Amanda Milburn, Lolo Plan Revision Team Leader
Lolo National Forest
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Re: Lolo National Forest Land Management Plan Proposed Action and Wilderness Evaluation.

April 1, 2024

Submitted electronically via
https://cara.fs2c.usda.gov/Public/CommentInput?project=62960.

Dear Forest Plan Revision Team,

Please accept these comments on behalf of Wild Montana (formerly Montana Wilderness Association), The Wilderness Society, National Parks Conservation Association, and our members in response to the Forest Service's Proposed Action for the Lolo National Forest's Land and Resource Management Plan ("Forest Plan") revision. We appreciate all the work the planning team has already done, and hope you will find the additional resources and approaches outlined below useful as the revision process proceeds.

I. Organizational Backgrounds

Since 1958, Wild Montana has been uniting and mobilizing people across Montana, creating and growing a conservation movement around a shared love of wild public lands and waters. We work at the local level, building trust, fostering collaboration, and forging agreements for protecting the wild, enhancing public land access, and helping communities thrive. Wild Montana routinely engages in public land-use planning processes, as well as local projects such as habitat restoration and timber harvest proposals, recreational infrastructure planning, oil and gas lease sales, and land acquisitions. Wild Montana has participated in the development of every national forest plan and subsequent revisions for national forests located within the state of Montana. Wild Montana and our thousands of members and tens of thousands of supporters are invested in the ecological integrity and quiet recreation opportunities on public lands, as well as the impact of climate change on Montana's wild places.

Since 1935, The Wilderness Society has led the effort to permanently protect nearly 112 million acres of wilderness in 44 states. Along with more than one million members and supporters, we believe that public lands belong to and should benefit all of us; and that our organization and work must embody the cultures and perspectives of people and

communities across our nation while simultaneously connecting and inspiring people to care about the outdoors. The Wilderness Society's roots run deep in the Lolo National Forest, going back to founder Bob Marshall's time spent in western Montana. The current work of The Wilderness Society is rooted in community-led collaboration, empowering local voices for the ecologic, cultural, and economic vitality of their home. The Wilderness Society has defined two priority landscapes for our work in the Northern Rockies–the Crown of the Continent and the Great Yellowstone/High Divide; the Lolo National Forest is represented in both landscapes. Wilderness Society staff have deep technical knowledge and have conducted research within Montana and across the nation. In the past decade, The Wilderness Society has actively engaged in all three Montana national forest plan revisions completed to date under the 2012 Planning Rule.

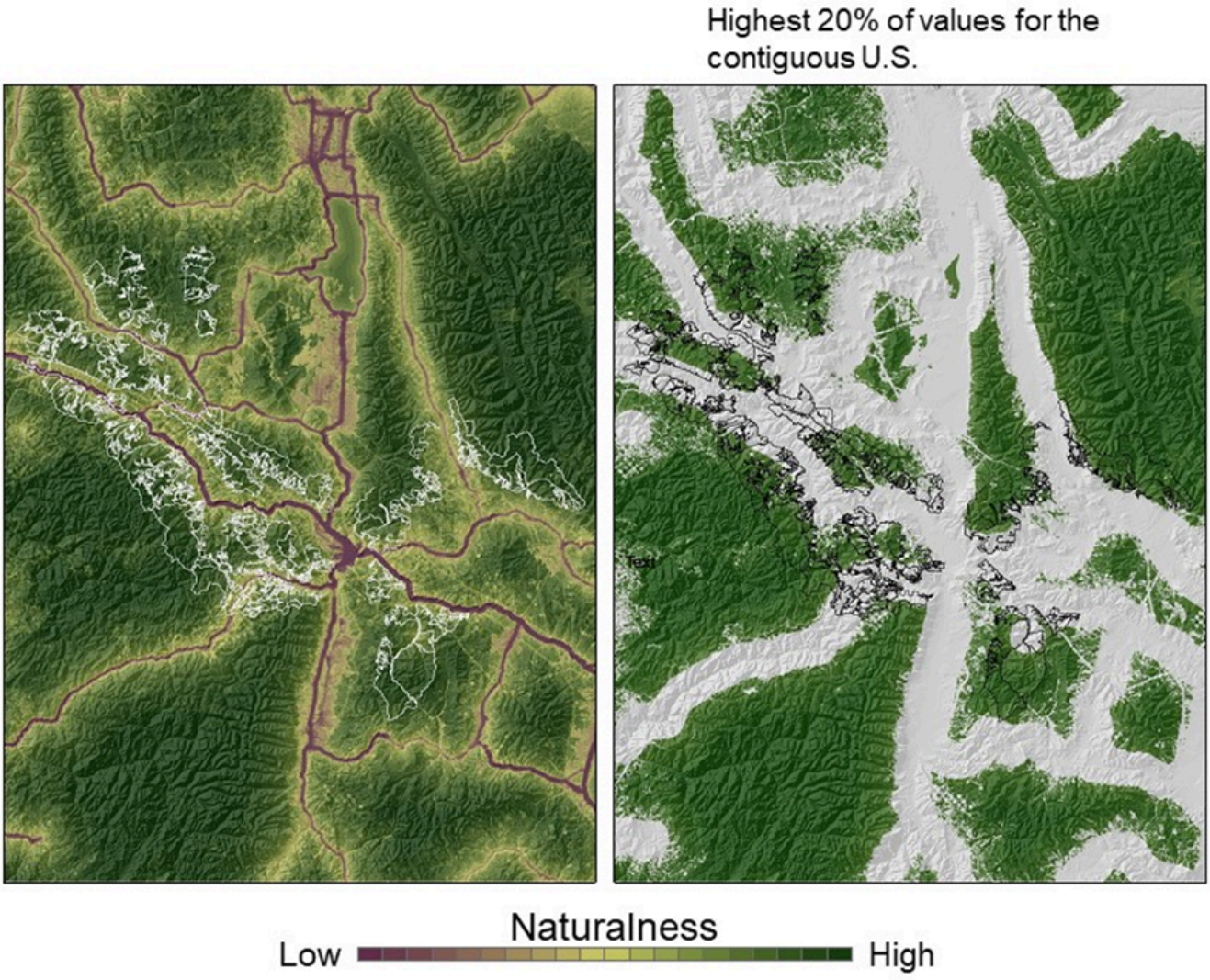
With over 100 years of experience, the National Parks Conservation Association (NPCA) is unique in its ability to build and mobilize communities around the protection of our national parks and the wildlife that call them home. Our ability to work at the local, state, regional and national levels, and to mobilize our 1.6 million members on behalf of the parks and wildlife, means that we can work strategically to protect the landscapes that support the unique quality of life that distinguishes the Northern Rockies. These lands have special historical, cultural, and spiritual significance to the people who live and visit here. To protect and share those deeply cherished values, we work with communities and Tribal nations in partnership to develop local solutions to address critically important issues such as climate change, increasing visitation and the growing recreation and development pressures on lands adjacent to and between parks. NPCA has engaged in all three National Forest planning processes that have occurred in the Crown of the Continent region with the goal of protecting the most important wildlife corridors and connectivity areas between the Crown of the Continent and the Greater Yellowstone Ecosystem. We are working to ensure the iconic wildlife of the Northern Rockies national parks are healthy and resilient despite the pressures of increasing recreation, development and climate change.

II. Wilderness Evaluation

We thank the Forest Service for the opportunity to comment on the Wilderness Evaluation for the Lolo National Forest Plan revision. We appreciate that the Wilderness Evaluation worksheet and criteria accurately and clearly explain the requirements of the Chapter 70 Wilderness Evaluation Handbook. However, it is not clear at this stage how each criterion will be assessed by the Forest Service and how the synthesis of each measure feeds into the alternative recommendations and final decision. The Wilderness Inventory and Evaluation is not referenced in the Proposed Action besides acknowledging the document is Appendix 8. We request that the DEIS include a robust discussion of inventoried polygons and how each criterion is being evaluated. These Wilderness Evaluation findings should be incorporated throughout the DEIS and plan alternatives.

When considering making new recommendations for Wilderness, in addition to the local evaluations already conducted, we believe that the national value of Wilderness

inventory areas should be assessed. The national value of lands can be too easily overlooked when making decisions about recommending Wilderness areas. For instance, an old road, non-conforming uses, cabins, etc. that are assessed locally could be used to disqualify lands that are nationally significant with respect to their wilderness character. To illustrate this point, we overlaid the wilderness inventory areas onto spatial data representing the degree of human modification of Theobald (2013). The absence of human modification (roads, developed land cover, transmission lines, etc.) has been widely used to map the degree of ecological integrity, naturalness, or wildness in scientific literature (Belote et al. 2017). Therefore, these data allow decision-makers the ability to assess the national value of local areas. Many of the wilderness inventory areas of the Lolo National Forest contain the top 10% and 20% of most natural (or "wildest") lands left in the contiguous United States.



Theobald's human modification data for the region around the Lolo National Forest shows the wilderness inventory areas (polygons in white on the left map and black on the right map). The left map shows the full gradient of values for the region, while the right map shows the top 20% of naturalness values for the contiguous United States. This illustrates the national significance of some of the wilderness inventory areas. Some are among the "wildest" places left in the contiguous U.S.

In addition to evaluating the national significance of wilderness inventory areas, we believe wilderness inventory areas should not be held to a higher standard than lands occurring in the existing National Wilderness Preservation System. For instance, the wilderness evaluation process may have identified features and evidence of uses (e.g., an old cabin or airstrip) that could disqualify the unit for consideration as a recommended wilderness. However, those same features (e.g., cabin or airstrip) likely occur in our existing and widely celebrated wilderness system. Belote (2018) evaluated wilderness inventory areas for five different Forest Service Regions using data on human modification, distance from roads, light pollution, and noise pollution (indicators associated with wilderness character) and demonstrated that values of each indicator within wilderness inventory areas are almost always within the range of the existing National Wilderness Preservation System.[1] In fact, some wilderness inventory areas were much "wilder" than existing Wilderness Areas. This kind of assessment to compare the qualities of lands within wilderness inventory areas and existing Wilderness areas can be conducted using either local or national data. We recommend not holding candidates for recommended wilderness to a higher standard than the existing Wilderness Areas.

III. Geographic Recommendations

Four congressionally designated wilderness areas are within, or partially within, the Lolo National Forest for a total of approximately 147,893 acres. The 1986 Lolo Forest Plan recommended 223,915 acres for Wilderness designation across the Forest including the Great Burn, Bob Marshall Additions, the Selway-Bitterroot Addition/Lolo Creek, and Sliderock. These areas have not received congressional designation to date; however, since 1986, the Lolo National Forest has had a rich history of being included in Wilderness legislative proposals, especially ones that have been proposed after finding common ground between conservationists and the timber industry. We request that, at a minimum, the Forest Service retain the 1986 recommended Wilderness parcels as a baseline across each DEIS plan alternative, and from there craft a range of alternatives for additional recommended Wilderness.

Furthermore, we recommend that the Forest Service craft, and ultimately adopt, a plan alternative that largely follows the recommended Wilderness aspects of previous proposals that were backed by community input: the Lolo Accords, the 2006 Proposed Action, and the Blackfoot Clearwater Stewardship Act. This would include recommended Wilderness designation for the following areas: the Cube-Iron Silcox

[1] Travis Belote, *Quantifying the Range of Variability in Wilderness Areas: A Reference When Evaluating Wilderness Candidates*, Aug. 2018 (Appendix A).

Roadless Areas, the Hoodoo Roadless Area, Ward Eagle Roadless Area, Meadow Creek/Upper North Fork Roadless Area, the Reservation Divide Roadless Area, a portion of the Selway-Bitterroot Addition/Lolo Creek Roadless Area, Sliderock Roadless Area, Stony Mountain Roadless Area, portions of the Bob Marshall Additions, and the Marshall Peak/West Fork Clearwater Roadless Area. Below we'll discuss each area in further detail.

In the summer of 2023, Wild Montana conducted wilderness evaluation data collection for the Cube Iron-Silcox and Sundance Ridge Roadless Areas, Sliderock/Quigg Roadless Area, The Great Burn Roadless Areas (Meadow Creek-Upper North Fork, Ward Eagle, Sheep Mountain-Stateline, and Hoodoo). We provided this information to the Forest Service in the fall of 2023 and have attached the report to these comments.[2]

A. Historical Context

In 1988, President Reagan used a pocket veto to end the bipartisan Montana Natural Resources Protection and Utilization Act, which would have protected over two million acres of worthy wildlands, including 1.4 million acres of new Wilderness.[3] This bill had the backing of both bodies of Congress and was the result of extensive negotiations with multiple stakeholders. In June 1990, mill workers, timber workers, and conservation groups gathered in the Libby Union hall to discuss and sign the Kootenai Accord. A few weeks later, the Lolo Accord was also signed after a lengthy debate at the Union Hall in Missoula. The Accords led to a corresponding bill identifying Wilderness and timberland being introduced in 1991 by Montana Senator Max Baucus, but the bill didn't make it through Congress.[4]

A year later, the Montana National Forest Management Act of 1992 passed both the House and Senate but did not make it to the President's desk.[5] A similar bill passed the House one session later, the Montana Wilderness Act of 1994.[6] These bills would have designated the following areas as Wilderness in the Lolo National Forest: Cataract Creek/Cube Iron-Silcox Roadless Complex, Great Burn, Sheep Mountain, Selway-Bitterroot Addition, Quigg Peak, Stony Mountain, and Bob Marshall Additions.

