species." (Draft Forest Plan, page 40). We applaud forest plan components that acknowledge and promote the role of fire within the planning area, such as goal FW-GL-FIRE-04 and desired condition FW-DC-FIRE-02 (pages 40 and 41). These plan components promote the acceptance of fire as a management tool, but they also allow for the management of both planned and unplanned ignitions to achieve resource objectives.

It is critically important that both planned and unplanned ignitions may be managed to achieve desired conditions across ALL three Management Areas. Haugo and Welch (2013) assessed forest conditions across the Clearwater Basin. They found that fifty-eight percent of the coniferous forests in the Nez Perce-Clearwater National Forests are moderately to severely departed from historic conditions. Haugo and Welch observed that the magnitude of departure in the mixed severity fire regime forests and the low severity fire regime forests is a result of fire suppression and extensive harvesting in the mid twentieth century.

In a phase two assessment, Haugo and Benton (2014) identified restoration and management needs to place forest landscapes of the Nez Perce-Clearwater National Forests on a trajectory to their natural range of variability. They found that restoration is needed on 49% of the lands that are classified as suitable for timber production (353,000 acres). Even if the Forest Service implements the most aggressive timber harvest program (65,100 acres treated in MA 3 every 5 years under Alternative W), it would take more than twenty-seven years to accomplish mechanical restoration on this many acres. Of course, this calculation assumes that vegetative conditions will otherwise remain static. Consequently, it

is imperative that planned and unplanned ignitions be managed to contribute to the achievement of desired conditions for forest lands across all Management Areas--not just Management Areas 1 and 2.

References

Aubry, K. B., McKelvey, K. S., & Copeland, J. P. 2007. Distribution and broadscale habitat relations of the wolverine in the contiguous United States. *Journal of Wildlife Management*. 71(7): 2147-2158.

Aubry, K. B., &Raley, C. M. 2002. The pileated woodpecker as a keystone habitat modifier in the Pacific Northwest (PSW-GTR-181). Retrieved from Olympia, WA: http://www.fwspubs.org/doi/suppl/10.3996/042013-JFWM-031/suppl_file/042013-jfwm-031rs04. pdf, http://www.treesearch.fs.fed.us/pubs/6718

Boyd, J., Bush, J., DeVolder, A., Holt, B., Jaka, J., Migala, R., & Shoemaker, J. 2017. Species status assessment report for the northern Rocky Mountains fisher. Denver, CO: U.S. Department of the Interior, Fish and Wildlife Service, Mountain-Prairie Region.

Canfield, J.E., L.J. Lyon, J.M. Hillis, and M.J. Thompson. 1999. Ungulates. Pages 6.1---6.25 in G. Joslin and H. Youmans, coordinators. Effects of Recreation on Rocky Mountain Wildlife: A Review for Montana. Committee on Effects of Recreation on Wildlife, Montana Chapter of The Wildlife Society. 307p.

Chadwick, D.H. 1983. A beast the color of winter: the mountain goat observed. University of Nebraska Press, Lincoln.

Christensen, A. G., L. J. Lyon, and J. W. Unsworth. 1993. Elk management in the Northern Region: Considerations in forest plan updates or revisions. Ogden, UT: USDA Forest Service. General Technical Report INT-303.

Cook, R., Cook, J., and Wisdom, M. 2018. The Clearwater Basin collaborative elk project: Summary of results through 2017. Boise, ID: U.S. Department of Agriculture, Forest Service.

Copeland, J. P., Mckelvey, K. S., Aubry, K. B., Landra, A., Persson, J., Inman, R. M., . . . May, R. 2010. The bioclimatic envelope of the wolverine (Gulogulo): do climatic constraints limit its geographic distribution? *Canadian Journal of Zoology*. 88(3): 233-246.

Côté, S.D., and Festa---Bianchet, M. 2003. Mountain goat. In Wild mammals of North America: biology, management, and conservation. Edited by G.A. Feldhamer, B. Thompson, and J. Chapman. The John Hopkins University Press, Baltimore, Md.pp. 1061–1075.

Czech, B. 1991. Elk behavior in response to human disturbance at Mount St. Helens National Volcanic Monument. *Applied Animal Behaviour Science*. 29:269–277.

Dailey, T. V., & Hobbs, N. T. 1989. Travel in alpine terrain: energy expenditures for locomotion bymountain goats and bighorn sheep. *Canadian Journal of Zoology*. 67(10): 2368-2375.

Dorrance, M.J., R.D. Jakimchuck, and E.R. Carruthers. 1975. Effects of snowmobiles on white---tailed deer. *Journal of Wildlife Management*. 39(3): 563---569.

Festa-Bianchet, M., and S. D. Côté. 2008. Mountain goats: ecology, behavior and conservation of an alpine ungulate. Island Press, Washington, DC, USA.

Fox, J. L., Smith, C. A., & Schoen, J. W. 1989. Relation between mountain goats and their habitat in southeastern Alaska. Gen. Tech. Rep. PNW-GTR-246. Portland, OR: US Department of Agriculture, Forest Service, Pacific Northwest Research Station. 25 p, 246.

