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Mr. Charles Mark

Supervisor, Salmon-Challis National Forest

Attn: Forest Plan Revision

1206 South Challis St

Salmon, ID 83467

Re: Addendum to June 16, 2018 correspondence

Justification for SCC Classification for Bighorn Sheep

Dear Mr. Mark,

Idaho Wild Sheep Foundation submitted our rationale and position as to why we believe Rocky Mountain Bighorn Sheep (RMBHS) populations within the Salmon - Challis National Forest more than meet the criteria to be classified as Species of Conservation Concern (SCC). Idaho WSF utilized the website Forest Review Results, as a format for our comments. During the Webinar on May 11, that document was discussed in detail and referenced by your staff for review. Additional information has come to our attention regarding the actual guidance guidelines the USFS uses to determine a rating as displayed in the Forest Review Results; specifically, the "Methods and Guidelines for Assessing Evidence to Classify Species as Potential SCC." Ax discussed, during the webinar the Forest Review Results were referenced however, there was no mention of the Methods and Guidelines for Assessing Evidence to Classify Species as Potential SCC. If that link, "Salmon - Challis Potential Species of Conservation Concern Detailed Assessment Method", was on the site when we first reviewed the SCC link, we missed it because it was never discussed. Granted, if it was posted at that time, we overlooked it. Again, this is a departure from open communications so that interested parties can comment with the best information available. Regardless, reviewing that template has prompted us to write an addendum to our correspondence of June 16, 2018.

Criteria 1. Geographic Distribution within the Salmon-Challis N.F.

We concur that B. = Patchy OR gaps best describes the separated populations.

We DO NOT concur with the sub ranking of 1, Habitats exist primarily as patches, some of which are small and isolated to the degree species interactions are limited by movement between patches. Local sub-populations in most of the species range interact as a meta-population or patchy population, but some populations are so disjunct that sub-populations in those patches are essentially isolated from other populations

As discussed in our earlier letter, we do not believe all the sub populations are robust enough to comprise one healthy interactive meta-population. We do not subscribe to FS ranking based on "interactions are limited" and the sub-populations are so disjunct that sub-populations are "essentially isolated from other populations." Bighorn pioneering and interaction DOES occur at a relatively low level, in association with the population densities, BUT it does occur (IDFG Plan, 2010). To state the populations are "essentially isolated" is totally inaccurate, especially in regard to the history and capabilities of bighorn to move long distances in a relatively short time period. Telemetry data, particularly with young rams, has established that scenario in most, if not all, populations around the west.

Idaho WSF firmly believes the ranking should be B2, which indicates the potential for population interaction. During a disease event, the consequences of that interchange can easily jeopardize these sub-populations. Particularly if a series of disease outbreaks occur in a relatively short period of time (decade+). Idaho WSF believes bighorn exist under the shadow of continuous disease outbreaks and their persistence over their remaining range on the SCNF is a credible concern.

Criteria 2. Geographic distribution outside the Salmon-Challis N.F.

Aside from bighorn populations along the Montana-Idaho state line in the Beaverhead and the Tower-Kriley populations, there is little to no influence from RMBHS populations outside the PMU's on the Salmon -Challis. Surrounding populations do not influence or provide a flow of RMBHS from those areas that would significantly impact the sub-populations on the SCNF. In all likelihood, the probability exists for some interaction, but it is thought to be limited. Idaho WSF concurs that the B ranking is appropriate.

Criteria 3. Capability of the species to disperse.

Idaho WSF strongly disagrees with the B ranking; "Disperses only through suitable habitat" (dispersal areas may or may not be corridors). The assessment of the USFS ranking is hinged on the word "typically" in the statement: "Bighorn typically travel along migration corridors that provide visibility and escape terrain" (Risenhoover et al. 1988), and "large rivers, continuous conifer forest, and flat terrain pose significant barriers to movement ad dispersal" (Singer et al. 2000). Bighorn movements are not typical and defy every description outlined above. Entire sub-populations moving outside familiar range is not a normal behavior. Movements of a single animal or small group of bighorn across large landscapes, including unsuitable habitat, is not an anomaly. The hinge in this ranking is based on "may be limited" which is completely different from never! As populations grow and reach a density that compels animals to pioneer and occupy adjacent ranges, the risk for disease flow between areas is enhanced, thus the real concern for overall persistence of bighorn sheep on the Salmon-Challis N.F.

Idaho WSF believes a ranking of C is more appropriate for this criterion. There is a huge gap between B "only disperses" and C" readily disperses" that is unrealistic. Bighorn may not readily disperse, but they can and do disperse in these areas, thus providing ample opportunity for disease flow between sub-populations. Again, persistence of bighorn on the SCNF is safeguarding against disease outbreaks, but when disease occurs, it does have the capability to disperse throughout the sub-populations.

Criteria 4. Abundance of the species on the Salmon-Challis N. F.

Idaho WSF does not agree with the US FS ranking of B, "Uncommon- Current abundance is large enough that demographic stochasticity is not likely to lead to rapid local extinction, but, in combination with highly variable environmental factors could pose a threat."