In 2003 the Lolo National Forest initiated a plan revision under the 2005 Planning Rule which led to a Proposed Action in 2006. This Proposed Action included the recommended Wilderness areas of Reservation Divide, Lolo Creek/Selway-Bitterroot Wilderness Addition, Hoodoo Roadless Area, and the Bob Marshall Additions.

The Blackfoot Clearwater Stewardship Project was instigated in 2006 as the Lolo National Forest began the initial revision of its 1986 Forest Plan. The BCSA brought diverse stakeholders together to collaboratively review, recommend changes as

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[2] *See* Wild Montana, *Lolo Wilderness Evaluation Report*, September 2023 [hereinafter *Wild Montana Lolo Wilderness Evaluation Report*] (Appendix B).
[3] S.2751, 100th Cong. (1988).
[4] S.72, 102nd Cong. (1991).
[5] S.1696, 102nd Cong. (1992).
[6] H.R. 2473, 103rd Cong. (1994).

needed, and implement the revised Lolo Forest Plan via legislation. There are three components to the BCSA– timber, recreation, and conservation. While the Lolo National Forest halted the initial plan revision, the BCSA Steering Committee continued to propose legislation that would include boundaries that closely follow the 1986 Plan and others that have been updated to reflect current conditions, follow more definable features, and incorporate winter recreation agreements. Senator Tester reintroduced the BCSA to the 118th Congress on June 22, 2023.[7]

Later, in 2009, Senator Tester introduced the Forest Jobs and Recreation Act (FJRA).[8] The FJRA was a collaborative proposal for three Montana National Forests–the Kootenai, Beaverhead-Deerlodge, and the Lolo–that focused on maintaining a healthy timber industry, habitat restoration, protecting public land access, and supporting a robust recreation economy. On the Lolo National Forest, the bill would have added 83,000 acres of Wilderness to the Bob Marshall and Mission Mountains Wilderness areas, largely following the Blackfoot Clearwater Stewardship Act proposal (see more below). The bill was reintroduced in 2011 and in 2013 when the legislation received bi-partisan approval in the Senate Energy and Natural Resources Committee. Unfortunately, the Forest Jobs and Recreation Act never passed.

The Lolo National Forest included the past Wilderness legislation in the 2006 plan's Wilderness Evaluation narratives, however, there is no mention of this historical context in the 2024 Proposed Action or Wilderness Evaluation.

B. Great Burn & String of Pearls Roadless Areas

The Lolo National Forest contains numerous inventoried roadless areas, including the largest roadless area in the Northern Region, the Hoodoo Roadless Area, which is colloquially referred to as the "Great Burn." The great fires of 1910 and subsequent burns altered the tree line in the Great Burn and gave it its characteristic visual look and name. It is currently managed as recommended Wilderness. Other notable roadless areas in this vicinity are collectively referred to as the "String of Pearls," and are on the west side of I-90 between the Great Burn and Lookout Pass.

The 252,000-acre Hoodoo Roadless Area is jointly managed by the Nez Perce-Clearwater (Idaho) and Lolo (Montana) National Forests. Both forests currently manage this roadless area largely as recommended wilderness. These recommended wilderness areas are contiguous, and there are 47 shared miles of boundary between the Montana and Idaho Hoodoo Roadless Areas. The Hoodoo Roadless Area (also known as the Great Burn) is not only superlative in size, but it also contains exceptionally wild country that provides outstanding opportunities for both wildlife and quiet recreation. The Hoodoo Roadless Area received one of the highest wilderness ratings of any area managed by the Forest Service during the RARE Analysis processes, and the Forest Service has been recommending that Congress designate the area as Wilderness since the 1970s. Portions of the Great Burn Proposed

[7] S.2149, 118th Cong. (2023).
[8] S.1470, 111th Cong. (2009).

Wilderness have been included in more than twenty legislative proposals, including one that went to President Reagan's desk in 1988 and was pocket-vetoed. We strongly support the Proposed Action's decision to maintain the 1986 plan's recommended Wilderness area for the Hoodoo Roadless Area and request the boundaries and management designation be carried forward in each proposed DEIS and FEIS alternative.

The Great Burn is a vital biological core area for far-ranging wildlife in the Northern Rockies. Past and ongoing habitat fragmentation threatens the persistence of many species of wildlife. The proposed Great Burn Wilderness is part of several roadless areas that form a biological link between the Salmon-Selway and Cabinet/Yaak/Selkirk ecosystems, facilitating the genetic interchange needed for far-ranging species such as grizzly bears and wolverines as well as other sensitive species to persist. The Idaho-portion of this area was described as follows in the Nez Perce-Clearwater 2020 Draft Environmental Impact Statement: "outstanding scenery, the variety and abundance of wildlife species (elk, black bears, mountain goats, and moose) and the high quality westslope cutthroat trout fishery are major attractions."[9] The Great Burn also provides very high quality maternal denning habitat for wolverines. The vastness, high wilderness character values, and wildlife habitat quality are critical elements that make the Great Burn one of the most outstanding examples of deserving recommended wilderness in our region.[10]

The adjacent Nez Perce-Clearwater National Forest has proposed opening a 150-foot corridor for the Stateline Trail #738. We strongly objected to the Nez Perce-Clearwater's FEIS and draft final plan. It would be inappropriate for the Lolo to follow this recommendation and allow mechanized use on the Stateline Trail within the recommended Wilderness area. This trail effectively severs the long-standing recommended Wilderness areas across both forests and could invite illegal mountain bike incursions into connective trails that remain in recommended Wilderness. The Stateline Trail has been maintained for stock and foot-users. A recent Missoulian article stated that the trail is in "deteriorating condition."[11] As Wild Montana has raised with the Lolo National Forest, the current trail contains dangerous corners and poor site lines that increase the chances of a fast-moving bike running into a mountain goat or a slow-moving backpacker.[12] This is especially notable given that the Stateline Trail and the Heart Lake Trail are popular destinations for families with children.

Two other roadless areas to the north of the Hoodoo Roadless Area in the Great Burn ecosystem deserve recommended wilderness status, Ward Eagle and Meadow Creek-Upper North Fork. These areas are currently managed as nonmotorized

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[9] *Draft Environmental Impact Statement: Land Management Plan Revision for the Nez Perce-Clearwater National Forests*, U.S. Forest Service (Dec. 2019), at E-70.

[10] *See Wild Montana Lolo Wilderness Evaluation Report* at 54–68.

[11] Joshua Murdock, *Wilderness advocates worry as Stateline Trail may reopen to bikes*, Jan. 24, 2024, https://missoulian.com/news/local/wilderness-great-burn-mountain-bikes-nez-perce-cle[…]rest-hoodoo/article_788736ec-ba3c-11ee-8308-eb3e728d4978.html.

[12] Wild Montana (formerly the Montana Wilderness Association) Letter to Forest Supervisor Carolyn Upton, *Re: Visit to the Great Burn and Closure Order Request*, Aug. 20, 2020 (Appendix C).

backcountry areas and have incredibly wild character, including old-growth cedar forests, modeled whitebark pine habitat, and high ridgelines.[13] These roadless areas provide ideal habitat for elk, moose, pika, and mountain goat as well as large landscape connectivity for grizzly bears and wolverine.

C. Cube Iron-Cataract Roadless Areas

The Cube Iron-Silcox/Cataract Roadless Complex contains clean rivers, impressive peaks, wildlife-rich alpine lake basins, offering a variety of challenging quiet recreation opportunities for those on foot and horseback. These roadless areas provide critical connectivity that serve as a corridor between the Cabinet Mountain Wilderness, Mission Mountain Wilderness, and the Bitterroots. Wildlife species in this area include elk, bighorn sheep, moose, mountain goats, wolves, fox, grizzly and black bear, lynx, bull trout, and westslope cutthroat trout.

The roadless complex comprises three inventoried roadless areas in the Lolo National Forest: the Cube Iron-Silcox Roadless Area 36,998 acres; the Cataract Roadless Area 9,432 acres; and the Sundance Ridge Roadless Area 7,550 acres. These three almost contiguous Roadless Areas provide an extensive area of connected wild country.[14] In the 1986 Forest Plan, the Forest Service stated this area was a large roadless area that is "distinguished primarily by [its] natural environmental character," and would be managed to provide for recreation activities in a "near-natural setting and for old-growth dependent wildlife species." The Forest Service designated this area as essential grizzly bear habitat.[15] We support the Cube Iron-Cataract Coalition's proposal for recommended Wilderness for a majority of the Cube Iron-Silcox and Sundance Roadless areas.

D. Reservation Divide Roadless Area

One of the areas originally proposed for recommended Wilderness in the 2006 Proposed Action but left out of the 2024 Proposed Action, is the Reservation Divide Roadless Area parcel. In the 2006 Wilderness Evaluation, the Forest Service discussed public and Tribal interest in recommended Wilderness for this parcel and stated "[t]his area has many unique features and undisturbed natural processes, particularly along the ridgeline." We request that the Forest Service carry forward this 2006 recommendation into the DEIS alternatives, including the preferred alternative.

E. South Fork Lolo Creek Roadless Area & the Carlton Ridge Research Natural Area

The 1986 Lolo Forest Plan also recommended the Lolo Creek/Selway-Bitterroot Addition which is 3,702.5 acres. This area provides contiguous wildlife connectivity between the Bitterroot National Forest and other important landscapes to the north. Adjacent to the recommended wilderness parcel is one of the Lolo National Forest's six

[13] *See Wild Montana Lolo Wilderness Evaluation Report* at 27–48.
[14] *See Wild Montana Lolo Wilderness Evaluation Report* at 4–19.
[15] *Lolo National Forest Plan*, U.S. Forest Service (February 1986).

Research Natural Areas (RNAs), Carlton Ridge RNA. Since 1987, the RNA has protected 920 acres within the unique subalpine forests on this ridge. This RNA protects one of the best-known examples of an alpine larch forest on deep subalpine soils known to occur in the northern Rocky Mountains. Additionally, whitebark pine, a threatened species, is also present around Lolo Peak, the Selway-Bitterroot Addition Recommended Wilderness, and the Carlton Ridge RNA. We thank the Forest Service for originally proposing to expand the RNA to a total of 1,524 acres. This expansion should be integrated into the DEIS plan alternatives and retained in the preferred alternative.

Additionally, as was originally proposed in the 2006 Proposed Action, we recommend that the Lolo Creek/Selway Bitterroot Addition recommended Wilderness parcel be expanded to the 6,600' elevation contour so that it goes past the RNA to protect those important resources. This change in boundary would also help provide protections for Lolo Peak and the Carlton Lakes Basin.

F. Rattlesnake Wilderness and National Recreation Area

In the Proposed Action, the Rattlesnake Wilderness and National Recreation Area (NRA) is comprised of Wilderness, Concentrated Recreation Area, and Backcountry. The Rattlesnake Wilderness and NRA is a unique designation and should be its own management area under the forest plan. The 2006 Proposed Action had the Rattlesnake designated as an "area with special management." The uses in the NRA are distinct and different from other areas that are designated as MA5 for Concentrated Recreation Use and MA3 for Backcountry. The NRA has its own unique history and past management direction that must be incorporated into the plan language. The standards for the NRA should include that the area is not suitable for new road construction or reconstruction and is not suitable for commercial timber activities. We also understand that the road corridor is listed as semi-primitive motorized not for public access, but to maintain administrative access. It would be beneficial to the Forest Service if that was explicitly stated in the plan to aid public understanding of plan components and provide clarity.

G. Quigg & Stony Mountain Roadless Areas

The 1986 plan's Quigg Peak or Sliderock Recommended Wilderness forms the eastern ramparts for 18 miles in the heart of Rock Creek Canyon. Broad glaciated ridges rise steeply from Rock Creek, breaking in expanses of loose talus, giving the area its nickname, Sliderock. Quigg Peak (8,500') is the highest point, 4,500' above Rock Creek, and the geographic center of the oval-shaped recommended Wilderness. Quigg Peak is ideal habitat for bobcat, cougar, fisher, lynx, marten, black bear, moose, marten, elk, bighorn sheep, and mule deer herds. Goshawk, golden eagle, and peregrine falcons are also present. Quigg Peak provides excellent wintering range for bighorns, elk, and deer. Quigg's roadless tributary streams (Grizzly, Ranch, Butte Cabin, Cougar, Hogback, and Upper Willow) feed the world-class trout waters of Rock Creek. The Quigg Peak recommended Wilderness is adjacent to the Bureau of Land Management's (BLM) Quigg West Wilderness Study Area. Additionally, the adjoining wild lands on the

Beaverhead-Deerlodge National Forest were recommended for Wilderness in the 2008 Revised Beaverhead-Deerlodge Forest Plan and were upheld under court challenge.

