January 15th, 2023

Re: Seasonal Trail Closures - Salida Ranger District Trails # 1434, 1412 & 1336

To whom it may concern,

Thank you for the opportunity to comment on updates to the Season Trail Closures in the Salida Ranger District (SRD). Please accept these comments in objection to the proposal.

The TPA is a volunteer centered organization whose intention is to be a viable partner, working with the United States Forest Service (USFS) and the Bureau of Land Management (BLM) to preserve the sport of off-road motorcycle riding. The TPA acts as an advocate of the sport and takes the necessary action to ensure that the USFS and BLM allocate a fair and equitable percentage of access to public lands.

All public land users must question any management strategy that limits or closes access to public land. We must ask questions and insist that the justification behind these decisions is relevant and based on fact. As a motorized advocacy organization we know to well what it means to have your access limited on public lands. Our initial reaction to the SRD's proposal was in favor of expanding seasonal closures to all uses on the following trails; Greens Creek #1412, Rainbow Trail #1436 and ATV route #1434. After all, it only seems to make sense that if human disturbance is the issue then all human related activities be limited.

At first glance this seems like an obvious conclusion and now that seasonal closures are becoming more common to include all uses it would indicate that it is an effective strategy. However, we have been unable to find an example of where their implementation has a measurable deliverable as to its effectiveness as part of the proposal. If they are effective at achieving their goals shouldnt part of the plan include how that will be measured? Are seasonal closures rescinded or reevaluated if, after a certain amount of time, issues persist, get worse or get better? Coupled with questionable rationale behind their implementation in the first place, these are just some of the questions all public land users must ask of those implementing or suggesting them as a management strategy.

Therefore, with thoughtful consideration and the review of supporting documents it is the TPA's suggestion that the SRD not expand the current seasonal closures to include all uses. In addition the TPA suggests that the SRD revisit the existing closures and the rationale that has

put them in place. Please find additional comments prepared by Wildlife Science International on behalf of the TPA below.

Sincerely,

Chad Hixon
TPA Executive Director

To:
Chad Hixon
Trails Preservation Alliance

From:
Rob Roy Ramey II, Ph.D.
Wildlife Science International, Inc.
P.O. Box 386
Nederland, CO 80466

Date: January 15, 2023

Chad,
Please submit my scientific review (below) of as part of your comments on the proposed seasonal closures of the following trails: Greens Creek #1412, Rainbow Trail #1336, and the 1434 ATV route (hereafter referred to as, Proposed Action).

Review of Proposed Action

Summary
The USFS has failed to provide a credible scientific rationale in support of the Proposed Action. More specifically, the proposed action rests on the false premise that non-hunting recreation (motorized or non-motorized) in big game winter range is a threat to local elk and mule deer populations. That premise and the three-sentence rationale for the Proposed Action, are based upon nothing more than surmise and speculation. The premise and rationale behind the Proposed Action are also refuted by elk and mule deer population data and statements in CPW's herd management plans. The sole scientific support cited in support of the Proposed Action is an erroneous citation to the findings of Ciuti et al. (2012).

1) The premise that non-hunting recreation on public lands in and around Chaffee County is a threat to its local big game populations of elk and mule deer, is frequently stated as if it were fact, however, it lacks a factual basis. To date, no credible data have been produced that directly link non-hunting recreational use with declines in individual fitness or population trends

in elk or mule deer that cannot be attributed to other factors including: density dependence, disease, competition, hunting, predation, permanent development, drought, and/or biased experimental design (i.e. repeated pursuit of radio-collared animals until reproductive failure occurred or harassment inside of enclosures where they were previously hunted). An exhaustive scientific review of this fundamental issue may be found in my peer review of the Chaffee County Wildlife Tool (attached and included herein as part of this comment).

2) The rationale behind the Proposed Action is contrary to CPW's most recent elk and deer population estimates. The 2019-2021 elk population data for the Data Analysis Units E-17, E-27, and E-22, shows that all three of these populations are above current objectives. Those data may be found here: https://cpw.state.co.us/thingstodo/Pages/Statistics-Elk.aspx; https://cpw.state.co.us/thingstodo/Pages/Statistics-Deer.aspx. Herd Management Plans may be found here: https://cpw.state.co.us/thingstodo/pages/herdmanagementplans.aspx.)

While mule deer in Data Analysis Units D-15, D-16, and D-34 are below objective, herd management plans make no mention of this being the result of recreational disturbance of any kind. Instead, cougar predation, density dependence, habitat conversion by agriculture and development have been the leading causes of decline to now stable levels. Mule deer D16 (2020) plan states, "Since 1999, the leading cause of known deer mortality in D-16 has been cougar predation, which led to the initiation of a nine-year, three-staged research project in D-16 and neighboring herd D-34 to examine mule deer population response to changes in cougar density and how cougar/deer populations respond to various harvest levels. This project will provide better understanding of how cougar harvest could be used as a deer management tool."

The D-15 herd plan states, "Since its low point in the mid 1990s following an apparent density-dependent population crash, this population has gradually rebounded and increased to a post-hunt 2009 estimate of nearly 6,000 deer. With the exception of a slight population decline associated with low survival rates during the substantial winter of 2007-08, the population trend for this herd remains positive. However, measured survival rates of radio-collared fawns and does in the adjacent D-16 DAU (Cripple Creek Deer Herd) have again begun to decline in recent years and local biologists have begun noticing apparent over-use of available winter range forage. Much of the available habitat has reached later-seral stages and appears heavily browsed. Game damage complaints are currently at reasonable levels, but have increased somewhat in recent years, particularly in and around the human population centers of Salida and Buena Vista. Given these indicators, current populations may be approaching the general social and biological carrying capacity for deer in this DAU as current habitat conditions, human encroachment and development, and competition with elk and livestock begin to potentially create a density-dependent situation."