Frair, J. L., E. H. Merrill, H. L. Berger, and J. M. Morales. 2008. Thresholds in landscape connectivity and mortality risks in response to growing road networks. *Journal of Applied Ecology*. 45:1504–1513.

Franklin, J.F., M. A. Hemstrom, R. V. Pelt, J. B. Buchanan, and S. Hull. 2008. The case for active management of dry forest types in eastern Washington: Perpetuating and creating old forest structures and functions. Washington Department of Natural Resources. 105 p.

Freddy, David J., B.M. Whitcomb and M.C. Fowler. 1986. Responses of mule deer to disturbance by persons afoot and snowmobiles. *Wildlife Society Bulletin*. 14(1): 63-68.

Geist, V. 1982. Adaptive behavioral strategies. Pages 219–277. In: Elk of North America: Ecology and management, eds. J. W. Thomas and D. A. Toweill. Harrisburg, PA: Stackpole Books Incorporated. 698 p.

Harris G., R.M. Nielson, and T. Rinaldi. 2014. Effects of winter recreation on northern ungulates with focus on moose (*Alces alces*) and snowmobiles. *European Journal of Wildlife Resources*. 60:45–58.

Haugo, R., and T. Benton. 2014. Forest composition and structure restoration needs within the Clearwater Basin, Idaho: Clearwater Basin Collaborative phase 2 landscape assessment. The Nature Conservancy and Ecosystems Research Group, Moscow, ID.

Haugo, R., and N. Welch. 2013. Current ecological conditions and restoration needs in forests of the Clearwater Basin, Idaho. The Nature Conservancy, Moscow, ID.

Heitz, L.F., C.C. Warnick, and J.S. Gladwell. 1980. Idaho Hydroelectric Potential: Theoretical Potential in Streams and Potential at Existing Dams and Proposed Sites. Idaho Water Resources Research Institute, University of Idaho: Moscow, ID.

Heinemeyer, K. S. 1993. Temporal dynamics in the movements, habitat use, activity, and spacing of reintroduced fishers in northwestern Montana. (M.S.). University of Montana, Missoula, MT.

Heinemeyer, K., J. Squires, M Hebblewhite, J.J. O'keefe, J.D. Holbrook , and J. Copeland. 2019. Wolverines in winter: Indirect habitat loss and functional responses to backcountry recreation. *Ecosphere*. 10(2): 1-23.

Hells Canyon Bighorn Sheep Restoration Committee (HCBSRC) 2005. Hells Canyon Initiative annual report FY05. Idaho Dept. of Fish and Game, Oregon Dept. of Fish and Wildlife, Washington Dept. of Fish and Wildlife, U.S. Forest Service, Bureau of Land Management, Foundation for North American Wild Sheep. Idaho Dept. of Fish and Game, Lewiston, ID.

Hershey, T. J. 2011. Implications of back-country travel on key big game summer range in the Bighorn-Weitas Roadless Area. Report for Clearwater National Forest, Idaho.

Hickey, C. 2020. Personal communication. Idaho Department of Fish and Game. Lewiston, ID.

Hillis, J. M., M. J. Thompson, J. E. Canfield, L. J. Lyon, C. L. Marcum, P. M. Dolan, and D. W. McCleery. 1991. Defining elk security: The Hillis paradigm. Pages 38–43. In: Proceedings of the elk vulnerability

symposium, eds. A. G. Christensen, L. J. Lyon, and T. N. Lonner. Bozeman, MT: Montana State University. 330 p.

Hurley, M. A., and G. A. Sargeant. 1991. Effects of hunting and land management on elk habitat use, movement patterns, and mortality in western Montana. Pages 94–98. In: Proceedings of the elk vulnerability symposium, eds. A. G. Christensen, L. J. Lyon, and T. N. Lonner. Bozeman, MT: Montana State University.

IDFG. 2019. Idaho mountain goat management plan 2019-2024. Boise, ID.

IDFG. 2014. Management plan for the conservation of wolverines in Idaho. Boise, ID.

Inman, R. M., Packila, M. L., Inman, K. H., Mccue, A. J., White, G. C., Persson, J., . . . Sartorius, S. S. 2012. Spatial ecology of wolverines at the southern periphery of distribution. *Journal of Wildlife Management*. 76(4): 778-792.

Jones, J. L. 1991. Habitat use of fisher in north central Idaho. (M.S.). University of Idaho,

Jones, J. L., & Garton, E. O. 1994. Selection of successional stages by fisher in north central Idaho. In S.W. Buskirk, A. Harestad, M. Raphael, & R. A. Powell (Eds.), Martens, sables, and fishers: biology and conservation (pp. 377-387). Ithaca, NY: Cornell University Press.

Kasworm, W., H. Carriles, T.G. Radandt, M. Proctor, and C. Servheen. 2009. Cabinet-Yaak Grizzly Bear Recovery Area 2008 research and monitoring progress report. U.S. Fish and Wildlife Service, Missoula, Montana. 76 pp.