This area contains Rock Creek, a world-renowned blue-ribbon trout stream that flows clean, cold, and clear thanks to its roadless headwaters. While its furthest headwaters are protected in the Anaconda-Pintler Wilderness, its tributary streams largely remain at risk (the exception being those protected by the Welcome Creek Wilderness). The FJRA would have added Wilderness areas in the Rock Creek drainage that are contiguous to two large and important roadless areas on the Lolo National Forest: Stony Mountain (32,795 acres) and Sliderock/Quigg (67,264 acres). Furthermore, the 2006 Proposed Action included both roadless areas as recommended Wilderness. Both roadless areas, straddling a 15-mile stretch of Rock Creek, are currently closed to motorized vehicles.

The 2024 Proposed Action designated the Sliderock/Quigg Roadless Area as recommended Wilderness continuing the 1986 designation, while Stony Mountain is managed as nonmotorized backcountry.[16] We request the Forest Service retain the 1986 recommended Wilderness for the Sliderock/Quigg Roadless Area and designate the Stony Mountain Roadless Area as recommended Wilderness as was proposed in the 2006 Proposed Action.

H. Roadless Areas Included in the Blackfoot Clearwater Stewardship Act

One major federal legislative proposal currently under consideration to add Wilderness to the Lolo National Forest is the Blackfoot Clearwater Stewardship Act (BCSA). Passage of the BCSA would add 79,060 acres of Wilderness to the Lolo National Forest. The boundaries of the BCSA proposal roughly align with the Bob Marshall Additions recommended Wilderness area established in the 1986 plan, with the exception of the Marshall Peak/West Fork Clearwater Unit. Senator Tester reintroduced the BCSA to the 118th Congress on June 22, 2023.[17] Polling has shown that 84% of Montanans support the BCSA and we're hopeful Congress passes the broadly supported, grassroots-driven bill this congressional session.

The Blackfoot Clearwater Stewardship Project (BCSP) originally began during travel planning efforts for the Lake Elsina and Lake Dinah area and was formally instigated in 2006 as the Lolo National Forest began the initial revision of its 1986 Forest Plan. The BCSP brought diverse stakeholders together to collaboratively review, recommend changes as needed, and implement the revised Lolo Forest Plan via legislation. There are three components to the BCSA Proposal– timber, recreation, and conservation. While the Lolo National Forest halted the initial plan revision, the BCSP Steering Committee continued to propose legislation that would include boundaries that closely follow the 1986 Plan and others that have been updated to reflect current conditions, follow more definable features, and incorporate winter recreation agreements. The

[16] *See Wild Montana Lolo Wilderness Evaluation Report* at 19–27.
[17] S.2149, 118th Cong. (2023).

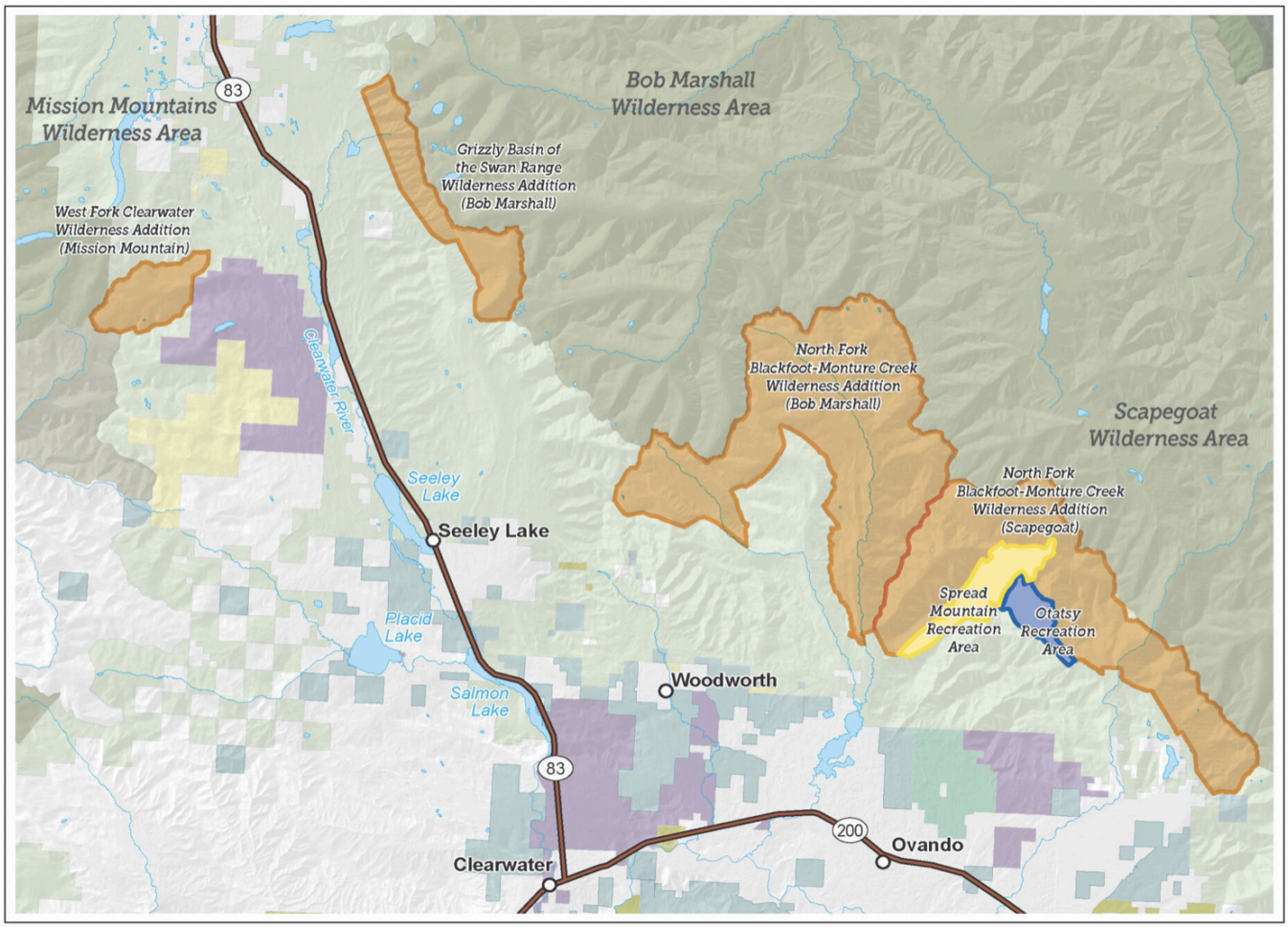
BCSP Steering Committee helped to establish the Southwestern Crown of the Continent Collaborative in 2010. To date, the collaborative has created or maintained an average of 153 jobs, brought in $35 million in federal investments, and led to an overall investment of $92 million in the local economy, resulting in 57,040 acres treated for noxious weeds, 204 miles of stream restoration, and 3,431 miles of multiple-use trails maintained.

The BCSA legislation would establish new Wilderness in the Lolo National Forest as well as create the Otatsy and Spread Mountain Recreation Management Areas, allocating 2,000 acres to high-quality snowmobiling near Ovando and 4,500 acres for mountain bike access to Spread Mountain, Center Ridge, and Otatsy, Canyon, and Camp Lakes.

The Wilderness added by the BCSA would include:

- Marshall Peak/West Fork Clearwater Recommended Wilderness Addition to the Missions Mountains Wilderness, 4,460 acres.
- Grizzly Basin Recommended Wilderness Addition to the Bob Marshall Wilderness, 7,792 acres.
- Monture Creek Recommended Wilderness Addition to the Bob Marshall Wilderness, 40,072 acres.
- North Fork Blackfoot Recommended Wilderness Addition to the Scapegoat Wilderness, 30,967 acres.
- Otatsy Recreation Management Area (winter semi-primitive motorized ROS, summer semi-primitive non-motorized ROS), 2,013 acres.
- Spread Mountain Recreation Area (semi-primitive non-motorized ROS, suitable for mechanized use), 3,835 acres.

See map below.



Legislative Proposal Map[18]

This landscape has incredible conservation values. Grizzly Bears, Canada lynx, mountain goats, and a host of other wildlife depend on the Blackfoot's wild public lands. Moreover, native bull and westslope cutthroat trout thrive here thanks to the clean, cold, clear, and connected waters that feed the Blackfoot River. We request that the Forest Service mirror all of the BCSA components in the draft and final plans, including the recommended Wilderness areas and recreation suitability determinations.

Finally, please consider all the recommendations in this section as elements of a proposed alternative that should be integrated into the DEIS range of alternatives, and ultimately included in the draft and final plans' preferred alternative.

[18] *See also* Blackfoot Clearwater Stewardship Act detailed legislative map (Appendix D).

IV. Listed & Sensitive Species Analysis

Under the National Forest Management Act (NFMA), the Forest Service must "provide for diversity of plant and animal communities" on units of the National Forest System.[19] To implement this requirement, the revised 2012 Planning Rule directs the agency to "provide the ecological conditions necessary" to "contribute to the recovery of federally listed endangered and threatened species… and maintain a viable population of each species of conservation concern within the plan area."[20] This requirement includes "standards and 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 their structure, function, composition, and connectivity."[21] We encourage the Lolo not to rely solely on coarse-filter plan components to contribute to the recovery of federally listed species but to develop and adopt a range of species-specific plan components that are necessary to properly protect habitat.

Threats to the intactness and function of the Lolo National Forest's ecological processes include continued fragmentation of private lands adjacent to the Forest, which are utilized by wildlife that move between public and private lands, internal fragmentation of forest lands through road building, changes in wildlife behavior and severity of wildfires due to climate change and historical suppression, invasive species (both aquatic and terrestrial), human development impacts to water quality, and a variety of modeled climate change impacts including shifts in precipitation and temperature regimes for this area.

We look forward to seeing species-specific analysis and forward-looking plan components that account for changes due to the accelerating impacts of climate change and recreational pressures, among other reasonably foreseeable impacts to species and their habitat.

A. Grizzly Bear

The Lolo National Forest is part of the Crown of the Continent ecosystem and is notable for its intactness, with all major carnivores still present on the forest, including resident grizzly bears.

Lolo National Forest managed lands are also recognized for providing important linkages for grizzly bears between the Cabinet-Yaak recovery zone in the northern and the southern Bitterroot and the Greater Yellowstone recovery zone. The Lolo National Forest manages lands found within the Northern Continental Divide Ecosystem (NCDE) recovery zone. The NCDE Conservation Strategy seeks to maintain a recovered, genetically diverse population throughout the monitoring area while maintaining demographic and genetic connections with Canadian populations and/or genetic

[19] 16 U.S.C. § 1604(g)(3)(B).
[20] 36 C.F.R. § 219.9(b)(1).
[21] 36 C.F.R. § 219.9(a).

connectivity with other ecosystems (Cabinet-Yaak, Bitterroot, Greater Yellowstone).[22] Much has been done through the 2018 Forest Plan Amendments to incorporate relevant direction from the Northern Continental Divide Ecosystem (NCDE) Draft Grizzly Bear Conservation Strategy into the forest plans for the Helena, Kootenai, Lewis & Clark, and Lolo National Forests (NCDE Amendment). We are glad to see that the Proposed Action carries these amendments forward in Appendix 9.

The strategy sets a target of retaining a population of more than 800 bears. Grizzly bear populations in the Lolo National Forest will continue to expand their habitat footprint as recovery proceeds. Over the lifetime of the next Forest Plan, grizzly bears will be increasingly present in the human-developed areas adjacent to this forest and it is likely that human-bear conflicts will increase. It will be important to re-evaluate food storage orders for the Lolo through this planning process and allocate adequate resources for public education as well as consider best management standards for grizzly bear populations. As the Lolo National Forest plan revision continues, the planning team should consider what types of plan components will be necessary to protect the grizzly bear should it be delisted and how adding the grizzly bear to the species of conservation concern list part way through the revision process will play into the Forest Service's analysis.

At this time, the Lolo National Forest should consider extending all of the Desired Conditions, Goals, Standards, and Guidelines that are included in the NCDE Amendment and that apply to the primary conservation area, into Zone 1 and the Ninemile Demographic Connectivity area (Ninemile). This will ensure that the management strategies that have proven effective for grizzly bears are included in the linkage areas that connect the NCDE and Bitterroot Ecosystems. There should be consideration given to extending those requirements across the Lolo National Forest, because at this time grizzly bears could be living or traveling through anywhere on forest lands. Particularly, NCDE-DC-AR-02 and NCDE-STD-AR-05 could be applied to Lolo Forest Lands, specifically Ninemile, but potentially across the forest, in order to prevent large-scale overnight recreational development on the Lolo National Forest from impacting the potential for grizzly bears to repopulate areas of the forest. Setting some sort of limits, both in scale and frequency of development, of both overnight recreational development and future trailhead developments, will be beneficial for grizzly bear linkages across the Lolo National Forest. We would encourage the Lolo National Forest to actually go further than the NCDE Amendments with regard to NCDE-DC-AR-02 and NCDE-STD-AR-05 and set very clear limits of what sort of overnight recreational development is allowed. For instance, NCDE-STD-AR-05 could be written to include stricter requirements based on the type of recreational development and the potential to displace bears or increase the risk of bear-human conflicts (i.e., Hotel = 1 in three decades, trailhead = 1 in one decade)

[22] *Conservation Strategy for the Grizzly Bear in the Northern Continental Divide Ecosystem*, Interagency Grizzly Bear Committee, NCDE Subcommittee (2020), http://igbconline.org/wp-content/uploads/2020/04/NCDEConservationStrategy.3.25.20.pdf.

