

Data Submitted (UTC 11): 3/29/2024 6:00:00 AM

First name: Karen

Last name: Knudsen

Organization: Clark Fork Coalition

Title: Executive Director

Comments: Please see attached comments:

Dear Revision Team,

The Clark Fork Coalition (CFC) is a non-profit organization dedicated to protecting and restoring the Clark Fork River Basin in western Montana. For nearly 40 years, the CFC has worked tirelessly to improve the health of our watershed and ensure that the Clark Fork River and its tributaries can flow with clean, cold, and abundant waters for generations to come.

The CFC has a decades-long relationship with the Lolo National Forest to protect and restore aquatic habitat, fisheries, and watershed health. In partnership with the Lolo NF, we have completed several restoration projects on the headwaters of Lolo Creek, and now we are working to restore the headwaters of O'Brien Creek. We are also working on downstream sections of Miller Creek, Grant Creek, and Gold Creek to restore aquatic habitat and connectivity to Forest Service headwaters.

CFC also owns and leases water rights on streams that originate on Lolo NF lands. We own water rights on Lolo Creek and O'Brien Creek, and lease water rights on Ninemile Creek, Fire Creek, and Placid Creek that are used to restore instream flows to dewatered stream reaches. We have been engaged in beaver dam analog installation, maintenance, and monitoring on the Forest. We have helped support the monitoring of the western pearl shell mussel and have conducted a water temperature study on the Lolo NF.

The Lolo NF is home to many fish and wildlife species that depend on clean, cold water and functioning ecosystems. Additionally, many communities depend upon the ecosystem services that the Forest provides including drinking water, healthy fisheries and wildlife populations, and recreational opportunities. A conservation focused Forest Plan on the Lolo NF will ensure these benefits will continue for generations to come. In general, CFC supports the desired conditions developed in the revision, but we believe some of the objectives should be more aggressive to meet these desired conditions in a timely manner. Additionally, we are concerned about introducing summer motorized recreation into the Rattlesnake, LaValle, and Butler Creek watersheds degrading bull trout and genetically pure westslope cutthroat habitat.

Specific Comments:

Our comments focus on the protection and restoration of aquatic resources and are developed from our experience on the Lolo NF. They are organized chronologically as they are addressed in the Proposed Action. Our comments include sections 2.1.1. Ecological Sustainability, 2.2.7. Other integrated Multiple Uses (Acquired Lands Restoration Emphasis Areas and Infrastructure), and two specific Geographic Areas where we work extensively (Lolo Creek and Greater Missoula). For your convenience, we include the page number of each section that we comment on.

Old Growth (OG) pg. 21

We are encouraged that the Lolo NF recognizes the unique characteristics of old growth on the Forest, and that the Lolo NF supports the conservation and expansion of old growth conditions on the forest. Old growth forests provide wildlife habitat, species diversity, hydrological regimes, nutrient cycles, carbon storage, and numerous other ecological processes.

* We support Desired Conditions (FW-OG-DC) 04: The long-term abundance, distribution, and resiliency of old-growth conditions contribute to the overall ecological integrity of ecosystems and watersheds.

We believe the Forest could improve upon Objective (FW-OG-OBJ) 01: Within ten years, at least one landscape prioritized within an Adaptive Strategy for Old-Growth Forest Conservation will exhibit measurable improvements in old growth desired conditions as a result of retention, recruitment, and proactive stewardship activities and natural succession. Please consider increasing the number of landscapes that will exhibit measurable improvements to two landscapes.

Connectivity (CON) pg. 27

We support a forest plan that maintains and restores the integrity and resilience of ecosystems and provides for connectivity. Connectivity can help maintain sediment balance and sustain riparian vegetation corridors. Connectivity also creates linkages between aquatic and terrestrial habitats and allows wetland-dependent species to move between habitats as needed for feeding or reproduction.

* We support the Desired Conditions (FW-CON-DC) 03: Infrastructure on NFS lands, and public use of NFS lands, does not substantially impede the daily activities, seasonal movements, dispersal, and potential range shifts of native species.

