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Comments: USDA Forest Service,

Rocky Mountain Region,

Attn: Frank Beum, Reviewing Officer,

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submitted online to <https://cara.fs2c.usda.gov/Public/CommentInput?project=51806>

October 30, 2023

Thank you for the opportunity to object to the GMUG National Forest Plan and FEIS.

I submitted 2 comment letters on the Draft Plan on 11/24/21. One of the letters addressed land issues, and other letter addressed bighorn issues. The bighorn letter had some SCC issues which I am addressing in a separate objection per the process. In this letter I am objecting to land issues from my 11/24/21 comment letter.

Note that I submitted an objection on the land issues on October 29, 2023. This objection supersedes and replaces that - I have added more information on the Iron Fens.

#### 1) Timber Suitability

As I stated in my original comments "The aspen and spruce/fir forests along US550 and also along the north side of the Sneffels Range are amazingly beautiful and bring thousands of visitors; we can't have the trees harvested. Even patches of harvest would mar the beautiful views." I object that the Timber Suitability map for the Released Preferred Alternative B still has patches of red/suitable timber next to and very close to US550 between Ironton and Red Mountain Pass. US550 is a Scenic Byway - there should not be any timber production next to the highway or within the Scenic Byway overlay (0.5 mile on either side of road) or within the view shed from the highway.

I also object to the large patches of timber suitability in Ouray County along the north side of the Whitehouse CORE Act Wilderness Addition. Large scale timber harvest in this area would mar the iconic views of the Sneffels range - these views are why many of us live here and why many of the tourists visit here.

#### 2) Timber Suitability in relation to the Iron Fens

The slopes above US550 south of Ironton (both east and west sides) drain into the biologically important and pristine Ironton Iron Fen area - any timber harvest production above and upstream has the potential to damage this area. The iron fens and wetlands on both sides of the highway in the Ironton area would be especially sensitive to redirecting more metals-contaminated water into them. That extra load of metals could cause the system to go out of balance and start to degrade, not being able to handle more pollutants. I object to the remaining suitable timber patches along and upstream of the iron fens, in both sides of the highway.

Groundwater dependent ecosystems include wetlands, lakes, streams, springs as well as subterranean ecosystems and are directly tied to land use practices and management strategies (Minckley & Unmanck, 2000; Stacey et al., 2011). These systems, particularly wetlands and springs, provide critical refuge for species during drought and support disproportionately high amounts of biodiversity relative to their size (Costelloe &

Russell, 2014; Davis et al., 2013; Kurzweil et al., 2021; Misztal et al., 2016). The GMUG has identified, through the work of the Spring Stewardship Institute as well as GMUG staff that the highest number and density of springs is located in the Uncompahgre National Forest (US Forest Service, 2018), and it has been documented that this area also has a high concentration of an even more rare and high functioning system, iron fens (Johnston et al., 2012). Fens are a groundwater dependent wetland that accumulates at a minimum, 40cm of peat. These systems represent less than 3% of the global land surface, yet store double the amount of carbon that the worlds forest store, which represent close to 40% of the land surface (Beaulne et al., 2021; Rodney A. Chimner et al., 2002), making these systems critical to protect, as they can move quickly from a carbon sink, to a carbon source via degradation (Leifeld & Menichetti, 2018; Liu et al., 2019). Iron fens provide an additional critical ecosystem service outside of carbon storage, this is metal cycling. These fens have co-evolved with acidic metal laden water, and due to the biogeochemical properties, are able to change the speciation of metals, allowing them to precipitate out before reaching primary flow paths (Stefan Kügler, Rebecca E. Cooper, Carl-Eric Wegner, Jan Frieder Mohr, Thomas Wichard, 2019). Both the Hayden and Abrams parcels have been identified as having some of the best examples of intact, high functioning iron fens in the San Juans as Identified by Dr. Rod Chimner, global peatland specialist, and Dr. Jake Kurzweil, a local wetland scientist. These systems are not only rare globally, but these iron fens are also rare locally and are incredibly sensitive to landscape disturbances (Chimner et al., 2010). Both the Hayden and Abrams parcels have been identified as suitable for timber harvest and this decision gives this group pause due to the documented presence of critical wetlands and fens located in this region (Johnston et al., 2012). The negative impact of logging on wetlands has been documented for over three decades (Richardson, 1994) and the impacts of logging on fens can be seen in other national forests of the U.S. (U.S. Forest Service, 2018). The proposed suitable logging sites in the Hayden and Abram parcels coincide with the location of the highest density of fens in the GMUG forest (Johnston et al., 2012). This creates the potential to degrade or destroy these rare systems that provide many ecosystem services to the plants, animals, and humans that depend on them.