Furthermore, the U.S. Fish & Wildlife Service recently initiated the process to evaluate the restoration of grizzly bears to the Bitterroot Ecosystem with the goal of finalizing the Record of Decision by November 2026.[23] This timeline will coincide with the finalization of the Lolo Forest Plan and both plans must work in conjunction.

B. Wolverine

In November 2023, the Wolverine was listed as Threatened under the Endangered Species Act (ESA). This listing means that the Forest Service must aid in the conservation of the wolverine and ensure that all activities, including decisions made through revision of this forest plan, are not likely to jeopardize the continued existence of the wolverine or destroy or adversely modify designated critical habitat.[24] The Forest Service also must ensure that the revised forest plan contributes to the recovery of the wolverine.[25]

The Forest Service in conjunction with U.S. Fish and Wildlife Service, must ensure this forest plan decision, which could open modeled wolverine habitat to over-snow vehicle use, would not jeopardize the wolverine and instead would contribute to species recovery. Under the ESA, "conservation" means "to use and the use of all methods and procedures which are necessary to bring any endangered species . . . to the point at which the measures provided pursuant to [the ESA] are no longer necessary."[26] Thus, "the ESA was enacted not merely to forestall the extinction of species[], but to allow a species to recover to the point where it may be delisted."[27] This federal agency obligation is an affirmative duty.

Areas of the Great Burn in the Lolo National Forest provide excellent maternal denning habitat for wolverines. Wolverine have particularly narrow habitat needs, especially in winter and for females of reproductive age. The presence of persistent spring snowpack is a necessary component of wolverine habitat. Habitat needs and constraints become even narrower when assessing maternal denning needs. The Heinemeyer et al. study utilized in the draft assessment showed that female wolverines exhibited stronger avoidance of off-road motorized winter recreation, and wolverines of both sexes avoided areas of both motorized and non-motorized winter recreation.[28] The study goes on to explain how wolverine and backcountry winter recreation are both expected to be affected by climate change "potentially resulting in a funnel effect where the overlap between winter recreation and wolverine distribution increases as they both respond to declining snow extent, depth, and the snow season."[29] Additionally, the McKelvey et al.

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[23] *Grizzly Bear Recovery Program*, U.S. Fish & Wildlife Service, https://www.fws.gov/BitterrootEIS.
[24] 16 U.S.C. §§ 1531 et seq.
[25] 36 C.F.R. § 219.9(b).
[26] 16 U.S.C. § 1532(3).
[27] *Gifford Pinchot Task Force v. U.S. Fish & Wildlife Serv.*, 378 F.3d 1059, 1070 (9th Cir.), amended, 387 F.3d 968 (9th Cir. 2004).
[28] *Draft Assessment: Lolo National Forest Land Management Plan*, U.S. Forest Service (June 2023), at 161 [hereinafter *Draft Assessment*]; Heinmeyer et al., *Wolverine in winter: indirect habitat loss and functional responses to backcountry recreation*, Ecosphere 10(2)e:2611, at 17–18 (2019).
[29] *Id*.

study modeled connectivity of wolverines based on persistent snowpack and identified areas of potentially important connectivity pathways, some of which are expected to decline as a result of climate change.[30] It has been predicted that between 2030 and 2059 suitable habitat in the contiguous U.S. for wolverine will decrease by 31%. These estimates further predict that habitat in the contiguous U.S. will decrease by 63%.[31] Climate change will reduce wolverine habitat while simultaneously restricting winter recreationists to these areas that maintain persistent snowpack. This overlap will impact maternal denning success and lead to habitat loss and population declines.

The currently proposed Desired Condition FW-WRISK-DC-07 provides a good starting point stating that "suitable wolverine material habitat is widely dispersed throughout the forest and includes locations with limited disturbance from winter recreation."[32] To contribute to species recovery as required by the ESA, the Forest Service should also designate modeled and occupied wolverine habitat as not suitable for winter motorized use under the Recreation Opportunity Spectrum (ROS). The plan should include additional plan components for wolverine recovery and extensive analysis in the DEIS regarding each proposed alternative's potential impacts to the species.

C. Lynx

In March 2000, the Canada lynx was listed as Threatened under the Endangered Species Act (ESA). This listing means that the Forest Service must aid in the conservation of lynx and ensure that all activities, including revision of this forest plan, are not likely to jeopardize the continued existence of this species or destroy or adversely modify designated critical habitat.[33] As discussed above for the wolverine, the Forest Service - in conjunction with the U.S. Fish and Wildlife Service - must ensure that this forest plan decision, which could open modeled and occupied Canada lynx habitat to over-snow vehicle use and other potential stressors and threats, will not (a) jeopardize populations of Canada lynx across the forest, (b) reduce the potential for recovering this species, or (c) impair the function and use of crucial travel corridors and linkage zones for this species at a regional scale.

We have significant concerns about the management direction outlined for Canada lynx under Appendix 10, and the ability of the Lolo National Forest to effectively manage and restore Canada lynx under the current Proposed Action as written.

In keeping with the 2012 Planning Rule requirement to "use the best available scientific information to inform the planning process…."[34] numerous scientific studies (only a subset of which are cited in the Lolo Forest Plan Assessment) detailing significant climate change impacts to Canada lynx must be incorporated into the management

[30] McKelvey et al. *Climate change predicted to shift wolverine distributions, connectivity, and dispersal corridors*, Ecological Applications 21(8) (2011).
[31] *Id*.
[32] *Proposed Action: Lolo National Forest Land Management Plan*, U.S. Forest Service (Jan. 2024), at 45 [hereinafter *Proposed Action*]. We believe this standard in the Proposed Action contains a typo and should read "wolverine *maternal* habitat."
[33] 16 U.S.C. §§ 1531 et seq.
[34] 36 CFR 219.3.

direction for this species. As just one example, scientists and managers have great clarity around the fact that “habitat for mammals, including predators (Canada lynx, fisher, wolverine) and prey (snowshoe hare) that depend on high-elevation, snowy environments, is expected to deteriorate relatively soon if snowpack continues to decrease” (McKelvey and Buotte, 2017).

Current and projected climate-related impacts to Canada lynx in the Northern Rockies, as well as vulnerability assessments, climate adaptation strategies, and the best available science (often from the Forest Service’s own scientists in Region 1), are missing entirely from Appendix 10. Instead, the Proposed Action has chosen to retain the 2007 Northern Rockies Lynx Management Direction and its objectives, standards, and guidelines in their entirety without modification.

While we appreciate Desired Condition FW-WRISK-DC-04: “Forests representing a diversity of seral stages occur at spatial scales and arrangements that support lynx occupancy and dispersal. Essential lynx habitat elements are common and well distributed at spatial scales relevant to supporting the physiological, behavioral, and life history needs of lynx,” the Forest must develop Standards that acknowledge that climate change already has and will continue to negatively affect Canada lynx populations as the basis for developing science-informed standards, guidelines, and related management actions that will sustain this species. The current Standard in the PA (FW-WRISK-STD-01: “The Canada lynx direction in Appendix 10 will apply”) does not meet multiple requirements of the 2012 Planning Rule with regard to the use of best available science or in developing plan components that will help recover Species at Risk.

In addition, Standards and Guidelines for Canada lynx must also address the ways in which climate change exacerbates other existing stressors and threats to this species, e.g. forest-wide and regional connectivity, the impact of winter recreation, and the use of new and existing roads by other carnivore species that have the potential to exclude Canada lynx through inter-species competition (described below).

In 2013, Squires et al. “combined resource selection, step selection, and least-cost path models to define empirically movement corridors for lynx in the Northern Rocky Mountains” to address multiple management and species-recovery needs:

> Maintaining connectivity with source populations is especially important for populations of boreal species at the southern edge of their distributions, where anthropogenic disturbance and climate change can be a threat. In the conterminous United States, Canada lynx (*Lynx canadensis*) is a federally threatened boreal species that may require connectivity with northern populations to persist. Connectivity is a function of movement between patches and the likelihood that patches are suitable for resident populations…We used telemetry data for 64 lynx monitored during 1998–2007 to create a broad-scale resource selection model that predicted probable lynx habitat across the species’ distribution in the Northern Rocky Mountains….We found that connectivity between lynx habitat in Canada and that in the conterminous US is facilitated by

> only a few putative corridors that extend south from the international border. Maintaining the integrity of these connectivity corridors is of primary importance to lynx conservation in the Northern Rockies.[35]

Although this scientific paper and datasets/ analyses were cited in the Lolo Forest Plan Assessment's reference section, there has been no attempt to crosswalk the identification of these vital linkage zones with the Wilderness Evaluation process in Appendix 8 of the Proposed Action. In addition to creating a map that includes these layers, we ask that the Wilderness Evaluation for each polygon in the Inventory include this information under the "rare plant or animal communities or rare ecosystems" column within the Unique Features table.

Additionally, a significant portion of the scientific information within the 2007 Northern Rockies Lynx Management Direction is out of date. For example, page 3 of Appendix 10 states that there is "...no evidence that some activities, such as forest roads, pose a threat to lynx." However, new science indicates that impacts from inter-species competition may be mediated through roads or snowmobile trails. For instance:

> The persistence of cold-adapted species along their equatorial range edge (i.e., southern range edge for species in the Northern Hemisphere and northern range edge for species in the Southern Hemisphere) is threatened by climate change. These species will be challenged not just by unfavorable climatic regimes, but also by changing biotic interactions, which may be more intense along equatorial edges. However, we currently have a poor understanding of the nature of biotic interactions at range edges and how climate may mediate those interactions, particularly for cold-adapted mammals. We studied the distribution of threatened Canada lynx (*Lynx canadensis*) at their southern range edge in northern Washington, United States from 2014 to 2016. Using data collected from 397 camera-trap stations in snow-on and snow-off seasons, and single- and 2-species occupancy models, we investigated seasonal patterns of habitat selection and spatial association of lynx with their primary prey (snowshoe hares, *Lepus americanus*) and potential competitors (bobcats, *Lynx rufus*; cougars, *Puma concolor*)....Two-species occupancy models showed a decrease in use of camera sites by lynx when bobcats were present, suggesting lynx were avoiding their warm-adapted competitor. Taken together, these results suggest that biotic interactions are partly shaping large-scale lynx distribution patterns along their southern range edge. Increasing temperatures and loss of snow may result in a combination of habitat isolation and potential for increased competitive interactions for lynx at the margins of their range. Although spatial overlap of these 2 species increased in snow-off seasons, there was limited overlap during winter as well, which may have been facilitated by presence of roads or snowmobile trails that allowed access to deep-snow sites for the more warm-adapted bobcats.[36]

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[35] John R Squires et al., *Combining resource selection and movement behavior to predict corridors for Canada lynx at their southern range periphery* (2013), Biological Conservation 157: 187–95 (Appendix E).
[36] Arthur E. Scully et al., *Influence of biotic interactions on the distribution of Canada lynx*

These findings are both confirmed and expanded by a new scientific study that used camera trapping as a lens to view mammal responses to changes in human activity during the COVID-19 pandemic.

> Across 163 species sampled in 102 projects around the world, changes in the amount and timing of animal activity varied widely. Under higher human activity, mammals were less active in undeveloped areas but unexpectedly more active in developed areas while exhibiting greater nocturnality. Carnivores were most sensitive, showing the strongest decreases in activity and greatest increases in nocturnality….Trophic group (combining body mass and trophic level) was the strongest predictor of changes in animal activity in response to increasing human use, with large herbivores showing the largest increases in activity and carnivores showing the strongest decreases. This is consistent with carnivore avoidance of higher mortality risk from encounters with people.[37]

Both studies strongly support the need for the Lolo National Forest to significantly improve Forest-wide management components and direction for Canada lynx through additional Standards and Guidelines. In part, these additional elements should be based on the creation of a new map that would include the following data layers: (1) connectivity/ linkage zones that Forest Service biologists have identified as critically important in sustaining populations of lynx at their southern distribution; (2) the Lolo National Forest Wilderness Inventory; (3) the Lolo National Forest Proposed Action's "Desired Winter Recreation Opportunity Spectrum" map (CB-05 in Appendix 1); and (4) projected snow cover through 2040.

As described in Appendix 10 of the Proposed Action under Selected Alternative F (Scenario 2), "when National Forests are designing management actions in unoccupied mapped lynx habitat they should consider the lynx direction, especially the direction regarding linkage habitat. If and when those National Forest lands become occupied, based upon criteria and evidence described in the Conservation Agreement, the direction shall then be applied to those forests."

Due to this directive, accurate identification of occupied and unoccupied lynx habitat on the Lolo National Forest is absolutely *critical* to sustaining and managing Canada lynx into the future. However, long-term climatic shifts in the distribution of this species - along with shorter-term shifts in response to climate-related events like drought, larger and more severe wildfire seasons, etc. - are likely to result in more dynamic and unexpected shifts in populations than was the case when the 2007 Northern Rockies Lynx Management Direction was written.

As a result, the Lolo National Forest must include plan components that clearly explain how and when Forest Service biologists will survey lynx habitat previously assumed to be unoccupied at regular intervals to ensure that changes in population distribution and

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(Lynx canadensis) at the southern edge of their range, 2018, Journal of Mammalogy, 99(4):760–72 (Appendix F).