Hundreds of fish barrier culverts are present on the Lolo NF. For example, Hendrickson et al. (2008)[1], surveyed fish bearing streams and recorded 694 culvert crossings along 6193 miles of roads on the Lolo NF. They found that 588 culverts (85%) were total or partial barriers to fish passage. This survey was conducted before the transfer of Plum Creek lands to Forest ownership [ndash] over a hundred more fish barriers were added to the Forest following this transfer.

The CFC has been upgrading or removing more than 10 culverts each year in just one watershed on the Forest. Specifically, in the last 5 years, CFC in partnership with the Lolo NF, has removed 46 fish passage barrier culverts and upgraded 7 fish passage barrier culverts in the Upper Lolo Watershed increasing the year-round available habitat by several miles. We expect this partnership to continue for years to come. In fact, we have an additional 10 culvert upgrades, and 4 culvert removals in the planning phase.

We believe the Forest could improve upon Objective (FW-CON-OBJ) 01: Reconnect at least 3 miles of aquatic habitat every five years by removing human-caused barriers to the free movement of aquatic species. We believe that the Lolo NF should aim to reconnect much more than 3 miles every 5 years. For example, in one culvert upgrade project last year, the Clark Fork Coalition in partnership with the Forest reconnected 4 miles of stream in the Upper Lolo Watershed [ndash] exceeding the 5-year objective in one year. Please consider shortening the timeframe for implementation of Objective (FW-CON-OBJ) 01 to reconnecting 3 miles each year as a more appropriate objective.

We believe the Forest could also improve upon Objective (FW-CON-OBJ) 02: Remove or upgrade at least 20 existing NFS road-stream crossing structures every five years, where the road-stream crossings impede aquatic organism passage. [rdquo] Again, we believe that the Lolo NF should aim to remove or upgrade much more than 20 culverts every 5 years. Please consider shortening the timeframe for implementation of Objective (FW-CON-OBJ) 02 to removing or upgrading 20 culverts each year as a more appropriate objective.

Watershed (WTR) pg. 33

The Clark Fork Coalition is proud to be a partner in the Lolo's watershed and stream restoration program that addresses aquatic, riparian, and water quality issues. We are happy to hear that partnerships like ours have resulted in hundreds of road miles treated and hundreds of miles of fish habitat made available. We have also

worked with the Forest to improve beaver habitat and screening downstream diversions, as well as secured instream water flow rights.

* We support the Desired Conditions (FW-WTR-DC) 01-09.

* We support the Goal (FW-WTR-GO) 04: The Lolo National Forest works with partners to improve aquatic habitat, increase resiliency, and to enhance ecosystem conditions for beaver.

* We support the Guidelines (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 support the Guidelines (FW-WTR-GDL) 05: To prevent the capture of fish and amphibians, new and reconstructed stream diversions should be screened.

We believe the Forest could improve upon Objective (FW-WTR-OBJ) 01: Improve the quality, connectivity, and hydrologic function of at least 10 miles of aquatic habitat every five years, prioritizing this restoration work in the CWN to benefit bull trout spawning/rearing habitat or reaches with abundant and genetically intact westslope cutthroat trout populations.

In the last 2 years, the Clark Fork Coalition in partnership with the Lolo NF has installed wood jams on 15 miles of streams in the Upper Lolo Watershed. Installing wood jams into streams is a key method to improve the hydrologic function of streams and increase fish habitat. In two years, we have exceeded this 5-year objective. Please consider shortening the timeframe for implementation of Objective (FW-WTR-OBJ) 01 to: improving the quality, connectivity, and hydrologic function of at least 10 miles of aquatic habitat each year as a more appropriate objective.

* We support the Objective (FW-WTR-OBJ) 02: Improve soil and watershed function and resiliency on at least 4,000 acres every five years, prioritizing this work within the CWN, Watershed Condition Framework (WCF) priority watersheds or municipal watersheds. Activities lead to measurable levels of improvement to the WCF metrics that are currently rated as [Isquo]at risk[rsquo] or [Isquo]not properly functioning.[rsquo]

* We support the Objective (FW-WTR-OBJ) 03: Complete all essential restoration work, as identified by Watershed Restoration Action Plans, within at least one Watershed Condition Framework (WCF) priority watershed every three to five years.