Keim, J. 2004. Modeling core winter habitats from habitat selection and spatial movements of collared mountain goats in the Taku River drainage of north-west British Columbia. Biennial Symposium of North Wild Sheep and Goat Council. Vol. 14. 2003.

Koeth, C. 2008. Clinging to existence. Montana Outdoors. Available online at: http://fwp.mt.gov/mtoutdoors/HTML/articles/2008/mountaingoats.htm

Leege, T. A. 1984. Guidelines for evaluating and managing summer elk habitat in northern Idaho. Boise, ID: Idaho Department of Fish and Game. Wildlife Bulletin, No. 11.

Lyon, L. J. 1983. Road density models describing habitat effectiveness for elk. *Journal of Forestry*. 81:592–595.

Lyon, L. J., and J. E. Canfield. 1991. Habitat selection by Rocky Mountain elk under hunting season stress. Pages 99–105. In: Proceedings of the elk vulnerability symposium, eds. A. G. Christensen, L. J. Lyon, and T. N. Lonner. Bozeman, MT: Montana State University.

Lyon, L. J., and A. G. Christensen. 2002. Elk and land management. Pages 557–581. In: North American elk: Ecology and management, eds. D. E. Toweill and J. W. Thomas. Washington, D. C.: Smithsonian Institution Press.

Lyon, L. J., and C. E. Jensen. 1980. Management implications of elk and deer use of clearcuts in Montana. *Journal of Wildlife Management*. 44:352–362.

May, R., A. Landa, J. van Dijk, J.D.C. Linnell, and R. Andersen. 2006. Impact of infrastructure on habitat selection of wolverines Gulogulo. *Wildlife Biology*. 12: 285–295.

McLaren, M.A. and J.E. Green. 1985. The reactions of muskoxen to snowmobile harassment. *Arctic*. 38(3): 188-193.

Mote, P., A. Hamlet, M. Clark, and D. Lettenmaier. 2005. Declining mountain snowpack in western North America. *Bulletin of the American Meteorological Society*. 86:1-39.

Naylor, L. M., M. J. Wisdom, and R. G. Anthony. 2009. Behavioral responses of North American elk to recreational activity. *Journal of Wildlife Management*. 73:328–338.

Mace, R.D., J.S. Waller, T.L. Manley, L. Jack Lyon, and H. Zuuring. 1996. Relationships among grizzly bears, roads and habitat in the Swan Mountains, Montana. *Journal of Applied Ecology.* 33: 1395-1404.

McKelvey, K. S., Copeland, J. P., Schwarts, M. K., Littell, J. S., Aubry, K. B., Squires, J. R., . . . Mauger, G. S. 2011. Climate change predicted to shift wolverine distributions, connectivity, and dispersal corridors. *Ecological Applications*. 21(8): 2882-2897.

Olliff, T., Legg, K. and Kaeding, B. 1999a. Effects of Winter Recreation on Elk in Effects of Winter Recreation on Wildlife of the Greater Yellowstone Area: A Literature Review and Assessment. Greater Yellowstone Coordinating Committee, Yellowstone National Park. Pp. 17-30.

Olliff, T., Legg, K. and Kaeding, B. 1999b. Effects of Winter Recreation on Moose in Effects of Winter Recreation on Wildlife of the Greater Yellowstone Area: A Literature Review and Assessment. Greater Yellowstone Coordinating Committee, Yellowstone National Park. Pp. 73-86.

Olson, L. E., Squires, J. R., Roberts, E. K., Miller, A. D., Ivan, J. S., &Hebblewhite, M. 2017. Modeling large-scale winter recreation terrain selection with implications for recreation management and wildlife. *Applied Geography*. 86: 66-91.

Pederson, G.T., L.J. Graumlich, D.B. Fagre, T. Kipfer and C.C. Muhlfeld. 2010. A century of climate and ecosystem change in Western Montana: what do temperature trends portend? Climatic Change 96: DOI 10.1007/s10584-009-9642-y, 22pp.

Phillips, G. E. 1998. Effects of human-induced disturbance during calving season on reproductive success of elk in the upper Eagle River Valley. Dissertation. Fort Collins, CO: Colorado State University.

Poole, K. G., K. Stuart---Smith, and I. E. Teske. 2009. Wintering strategies by mountain goats in interior mountains. *Canadian Journal of Zoology*. 87:273–283.

Powell, R. A., & Zielinski, W. J. 1994. Fisher. In L. F. Ruggiero, K. B. Aubry, S. W. Buskirk, L. J. Lyon, & W. J. Zielinski (Eds.), The scientific basis for conserving forest carnivores: American marten, fisher, lynx, and wolverine in the western United States (pp. 38-73). Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station.

Preisler, H. K., A. A. Ager, and M. J. Wisdom. 2006. Statistical methods for analyzing responses of wildlife to human disturbance. *Journal of Applied Ecology*. 43:164–172.

Rice, C. G. 2008. Seasonal altitudinal movements of mountain goats. *Journal of Wildlife Management*. 72:1706–1716.