[37] A. Cole Burton, *Mammal responses to global changes in human activity vary by trophic group and landscape* (2024), Nature Ecology & Evolution (Appendix G).

linkage zones are detected in real-time. Currently, the At-Risk Wildlife monitoring plan components[38] and the Required Monitoring embedded within the Northern Rockies Lynx Management Direction[39] do not address this need at all. Additionally, as we recommended for wolverine plan standards, the Forest Service should designate modeled and occupied lynx habitat as not suitable for winter motorized use under the ROS.

D. Mountain Goats

We appreciate that the Forest Service listened to our feedback regarding adding mountain goats to the Lolo National Forest's Species of Conservation Concern (SCC) list. The rationale provided for adding mountain goats as a Lolo SCC is as follows, "[a]ll herds within the plan area have demonstrated or are suspected to have population declines. Populations within the plan area are small and isolated and likely have limited connectivity to other populations due to habitat arrangements within the larger landscape. Although the specific cause of the population decline is unknown, multiple threats to the species exist within the plan area, and when coupled with the inherently small populations within the plan area indicate there is substantial concern for the species."[40]

Mountain goat habitat is broadly characterized by steep, rugged, and high-elevation terrain within subalpine to alpine regions.[41] The species prefers habitat close to "escape terrain," such as cliffs, which allow individuals to avoid predation and disturbance.[42] Habitat is also selected based on heat load, which accounts for incoming sunlight, and influences both forage productivity and snow depth.[43] Given the limited availability of suitable habitat, mountain goat populations undergo short altitudinal migrations to accommodate seasonal resource variation.[44] Habitat becomes even more limited in the winter when snow accumulation and harsh weather conditions concentrate mountain goat populations into ranges 2-50% the size of those occupied in the summer.[45] In the Rocky Mountains, preferred mountain goat winter habitat and feeding areas are located within 200m-wide ridgetop corridors that provide access to escape terrain.[46] Mountain

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[38] *Proposed Action* at 171, Table 81.
[39] *Proposed Action* at app'x 10, p. 9.
[40] Northern Region/Lolo National Forest, *Lolo National Forest Evaluations and Rationales for Identifying Species of Conservation Concern: Animals*, Oct. 2023, https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd1149533.pdf, at 104.
[41] Bruce L. Smith & Nicholas J. DeCesare, *Status of Montana's mountain goats: A synthesis of management data (1960–2015) and field biologists' perspectives,* May 2017, Montana Fish Wildlife and Parks; Idaho Department of Fish and Game, *Idaho Mountain Goat Management Plan 2019-2024* (Appendix H).
[42] Clifford G. Rice, *Seasonal altitudinal movements of mountain goats*, 72 Journal of Wildlife Management 1706 (2008).
[43] Aaron Shafer et al., *Habitat selection predicts genetic relatedness in an alpine ungulate*, 93 Ecology 6 (2019).
[44] Clifford Rice, *supra* note 42.
[45] Kim Poole et al., *Wintering strategies by mountain goats in interior mountains*, 87 Canadian Journal of Zoology 273 (2009).
[46] Steeve Côté and Marco Festa-Bianchet, *Mountain Goat, Wild Mammals of North America: Biology, Management, Conservation*, The John Hopkins University Press (2003), 1061–75.

goats face increased energy expenditures and physiological stress in the winter, making their winter habitat critical to population success. Preferred winter habitat is limited and isolated, leaving mountain goats vulnerable to direct threats as well as indirect threats that cause them to abandon high-quality habitat. Changes in spatial distribution, such as avoiding and/or fleeing areas of natural or anthropogenic disturbance, lead to increased energy expenditures at a time when forage resources are limited. Limited resource availability and harsh winter conditions result in nutritional deficiencies, increased starvation risk, and high juvenile mortality. Vulnerability to direct and indirect threats also occurs as a result of the small size and reproductive isolation of many populations. Undisturbed, high-quality winter habitat is critical to mitigating these threats and maintaining over-winter survival rates and population size.[47]

Mountain goats are highly sensitive to both motorized and non-motorized recreational disturbance and demonstrate behavioral changes (increased vigilance and decreased foraging time), reduced reproductive success, and changes in spatial distribution (reducing presence in or abandoning desired habitat).[48] These impacts are particularly acute in the winter, when resources and expendable energy are limited, as well as when disturbance occurs near nursery groups.[49] Unpredictable disturbances that occur at high-intensity, such as those of motorized vehicles, are most detrimental to mountain goats and elicit moderate-to-strong negative physiological and functional responses in exposed animals.

Historically, mountain goat populations faced limited disturbance from winter motorized recreation such as snowmobiling. Until the 1990s machines lacked the capability to access remote areas frequented by mountain goats. Technological advances, the introduction of snow bike technology, and decreased snowpack availability are now leading to increased competition between mountain goats and motorized recreationists for the same areas, particularly along ridgetops used by mountain goats for winter feeding and also favored by snowmobilers and snowbikers for the access to highline views. Studies on general ungulate populations demonstrate that snowmobiles can cause increased flight response, habitat loss, and mortality. Several studies have documented the negative impacts of helicopter disturbance on mountain goat populations, as well as that of non-aircraft disturbance.[50] Both aircraft and non-aircraft disturbance can reduce effective habitat, lower forage and resting rates, and impact seasonal habitat use.

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[47] Steeve Côté and Marco Festa-Bianchet, *supra* note 46; Kylie Paul, K., *Potential Conflicts Between Wildlife and Over-snow Recreation in the Scotchman Peaks/Savage Peak Area* (2017) (Appendix I).
[48] Gayle Joslin, *Mountain goat population changes in relation to energy exploration along Montana's Rocky Mountain front*, Biennial Symposium of the Northern Wild Sheep and Goat Council 5:253–269 (1986) (Appendix J); Kevin Hurley, *Northern Wild Sheep and Goat Council position statement on helicopter-supported recreation and mountain goats*, July 9 2004, Biennial Symposium of the Northern Wild Sheep and Goat Council 14:131–136 (Appendix K).
[49] Grant Harris et al., *Effects of winter recreation on northern ungulates with focus on moose (Alces alces) and snowmobiles,* 60 European Journal of Wildlife Resources 45 (2014).
[50] Grant Harris et al., *Effects of winter recreation on northern ungulates with focus on moose (Alces alces) and snowmobiles,* 60 European Journal of Wildlife Resources 45 (2014); Kevin Hurley, *Northern Wild Sheep and Goat Council position statement on helicopter-supported recreation and mountain goats*, July 9 2004, Biennial Symposium of the Northern Wild Sheep and Goat Council 14:131–136 (Appendix K).

Mountain goats are particularly vulnerable to the potential negative impacts of snowmobile disturbance, as research indicates that ungulates become increasingly sensitive, rather than habituated, to long-term and repeated disturbance. Given the accessibility of snowmobiles to rugged terrain and the frequent unpredictable, high-intensity disturbance resulting from this access, expansion of snowmobiling activity into critical mountain goat winter range is likely to reduce habitat availability and quality, increase energy expenditures, and reduce reproductive success. Mountain goat populations are small and isolated, making them vulnerable to and often unable to recover from population declines.

E. Fish Species

The Lolo also contains important and healthy rivers including the Flathead River, Blackfoot River, Clearwater River, Clark Fork River, St. Regis River, and Rock Creek, which support important spawning populations of bull trout (threatened, *Salvelinus confluentus)* and westslope cutthroat trout (Montana species of concern, *Oncorhynchus clarkia lewisi*).

Areas of the Lolo National Forest provide critically important habitat for westslope cutthroat trout, and the draft assessment provides an excellent summary of the current state of scientific knowledge about the highly significant threats to this cold-water-adapted species. In light of ample evidence to the contrary represented in the Draft Assessment, we disagree with the decision not to identify westslope cutthroat trout as a Species of Conservation Concern.

> "Genetically pure populations are present in only a fraction of the waterbodies in the species historic range (Hitt et al. 2003, Shepard et al. 2005, McKelvey et al. 2016, Muhlfeld et al. 2017); however, non-hybridized westslope cutthroat continue to coexist in areas with extensive non-native fisheries (Smith 2021). Rates of hybridization have increased in waterbodies in Western Montana (Muhlfeld et al. 2017, Dangora 2022), and are likely to continue to increase due to changing hydrological conditions associated with climate change and subsequent changes in non-native species distribution (Muhlfeld et al. 2014, Bell et al. 2021). Hybridization with rainbow trout alters trait expression, including migratory behaviors, growth rates and reproductive strategies (Corsi et al. 2013, Strait et al. 2021, Dangora 2022), which may have fitness consequences (Muhlfeld et al. 2009a, Drinan et al. 2015, Kovach et al. 2015b, Kovach et al. 2016a, Kovach et al. 2016b). Within the plan area, the degree of hybridization is substantial…"[51]

Muhlfeld et al. (2009a, 2014) have clearly and comprehensively shown that hybridization with rainbow trout rapidly reduces the fitness of westslope cutthroat trout and that rates of hybridization are very significantly accelerated by climate change. We would ask that the Regional Forester reconsider and add westslope cutthroat trout to

[51] *Lolo National Forest Potential Species of Conservation Concern List and Rationale: Animals*, U.S. Forest Service (June 2023), at 131.

the list of Species of Conservation Concern. This request is also supported by the vast amounts of work by state and federal agency fisheries biologists and managers in Region 1 currently working to restore and sustain westslope cutthroat trout populations.

F. Other Wildlife

Important summer and winter big-game habitat for elk, mountain goats, white-tailed, and mule deer are provided by all districts of this forest. Bighorn sheep summer and winter habitat is present on the Plains-Thompson Falls and Missoula districts.

We appreciate that the Proposed Action has plan components focused on the ecological role and importance of beavers as ecosystem engineers and keystone species on the Lolo National Forest.[52] In an era of accelerating climate change, understanding their role in creating diverse fish habitat, increased landscape-scale water storage, attenuation of flood events, baseflow and groundwater recharge, and the creation of wildlife habitat is of critical importance at this stage of the forest plan revision.

In particular, we appreciate and support the creative watershed restoration strategy in the Proposed Action that focuses on protecting and restoring beaver habitat, e.g. FW-WTR-DC-07: "The timing, variability, and duration of floodplain inundation is within the natural range of variation associated with disturbance mechanisms such as wildlife, beaver habitat manipulation, and floods"; FW-WTR-GO-04: "The Lolo National Forest works with partners to improve aquatic health, increase resiliency, and to enhance ecosystem conditions for beaver"; and FW-WTR-GDL-02: "to protect the ecosystem services provided by beaver ecosystem engineering, management activities should not remove or otherwise alter beaver dams, except to protect critical infrastructure and public safety, or where necessary to support the management of at-risk species." We suggest that this plan component also recognizes the value of beaver for natural water storage and climate change adaptation – i.e. as a strategy to hold water in the headwaters when there is less snowpack to support late-season runoff. For this reason, we would ask that FW-RMZ-OBJ-02 be expanded, from "Implement beaver habitat restoration actions in at least two watersheds every 5 years" to "Implement beaver restoration actions in at least five watersheds every 5 years."

G. Whitebark Pine

We support the Desired Conditions included in the Proposed Action for at-risk species in general, i.e. FW-ARISK-DC-01: "[t]he distribution and abundance of at-risk species are resilient to demographic and environmental stochasticity, supporting their long-term persistence and recovery" and FW-ARISK-DC-02: "[c]onnectivity exists among areas of suitable habitat for at-risk species, facilitating movement and dispersal among occupied habitats, recolonization of formerly occupied habitats, and colonization of new habitat essential for adaptive range shifts." Similarly, the Desired Conditions for whitebark pine were robust, e.g. FW-PRISK-DC-02: "[w]hitebark pine populations are less susceptible

[52] *Proposed Action* at 33–34.

to white pine blister rust, mountain pine beetle, wildland fire, and succession to more shade tolerant trees" and FW-PRISK-DC-02: "[c]one-bearing whitebark pine stands occur at a density and spatial distribution conducive to visitation and seed gathering by Clark's nutcracker." We also appreciated and agreed with the commitment to treating "300 acres per year, measured as an annual average on a decadal basis, for the purpose of sustaining or restoring whitebark pine" as articulated under FW-PRISK-OBJ-02.

