Data Submitted (UTC 11): 3/31/2024 2:24:17 PM

First name: Stephen Last name: Seninger

Organization: Friends of Lolo Peak

Title:

Comments: Amanda Milburn, Lolo Plan Revision Team Leader

Lolo National Forest 24 Fort Missoula Road Missoula, MT 59804

Re: Lolo National Forest Land Management Plan Proposed Action and Wilderness Evaluation.

March 30, 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 Friends of Lolo Peak 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.

Organizational Background

Friends of Lolo Peak is a citizens' group of residents and businesses, hikers, hunters, anglers, and skiers dedicated to permanently protecting the outstanding natural integrity, scenic values, and traditional uses of public lands in the Lolo Peak area for future generations. We support expansion of the Carlton Ridge Research Natural Area to further protect its unique character. Friends of Lolo Peak has made annual spring and summer hikes on the Mormon Peak trail to Carlton Ridge, the Carlton Lake Basin, and Lolo Peak. Our members have also been involved with ongoing Carlton Ridge RNA studies of trees and vegetation with an emphasis on the effect of burn severity on the alpine larch community. Friends of Lolo Peak was an active participant in the 2005-2006 Forest Plan Revision Process and have been actively engaged with hands-on field monitoring of our mission area since that time. We have also participated fully in the current management plan revision process, and we thank the revision team for creating an open, transparent process.

Ecosystem Integrity and Management

Friends of Lolo Peak's comments recognize the White House Council on Environmental Quality's (CEQ) recent guidance on ecological connectivity and wildlife corridors (Memorandum, 2023), as well as 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 to sustain the nation's biodiversity and "enable wildlife to adapt to fluctuating environmental conditions, including those caused by climate change." The Carlton Lake Basin at the foot of Lolo Peak is an important wildlife corridor between the South Fork Lolo Creek Recommended Wilderness to the west and the Selway-Bitterroot Wilderness to the south (Memorandum, 2023; An Assessment, 2004). To preserve this connectivity, we recommend the Carlton Lake Basin for Wilderness, so the management matches the adjacent areas. The basin's critical role is not only as a high elevation wildlife corridor between Wilderness and surrounding protected public lands, but it also contributes to the survival of important plant and animal species that are threatened by our changing climate (Krosby, 2018). Lolo Peak and Carlton Lake Basin provide an ecological niche for unique and threatened species such as sphagnum moss meadows, Alpine Larch, pikas, marmots. Wolverine have also been seen passing through and

the Grizzly Bear reintroduction efforts will rely on wild landscapes like the Carlton Lake Basin. The proposed expansion of the existing Carlton Ridge RNA would provide a buffer on the east and only strengthens the argument for continuing with permanent protection to the west.

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 (not in all ranger districts, threatened, Ursus arctos horribilis).

The Lolo National Forest will most likely 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 (Conservation Strategy, 2020).

Furthermore, U.S. Fish & Evice 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.

Whitebark Pine

Climate change will negatively affect whitebark pine. High elevation whitebark pine stands on the south slope and gentle ridge top leading west past the False Summit of Lolo Peak.

Whitebark pine (Pinus albicaulis) is the major species intermixed with the lower part of the alpine larch forest and extending down to seven thousand feet in elevation. It is a keystone species of high-mountain ecosystems and is threatened by the effects of introduced blister rust disease, mountain pine beetle epidemics, global warming, and successional replacement linked to fire suppression. Annual growth-ring patterns of alpine larch and whitebark pine are the two most sensitive recorders of climatic variation in the inland Northwest. A 748-year climatic record has been constructed from the RNA's larch. The alpine larch and whitebark pine zones give way down slope to the common lower subalpine forest composed of lodgepole pine (P. contorta), subalpine fir (Abies lasiocarpa), and associated species. This continuous gradient of forest zones is another feature of ecological interest. (Based on written field notes in October 2018 by Dr. Stephen Arno, a member of Friends of Lolo Peak).

Riparian Areas and Carbon Storage

Riparian areas can play a key 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 function as dispersal corridors as climate change induces range shifts for some species and to provide microclimatic refugia from warming. The sphagnum moss wetland to the west and above Carlton Lake and a lake next to Lantern Ridge offer habitat for rare species such as the Northern Bog Lemming, water, and other nutrients. This requires more field research in the Carlton Lake Basin fen wetland, a species under technical assessment for listing by the US Fish and Wildlife Service. Further field surveys for this species in the Carlton Lake Basin fen and nearby wetlands are needed.

Both the sphagnum moss fen and the higher elevation lake and wetlands in the western portion of the Carlton Lake Basin are features that created themselves" as the peat layers build up over time and thus serve an important 'carbon storage' function (Climate Change, 2022).