Richard, J. H., J. Wilmshurst, and S.D. Côté. 2014. The effect of snow on space use of an alpine ungulate: recently fallen snow tells more than cumulative snow depth. *Canadian Journal of Zoology*. 92: 1067–1074.

Rowland, M. M., M. J. Wisdom, B. K. Johnson, and J. G. Kie. 2000. Elk distribution and modeling in relation to roads. *Journal of Wildlife Management*. 64:672–684.

Rowland, M. M., M. J. Wisdom, B. K. Johnson, and M. A. Penninger. 2004. Effects of roads on elk: Implications for management in forested ecosystems. *Transactions of North American Wildlife and Natural Resources Conference*. 69:491–508.

Rowland, M. M., M. J. Wisdom, B. K. Johnson, and M. A. Penninger. 2005. Effects of roads on elk: Implications for management in forested ecosystems. Pages 42–52. In: The Starkey Project: A synthesis of long-term studies of elk and mule deer, ed. M. J. Wisdom. Reprinted from 2004 Transactions of North American Wildlife and Natural Resources Conference, Alliance Communications Group, Lawrence, Kansas.

Ruggiero, L. F., Aubry, K. B., Buskirk, S. W., Lyon, L. J., & Zielinski, W. J. E. 1994. The scientific basis for conserving forest carnivores: American marten, fisher, lynx and wolverine in the western United States (General Technical Report RM-254). Retrieved from Ft. Collins, CO: https://www.fs.fed.us/rm/pubs_rm/rm_gtr254.pdf

Sauder, J. D. 2014. Landscape ecology of fishers (pekaniapennanti) in north-central Idaho. (Doctoral dissertation). University of Idaho, Moscow.

Sawyer, H., R. M. Nielson, F. G. Lindzey, L. Keith, J. H. Powell, and A. A. Abraham. 2007. Habitat selection of Rocky Mountain elk in a nonforested environment. *Journal of Wildlife Management*. 71:868–874.

Schoen, J. W., &Kirchoff, M. D. (1982). Habitat use by mountain goats in southeast Alaska. Final Report, Federal Aid in Wildlife Restoration Projects W-17-10. W-17-11, W-21-1, and W-21-2, Job 12.4 R. Alaska Department of Fish and Game, Juneau, Alaska.

Schwartz, M. K. 2007. Ancient DNA confirms native Rocky Mountain fisher (Martes pennanti) avoided early 20th century extinction. *Journal of Mammalogy*. 88(4): 921-925.

Schwartz, M. K., Copeland, J. P., Anderson, N. J., Squires, J. R., Inman, R. M., McKelvey, K. S., . . .Cushman, S. A. 2009. Wolverine gene flow across a narrow climatic niche. *Ecology*. 90(11): 3222-3232.

Seip D.R., C.J. Johnson, and G.S. Watts. 2007. Displacement of mountain caribou from winter habitat by snowmobiles. *Journal of Wildlife Management*. 71:1539–1544.

Shafer, A., Northrup, J.M., White, K.S., Boyce, M.S., Côté, S.D. and D.W. Coltman. 2012. Habitat selection predicts genetic relatedness in an alpine ungulate. *Ecology*. 93(6):1317---1329.

Shively, K. J., A. W. Alldredge, and G. E. Phillips. 2005. Elk reproductive response to removal of calving season disturbance by humans. *Journal of Wildlife Management*. 69:1073–1080.

Skolvin, J. M. 1982. Habitat requirements and evaluation. Pages 369–413. In: Elk of North America: Ecology and management, eds. J. W. Thomas and D. A. Toweill. Harrisburg, PA: Stackpole Books. 698 p.

Spahr, R. 1991. Threatened, endangered, and sensitive species of the Intermountain Region. US Dept. of Agriculture, Forest Service, Intermountain Region.

Smith, K. G. 1982. Winter studies of forest-dwelling mountain goats of Pinto Creek, Alberta. In Biennial Symposium of the Northern Wild Sheep and Goat Council (Vol. 3, pp. 374-390).

Smith, D.R., 1954. The Bighorn Sheep in Idaho: Its Status Life History and Management. Idaho Department of Fish and Game, Boise, ID. Smith, T.S., Flinders, J.T., Winn, D.S., 1991. A habitat evaluation procedure.

Switalski, A. 2016. Snowmobile best management practices for Forest Service travel planning: a comprehensive literature review and recommendations for management – wildlife. *Journal of Conservation Planning*. 12: 13–20.

Taylor, S., W. Wall, and Y. Kulis. 2006. Habitat selection by mountain goats in south coastal British Columbia. *Biennial Symposium of the Northern Wild Sheep and Goat Council*. 15:141–157.

Thomas, J. W., R. J. Miller, H. Black, J. E. Rodiek, and C. Maser. 1976. Guidelines for maintaining and enhancing wildlife habitat in forest management in the Blue Mountains of Oregon and Washington. *Transactions of the North American Wildlife and Natural Resources Conference*. 41:452–476.

