

FEB 21 2023

February 21, 2023

Mr. Thad Berrett  
District Ranger  
1415 Fort St.  
Buffalo, WY 82834

**Scoping Notice - Pole Creek Vegetation Management Project**

Dear Mr. Berrett,

Please consider the following comments pertinent to the Pole Creek Vegetation Management Project. I request these comments be addressed in the environmental assessment (EA).

**Aspen Habitat Enhancement** – I support the aspen habitat restoration described in the project proposal. Aspen habitat is valuable for many species of wildlife and provides a crucial component of diversity on the forest landscape.

**Riparian Habitat Enhancement** – I support the riparian habitat enhancement discussed in the project proposal. Planning should ensure that adjacent Engelmann spruce habitats remain intact as this conifer species provides important winter cover and forage for moose.

Elk were selected as a Bighorn National Forest Plan Management Indicator Species for the following reasons (Bighorn National Forest Plan- Appendix C, 2010):

- Relationship to management issues (vegetation management and road densities),
- Feasibility to model habitat (elk security),
- Feasibility to monitor population trends (WGFD data),
- Possible indication of habitat for other species requiring forested cover away from roads (e.g. martin),
- Forest wide distribution, forest wide and project scale analysis feasibility,
- Past management and public interest.

Elk received considerable emphasis in the 2005 Forest Plan revision as well as past Forest project analysis. Elk are the most popular wildlife game species on the Forest given the public access the Forest provides and the high public interest in elk hunting. Hunt Area 35 has provided a case study of the importance of forested cover and road densities with availability of elk hunting opportunities. From 1971 to 1980, elk hunters generated an average of 5,341 recreation days each year. In 1989, the season structure was changed to limited quota management due to declining hunter success due to hunter overharvest resulting from high road densities and lack of forest cover. Hunting improved, with improved hunter success, but at a with much lower recreation opportunity. From 1991 through 2000, elk hunters generated an average of 1,716 recreation days each year. This is a significant loss of hunting opportunity as well as economic benefit to the local economy.

Although Hunt Area 35 elk numbers have increased under more conservative management, problems persist with managing this subpopulation. Elk have changed their habitat and moved to private land refuges early in the hunting season hampering the ability to achieve harvest objectives. The lack of elk security on the Forest and high road densities likely contribute to this movement.

**Elk Security** – The EA should include a thorough review and analysis of the proposed projects' effect on elk security and potential elk security at the project scale as well as the hunt area scale. The Forest Plan strategy identifies elk security as an important component of elk habitat on Bighorn National Forest.

Forest Plan Chapter 1 – page 3. Maintain or increase the amount of elk (MIS) security areas at the forestwide scale. Current level is 47% of potential. Assess availability of security areas at the geographic area scale, and incorporate security area analysis into travel and vegetation project management decisions to increase availability, where feasible.

Furthermore, the Forest Plan has an elk security guideline directing project planning to include analysis of effects on amounts of security.

Forest Plan Chapter 1 – page 46. Maintain current amounts (no net decrease) of elk security areas at the Forestwide level for planned management actions. Coordinate with the Wyoming Game and Fish Department in project level analysis of effects, project design, and identification of improvement areas. Refer to Appendix A of the Revised Plan for the definition of security areas and implementation considerations.

The scoping notice notes that some areas of elk security may be impacted but will be mitigated by other management actions. Given that elk security is well below research recommended guidelines (Hillis et. al. 1991) at the Forest scale, no decrease should be considered acceptable. Furthermore, given that both hunt areas (elk hunt areas 34 and 35) where the project is located are well below recommended amounts of security, no decrease in either hunt area is acceptable. Existing security is so far below the recommended level, potential security should also be maintained. Although not meeting the security definition, this cover still provides value to elk, especially with the large-scale reduction in conifer cover proposed by this project and recently completed projects.