* We support the Objective (FW-WTR-OBJ) 04: Secure instream flow water rights where possible to secure long-term favorable flows for beneficial uses. Complete at least 3[ndash]5 applications for water rights each year.

CFC specifically supports the Objective of securing instream flow water rights for non-consumptive ecosystem services and would encourage the USFS to explore instream flow opportunities whenever the Forest acquires new real property with appurtenant water rights. In the same vein, CFC would encourage the Forest to actively monitor and enforce its existing water reservations, in particular in the face of new permit requests or changes of use on streams where the Forest holds instream water reservations.

* In addition, CFC supports Standard (FW-WTR-STD) 04: Hydroelectric and other surface water development authorizations shall include requirements for instream flows and habitat conditions that maintain or restore native fish and other desired aquatic species populations, riparian dependent resources, favorable channel conditions, and aquatic connectivity.

CFC believes that instream flow should be a condition precedent to any proposed surface water development on the Forest.

Finally, the CFC is concerned with the lack of concrete goals and objectives related to maintaining adequate stream flows through water storage. The PA references numerous goals and objectives related to natural water storage opportunities by improving beaver populations and distribution, which CFC fully supports. The PA also

rightly recognizes the importance of intermittent and ephemeral streams and wetlands when it comes to storing water and sustaining stream flows. However, the PA fails to mention any similar opportunities for the 14 existing man-made storage facilities on the Forest.

The CFC endorses a variety of storage tools (both natural and man-made) that will increase our ability to capture and preserve crucial water supplies for use during driest months. These storage tools could include investments aimed at increasing natural water storage, such as beaver or wetlands, or man-made storage infrastructure, such as strategically located alpine reservoirs.

In the face of a warming climate, CFC supports the call for the Forest to assess opportunities to expand existing surface water storage facilities. With collaborations, diverse partnerships, and sufficient funding, solutions can be developed for the benefit of a variety of beneficial users, stream flows and fish & wildlife. Rehabilitating and retrofitting existing reservoir infrastructure sitting at the headwaters of priority tributary streams is one such [ldquo]win-win[rdquo] opportunity. The CFC encourages the Forest to articulate clear goals and objectives related to maintaining, or perhaps enhancing, water storage facilities on the Forest.

Riparian Management Zones and Ecosystems (RMZ) pg. 36

Riparian forests provide continuous wood recruitment into streams and maintain the ecological health of aquatic habitat. We support large buffers along Riparian Management Zones (RMZs) for lands suitable for timber production and where harvest could occur. We also support beaver habitat restoration projects and the many benefits they provide to aquatic ecosystems.

- * We support Desired Conditions (FW-RMZ-DC) 01-05.
- * We support Suitability (FW-RMZ-SUIT) 01:RMZs are not suitable for timber production.
- * We support Objective (FW-RMZ-OBJ) 02:Implement beaver habitat restoration actions in at least two watersheds every 5 years.

Conservation Watershed Network (CWN) pg. 40

The Conservation Watershed Networks are some of the most important lands on the Forest. They are current and future fisheries strongholds that will remain highly functional in future climate change scenarios. These populations will be anchors that will help us protect and recover other fish populations in the future. It is essential that these areas are maintained and restored to natural conditions.

- * We support the Desired Conditions (FW-CWN-DC) 01: The CWN has functionally intact aquatic and riparian ecosystems that provide high-quality water and interconnected habitat that enhance the recovery of threatened or endangered species in addition to benefitting species of conservation concern.
- * We support the Desired Conditions (FW-CWN-DC) 02: The CWN provides habitat that supports robust native fish populations, which can expand to and recolonize adjacent unoccupied habitats. These areas conserve key demographic processes likely to influence the sustainability of aquatic species.
- * We support the Desired Conditions (FW-CWN-DC) 03: Roads and other infrastructure (e.g., dams, campgrounds, trails) in the CWN are actively managed to reduce their risk to aquatic resources.

We believe the Forest could improve upon Objective (FW-CWN-OBJ) 01:Actively change the existing road network to cause a permanent or long-term reduction in the amount of road-related material being delivered to the aquatic ecosystem within the CWN. Every 5 years, reduce or eliminate existing risks by at least 5 percent within the CWN by removing roads in the RMZ (with road decommissioning, road storage, or road rerouting), and/or removing/upgrading road-stream crossings.