Toweill, D.E., Geist, V., 1999. Return of Royalty: Wild Sheep of North America. Boone and Crockett Club and Foundation for North American Wild Sheep, Missoula, MT. USDA Forest Service, 2003.

TWS. 2015. Letter from Brad Brooks, Josh Hicks, and Phil Hartger of The Wilderness Society to Zachary Peterson and Carol Hennessey of the Nez Perce-Clearwater National Forests.

Tyler, N.J.C. 1991. Short-term behavioral responses of Svalbard reindeer Rangifer tarandusplatyrhynchus to direct provocation by a snowmobile. *Biological Conservation*. 56: 179-194.

USDA, Forest Service. 2011a. Final Supplemental Environmental Impact Statement: Forest Plan Amendments for Motorized Access Management within the Selkirk and Cabinet-Yaak Grizzly Bear Recovery Zones. Kootenai, Lolo, and Idaho Panhandle National Forests. 495 pp.

USDA, Forest Service. 2020. Bear Models Overview. 5 pp.

USDI, Fish and Wildlife Service. 1993. Grizzly Bear Recovery Plan. Missoula, Montana. 181 pp.

Vinkey, R. S. 2003. An evaluation of fisher (Martes pennanti) introductions in Montana. (Master of Science Master's thesis). University of Montana, Missoula.

Wakkinen, W.L. and W.F. Kasworm. 1997. Grizzly bears and road density relationships in the Selkirk and Cabinet-Yaak recovery zones. Interagency Grizzly Bear Committee. 28 pp.

Weir, R. D., &Harestad, A. S. 2003. Scale-dependent habitat selectivity by fishers in south-central British Columbia. *Journal of Wildlife Management*. 67(1): 73-82.

Weir, R. D., Lofroth, E. C., & Phinney, M. 2011. Density of fishers in boreal mixed-wood forests of northeastern British Columbia. *Northwestern Naturalist*. 92(1): 65-69.

Wisdom, M. J., Holthausen, R. S., Wales, B. C., Hargis, C. D., Saab, V. A., Lee, D. C., . . . Eames, M. R. 2000. Source habitats for terrestrial vertebrates of focus in the Interior Columbia Basin: Broadscale trends and management implications Vol. 2 (General Technical Report PNW-GTR-485). Portland, OR.

White, K. S. 2006. Seasonal and sex---specific variation in terrain use and movement patterns of mountain goats in southeastern Alaska. *Proceedings of the Biennial Symposium of Northern Wild Sheep and Goat Council*. 15:183–193.

Figure 1. Proposed wilderness areas.