Fens contribute substantially to the state's biological diversity. Recent field studies have documented more than 180 plant species associated with fens in Montana-approximately 87% of the 2,500 vascular plants known to occur in the state. Fifteen of these plants are exceedingly rare, and their populations are monitored by the Montana Natural Heritage Program. The northern bog lemming, a rare animal in the Rocky Mountains, is also confined to fens.

Research Natural Area

We support the proposed expansion of the Carlton Ridge RNA to the west of the current RNA. The enlarged area will be a living laboratory for a detailed study of the post-fire ecology of Carlton Ridge. The Whitebark Pines

may be a source for needed disease and pest resistant seeds. The RNA expansion has been proposed since the 2006 draft plan, and is absolutely merited, and (apparently) not contested at this point.

Carlton Ridge is the only known location in the United States where a fully developed alpine larch forest and understory plant community occurs, and thus it is valuable for ecological studies comparing different forest types which are commonly associated with normal soils.

The Forest Service and National Park Service are conducting research and restoration practices to counteract the decline of whitebark pine. The extent and accessibility of whitebark pine in the Carlton Ridge RNA makes it an excellent candidate for study. Alpine larch and whitebark pine are long-lived trees that produce growth-ring sequences extremely sensitive to climatic fluctuations, and thus are useful in studies of global climate change and past fire history (e.g., Knapp and Soule 2011). The good access of the RNA to research institutions in Missoula makes it a prime area for continuing studies related to alpine larch ecology and hybridization, whitebark pine restoration, global climatic change, recovery from a major fire, and other features of upper subalpine ecosystems. Several investigations involving scientists and graduate students from the Rocky Mountain Research Station and universities have been conducted in the RNA (Conifer seedlings, 2022). Carlton Ridge is the only known location in the United States where a fully developed alpine larch forest and undergrowth community occurs, and thus it is valuable for ecological studies comparing different forest types which are commonly associated with normal soils.

The proposed Carlton Ridge RNA expansion fulfills conservation of the important scientific values and vision expressed long ago by such forestry science luminaries like Stephen Arno, Ph.D., Clinton Carlson, Ph.D., and James Habeck, Ph.D. who studied and published extensive findings from the Carlton Ridge RNA in their description of the area:

"Alpine larch is an exceptionally cold-hardy tree that grows only in a few high mountain ranges of the inland, northwestern United States and southwestern Canada. On north-facing slopes and other moist sites, it forms groves of erect trees above the elevational limits of other trees. All alpine larch-dominated sites are heavily glaciated rock lands, where scarcity of soil impedes vegetation development. In contrast, the two-mile-long upper slope of Carlton Ridge - in the existing Research Natural Area and its proposed western addition - is unique in having a well-developed soil mantle at high elevation (about 8,000 feet) that supports a continuous forest of alpine larch. This forest represents a "climatic climax" community of great interest to ecological science."

We thank the Forest Service for proposing to expand the RNA to a total of 1,524 acres.

Sustainable Recreation Opportunities

The Carlton Ridge Trail 1311 has been maintained traditionally for stock and foot-users although in recent years it has been opened for mechanized mountain bike access. The current trail contains dangerous corners and poor site lines that increase the chances of a fast-moving bike running into slower paced foot traffic. A You Tube video posted to a national website (https://www.trailforks.com/video/136095/) of a fast speed descent mountain bikers on Carlton Ridge Trail 1311 illustrates how this trail is being misused and can create user conflicts, some of which would endanger foot travelers on the trail. Moreover, ongoing upgrades in power and speed of e-bikes portend serious trail user conflicts as currently high consumer demand for these motorized bicycles will continue in future years.

To maintain sustainable recreational opportunities in the Lolo Creek inventoried roadless area Friends of Lolo Peak recommend managing the area as both non-motorized and non-mechanized backcountry (Seeing the Forest, 2009). Our reason for urging protection for the lower Mill Creek drainage and lower slopes of Carlton Ridge is based upon membership's more than thirty-seven years of year-round hiking of this area on foot, snowshoes and /or skis. Our members have seen evidence of an incredible diversity of wildlife inhabiting or passing through this area, including tracks of snowshoe hare, mountain lions, lynx, black bear, wolf, moose, and wolverine (BIG GAME, 2023). The area also provides a unique experience of deep wildness that is accessible year-round from Mill Creek trailhead as a day hike (no multi-day backpacking required). To be able to leave Missoula and head up Mill Creek onto either Lantern Ridge or Mormon Ridge as a day trip and experience such biological diversity and perceived remoteness is an experience that needs to be protected for future generations. To that end, the proposed mapping of Mill Creek trail #1310 as summer motorized and the allowance of

mechanized travel on the west end of Carlton Ridge trail 1311 and motorized on the east end of 1311 are completely antithetical to the needs of the wildlife and the serenity of this uniquely year-round accessible area. There are plenty of other areas available to motorcycles and mountain bikes, and this area should not be one of them.