The Forest Service, however, must include specific standards for whitebark pine. These standards must acknowledge that climate change will negatively affect whitebark pine and evaluate the compounded negative effect caused by the concentration of over-snow vehicle use at higher elevations as climate change progresses. Data collected by Winter Wildlands Alliance showed that between 1983 and 1995, snowmobiles damaged between 12 and 720 trees per acre across approximately 72,393 surveyed acres on the Hebgen Ranger District of the Gallatin National Forest.[53] On the Kootenai National Forest, north of the Great Burn in Montana, the Over-Snow Motorized Use Travel Plan scoping documentation extensively acknowledged that adverse effects to whitebark pine may result from running over tree parts present above the snow layer, breaking limbs, abrasion of branches, and leader growth and abrasing branches.[54]

V. Connectivity Assessment & Key Linkage Areas

The ecological sustainability section of the 2012 Planning Rule specifies that plan revisions must "includ[e] components to maintain or restore … connectivity…"[55] Given the importance of the Lolo National Forest for connectivity within Western Montana and other large surrounding wildland ecosystems, we are pleased to see that the Proposed Action reflects this issue in the desired conditions for both terrestrial vegetation and wildlife. The Lolo National Forest should ensure that the draft plan helps the Forest Service meet direction in the White House Council on Environmental Quality's (CEQ) recent guidance on ecological connectivity and wildlife corridors, as well as meet requirements of the 2012 Planning Rule relating to connectivity and ecological integrity. The CEQ guidance, issued in March 2023, establishes a national policy to promote greater wildlife habitat connectivity as a means to sustain the nation's biodiversity and "enable wildlife to adapt to fluctuating environmental conditions, including those caused by climate change."[56] Pursuant to the CEQ guidance, federal agencies are expected to assess connectivity and corridor values on the public lands they manage; develop policies to "conserve, enhance, protect, and restore" corridors and connectivity,

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[53] Winter Wildlands Alliance, *Seeing the forest and the trees: assessing snowmobile tree damage in national forests: A report by Winter Wildlands Alliance*, 2009 (Appendix L).
[54] Kootenai National Forest Over-snow Motorized Use Travel Plan, *Draft Minimization Criteria Screening*, U.S. Forest Service (July 2023), at 6.
[55] 36 CFR 219.8(a)(1).
[56] *Memorandum for Heads of Federal Departments and Agencies: Guidance for Federal Departments and Agencies on Ecological Connectivity and Wildlife Corridors*, Council on Environmental Quality (Mar. 21, 2023).

including in forest planning and management; and actively identify and prioritize actions that promote greater connectivity.

We appreciate that the Lolo National Forest is undertaking a connectivity analysis similar to the process used in the Custer Gallatin Forest Plan revision. We continue to support the process used by the Custer Gallatin National Forest that relies on the Williamson et al. study.[57] As a result of the connectivity analysis, we request that the Lolo National Forest create specific plan components and a "Key Linkage Area" designation following the precedent of the Custer Gallatin National Forest.[58] Roads and trails, recreation, and designated areas all play a role in facilitating or hindering wildlife movement and connectivity. We would like to see desired conditions and other plan components related to connectivity and linkage areas woven into additional sections of the forest plan as appropriate.

As we discussed in our assessment comments, the Forest Service should also conduct additional analysis in the DEIS about the role of riparian areas in providing both terrestrial and aquatic connectivity. Riparian areas can play an important role in providing habitat connectivity for many species and have been frequently identified as priority areas for conservation under climate change because they span climatic gradients and have cool, moist microclimates relative to surrounding areas. They are therefore expected to act as dispersal corridors for climate-induced species range shifts and to provide microclimatic refugia from warming.[59] We would suggest exploring the use of recent analyses and tools (e.g. Krosby et al.) in considering the role of riparian areas across the Lolo National Forest in the DEIS.

VI. Forest-Wide Standards

A. Recommended Wilderness Management

Public land managers are responsible for managing recommended Wilderness areas to preserve wilderness character and their potential for future inclusion into the National Wilderness Preservation System. We appreciate that the 1986 Lolo Forest Plan acted to protect the wilderness character of recommended Wilderness areas using Management Area 12.[60] The 1986 plan states that "motorized access is not permitted except as provided for under the Wilderness Act" and that the Forest Service will "[m]anage proposed wilderness to protect their wilderness characteristics pending a decision as to their classification."[61] The draft assessment stated that the 1986 Management Area 12 prohibits public motorized and mechanized uses in recommended Wilderness.[62] While

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[57] *Record of Decision: Custer Gallatin National Forest Land Management Plan*, U.S. Forest Service (Jan. 2022), at 28, 43–44 [herinafter *Custer Gallatin Final Forest Plan*]; Williamson et al., *Incorporating wildlife connectivity into forest plan revision under the United States Forest Service's 2012 planning rule*, Conservation Science and Practice 2:15 (2020).

[58] *Custer Gallatin Final Forest Plan* at 51.

[59] Krosby M, Theobald DM, Norheim R, McRae BH, *Identifying riparian climate corridors to inform climate adaptation planning*, PLoS ONE 13(11): e0205156 (2018) (Appendix M).

[60] *Draft Assessment* at 307–09.

[61] *The Lolo National Forest Plan*, U.S. Forest Service (Feb. 1986), at III-37.

[62] *Draft Assessment* at 307.

we agree with this statement in the draft assessment, the Forest Service has not always managed for or enforced the mechanized use aspect. It is critical that the revised forest plan contain clear plan standards and suitability components that prohibit nonconforming uses in recommended Wilderness.

The Proposed Action does state that motorized and mechanized uses are not suitable in recommended Wilderness,[63] however we are concerned that the clear direction provided by the 1986 Plan's standards is absent from the Proposed Action. We have learned from direct experience that there is a need for clear, unambiguous standards that fully retain wilderness character and recommended Wilderness areas. Standards are a mandatory constraint on decision-making, established to help achieve or maintain the desired condition(s), to avoid or mitigate undesirable effects, or to meet applicable legal requirements. Inevitably changing technology and increasing recreation pressures over the life of a forest plan emphasize the need for standards that maintain the desired condition of recommended Wilderness areas.

Recommended Wilderness areas must be managed for social and ecological characteristics that preserve and enhance wilderness character over time, as required by the 2012 Planning Rule, Forest Service guidance, and caselaw. Furthermore, the revised forest plan must adopt clear standards for the proper management of recommended Wilderness areas and mechanisms by which those standards can be immediately implemented.

The 2015 Forest Service Manual planning directives address the management of recommended Wilderness areas.[64] Those directives state:

> 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.

Furthermore, the Forest Service Handbook[65] states:

> When 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. In addition, the plan may include one or more plan components for recommended wilderness areas that:
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> 1. Enhance the ecological and social characteristics that provide the basis for wilderness designations;

[63] *Proposed Action* at 156.
[64] FSM 1923.03(3).
[65] FSH 1909.12, ch. 70 § 74.1.

2. Continue existing uses, only if such uses do not prevent the protection and maintenance of the social and ecological characteristics that provide the basis for wilderness designation;
3. Alter existing uses, subject to valid existing rights; or
4. Eliminate existing uses, except those uses subject to valid existing rights.

The Handbook reiterates the direction given in the 2012 Planning Rule by stating all plan components "must", *not may*, "protect and maintain the social and ecological characteristics that provide the basis for wilderness designation". The Handbook also restates the Forest Service's authority to "alter" or "eliminate existing uses" in the maintenance of those characteristics. Every National Forest in Region 1 includes recommended Wilderness standards that prohibit nonconforming uses. We strongly encourage the Lolo National Forest to follow the lead of these other Region 1 Forests. We are providing the following examples to demonstrate why strong standards for recommended Wilderness that prohibit nonconforming uses are essential. By allowing nonconforming uses to persist and establish, and by failing to manage these areas in a manner consistent with National Forest policy, these plan decisions failed to protect and maintain ecological and social characteristics for Wilderness designation.

1. *Beaverhead Deerlodge National Forest, Mt. Jefferson Recommended Wilderness:*

   In 1990, the Beaverhead Deerlodge National Forest created the 4,474 acre Mt. Jefferson Recommended Wilderness Area in the Hellroaring Creek drainage, the ultimate headwaters of the Missouri River. Although small, the Mt. Jefferson Recommended Wilderness Area was adjacent to the 23,054 acre Centennials Recommended Wilderness Area, managed by the Bureau of Land Management (BLM), for a combined total of about 28,000 acres. The previous Beaverhead Deerlodge National Forest Plan allowed snowmobiling in Recommended Wilderness Areas. When snowmobiling technology improved in the 1990s, Mt. Jefferson became a publicized snowmobile destination, accessed primarily from the Idaho side. Attempts by the Madison District Ranger to close the recommended Wilderness areas to snowmobiles were overruled by the Forest Supervisor. In contrast, snowmobiling was prohibited in the adjacent BLM Centennials Recommended Wilderness Area. In 2002, the responsible BLM field manager wrote a letter to the Beaverhead Deerlodge National Forest requesting the closure of the Forest Service portion of the recommended Wilderness area to curtail illegal trespass. His request was ignored. When the Beaverhead Deerlodge National Forest revised its Forest Plan in 2009, the already small Mt. Jefferson recommended Wilderness area was cleaved in half: 2,000 acres in the upper reaches of the Hellroaring Creek drainage were stripped of recommended Wilderness area status, leaving only a 2,000 acre recommended Wilderness area in the lower reaches of the valley.

This example addresses the issue of illegal trespass in adjacent public lands when nonconforming uses are allowed. This is very relevant to decision-making for the Nez Perce-Clearwater given the adjacent Hoodoo Roadless Area acres managed by the Lolo National Forest as recommended Wilderness. Illegal trespass by nonconforming uses on the Lolo is expected to be an issue if management of the Nez Perce-Clearwater National Forest goes forward with the Preferred Alternative as discussed in Objection 1.

2. *Beaverhead Deerlodge National Forest, West Big Hole Recommended Wilderness:*

Approximately 56,000 acres of the 130,000 acre West Big Hole Inventoried Roadless Area, on the east slope of the Beaverhead Range was a recommended Wilderness area in the Beaverhead Deerlodge National Forest's 1980s-era Forest Plan. Crowned by 10,620ft Homer Youngs Peak, the West Big Hole is a key link in the chain of wild areas that connect the Greater Yellowstone Ecosystem with central Idaho wildlands, including the Frank Church-River of No Return and Selway-Bitterroot Wildernesses. The previous Beaverhead Deerlodge National Forest Forest Plan allowed snowmobiling in recommended Wilderness areas. When snowmobile technology improved in the 1990s, the West Big Hole became a popular high-marking playground. As a result, when the Beaverhead Deerlodge National Forest released its revised Forest Plan in 2009, the West Big Hole Recommended Wilderness Area was eliminated.

Winter motorized technology continues to improve. In recent decades snow bikes have become a readily available and popular technology. Snow bike riders can access more densely forested and steeper terrain than snowmobiles. These capabilities have potential impacts on winter habitat security for sensitive species such as wolverines and mountain goats as discussed elsewhere in this objection.

3. *Beaverhead Deerlodge National Forest, Anaconda-Pintler Wilderness Recommended Inclusions (Sullivan and Tenmile Creek):*

The 1980s Beaverhead Deerlodge National Forest Plan included Sullivan and Tenmile Creeks as Recommended Wilderness Area additions to the Anaconda-Pintler Wilderness. At the southeastern end of the Anaconda Range, these drainages harbor ancient, gnarled, 800-year-old subalpine larches that are among the oldest trees in Montana. Just like the West Big Hole and Mt. Jefferson, snowmobiles were allowed in this recommended Wilderness area. When technology improved enough to allow access into this rugged high country, winter motorized recreation became popular enough that the Beaverhead Deerlodge National Forest removed the recommended Wilderness area when it revised its Forest Plan in 2009.

4. Flathead National Forest, Jewel Basin:

The aptly-named Jewel Basin is a beloved gem in the Crown of the Continent ecosystem and the crown jewel of the Swan Range. The spectacular alpine lakes of Jewel Basin are not unlike some of the incredible alpine lakes in the Hoodoo Roadless Area. In the 1987 Flathead National Forest plan, the Jewel Basin Recommended Wilderness Area encompassed over 32,000 acres. Like all 1980s forest plans, the 1987 plan did not address mechanized transport. In subsequent years, the Alpine No. 7 trail that traverses the Swan Crest and bisects the Jewel Basin caught the interest of mechanized users, becoming a popular mountain and dirt biking destination. Images of mountain bikers riding the Alpine No. 7 trail are used on local mountain biking websites and promotional materials. These mechanized users actively advocated for use of additional portions of Alpine No. 7 in Jewel Basin, as well as other trails in the Jewel Basin Recommended Wilderness Area.

The 2018 Flathead ROD ultimately eliminated 14,000 acres of recommended Wilderness area in Jewel Basin, shrinking the area nearly in half. The plan attributed this loss specifically to recreational use pressure: “Jewel Basin recommended wilderness area excluded a portion in the south end where mechanized transport occurs.” The Flathead FEIS also specifically stated that the acreage of the Jewel Basin Recommended Wilderness Area was, “reduced … to minimize effects on mechanized transport.” In this case, the establishment of mountain biking in a recommended Wilderness area directly precluded that part of the recommended Wilderness area from continued protection and the possibility of future designation.

5. *Custer Gallatin National Forest, Lionhead:*

The Lionhead Recommended Wilderness Area in the Custer Gallatin National Forest was managed as recommended Wilderness between 1987 and 2022. The 2006 travel plan prohibited snowmobiles in the area and acknowledged that mountain biking was inconsistent with managing for wilderness character, but deferred a specific decision regarding mechanized use. No decision was ever issued and mechanized use became more established in the area on the Continental Divide National Scenic Trail (CDNST). Because of this, in the 2021 Final Forest Plan, the Forest Service eliminated recommended Wilderness protections to transform the entire CDNST section as a mountain bike trail even though mechanized use was not listed as a “compatible” use of the trail in the CDNST Comprehensive Plan that was created under the National Trails System Act.