Thus, there are no data to support the premise and rationale for the Proposed Action.

3) Ciuti et al. (2012) was either misread or misrepresented by USFS staff writing the justification of the Proposed Action. Reading Ciuti et al. (2012) closely, it is clear that the "landscape of fear" studied by the authors was created by the obvious threat of ***hunting*** on public lands, and not by non-hunting recreation. As pointed out by Ciuti et al. (2012) and others, hunting is what leads to a "landscape of fear" where humans are perceived by game species as

predators, which leads to increased vigilance and potential avoidance of human activity. The association between hunting and motorized vehicles, including UTVs, ATVs and e-bikes all used by a large proportion of hunters, is what leads to game animals exhibiting stronger reactions to them. Thus, the USFS needs to recognize that it is not hiking, horseback riding, cycling, e-biking, motorcycling, ATVing, or vehicles per se that are driving elk vigilance, it is first and foremost, hunting.

The following excerpts from Ciuti et al. (2012) underscore why recreation hunting on public lands is the driver of the behaviors they observed:

> "The highest levels of vigilance were recorded on public lands where ***hunting*** and motorized recreational activities were cumulative compared to the national park during summer, which had the lowest levels of vigilance."

> "This is a true landscape of fear, where each human is perceived by elk to be a potential predator, even within the protected area, as animals are threatened by ***hunting*** pressure immediately along its borders."

> We found the highest levels of elk vigilance on public lands during the hunting season, when ***hunting*** and intrusive recreational activities occurred cumulatively, whereas the lowest levels were found in the national park in summer – even when crowded with people…"

> "If ***hunting*** is not permitted, then behavioural adaptations, such as habituation, can evoke a decrease in vigilance levels (Fig. 4; [72])."

> "… in a human-dominated landscape where ***hunting*** is allowed, behavioural responses to road traffic can be extreme."

In addition to the findings above, Ciuti et al. (2012) stated that:

> "We documented the complex link between disturbance and behavioural response in a human-dominated landscape, though we were not able to estimate the actual cost of human disturbance on wildlife in terms of fitness and population dynamics."

This is an honest acknowledgement that is important relative to the Proposed Action (and similar closure orders like it) because it illustrates the notable absence of any evidence of a negative effect on survival and reproduction at an individual level (i.e. Darwinian fitness), or collectively on population trends, that are independent of other factors (i.e. predation, disease, climatic variation, and overabundance). Yet, despite an absence of data and exclusion of other factors through hypothesis testing, some authors prefer to assume that virtually any behavioral reaction by wildlife to human activity will somehow be deleterious to the wildlife population. However, federal agencies cannot rely on unsupported assumptions, nor surmise and opinion, instead they are required to comply with the Information Quality Act. And, as discussed above, the best available data do not indicate that there is any deleterious effect of recreational activity on elk or mule deer in any of the three trails covered in the Proposed Action. Nor are there unbiased data

in the literature indicating the same from other Rocky Mountain elk or mule deer populations (see peer review of Chaffee Wildlife Tool for additional details). In fact, CPW population estimates reveal that elk populations in Colorado are at an all-time high of over 308,000 with an increase of over 33,000 in just the past seven years.

The paper by Ciuti et al. (2012) (as well as other behavioral ecology papers in the recent peer reviewed literature including Cromsigt et al. 2013; Middleton et al. 2013; Paton et al. 2017; Spitz et al. 2019; Zanette et al. 2019; Zanette and Clinchy 2020) also underscore why the USFS needs to rethink its approach to managing public access to public land in this area. It is the majority of users that should retain full access, rather the minority, recreational hunters, who currently represent just 3% of visitor days in USFS lands in the Rocky Mountain Region (USFS 2020).

4) If the USFS truly wishes that elk or mule deer become less vigilant in human presence (i.e. more habituated), the solution is simple: implement a year-round firearms and hunting closure in those areas where the most important high quality winter range is found. The elk will seek out these areas, as they do park lands, private lands, and urbanized areas where hunting is not a threat and humans are not perceived as predators. The clearest example of this behavioral adaptation to seek out refuges free of hunting pressure (and where humans are not perceived as predators) can be found in Rocky Mountain National Park and the adjoining land of the City of Estes Park, Colorado. Elk and mule deer wander the streets, suburbs, and open space lands unperturbed by all manner of motor vehicles, cyclists and pedestrians. Such a year-round firearms and hunting closure environment would allow a more balanced coexistence of hunting and non-hunting recreation.

Conclusion

In interest of the health of our big game populations, I urge the USFS to drop consideration of the Proposed Action and reconsider the rationale of previous closures to these trails. Instead of unjustified seasonal recreational closures, the USFS should focus instead on the two issues that are expected to impact elk and mule deer populations in this area: the spread of Chronic Wasting Disease and the soon to be implemented gray wolf reintroductions.

Sincerely,

Rob Roy Ramey II, Ph.D.
Wildlife Science International, Inc.

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