Based on best available science and consistency with NEPA, Friends of Lolo Peak believe that the Forest Service must continue managing the Carlton Ridge Trail, Lolo Peak, and Carlton Lake Basin as nonmotorized. Motorized use in this area would conflict with trails used by hikers, horse riders and backpackers leading to Lolo Peak and Lolo Peak and Carlton Lake Basin. Such motorized impacts on a rugged backcountry landscape would degrade biodiversity; especially should motorized users go beyond officially designated trails; unfortunately, unauthorized user created trails is an ongoing problem throughout our national forests. Furthermore, proposed motorized trails along the eastern edge of the current Carlton Ridge RNA would threaten that specially designated area of unique alpine and hybrid larch trees.

Friends of Lolo Peak support the Lolo National Forest retaining Forest Service Rd 1311 as motorized for Administrative use only.

Social and Economic Sustainability

Wild public lands represent highly valued ecosystem services and amenities (Payments, 2011;). Open lands, mountains, forest lands, free flowing streams and clean air help support a high quality of life for area residents and have become magnets to new migrants in the region. They are key economic assets in a community's environmental portfolio (Public Lands, 2023).

Public lands help move a community toward a broader economic base attracting new businesses that are more human resource based rather than natural resource-based businesses like financial services, health care, financial services, and, in some cases, information technology. Public lands contribute to a human-resource based economy. When people are asked why they are moving to these areas, they say "for the quality of life, the open lands and the natural environment" (Northern Rockies, 2019).

The Bitterroot and Missoula valleys are perceived as having high quality environments and amenities. Missoula is a city of more than 70,000 people located in a county of over 110,000 and the city serves as the regional center to a large surrounding population. This "Five Valleys" region can be seen as an interconnected regional community, with significant populations extending south from the Missoula valley south into the Bitterroot valley and north into the Flathead Valley. The city and surrounding smaller communities are in valleys surrounded by foothills and mountains and large concentrations of public lands, including National Forest lands and wilderness areas (Montana's Forest Products, 2021).

Recommended Wilderness Management

We are pleased that the Recommended Wilderness Area SB-PW-05 (from the Wilderness Draft Inventory Map) was carried over from the 1986 Forest Plan. However, our hope was that the larger Recommended Wilderness Area shown in the 2006 Draft Plan, which included SB-PW-05, would be adopted for the current in-process Plan. That larger area would include Lolo Peak, the Carlton Lake Basin and the upper Mill Creek drainage and extends east to the proposed RNA expansion. Management could occur in a geographically contiguous area. This is a place of special scenic value that provides a sense of remoteness and wildness near to population centers in western Montana. It is home to rare plants and animals and, along with the South Fork of Lolo Creek corridor, provides a travel path for animals along the western side of the Bitterroot Mountains. This area deserves special protection so that future generations can appreciate its unique qualities.

The desirable wilderness characteristics in your PROPOSED ACTION (Appendix 8 Wilderness Evaluation) are present in the Lolo Peak Carlton Lake basin: "apparent naturalness", "opportunities for solitude or primitive unconfined recreation" "unique features", and "size." Friends of Lolo Peak proposed wilderness for the Lolo Peak Carlton Lake Basin is not a stand-alone wilderness, but merely an extension of existing wilderness.

The area lying immediately west of section 23 and outside the Selway-Bitterroot Wilderness encompasses several features that expand the types of alpine larch and whitebark pine habitats. Only a small fraction of this

area burned in the 2017 Lolo Peak Fire. This proposed addition to wilderness status includes the headwaters of Carlton Creek above Carlton Lake, the north slope of 9096-foot Lolo Peak, and the headwaters of Mill Creek westward to Lantern Ridge. A suggested boundary that coincides with section lines, watersheds, and administrative boundaries would include section 22, all but the southwest corner of section 21, the northeastern part of section 28, and the northern part of section 27.

Features are:

- 1. Pure alpine larch on its typical talus habitat, extending up north slopes close to the summit of Peak 9096.
- 2.Typical alpine larch on north-facing rock-land extending down from the False Summit of Lolo Peak (8694 feet) to about seven thousand feet with increasing amounts of other conifers and apparent separation from western larch trees by several hundred feet of elevation.
- 3. High elevation whitebark pine stands on the south slope and gentle ridge top leading west past the False Summit of Lolo Peak.

In Summary FOLP advocates recommended wilderness for the Lolo Peak-Carlton Lake Basin area because of best science available support for this status and the following general features:

1)Visual Resources: Trails around Carlton Lake offer a variety of visual experiences from dense foreground vegetation to spectacular background vistas of Lolo Peak and surrounding boulder strewn ridges, avalanche chutes, rock outcrops and unobstructed views of the Lantern Ridge bordering recommended wilderness of South Fork Lolo Creek. Another viewpoint is the sphagnum moss meadow and a small lake-riparian area above the western headwall of Carlton Lake which provide unobstructed views of Lolo Peak, surrounding Carlton Ridge and the Lake basin extend eastward off into the Bitterroot Valley. Talus slopes and massive rock outcroppings punctuate this panoramic view, reminding the visitor of the ruggedness and wild remoteness of this area.