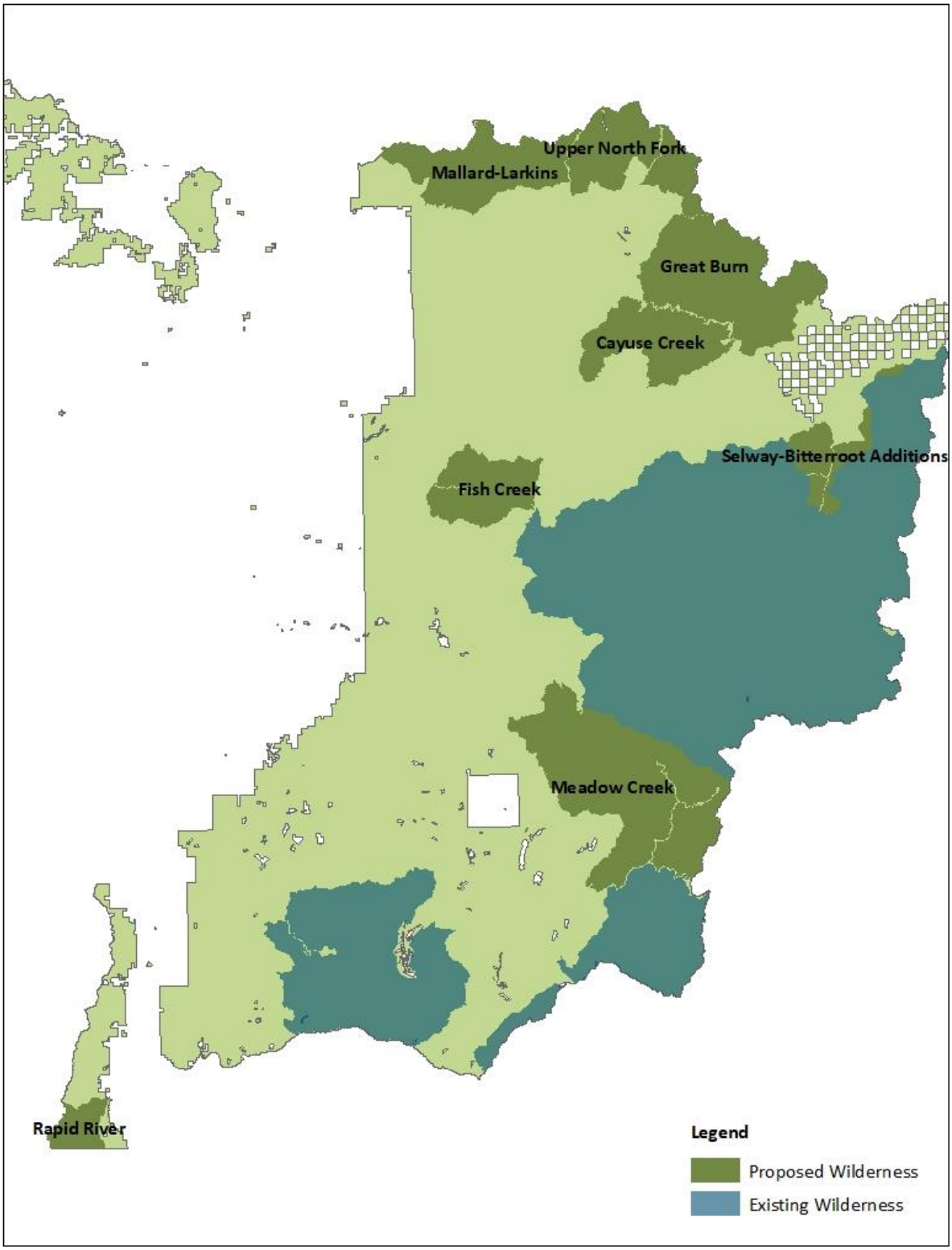


Figure 2. Mountain goat observations in the Great Burn Recommended Wilderness.

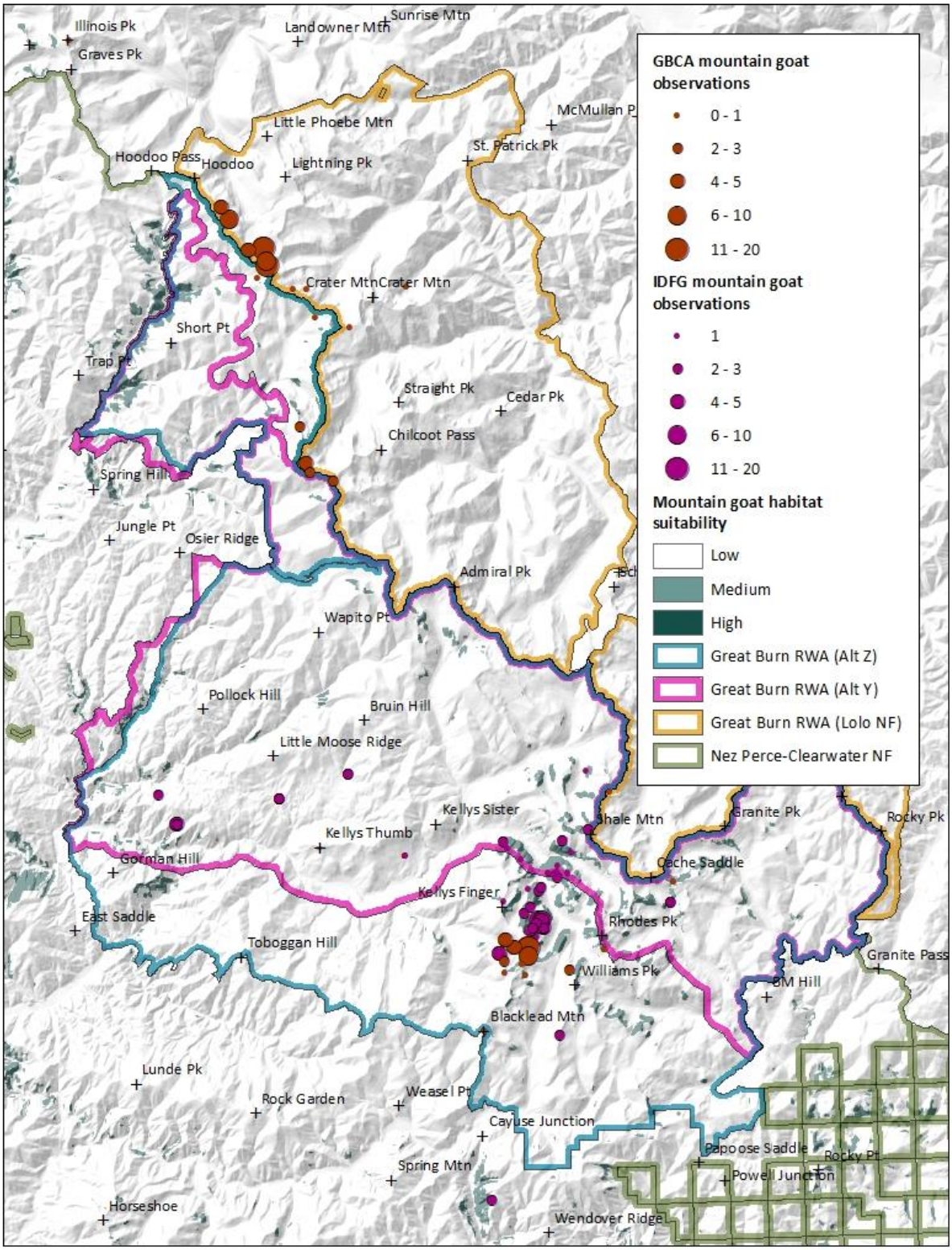


Figure 3. Proposed summer ROS settings and classifications.