Considering the outsized importance of Conservation Watershed Network to the long-term sustainability of key

species such as westslope cutthroat trout and bull trout, we believe that the Forest should aim to reduce environmental stressors more quickly in these areas. Most pronounced is the road system that chronically delivers sediment into streams, blocks fish passage, reduces streamside shade, and cumulatively reduces aquatic habitat quality, should be more aggressively addressed.

Please consider increasing the rate of treatments in Objective (FW-CWN-OBJ) 01 to: Every 5 years, reduce or eliminate existing risks by at least 10 percent within the CWN by removing roads in the RMZ (with road decommissioning, road storage, or road rerouting), and/or removing/upgrading road-stream crossings.

Additionally, including [ldquo]road storage[rdquo] as [ldquo]removing roads[rdquo] is incorrect. Road storage is a different treatment than road removal and only temporarily mitigates the impact of roads.

Please consider removing [ldquo]road storage[rdquo] from Objective (FW-CWN-OBJ) 01 to more accurately describe road removal treatments.

CFC further believes that the FS should amend its Standard (FW-CWN-STD) 01 to include at-risk fish and aquatic species (including westslope cutthroat trout, see comments below). This standard could be amended to read [ldquo]m]management activities in the CWN shall be designed and implemented in a manner that supports the recovery of federally listed species and at-risk fish and aquatic species and supports the achievement of desired conditions and does not degrade them when evaluated at the HUC12 subwatershed scale. Short-term site-specific adverse effects from project activities may occur when they support the long-term recovery of aquatic and riparian desired conditions and federally listed species and at-risk fish and aquatic species.

At-Risk Fish and Aquatic Species (FRISK) pg. 47

The Lolo NF is home to some of the last genetically pure populations of westslope cutthroat trout in MT. When cutthroat trout interbreed with rainbows, they are more susceptible to environmental changes, including parasites, diseases, and water temperature changes. The result is that the population becomes more susceptible to local extirpation and increased risk of being outcompeted by other species.

* We support: Desired Condition (FW-FRISK-DC) 01: Free flowing and interconnected waterbodies throughout the Lolo National Forest support diverse life history expression of at-risk aquatic species, including resident, fluvial, and adfluvial migratory strategies.

* We support: Desired Condition (FW-FRISK-DC) 02: Free flowing and interconnected waterbodies throughout the Lolo National Forest support the movement of at-risk aquatic species across multi-spatial scales, including movement of bull trout within and among local populations and core areas, and throughout the CWN.

* We support: Goals (FW-FRISK-GO) 01: The Lolo National Forest collaborates with Tribes, federal and state agencies, and other partners to identify and manage non-hybridized bull trout and westslope cutthroat populations to limit integration by non-native fish species.

* We support: Goals (FW-FRISK-GO) 02: The Lolo National Forest collaborates with Tribes, federal and state agencies, and other partners to increase the range and functionality of bull trout and westslope cutthroat populations.

* We support: Goals (FW-FRISK-GO) 03 The Lolo National Forest collaborates with Tribes, federal and state agencies, and other partners in identifying and mitigate impediments to occupancy for locations formerly identified as being occupied by western pearlshell.

We believe the Forest could improve upon the Guidelines (FW-FRISK-GDL) in this section. Excessive sediment and fish barriers from roads and culverts can dramatically decrease bull trout and cutthroat trout populations. Please consider adding a guideline to permanently reduce sediment inputs and fish barriers that would negatively affect westslope cutthroat trout and bull trout populations.

The CFC further believes that westslope cutthroat trout should be identified as a species of conservation concern and consequently, added to the Forest's list of at-risk fish species. While there are numerous populations of cutthroat trout throughout the waterways of the Forest, these populations are fragmented and lack connectivity due to a variety of factors, including habitat destruction, lack of adequate passage, stream degradation and chronic dewatering. These factors will be exacerbated by climate change which will lead to altered flow regimes, warming stream temperatures and other negative impacts.

As the Forest is aware, genetically pure populations are currently 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); 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).