We urge the Lolo to follow through on its responsibility to wilderness-quality lands and include robust plan components that are consistent with its own administrative recommendations to manage these landscapes for social and ecological characteristics that preserve wilderness character over time, allowing maximum potential for Wilderness designation in the future. We appreciate the inclusion of a Desired Condition for the Hoodoo Roadless Area, MCG-REC-DC-01, that states “snowmobile trespass

does not occur in the recommended wilderness."[66] We hope this condition is carried forward in the DEIS and expanded to include the consideration of no snowmobile trespass in recommended Wilderness across the Forest. We also recommend the final plan include provisions for robust monitoring of illegal use and road closure violations to recognize the threat of unauthroized off-road recreation.

B. Roadless Areas

The Lolo National Forest contains 757,930 acres of important inventoried roadless areas. In recent years, the Forest Service has increasingly brought forward proposals to conduct timber harvest activities in inventoried roadless areas.[67] It is critical that the Forest Service pay close attention to maintaining the character of inventoried roadless areas and minimize character-altering activities. While the 2001 Roadless Area Conservation Rule provides some layer of protection for most timber harvest and road construction activities, other protections are needed to ensure these areas maintain their ecological integrity, including connectivity, as required by the 2012 Planning Rule.[68] The draft assessment acknowledges these areas are important to "maintaining habitats, natural processes, and remote recreation opportunities."[69] Recent studies have shown just how important roadless forests are to climate change, drinking water, wildlife, and landscape connectivity.[70] Roadless areas also often contain important watersheds for drinking water and capture significant amounts of carbon. For any designations overlaying roadless areas, we request that the Forest Service assign these lands management areas or plan components that will maintain their unroaded character. Doing so will preserve the status quo while assuring these lands will continue to provide key ecosystem services over the life of the plan.

C. Backcountry Areas

We recommend the Forest Service make it clear in the plan components if each backcountry area is motorized or non-motorized. In the Proposed Action, this classification is only available in the ROS maps. This does not provide clear guidance to most of the public.

D. Trails and Roads Analysis

Roads and trails across the forest are important for the array of forest management activities and programs and to enable recreational activities enjoyed by the public. Local businesses and communities benefit from visitors who can safely access and experience the forest on National Forest System roads and trails. Transportation infrastructure contributes to ecological sustainability when it is properly designed,

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[66] *Proposed Action* at 137.
[67] *See*, *e.g.*, *Redd Bull Project Draft Decision Notice*, U.S. Forest Service: Lolo National Forest (2021), https://www.fs.usda.gov/project/lolo/?project=56574.
[68] 36 CFR 219.8(a)(1).
[69] *Draft Assessment* at 314.
[70] Belote et al., *Conservation value of national forest roadless areas*, Conservation Science and Practice, Issue 11, Vol. 2 (Sept. 2020) (Appendix N).

integrated within the landscape, and well-maintained and managed. However, when it is not, it can seriously diminish the integrity of ecosystems, species habitat and diversity, water quality, and scenery. Further, under-maintained infrastructure costs relatively more each year to keep open and leads to unsafe conditions. Climate change, which likely will bring more severe storms and different precipitation/runoff patterns, will endanger infrastructure thought stable under previous hydrologic regimes; either infrastructure will need to be re-designed to accommodate more severe storms or it will deteriorate and collapse. For all these reasons, it is important that forest plans meaningfully address transportation infrastructure with a 20-year vision and supporting direction. The attached literature review (Appendix O) surveys the extensive and best-available scientific literature on a wide range of road-related impacts to ecosystem processes and integrity on National Forest lands.[71]

We recommend the Lolo National Forest undertake a forest-wide analysis of trail systems to gain an understanding of what types of recreation are occurring where. This forest-wide understanding will help the Forest Service in creating plan components that make sense for what is on the ground.

Furthermore, the draft assessment stated there are over 4,100 miles of "undetermined roads."[72] The Forest Service should conduct additional analysis and disclose to the public the roads with "undetermined" status. This information was also not mentioned in the Proposed Action and we hope to see these roads and trails contemplated in the DEIS analysis. To address the Forest Service's unsustainable and deteriorating road system, "subpart A" of the Travel Management Rule is designed to shrink the size of the system. It requires that each forest conduct a "science-based roads analysis," generally referred to as a "travel analysis report" or "TAR."[73] Based on that analysis, forests must "identify the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of National Forest System lands," as well as roads "that are no longer needed to meet forest resource management objective that, therefore, should be decommissioned or considered for other uses, such as for trails."[74] The forest plan revision process is the appropriate place to ensure that subpart A's requirements will be met over the next 10 to 15 years, and set standards and guidelines for achieving an environmentally and fiscally responsible minimum road system (MRS) through decommissioning and repurposing unneeded roads and upgrading the necessary portions of the system. With forest plans determining the framework for integrated resource management and "an appropriately sized and sustainable transportation system, direction for identifying and achieving that MRS belongs in the forest plan.[75]

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[71] The Wilderness Society, *Transportation Infrastructure and Access on National Forest and Grasslands A Literature Review*, May 2014 (Appendix O).
[72] *Draft Assessment* at 295.
[73] 36 CFR 212.5(b)(1).
[74] 36 CFR 212.5(b).
[75] FSH 1909.12, ch. 20, § 23.231(2)(a). The regulatory history of subpart A makes clear that the Forest Service intended that forest plans would address subpart A compliance. In response to comments on the proposed subpart A, the Forest Service stated, "[t]he planning rule provides the overall framework for planning and management of the National Forest System. The road management rule and policy which

The substantive ecological and fiscal sustainability provisions of the 2012 planning rule complement and reinforce the requirements of subpart A. For example, forest plans must include standards and guidelines that maintain or restore healthy aquatic and terrestrial ecosystems, watersheds, and riparian areas, and air, water, and soil quality, taking into account climate change and other stressors.[76] Plans also must implement national best management practices (BMPs) for water quality; ensure social and economic sustainability, including sustainable recreation and access and opportunities to connect people with nature; and provide for "[a]ppropriate placement and sustainable management of infrastructure."[77] Given the significant aggregate impacts of the road system on landscape connectivity, ecological integrity, water quality, species viability and diversity, and other forest resources and ecosystem services, the Forest Service cannot satisfy the rule's substantive requirements without providing integrated plan components directed at making the road system considerably more sustainable and resilient to climate change stressors.

Plan components should "reflect the extent of infrastructure that is needed to achieve the desired conditions and objectives of the plan" and "provide for a realistic desired infrastructure that is sustainable and can be managed in accord with other plan components including those for ecological sustainability."[78] Plan components also must ensure fiscal responsibility.[79] As with ecological integrity and sustainability, the Forest Service cannot satisfy its mandate to achieve fiscal sustainability absent plan components that remedy the large size and decaying nature of the forest's road system. The revised plan should prioritize the reclamation of unauthorized and unneeded roads in Inventoried Roadless Areas, important watersheds, and other sensitive ecological and conservation areas and corridors. The plan should also include components that set decommissioning timeframes and incorporate road density thresholds that apply to all motorized routes, including closed, non-system, and temporary roads, and motorized trails. In addition to specific plan components, we look forward to an analysis in the DEIS and FEIS of the fiscal and ecological impacts associated with the forest road system.

E. Recreation Opportunity Spectrum (ROS) and the Framework for Future Travel Management

We were pleased to see that areas recommended as Wilderness in the Proposed Action were in the Primitive ROS setting. To classify recommended Wilderness as

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are implemented through the planning process must adhere to the sustainability, collaboration, and science provisions of the planning rule. For example, underthe road management policy, national forests and grasslands must complete an analysis of their existingroad system *and then incorporate the analysis into their land management planning process*." 66 Fed. Reg. 3206, 3209 (Jan. 12, 2001) (emphasis added).

[76] 36 CFR 219.8(a)(1)-(3).

[77] 36 CFR 219.8(a)(4), 219.8(b), 219,10(a)(3).

[78] FSH 1909.12, ch. 20, § 23.23l(a)(b); *see also id*. § 23.23l(2)(a) (desired conditions for roads "should describe a basic framework for an appropriately sized and sustainable transportation system that can meet [identified access and other] needs").

[79] 36 CFR 219.8(b).

anything other than “Primitive” will result in competing future desired conditions for the same area resulting in ambiguity regarding how these areas should be managed. In addition to the ROS suitability components, each Management Area should have complementary standards stating what uses are permissible.

The revised forest plan should also set up the proper framework for winter recreation and subsequent, implementation-level winter travel management planning.[80] The Lolo should reinforce the Travel Management Rule’s provisions through relevant forest plan standards and continue to have a winter-specific ROS classifications. The plan should provide a programmatic framework for managing over-snow vehicle use that includes, at a minimum: (1) suitability determinations for over-snow vehicle use that address both legal suitability (e.g., motorized use is prohibited in Wilderness) and practical suitability based on terrain, snowpack, wildlife habitat, and other condition that impact over-snow vehicle travel; (2) season dates; (3) minimum snow depths or minimum snow water equivalencies; (4) ROS classifications; (5) an objective to conduct timely winter travel management planning in compliance with subpart C travel planning; and (6) clear statements that any implementation-level area and route designations will be consistent with suitability determinations and ROS classifications, but that all suitable, motorized areas will not necessarily be open to off-road vehicle use. Instead, the forest should designate discrete open areas and trails within those areas that are located to minimize resource impacts and conflicts with other recreational uses.

We understand that the Proposed Action Winter ROS had a data and mapping error that impacted our ability to comment effectively. The Forest Service acknowledged this issue in a March 12, 2024 announcement. We look forward to seeing the corrected ROS maps before the official DEIS comment period. The Forest Service should put out the corrected information as soon as possible and provide an opportunity for public engagement to combat any confusion or the spread of incorrect information. Additionally, the Forest Service should provide more detailed maps and corresponding GIS layers for each ROS setting during or prior to the public comment period on the DEIS.

Because these significant errors in the ROS maps and associated motorized versus non-motorized allocations likely impact a range of resource issues and values under the Proposed Action, the Forest Service should release a corrected Proposed Action. We reserve the right to submit supplemental scoping comments once corrected maps and Proposed Action have been released

F. Recreation

1. Emerging Recreation

We encourage the planning team to think about emerging technologies when creating plan standards and prohibiting nonconforming uses in recommended Wilderness. Rapidly evolving, and advancing, recreation technology demands both unambiguous

[80] *Subpart C of the Forest Service Travel Management Rule*, 36 CFR 212.

plan components that clearly define what types of recreational uses are permitted in certain areas, as well as forward-thinking policies that anticipate the increased use and associated impacts of certain activities over the life of the new plan. For example, in the 1980s it was barely conceivable that mountain bikes would be able to traverse most trails. Today mountain biking is a growing and popular recreation activity in our region. This plan must be able to withstand advances in motorized and mechanized technology for the next 15-30 years that, like advancements made since the 1980s, will undoubtedly make further and faster backcountry access easier and therefore more desirable in all seasons.

Snow bikes are a relevant example in the Lolo National Forest. Timbersled, a snow bike manufacturer that is now owned by Polaris, claims it has doubled the number of sleds it has sold every year since 2010. The industry suggests that snow bikes are on pace to outsell snowmobiles in the next few years. The nimbleness of a snow bike far exceeds that of snowmobiles, allowing riders to access more heavily forested terrain and steeper aspects than on a snowmobile. The capabilities of these machines, and their likely increased presence, must be considered by the Lolo National Forest in evaluating the impacts of designating new winter motorized access areas.

Motorized (or electric-powered or electric-assisted) mountain bikes are another example of an emerging recreational technology that presents a challenge in the management of quiet trails. New electric bikes weigh as little as 43 pounds and are visually nearly indistinguishable from a nonmotorized mountain bike. Bike manufacturer Santa Cruz has been investing heavily in this type of electronic mountain bike and they are advertising their latest model using this tagline, “For riders looking for something that doesn’t scream EBIKE until they need it to.”[81] This technology will not only allow e-bike riders to access all terrain a standard mountain bike could ride, but it will also present a legal enforcement challenge given that close inspection is now necessary to discern whether a bike is motor-assisted or not. Worldwide, the 2022 e-bike market was estimated at $19.05 billion. The market is expected to grow at a compound annual growth rate of 14.5% to reach $52.37 billion a year by 2030.[82]

Snow bikes and e-bikes are just two examples of the many emergent technologies that could change use on our national forest lands. The use of hovercrafts and flying vehicles is increasingly popular. Their recreational use could pose new challenges for integrating them into forest planning management direction. We would also respectfully ask the Planning Team to Consult with Sovereign Tribal Nations who have deep connections to the lands, waters, and wildlife in the Lolo National Forest on the subject of emerging technologies given the tremendous number of issues and impacts on cultural values and resources that surfaced during an Indigenous panel on the “Impacts

[81] *See* Heckler SL at https://www.santacruzbicycles.com/en-US/bikes/heckler-sl#details.
[82] Grand View Research, *E-bikes Market Size, Share & Trends Analysis Report By Propulsion Type (Pedal-assisted, Throttle-assisted), by Battery Type, By Power, By Application, And Segment Forecasts, 2023 - 2030*, https://www.grandviewresearch.com/industry-analysis/e-bikes-market-report#:~:text=The%20global%20e%2Dbikes%20market%20size%20was%20estimated%20at%20USD,USD%2052.37%20billion%20by%202030.

of Recreation to Cultural Resources" at the 2022 Crown Managers Partnership Annual Forum.[83] Panelists discussed the effect that flying vehicles and hovercrafts would have in "sterilizing" lands and waters within their current and ancestral homelands if allowed. Furthermore, aircrafts specifically pose a danger to the integrity of Wilderness and recommended Wilderness, as well as to populations of disturbance-sensitive wildlife such as mountain goats. No matter how advanced aircraft technology becomes it will not be appropriate for transportation or recreation in any type of Wilderness.[84]

2. Outfitting and Guiding Permits

We appreciate that the Proposed Action includes a section on Recreation Special Uses that specifically contemplates outfitting and guiding permits. Professional Outfitters and Guides are an important part of the financial health of Montana and can play a role in preserving the ecological health of a landscape as well. Important monitoring elements should be contemplated in this revision of the Forest Management Plan to ensure compliance with plan guidance.