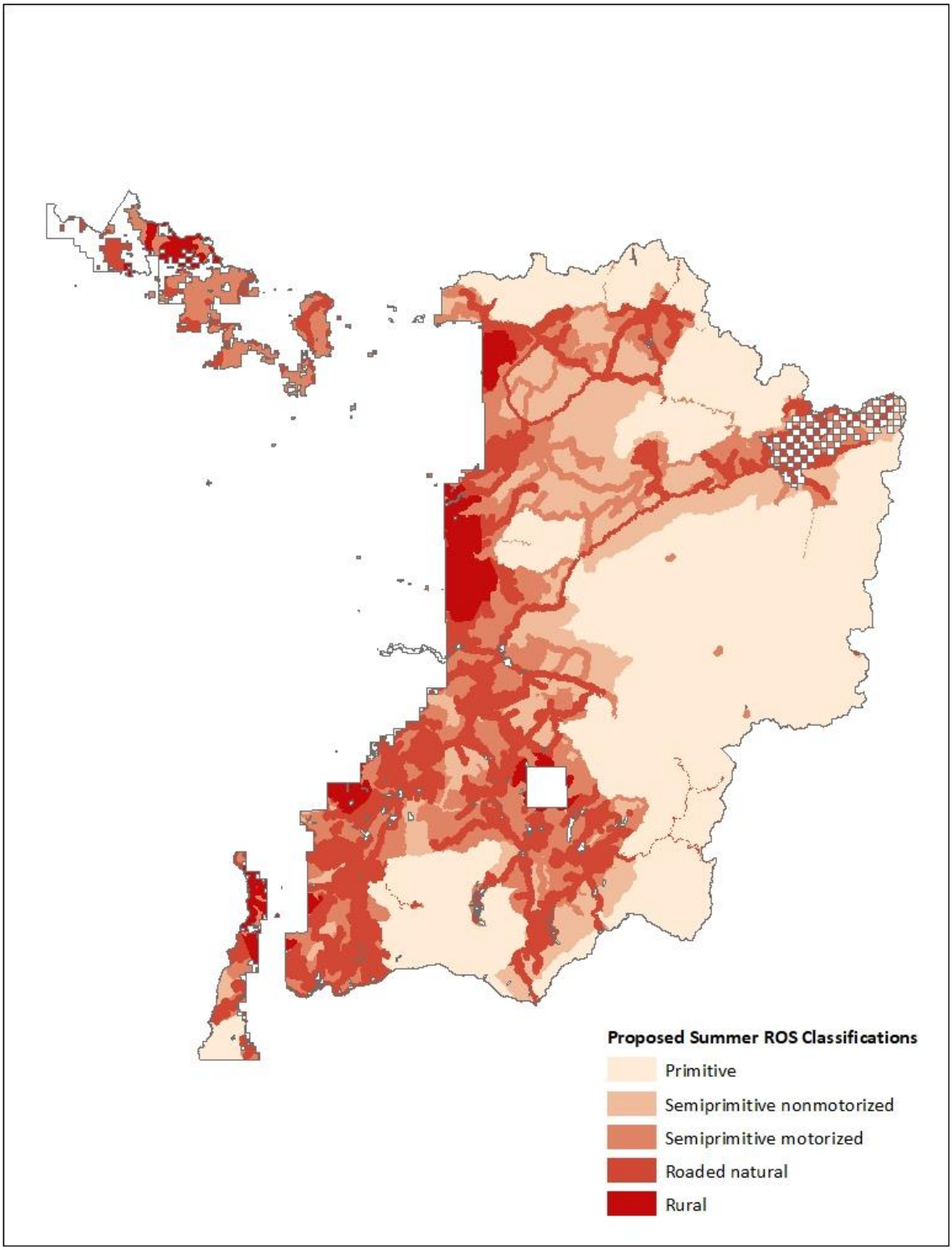


Figure 4. Proposed winter ROS settings and classifications.