While there are certainly isolated stronghold populations, we believe that an objective look at the wider picture for this species is bleak and that the Forest lacks adequate data (such as fish abundance, environmental DNA, etc[hellip]) to justify the conclusion that this species is stable.

Acquired Land Restoration Emphasis Areas (ALR) pg. 94

The Clark Fork Coalition applauds the Lolo NF land acquisition program. The Forest has acquired 184,447 acres of legacy industrial timberlands with degraded watershed function and extensive restoration needs. These legacy lands impact the stream system by roads delivering sediment to streams, culverts, blocking fish passage, and lack of large trees leaving streams devoid of wood recruitment.

* We support the Desired Conditions (FW-ALR-DC) 01: The legacy road system on acquired lands does not degrade aquatic ecosystem, watershed function, or ecosystem connectivity.

Legacy roads on acquired lands are particularly impactful on aquatic habitat because checkerboard ownership required constructing an excessive amount of roads to access each section. For example, a survey of 117,152 acres of legacy lands on the Clearwater Blackfoot area found an average road density of 6.9 mi/mi², and an average of 2.5 stream crossing culverts every mi². (InRoads Consulting 2015[2]). Extrapolating this data to all of the Lolo NF's recent land acquisitions equals 1,987 miles of roads and 720 culverts added to the Forest. This increases the Lolo NF's road system by nearly a third, and if far more miles of roads than are needed to meet the minimum transportation system or modern logging techniques.

We believe the Forest could improve upon Objective (FW-ALR-OBJ) 01: Every decade, decommission 10 miles of legacy routes to improve watershed conditions where the legacy road system exceeds the identified minimum transportation system needed to meet the desired conditions of the area.

The Clark Fork Coalition in partnership with the Forest has decommissioned (fully recontoured) more than 30 miles of the most impactful roads in the last 7 years on acquired legacy lands in the upper Lolo Watershed. This is three times the number of roads to be treated in Objective (FW-ALR-OBJ) 01. As noted above, nearly 2,000 miles of newly acquired roads have been added to the Lolo NF in land transactions. Many of these roads are chronically delivering sediment to streams and reducing the quality of aquatic habitat.

Please consider increasing the rate of road decommissioning in Objective (FW-ALR-OBJ) 01 to: Every year, decommission 5 miles of legacy routes to improve watershed conditions where the legacy road system exceeds the identified minimum transportation system needed to meet the desired conditions of the area as a more appropriate objective to improve watershed condition.

We believe the Forest should add an objective to remove or upsize culverts similar to Objective (FW-CON-OBJ)

02: Remove or upgrade at least 20 existing NFS road-stream crossing structures every five years, where the road-stream crossings impede aquatic organism passage. The Clark Fork Coalition has been upgrading or removing more than 10 culverts each year in just one watershed on the Forest. Specifically, In the last 5 years, CFC in partnership with the Lolo NF, has removed 46 fish passage barrier culverts and upgraded 7 fish passage barrier culverts in the Upper Lolo Watershed increasing the year-round available habitat by several miles. We expect this partnership to continue for years to come. In fact, we have an additional 10 culvert upgrades, and 4 culvert removals in the planning phase.

We believe that the Lolo NF should aim to remove or upgrade much more than 20 culverts every 5 years. Please consider removing or upgrading 20 culverts each year as a more appropriate objective.

In addition to high road densities, recently acquired legacy lands typically have very little wood in their streams. Removal of the large riparian trees greatly reduces wood recruitment into streams for decades or longer. The installation of wood jams into streams is a key method to improve the hydrologic function of streams and increase fish habitat.

We believe the Forest should add an objective similar to (FW-WTR-OBJ) 01: Improve the quality, connectivity, and hydrologic function of at least 10 miles of aquatic habitat every five years. In the last 2 years, the Clark Fork Coalition in partnership with the Lolo NF has installed wood jams on 15 miles of streams in the Upper Lolo Watershed. Please consider adding an objective to improve the quality, connectivity, and hydrologic function of at least 5 miles of aquatic habitat each year.

* We support Objective (FW-ALR-OBJ) 02: To reduce the likelihood of illegal uses on legacy routes, when restoration projects such as road improvements occur, deterrents such as gates, berms, boulders, or signage should be used.