Outfitting in designated Wilderness is allowed through Section 4d(5) of The Wilderness Act stating that commercial services may be performed within the wilderness areas…to the extent necessary for activities *which are proper for realizing the recreation or other wilderness purposes of the area.* This statement makes clear that permitting is not a blank check, and that those holding the right to guide in Wilderness should treat this permit as a privilege and not a right. The Forest should make available the monitoring processes for the execution of permits and create public access to any permit violations, allowing the public to be able to determine outfitters in good standing.

VII. Areas of Tribal Importance and Consultation

We are pleased to see that the Confederated Salish and Kootenai Tribe is listed as a cooperating agency for this management plan revision and that the Tribes have had the opportunity to draft portions of the plan language. We fully support the national directives to engage sovereign tribal nations in the co-management of our national forests.[85]

We also appreciate that the Proposed Action acknowledges that current Forest Service lands are the homelands of Indigenous nations who have occupied the area since time immemorial. When possible and where appropriate, we would encourage the Forest Service to incorporate traditional ecological knowledge into the planning process, analysis, and future plan components.

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[83] *"Recreation in the Crown of the Continent: Exploring Trends and Strategies for the Future"; Crown Managers Partnership Annual Forum* (Mar. 2022), *https://www.crownmanagers.org/2022-forum-recreation.*

[84] *Montana Wilderness Association v. McAllister,* 666 F.3d 549, 566 (9th Cir. 2011).

[85] *See e.g., Memorandum on Tribal Consultations and Strengthening Nation-to-Nation Relationships*, The White House (Jan. 26, 2021).

Similarly, we encourage the Forest Service to continue to solicit information and feedback from tribes with historic usage of the forest by developing a "*Final Areas of Tribal Importance Report*" as part of the assessment process, following on the outstanding regional model created by the Custer-Gallatin Forest Planning Team in 2017.[86] This component of the final Assessment on the Custer Gallatin National Forest identified Tribes historically associated with the forest, reviewed Tribal Rights in detail, and created a comprehensive review of the areas of cultural importance across the forest as a foundation for developing the new forest plan. By following this important precedent, the Lolo National Forest would be far better poised to address many of the issues raised by Tribes relative to federal land management on the Lolo, including (but not limited to) those listed in the draft assessment, e.g. "a systematic approach to protection of traditional cultural properties and other important American Indian interests on National Forest System lands; restoration, protection, and monitoring of habitat for culturally significant species; designated areas of culturally significant forest products; use of traditional Indian place names; and attention to water rights and hunting rights."[87]

While the draft assessment had a section that focused on "Cultural Resources and Areas of Tribal Importance," we did not see that information carried forward in the Proposed Action. We believe that a much more detailed and in-depth assessment is a vital first step toward more substantively addressing current directives by the Federal government to "ensure that the Department of Agriculture and the Department of the Interior (Departments) and their component Bureaus and Offices are managing Federal lands and waters in a manner that seeks to protect the treaty, religious, subsistence, and cultural interests of federally recognized Indian Tribes…".[88] Without taking this critically needed step, the Lolo National Forest will be fundamentally falling short of this mandate for the many Indigenous Nations and communities (in addition to the Salish, Kootenai, and Kalispel) who have used or traveled through these lands, including members of the Nez Perce, Coeur d'Alene, Blackfeet and Shoshone.[89]

A much more detailed and systematic review of the status and distribution of First Foods on the Lolo is an essential need if the Lolo National Forest is to uphold existing Treaty Rights and address federal directives, which are currently missing in large part from the current Proposed Action, e.g.: "Sacred sites, sacred places, tribal cultural landscapes, and Traditional Cultural Properties continue to have religious, cultural, and traditional importance to indigenous Tribes. Cultural contributions of Tribes are ongoing today, and the responsibility of the Forest Service to support their ability to exercise treaty rights remains of great importance."[90] The creation of a table that lists the Treaty

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[86] LaPoint, H., and Bergstrom, M., *Assessment Forest Plan Revision for Custer Gallatin National Forest: Final Areas of Tribal Importance Report* (2017), https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd532969.pdf.

[87] *Proposed Action* at 20.

[88] Joint Secretarial Order 3403: *On Fulfilling the Trust Responsibility to Indian Tribes in the Stewardship of Federal Lands and Water* (Nov. 15, 2021), https://www.doi.gov/sites/doi.gov/files/elips/documents/so-3403-joint-secretarial-order-on-fulfilling-the-trust-responsibility-to-indian-tribes-in-the-stewardship-of-federal-lands-and-waters.pdf.

[89] *Draft Assessment* at 6.

[90] *Proposed Actio*n at 7.

Rights and interests of all Tribal Nations and communities with the lands, water, wildlife, and forests in what is now the Lolo National Forest is critical to fulfilling this requirement.

VIII. Climate Change

When assessing both the status of ecosystems and system drivers, the Forest Service is required to evaluate information about likely future threats of "stressors" during the Forest Planning Process, including the influence of climate change.[91]

As the forest plan revision process continues over the next few years, the planning team should consider how they will respond to any forthcoming policies stemming from Secretarial Memorandum 1077-004.[92] This guidance stated that the Chief of the Forest Service would be developing "recommendations for methods to incorporate new analysis and data and the use of new and innovative tools and technology to ensure that climate resilience and carbon stewardship considerations are integrated into forest and relevant project planning. For land management planning, this should include recommendations for how to support the explicit consideration of carbon stewardship optimization and climate adaption in defining desired conditions and how to evaluate whether certain national Forest System lands are appropriate for designation as 'not suitable for timber production' pursuant to 16 United States Code (U.S.C.) 1604(k)."[93] The Forest Service should also operationalize climate refuges within its Conservation Watershed Network while protecting cold water refugia areas with persistent snowpack, microclimates, and river connectivity.

Fortunately, there is a wealth of literature, work, tools, and datasets/ analyses available both within and outside the Forest Service in Region 1, e.g.:

> Halofsky, Jessica E.; Peterson, David L.; Dante-Wood, S. Karen; Hoang, Linh; Ho, Joanne J.; Joyce, Linda A., eds. 2018. *Climate change vulnerability and adaptation in the Northern Rocky Mountains*. Gen. Tech. Rep. RMRSGTR-374. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. Part 1. pp. 1–273.

The development of this resource occurred over several years through a large number of workshops with Forest Service experts, managers, and external partners to develop vulnerability assessments for forest types, wildlife species, and disturbance types (e.g., wildfire, invasive plants) that we would expect the Planning Team to utilize in developing the Proposed Action. As the Lolo National Forest is one of the primary western forests undergoing forest plan revision that will be affected by these new recommendations, we look forward to seeing how the planning team utilizes these forthcoming methods and tools in the DEIS. This request is also consistent with the 2012 Planning Rule requirement that the Forest Service "use the best available scientific information to inform the planning process…."[94]

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[91] FSH 1909.12, ch. 10.
[92] *Climate Resilience and Carbon Stewardship of America's National Forests and Grasslands*, Secretarial Memorandum 1077-004 (June 23, 2022).
[93] *Id*. at b(4).
[94] 36 CFR 219.3.

IX. Old Growth

We appreciate the Planning Team's effort to coordinate the local plan revision with the nation-wide old-growth plan amendment (NOGA).[95] This includes both the discussion of Executive Order 14072, the inclusion of the proposed plan components in the NOGA scoping notice, and the acknowledgment of the challenge in assessing the landscape's mature and old-growth landscape targets. We believe the Lolo National Forest could lead the way in assessing, conserving, and recruiting old-growth forest conditions and appreciate the opportunity to offer the following recommendations for addressing old-growth conservation in the Lolo's plan revision.

First, if the NOGA is finalized before the release of the Lolo Forest Plan DEIS, we recommend that all of the alternatives, including the no-action alternative, include all of the plan components that are adopted in the final NOGA.

Second, a critical plan component that is missing in the Lolo's proposed action from the NOGA is the 'management approach.' The management approach in the NOGA is where the direction for developing an Adaptive Strategy for Old-Growth Conservation is found. This includes the need for the Adaptive Strategy to be developed collaboratively and the need for the strategy to identify priority areas for retention and promotion of old-growth forest conditions. Without the NOGA's management approach, the only language regarding the Adaptive Strategy in the Lolo's proposed action is the guideline, and this guideline lacks important information. We recommend that the Forest Service include all of the plan components from the NOGA in the Lolo's final plan, including the management approach, and that the plan require the Lolo to complete the Adaptive Strategy within a brief, specified time period. Furthermore, the Forest Service should explore with local partners the option of completing the Adaptive Strategy as part of the plan revision process, taking advantage of the Lolo's somewhat unique position of being in the early stages of a plan revision process.

Third, Barnett et al. (2023) developed a method for classifying mature and old-growth forests based on their function (carbon accumulation with stand age).[96] It is possible to use the classification methods of Barnett et al. (2023) as a complementary approach to the structural definitions used in Green et al.[97] We also see an opportunity to combine functional and structural criteria with your ST-sim modeling approach for assessing natural range of variation (NRV) as a means of quantifying landscape targets of mature and old-growth forests. The Lolo National Forest could lead the nation in classifying, mapping, and conserving mature and old-growth forests. The Wilderness Society is exploring ways to develop a higher-resolution inventory of old-growth forest conditions

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[95] *See Land Management Plan Direction for Old-Growth Conditions Across the National Forest System*, 88 Fed. Reg. 88,042 (Dec. 20, 2023); *See also Mature and Old-Growth Forests: Definition, Identification, and Initial Inventory on Lands Managed by the Forest Service and Bureau of Land Management*, U.S. Dep't of Agric. & U.S. Dep't of Interior (Apr. 2023); Executive Order 14072, *Strengthening the Nation's Forests, Communities, and Local Economies* (Apr. 2022).

[96] Barnett, K., Aplet, G.H. Aplet, and Belote, R.T. (2023). *Classifying, inventorying, and mapping mature and old-growth forests in the United States*, Frontiers in Forests and Global Change 5:100372.

[97] Green et al., *Old-growth forest types of the Northern Region*, U.S. Forest Service (1992, with errata through 2011).

than what has been released by the USFS and Barnett. We look forward to engaging with the Lolo on this important component of this work.

Fourth, The Wilderness Society submitted a scoping letter to the Forest Service in response to the proposed NOGA.[98] There are suggestions in our letter for how the Forest Service could improve the proposed NOGA as well as recommendations for how units should implement the nation-wide amendment. The Lolo should independently consider these recommendations and make adjustments as needed to the Proposed Action. This scoping letter is attached here as Appendix O for reference to the Lolo plan revision team.

Fifth, the Confederated Salish and Kootenai Tribes have considered ways to conserve, restore, and recruit old-growth forest conditions on the Flathead Reservation. We encourage the Forest Service to explore the topic of old-growth forest conservation with the Tribe to learn and understand its approach and consider ways to incorporate this learning into the Lolo's plan revision.

Lastly, we recommend that the Lolo clarify that stewardship activities should not simply increase the amount and distribution of forests that meet the minimum threshold definitions for classification as old growth as defined in the Green et al. 1992 framework; rather, the Lolo should aim to improve the representation of the qualities of old-growth forests, including old and large trees with complex features reflecting their age (e.g., large branches, thick furrowed bark, cavities) and other characteristics, like abundant large snags and down wood, where appropriate. We realize these characteristics will vary with forest type. Simply put, the minimum criteria for classification of old growth should not be used to guide mechanical treatments as this will drive stands toward the minimum threshold.

X. Wild and Scenic River Analysis

We appreciate that the Forest Service initially found 21 rivers and streams eligible for Wild and Scenic River protections, including the nine rivers that have had protections since 1991. In addition to these river segments, additional segments possess outstanding remarkable values that are unique within the region of comparison. The river segments of Fish Creek and South Fork Fish Creek each provide connectivity to the Clark Fork River and serve as cold water refugia in the Great Burn ecosystem and should also be found eligible.

[98] The Wilderness Society Comments, *USDA's Notice of Intent and Preliminary Proposed Action to Amend all National Forest Land Management Plans*, Feb. 2024 (Appendix P).

XI. Conclusion

We appreciate the opportunity to provide this feedback on the Lolo Forest Plan Proposed Action and look forward to continuing to engage with the Forest Service throughout this revision process. Please do not hesitate to reach out to us at any point.

Sincerely,

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