### 3) Bear Creek polygon O3a

This 6,000 acre parcel is discussed and listed as polygon O3a in the FEIS Part 1. I originally commented that this parcel should be recognized as Wilderness (as in Alternative D). I recognize the obstacle to that with the current Hard Rock 100 race and trail maintenance (motorized tools). I appreciate that Bear Creek was made a Wild and Scenic River (with 0.5 mile wide protective swath) and that the Bear Creek Trail was mapped with a 1.0 mile wide protective swath, but there is so much more important land and habitat there; I believe that General Forest is not enough protection for this very unique area. The FEIS states that solitude is affected by the highway that this parcel overlooks but that is very misleading - the initial 0.5 mile of the trail traverses very steeply up rock cliffs, and once you are above that it is indeed one of the most solitary and quiet areas in Ouray County simply because it is very hard to get up there. As a result of the solitude it is also one of the areas where bighorn sheep frequent high up in the summer. This area is an important part of the habitat for the Tier 1 S-21 Cow Creek bighorn herd; bighorn sheep frequent the high ridges above Bear Creek as well as the high meadows and ridges above Ouray north towards Bridge of Heaven. In the winter the bighorns move down and are frequently seen along US550, moving up and down to the river. My objection is that a General Forest designation simply does not protect that area as needed- it would be more appropriate to manage it as a Special Management Area (with no motorized access) or as a Wildlife Management Area.

In addition, there is a swath of new winter ROS motorized access in the Released Preferred Alternative, that extends across Bear Creek, parallel to US550. Previously this was listed as "No Restrictions" but I can't believe it was actually used by any snowmobiles in this area - it is bisected by the narrow, deep, and extremely steep canyon. The change from previous "No Restrictions" to Winter Motorized will likely increase the attention from snowmobile users and result in increased usage. My objection is that this swath from north of Ironton to south of Ouray should not be motorized in the winter because of the frequent bighorn usage through that swath. The Colorado Department of Transportation actually has bighorn warning signs along that section of US550.

#### 4) Hayden parcel

This is an approximately 10,000 acre area on the west side of US550 (east of CR361 and north of Red Mountain Pass) encompassing the Mt Hayden Ridge. This parcel is listed as General Forest in the Released Preferred Alternative; I commented on the Draft Plan that this area should be designated as a Special Management Area. An SMA designation would still allow existing helitax and in-holding lodge uses but would also be protective of this unique area. Although there is a lot of mine scarring and some old mining roads (overgrown, not used), many parts of it are extremely hard for people to get to - steep hikes as well as fewer maintained trails; this makes it more remote than on-map miles would imply. Even though the highway is visible it is far and very steeply below. Many times I have seen elk frequent the trees and benches north of Richmond Pass, and I know that elk and deer are common in the steep and forested slopes on the west side of the ridge. This Hayden area (and the Bear Creek polygon) are some of the largest and most practically remote areas left in Ouray County - we have to protect them while we still can. My objection is that this area needs the stronger SMA or WMA protection.

The Hayden area bordering US550 was previously, and in the Draft Preferred Alternative B, entirely non-motorized in the summer and winter ROS. In the Released Preferred Alternative B there is a large area from Spirit Gulch to McIntyre Gulch, and up to the Barstow and Greyhound Mines (in the alpine, above treeline) that has been designated summer motorized ROS. This area has been non-motorized (summer AND winter) as long as I have known it - the old mine roads are overgrown and inaccessible except for a very short portion near the Highway that I believe is used by the electric utilities. This area is a much used locals' hiking area, with amazing flowers and wildlife - I have seen deer, elk, moose (moose tracks and scat), and heard coyotes howling back there. The reason that so much wildlife is there is that it is NOT motorized - that whole section from Ironton to Red Mountain Pass on the west side has not been motorized (summer or winter) while the east side has. I strongly object to this summer ROS motorized designation in the Released Preferred Alternative B. Even though the USFS has said that the designation does not mean it WILL be motorized, just that it COULD be, I truly believe that this area needs to be more highly protected as a WMA, or a SMA, with no motorized access. Traditionally in Ouray County the west side of the highway south of Ironton has been non-motorized (summer and winter) and the east side has been motorized. The protections on the west side obviously need to be made stronger - the reason there is so much wildlife there is precisely because it is non-motorized.

Thank you again for the opportunity to participate in this process.