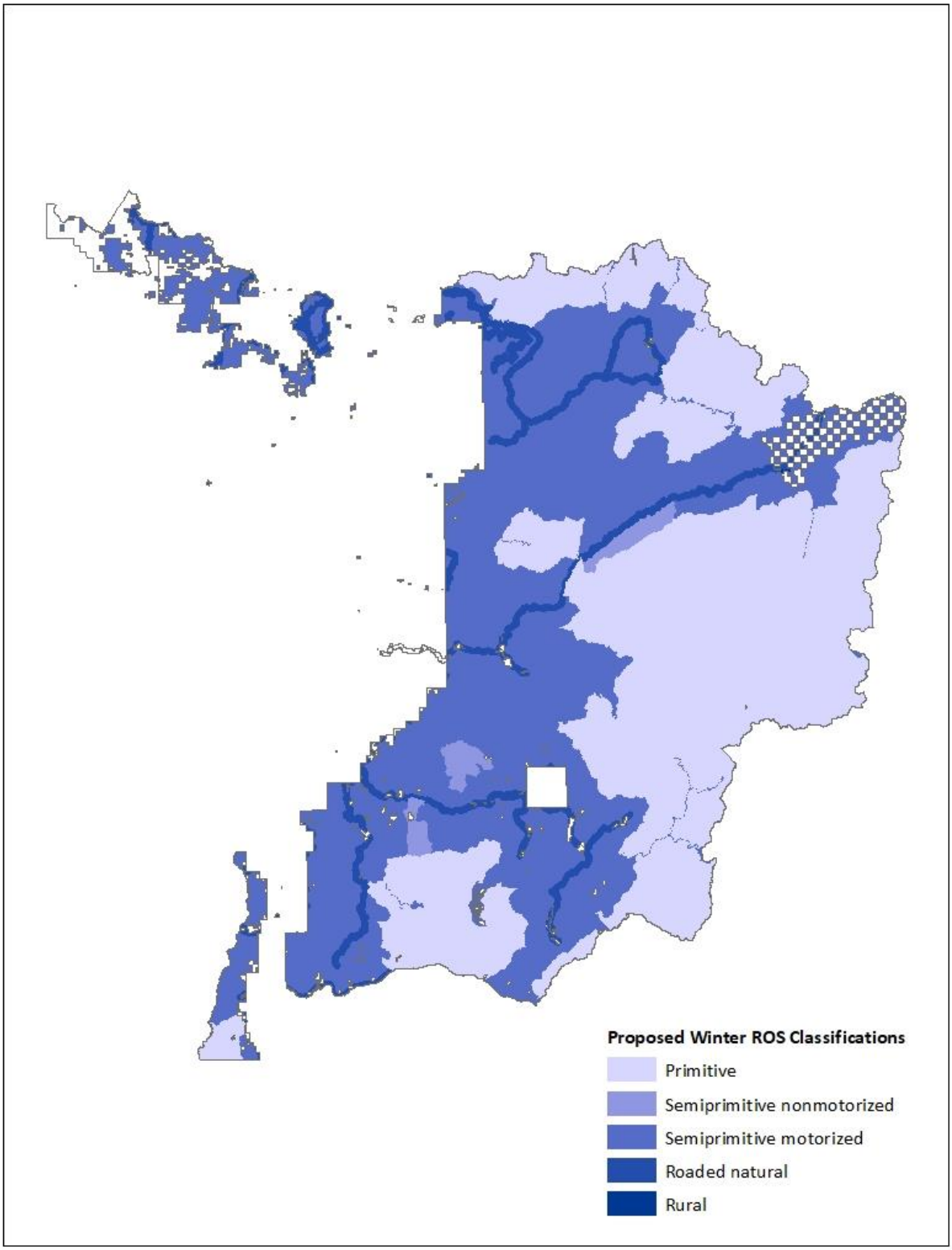


Table 1. Great Burn Conservation Alliance mountain goat observations

Date	Type of observation	Number observed	Latitude	Longitude
2009-07-04	Sighting	15	46.67114	-114.825
2010-08-15	Hair	0	46.92781	-114.884
2013-08-26	Hair	0	46.6696	-114.782
2013-08-26	Sighting	1	46.66082	-114.827
2013-08-27	Sighting	3	46.66203	-114.803
2013-09-20	Sighting	5	46.96006	-114.987
2014-08-08	Sighting	2	46.85367	-114.928
2014-08-14	Sighting	4	46.67417	-114.838
2016-07-04	Sighting	2	46.85722	-114.941
2016-08-01	Hair	0	46.92809	-114.94
2016-08-01	Scat	0	46.92796	-114.947
2016-10-09	Sighting	9	46.95547	-114.983
2017-07-19	Sighting	4	46.67143	-114.833
2017-08-05	Tracks and scat	0	46.73076	-114.777
2017-08-13	Hair	0	46.91691	-114.936
2018-01-12	Tracks	0	46.66157	-114.838
2018-07-10	Hair	0	46.63977	-114.851
2018-09-07	Tracks	0	46.69528	-114.743
2018-09-08	Sighting	4	46.94349	-114.973
2018-09-09	Sighting	5	46.86041	-114.943
2018-09-09	Sighting	2	46.87465	-114.946
2018-09-10	Sighting	3	46.66615	-114.839
2018-09-10	Sighting	8	46.66773	-114.825
2018-10-07	Sighting	1	46.91258	-114.916
2018-10-08	Sighting	19	46.93727	-114.962
2018-10-09	Tracks	0	46.93269	-114.967
2018-10-13	Tracks and scat	0	46.66505	-114.829
2019-06-30	Sighting	20	46.94423	-114.964
2019-07-23	Sighting	1	47.02632	-115.071
2019-09-08	Sighting	9	46.93874	-114.963