Infrastructure (INF) pg. 96

The Clark Fork Coalition supports the public use of a safe and efficient road system on the Lolo NF. We also support a transportation system has minimal impacts on the aquatic ecosystem or riparian management zones.

* We support: Desired Condition (FW-INF-DC) 07: The transportation system has minimal impacts on the aquatic ecosystem or riparian management zones. Impacts are minimized by reducing the hydrologic connectivity of roads and trails to streams, reducing sediment delivery to streams, reducing road/trail presence and/or strategic locations within floodprone areas/valley bottoms, reducing road and trail impact to floodplains, and improving aquatic organism passage.

Historic road building adjacent to streams, and outdated logging systems of the past has left many areas on the Lolo NF with highly impactful road systems. The Lolo NF has more than 6,000 miles of roads (Hendrickson et al. 2008) and has acquired approximately 2,000 additional miles of industrial timberland roads. In many areas on the Forest, road density is considered high or extremely high (e.g., Sheep Gap Salvage Project area had 5.3 mi/mi²). Furthermore, many roads on the Forest are within 300 ft of a stream (e.g., Sheep Gap Salvage Project area had 84.3 miles of roads within 300 ft. of a stream).

Previous monitoring on the Lolo NF shows that when road density approaches 2 mi/mi², sediment delivery levels begin to be problematic and could be observed and measured in stream channels (Riggers et al. 1998[3]). Road decommissioning is an important component of watershed restoration. By reducing chronic sediment delivery to streams and improving fish passage, road decommissioning is one of the most important tools the forest has for addressing aquatic habitat restoration (Switalski et al. 2004[4])

We believe the Forest could improve upon Objective (FW-INF-OBJ) 01: Every five years, decommission or place into intermittent stored service at least 50 miles of unneeded system and non-system roads, prioritizing this work within the CWN and WCF priority watersheds. Focus these road changes to reduce the risk of road-related material being delivered to the aquatic ecosystem, especially on road segments within the RMZ.

Road decommissioning and intermittent stored service are two very different treatments. Road decommissioning will permanently restore a roadbed and eliminate the associated ecological impacts from the road. A decommissioned road is defined in the glossary as [ldquo]the stabilization and restoration of an unneeded road to a more natural state (36 CFR 212.1).[rdquo] Intermittent stored service will only temporarily reduce the impact of the road.

The Clark Fork Coalition in partnership with the Forest has decommissioned (full recontoured) more than 30 miles of the most impactful roads in the last 7 years on acquired legacy lands in the upper Lolo Creek Watershed

Please consider de-coupling road decommissioning and intermittent stored service and adding language about recontour (Level 5) as a preferred treatment on streamside roads in Objective (FW-INF-OBJ) to: Every five years, decommission at least 25 miles of unneeded system and non-system roads, prioritizing this work within the CWN and WCF priority watersheds. Use Level 5 decommissioning on stream-side roads and lower-level treatments on dryer sites.

Please consider adding an objective that just address road storage in Objective (FW-INF-OBJ) to: Every five years, place into intermittent stored service at least 25 miles of unneeded system and non-system roads, prioritizing this work within the CWN and WCF priority watersheds.

Additionally, please consider adding a definition of intermittent stored service to the glossary.

Greater Missoula Geographic Area pg. 117

The Clark Fork Coalition is based in Missoula, and much of our restoration work is occurring in this geographic area. Specifically, we have ongoing restoration projects on Miller Creek, O[rsquo]Brien Creek, Grant Creek, and Gold Creek. These creeks are important watersheds and have key conservation fish populations.

* We support the designation of Rattlesnake Creek as an Eligible, Wild, Scenic, and Recreational River. The Rattlesnake Creek contains all the necessary characteristics to be considered for listing.

We oppose the desired Summer Recreation Opportunity Spectrum (ROS) of a semi-primitive motorized setting for Rattlesnake Creek, Butler Creek, and LaValle Creek areas (as mapped on GM-04. Specifically, Rattlesnake Creek Road (FS 99), Point Six/TV Mountain Road (FS 9962), LaValle Spur (FS 19080), and FS 19060.