There is a large amount of research showing the impact of roads on elk. Research specific to the Bighorn Mountains (Sawyer 1997) showed that marked elk strongly selected for areas with lower road densities. The average road density of summer elk locations was 0.42 mile/sq. mile while the average road density on the Bighorn National Forest was 0.88 mile/sq. mile. (These figures do not account for the increased miles of motorized travel due to the designation of ATV trails.) During the hunting season, elk selected areas with slightly lower road densities (0.37 mile/sq. mile).

The EA should compare current levels of security and potential security in relation to the recommended level. Including maps would be helpful to visualize and assess this important component of elk habitat. It is important to consider that managing for such a low level of security leaves little room for flexibility, especially when wildfire could impact existing security or potential security. I recommend no roads closed due to the Tie Hack Reservoir mitigation plan or the Clear Creek/Crazy Woman Creek Designated Motorized Trail System Project be opened. Lastly, reductions in security in either hunt area should not be mitigated in the adjacent hunt area as both hunt areas are so low in existing security.

Managing elk populations to objective continues to be compromised by elk moving to private lands adjacent to the Forest. Maintaining conifer cover on the forest, especially security areas and potential security areas, is important to keeping elk available for hunters. High elk numbers on forest can impact habitat and compromise projects designed to improve habitat (i.e. Aspen enhancement projects). Forest management should work to maintain cover and reduce road densities to help keep elk on publicly accessible lands thereby facilitating harvest compatible with management objectives.



Timber Harvest Sustainability – The Forest Plan repeatedly uses “sustain” and “sustainable” when describing forest management goals, objectives and strategies. A couple examples relative to the proposed project includes:

Forest Plan Chapter 1 – page 9. Timber - Annually offer a reliable sustainable level of forest products (sawtimber, posts and poles, Christmas trees, and fuelwood) on forest lands.

Forest Plan Chapter 1 page 19. The Bighorn National Forest will produce a sustained flow of forest products and other commodity outputs.

The EA should include an analysis of the proposed project in relation to available timber resources. Given the Forest Plan has not been revised to account for the Roadless Area Conservation Rule, I suggest that the analysis focus on a scale of “suitable” timber resources not to include areas contained in inventoried roadless areas. This will provide a more accurate analysis of project effects. Likewise, the analysis should account for areas of elk security. This area of the Bighorn National Forest has a history of extensive timber harvest as well as more recent timber harvests over the last 10 years. The EA should include information including the percentage of mature timber currently available for harvest compared to the percentage of mature timber resources proposed for harvest under this project. Many of the expansive clear cuts and select cuts of the 1970's and 1980's are many years away from reaching mature age to be available for harvest assuming a 120-year stand rotation for lodgepole pine in the Bighorns. The EA should include a discussion of how this project manages for long-term sustainability identified in the Forest Plan at the project scale given the past extensive harvest and long-term growth required to achieve mature stands.

The EA should also justify why additional harvest is necessary in recent timber harvest boundaries, particularly in the Doyle Creek drainage west of the Hazelton Road.

I appreciate the opportunity to comment and look forward to the Forest's in-depth analysis supporting this project.



Dan Thiele  
Certified Wildlife Biologist, The Wildlife Society



#### Literature Cited

Hillis, J.M., M.J. Thompson, J.E. Canfield, L.J. Lyon, C.L. Marcum, P.M. DoJan, D.W. Cleery. 1991. Defining elk security: The Hillis Paradigm *in* Elk Vulnerability - A Symposium. Montana State Univ., Bozeman, April 10-12, 1991.

Sawyer, Hall. 1997. North Fork Powder River and Horse Creek Elk Studies in the Bighorn Mountains, Wyoming. Final Report. Wyoming Cooperative Fish & Wildlife Research Unit. Laramie, WY. 129 pp.

USFS – Bighorn National Forest. 2010. Revised Land and Resource Management Plan Administrative Correction #1-- 3/5/2010. 17 pp.