2)Wildlife connectivity: Elk are present during late summer and early fall; moose are also occasionally present.

3)Wildlife Habitat: the high elevation rocky, boulder strewn slopes to the north of the lake are habitat for pikas and yellow belly marmots.

4)Outstanding Features: Spectacular quiet trail recreation opportunities with the Bitterroot Divide as a backdrop view from the north Lolo Peak (elevation 9606) to a connecting ridge to south Lolo Peak (elevation 9660), a wild country expanse unsurpassed in this part of Western Montana. The ambitious hiker scrambling down the north peak is met with riparian areas, wildflowers, and an all-encompassing basin bordered by sheer walls and ridges with an extended view into the Bitterroot Valley and the Sapphire Mountains to the east. Other backcountry opportunities include dropping over into a pass beyond Little Carlton Lake (a prime site for overnight camping) into the One Horse Basin with two lakes within the northern extent of the Selway Bitterroot Wilderness Area. Conclusion

We appreciate the opportunity to provide this feedback and look forward to engaging with you in the next steps of the Lolo National Forest Plan Revision process.

References

"Seeing the forest and the trees: assessing snowmobile tree damage in national forests: A report by Winter Wildlands Alliance", Winter Wildlands Alliance, 2009 (Appendix N).

Krosby M, Theobald DM, Norheim R, McRae BH, identifying riparian climate corridors to inform climate adaptation planning, PLoS ONE 13(11): e0205156 (2018).

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). 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.

Grizzly Bear Recovery Program, U.S. Fish & Dillie Service, https://www.fws.gov/BitterrootEIS. "Conifer seedling demography reveals mechanisms of initial forest resilience to wildfires in the northern Rocky Mountains", Kyra Clark-Wolf and others, Forest Ecology and Management 523 (2022) 120487, www.sciencedirect.com/journal/forest-ecology-and-management.

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). "The subnivium: a deteriorating seasonal refugium", Jonathan N Pauli1*, Benjamin Zuckerberg1, John P Whiteman2, and Warren Porter, Front Ecol Environ 2013; doi:10.1890/120222, Frontiers e-View site (www.frontiersinecology.org).

"Climate Change and Recreation in the Western United States: Effects and Opportunities for Adaptation," Anna B. Miller, Patricia L. Winte, José J. Sánchez, David L. Peterson, and Jordan W. Smith Journal of Forestry, 2022, 453-472

"The Outdoor Recreation Economy by State" Headwaters Economics November 27, 2023, at www.headwaters.org

"BIG GAME MIGRATION CONSERVATION FOR LOLO AND BITTERROOT NATIONAL FOREST PLAN REVISIONS" Scott Laird Montana Field Representative, Theodore Roosevelt Conservation Partnership 2023

"An Assessment of Wildlife and Fish Habitat Linkages on Highway 93 - Western Montana,"
Bill Rudiger and others, 2004. Western Montana. USDA Forest Service, USDI Fish and Wildlife Service,
Confederated Salish and Kootenai Tribe, Rocky Mountain Elk Foundation, Montana Fish, Wildlife and Parks,
Montana Department of Transportation, Geodata Services, The University of Montana. Forest Service
Publication #R1-04-81, Missoula, MT. 41 pp.

U.S. Congress, Joint Economic Committee Public lands boost local, state, and national economies October 19, 2023, https://www.jec.senate.gov/

"Northern Rockies Region Natural Resources: The Foundation for Economy and Quality of Life - Then, Now, Tomorrow", Walter Hecox, May 7, 2019, Headwaters Economics https://headwaterseconomics.org/public-lands/papl-hecox/

"Payments for Forest Ecosystem Services in the United States" by D. Evan Mercer, David Cooley, and Katherine Hamilton, Ecosystem Market Place February 2011, https://www.forest-trends.org/wp-content/uploads/imported/PES%20in%20USA_EM.pdf

"Montana's Forest Products Industry and Timber Harvest in 2018", Steven Hayes and others, Resource Bulletin, RMRS-RB-35. Fort Collins, CO, 2021, U.S. Dept. of Agriculture Forest Service, Rocky Mountain Research Station, 54 p. https://doi.org/10.2737/RMRS-RB-35

"Reconstructing annual area burned in the northern Rockies", Knapp, P.A., and P.T. Soule. 2011. USA: AD 1626-2008. Geophysical Research Letters, Vol. 38, Issue 17. https://doi.org/10.1029/2011GL048119.