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#### References:

- Beaulne, J., Garneau, M., Magnan, G., & Boucher, É. (2021). Peat deposits store more carbon than trees in forested peatlands of the boreal biome. *Scientific Reports*, 11(1), 1-11. <https://doi.org/10.1038/s41598-021-82004-x>
- Chimner, Rod A, Lemly, J. M., & Cooper, D. J. (2010). Mountain Fen Distribution, Types and Restoration Priorities, San Juan Mountains, Colorado, USA. *Wetlands*, 30(4), 763-771. <https://doi.org/10.1007/s13157-010-0039-5>
- Chimner, Rodney A., Cooper, D. J., & Parton, W. J. (2002). Modeling Carbon Accumulation in Rocky Mountain Fens. *Wetlands*, 22(1), 100-110. [https://doi.org/10.1672/0277-5212\(2002\)022\[0100:MCAIRM\]2.0.CO;2](https://doi.org/10.1672/0277-5212(2002)022[0100:MCAIRM]2.0.CO;2)
- Costelloe, J. F., & Russell, K. L. (2014). Identifying conservation priorities for aquatic refugia in an arid zone, ephemeral catchment: A hydrological approach. *Ecohydrology*, 7(6), 1534-1544. <https://doi.org/10.1002/eco.1476>
- Davis, J., Pavlova, A., Thompson, R., & Sunnucks, P. (2013). Evolutionary refugia and ecological refuges: key concepts for conserving Australian arid zone freshwater biodiversity under climate change. *Global Change Biology*, 19(7), 1970-1984. <https://doi.org/10.1111/gcb.12203>
- Johnston, B. C., Stratton, B. T., Young, W. R., Mattson, L. L., Almy, J. M., & Austin, G. T. (2012). Inventory

of Fens in a Large Landscape of West - Central Colorado: Grand Mesa, Uncompahgre, and Gunnison National Forests. Report to Forest Supervisor. Delta, Colorado: Grand Mesa, Uncompahgre, and Gunnison National Forests., April 6, 2(970).

Kurzweil, J. R., Abdi, R., Stevens, L., & Hogue, T. S. (2021). Utilization of ecological indicators to quantify distribution and conservation status of Mt. Tamalpais Springs, Marin County, California. *Ecological Indicators*, 125, 107544. <https://doi.org/10.1016/j.ecolind.2021.107544>

Leifeld, J., & Menichetti, L. (2018). The underappreciated potential of peatlands in global climate change mitigation strategies. *Nature Communications*, 9(1). <https://doi.org/10.1038/s41467-018-03406-6>

Liu, H., Zak, D., Rezaeezhad, F., & Lennartz, B. (2019). Soil degradation determines release of nitrous oxide and dissolved organic carbon from peatlands. *Environmental Research Letters*, 14(9). <https://doi.org/10.1088/1748-9326/ab3947>

Minckley, W., & Unmanck, P. (2000). Western springs: their faunas, and threats to their existence. In *Freshwater Ecoregions of North America*. (A. R. et Al, Ed.). Washington, DC.

Misztal, L., Hammer, S., & Campbell, C. (2016). *Fire and Water: Assessing Springs Ecosystems and Adapting Management to Respond to Climate Change*. Tucson, Arizona. Retrieved from [https://www.skyislandalliance.org/wp-content/uploads/2016/01/Misztal\\_Hammer\\_DLCC\\_Final\\_Report\\_with\\_Appendices.pdf](https://www.skyislandalliance.org/wp-content/uploads/2016/01/Misztal_Hammer_DLCC_Final_Report_with_Appendices.pdf)

Richardson, C. J. (1994). Ecological functions and human values in wetlands: A framework for assessing forestry impacts. *Wetlands*, 14(1), 1-9. <https://doi.org/10.1007/BF03160616>

Service, U. S. F. (2018). How Fen restoration projects ensure a healthy hydrologic system on the Plumas National Forest. Retrieved from <https://www.fs.usda.gov/detail/r5/landmanagement/?cid=fseprd587865>

Stacey, C. J., Springer, a E., & Stevens, L. E. (2011). Have Arid Land Springs Restoration Projects Been Effective in Restoring Hydrology , Species Composition Comparable To Natural Springs With Minimal Anthropogenic. *Collaboration for Environmental Evidence*, 002(April), 1-74.

Stefan Kügler, Rebecca E. Cooper, Carl-Eric Wegner, Jan Frieder Mohr, Thomas Wichard, K. K. (2019). Iron-organic matter complexes accelerate microbial iron cycling in an iron-rich fen18327529. *Science of the Total Environment*, 646. <https://doi.org/https://doi.org/10.1016/j.scitotenv.2018.07.258>

US Forest Service. (2018). *Grand Mesa Uncompahgre and Gunnison National Forests - REvised Draft Forest Assessments: Watersheds, Water, and Soil Resources*. Retrieved from <https://www.fs.usda.gov/detail/gmug/specialplaces/?cid=stelprdb5181324>