Idaho WSF believes an A ranking: "Current abundance is enough that stochastic and other factors could lead to potential imperilment." is more appropriate. Our rationale being demographic stochasticity, in combination with disease outbreaks, is a more realistic scenario than "in combination with variable environmental factors." The largest risk factor, disease transmission, has not been discussed as the major factor influencing historic and current populations (1990's die-off which reduced the population in 5 PMU's by approximately 50%). Not tying the threat of disease, as an influence to abundance on the SCNF, biases the entire analysis process in this criteria. Disease has and will continue to occur on the SCNF until the primary risk of disease transmission, contact with domestic sheep and/or goats, is mitigated, controlled or negated. Until such time, these sub-populations could become imperiled with a singular contact of infected domestic sheep or goats.

Criteria 5. Population trend in the Salmon-Challis N.F.

The USFS ranking of B, "Stable population", in the opinion of Idaho WSF, is totally invalid, as it is not is not supported by historic and/or recent population data. Again, there is a large gap between the criteria A "Significant downward trend in the Salmon-Challis" and B, "Stable population". We argue the population is not stable. Yes, it appears stable today, however at a very low population level given the habitat potential to accommodate 9,500 bighorn sheep; just within the PMU's on the SCNF (IDFG Plan 2010). Consistent disease outbreaks over time have prevented populations on the SCNF to increase beyond the current estimate of approximately 2,000; which is considered low density. The low density is vulnerable to continued decreases from disease events thus placing the population in jeopardy and increasing the concern for persistence. Again, under the right circumstances a large part of the sub population can be lost and or spread to adjacent populations exacerbating an already tenuous situation.

Idaho WSF firmly believes an A rating is warranted for this criteria. Albeit an A-, it is still an A!

Criteria 6. Habitat trend in the Salmon-Challis NF.

Idaho WSF has no data to dispute the assessment and analysis provided regarding this criteria. We do believe, however, an SCC ranking will compel the USFS to assess seasonal ranges for improvement opportunities, plus identify vegetation encroachment not beneficial to bighorns.

Criteria 7. Vulnerability of habitats in the Salmon-Challis N.F. to modification as a result of land management activities currently implemented, or proposed for implementation.

Idaho WSF has does not have data to analyze the assessment and analysis provided.

Criteria 8. Life history and demographic characteristics of the species.

Idaho WSF disagrees with the B ranking for this criteria; "Low reproductive rates or high mortality (e.g., susceptible to disease, predation, or competition), but not both; OR life history characteristics that suggest populations have intermediate ability to recover from disturbance events and no other demographic risk factor is known. Temper conclusions based on life-cycle considerations and whether population growth is likely to be more sensitive to changes in reproduction or age-specific mortality."

Idaho WSF believes an A ranking is more appropriate and better describes the bighorn sheep population on the SCNF; "Low reproductive rate and high mortality (such as: susceptible to disease, predation and competition); OR life history characteristics that suggest populations may not recover rapidly from disturbance events or other demographic risk factors are of concern."

Bighorns have a high productivity rate as most ewes of reproductive age have twins; however, survivability of lambs is poor during the first few months of life under normal circumstances. A recruitment rate of 30-40 lambs per 100 ewes into the yearling age class is considered good. The natural life history (cycle) of bighorns, when altered by outside influences such as a disease event and depressed recruitment after a disease event, result in negative survivability rates, a population below habitat capacity and stagnant in growth. Disease transmission events, from interaction with domestic sheep and/or goats, has and will continue to alter bighorn recruitment, mortality rates and population numbers. High mortality rates, sometimes 100%, have been documented in bighorn sheep populations throughout the west as a result of disease outbreaks. In addition, many of the survivors from a disease event become 'latent carriers' of the disease, which has lingering effects, preventing natural recovery and extending the potential for disease transmission into other areas for years

Idaho WSF believes the bighorn in the SCNF have relatively poor production and survival rates, particularly during a disease event and are exposed to high mortality rates.

In summary, geographic distribution within the SCNF, capability of species to disperse, abundance-population trend, plus the life history and demographic characteristics of bighorn on the SCNF are all points of disagreement with the SCNF ranking and SCC recommendations for bighorn sheep. Basically, Idaho WSF believes each of the above criteria and FS rankings will ultimately have adverse influences on bighorns within one or more of the PMU's. The impacts from disease and the ability of those pathogens to be distributed among the various PMU's is a real concern for the persistence of bighorn on the SCNF. Ours is not a subjective assessment, but rather rooted in experiences and events that have and will continue on the SCNF. Idaho WSF believes that SCC classification for bighorn sheep is met under the Methods and Guidance criteria and should be so classified to help insure growth and persistence of bighorns on the SCNF.

Respectfully,

Jim Jeffress and Mike Schlegel

Idaho WSF Conservation Committee

Original mailed 6/20/18

Idaho Wild Sheep Foundation

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