Rattlesnake Creek supports a stable bull trout population; Butler Creek and LaValle Creek support genetically pure cutthroat trout populations. Sections of these roads are connected to the streams and chronically deliver sediment to the streams. Allowing motorized recreation would increase sediment production along the road and sediment delivery to the streams. This in turn would degrade aquatic habitat including increased bank erosion, stream sedimentation, fewer pools, reduced pool size (e.g., Marion et al. 2014[5], Gucinski et al 2000[6]) negatively impacting these important conservation fish populations.

Both the Rattlesnake and Butler Creek/Point Six roads are gated year-round and do not permit motorized recreation. These areas receive extensive non-motorized use from hikers, bikers, hunters, berry pickers, dog walkers, and birders among other non-motorized users. There is currently no motorized recreational use in the area. Please consider making these areas as a semi primitive non-motorized setting to align with the current

recreational use and protect these important aquatic resources.

Lolo Creek Geographic Area pg. 123

The Clark Fork Coalition has been working in the Lolo Creek Watershed for nearly a decade in partnership with the Lolo NF to restore the watershed and fisheries. We appreciate the Forest Plans recognition of the cultural, historical, and ecological importance of the Geographic Area.

The Clark Fork Coalition appreciated the recognition for the ecological and recreational benefits of roadless areas and supports their protection from road building and timber harvest. Typically, these areas are very steep and remote, and have remained unlogged because of economic and environmental constraints. We believe IRAs should be recommended Wilderness.

* We support the inclusion of the headwaters of North Creek outside the IRA for recommended Wilderness. In 2020, The Clark Fork Coalition decommissioned (full recontoured) several miles of roads in the headwaters of North Creek (tributary of Granite Creek) due to their high sediment production and sediment delivery to Granite Creek. This work ostensibly expanded the Hoodoo IRA as mapped on Map LO-01.

* We support the entirety of Lolo IRA as Recommended Wilderness designation, rather than just a portion of the IRA. The entirety of this IRA has wilderness characteristics and should be considered for Wilderness protection. For example, the South Fork of Lolo Creek is a stronghold for bull trout in the watershed, and Wilderness protection would protect this population from risks.

* We support the designation of the South Fork of Lolo Creek as Wild and Scenic. As mentioned above, Lolo Creek is bull trout stronghold and provides cold, clean water to the mainstem of Lolo Creek. Protection of this watershed is very important for the ecological health of the entire Lolo Creek Watershed.

Conclusion

We appreciate the Lolo National Forest's efforts to update their management plan. We hope that the plan will help guide the restoration of degraded streams and watersheds that fish, wildlife, and communities depend upon. We look forward to continuing to work collaboratively with the Lolo NF. Please do not hesitate to contact us if you have any questions.

Thank you for the opportunity to comment.

Sincerely,

Karen Knudsen, Executive Director

Clark Fork Coalition [bull] P.O. Box 7593 [bull] Missoula, MT 59807

[1] Hendrickson, S., K. Walker, S. Jacobson, and F. Bower. 2008. Assessment of Aquatic Organism Passage at Road/Stream Crossings for the Northern Region of the USDA Forest Service. USADA Forest Service Northern Region. 12 p.

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[3] Riggers, B.W., A. Rosquist, R. Kramer, and M. Bills. 1998. An Analysis of fish habitat and population conditions in developed and undeveloped watersheds on the Lolo National Forest. Unpublished Forest Service Report.

[4] Switalski, T.A., J.A. Bissonette, T.H. DeLuca, C.H. Luce, and M.A. Madej. Benefits and impact of road removal. *Frontier in ecology and the Environment*. 2(1): 21-28.

[5] Marion, D.A., J.D. Phillips, C.Y. Yocum, S.H. Mehlhope. 2014. Stream channel responses and soil loss at a off-highway vehicle stream crossings in the Ouachita National Forest. *Geomorphology* 2016: 40-52.

[6] Gucinski H, Furniss MJ, Ziemer RR, and Brookes MH. 2001. Forest roads: a synthesis of scientific information. General Technical Report PNW-GTR-509. Portland, OR: US Department of Agriculture, Forest Service, Pacific Northwest Research Station..