

FEB 17 2023

February 17, 2023

Subject: Pole Creek Vegetation Management Project

District Ranger Wayne T. Berrett;

This 90,000-acre proposal with 30,000 acres of potential harvestable acres is concerning. These comments address issues which the 2005 Bighorn National Forest (BNF) Land and Resource Management Plan (LRMP) show as other goals to strive toward. This project is primarily focused on timber issues. The proposal needs to balance the timber cutting within the project area with the other LRMP goals. My concerns include; is the proposed harvesting sustainable, pre-commercial thinning effectiveness and the economic costs of these actions to the taxpayer.

Timber Sustainability

With sales done from the 1990s to the current time, is timber harvesting sustainable while meeting the other goals and objectives of the LRMP?

I began my time on the Buffalo Ranger District in the fall of 1983 as timber/fire staff. My timber sale preparations included the Sawsite, Elgin Park and Taylor Creek sales. Concern for the sustainability of timber harvest led me to do an analysis of previous timber harvesting on the district in 1985. I reviewed the timber sale contracts files, which were still in the district files, for the 1940s through the early 1980s. While the average cut per year was 5 million board feet, the yearly production was just 3 million board feet from the 50,000 acres available for management. For more than two decades, the removal of timber exceeded growth by 2 million board feet per year. Acres cut during this period were nearly 18,000. Some of the proposed cutting units in the same area as the Dullknife Project of 2007, a WUI project, completed just a few years ago. Other recent timber sales include the Pole Creek sale, Poison Creek, Canyon Creek, Southwest Fuels, Billy Creek, Caribou Mesa, Buffalo Municipal Watershed and numerous WUI projects. How many acres have been harvested in this area since the 1980s? What is the volume removed from this area since the 1980s to the present including the Buffalo Municipal Watershed project?

In 1971, a report titled, "Forest Management in Wyoming" prepared by the U.S. Department of Agriculture, Forest Service, reviewed the impacts of large clearcuts in the National Forests in Wyoming including the Bighorns from the 1960s. This is at the same time clear cutting on the Bitterroot and Monongahela National Forests was raising concerns in the national news. The Wyoming report dealt with the issue of clearcutting, road building and decommissioning, regeneration, and the importance of wildlife, recreation and scenic quality. The same issues which are concerning with this proposal. Sustainability of timber cutting was and remains in question.

In 1985 the first BNF Forest Plan was finalized. Allowable Sale Quantity (ASQ) was 12.5 million board feet per year. Finding adequate timber volume while balancing the other multiple uses was becoming increasingly difficult. I was directed to survey the Rock Creek drainage. The assignment was to find 12.5 million board feet of timber - exactly the same amount as the BNF's ASQ. Over the next few summers, I spent considerable time searching the area. Not only was there not 12.5 million feet of timber, but any road building would have been extremely expensive. I mention this as an example of the issue with sustainability. The BNF was then struggling to find sufficient timber volume to meet the ASQ.

The 1985 plan included a seven-year regeneration standard. A lawsuit was filed against the BNF because a seven-year regeneration standard was in violation of NFMA's 5-year regeneration requirement. The court case was settled in 1991 with the BNF agreeing to meet the 5-year standard. Part of the settlement was establishing elevation limits for timber harvests. On November 18, 1991 the BNF Supervisor Lloyd D. Todd signed an amendment to the 1985 LRMP. It stated, "They [timber cutting] are located at elevations generally between 7,400 feet to 9,200 feet in elevation. The maps

delineating this information will be permanently available for public review in the Forest Supervisor's office in Sheridan, Wyoming during normal business hours." Are the maps available for review? Does this proposal plan any harvests above the 9200-foot elevation or below the 7400-foot elevation?

The proposal indicates regeneration (clear cuts) will be larger than the 40 acres allowed with NFMA's 5-year regeneration requirement. Cuts in the Buffalo Municipal Watershed project have been whole tree skidded. At the January 26 meeting it was stated that these cuts would be regenerated naturally due to the opening of the serotinous cones. Will the units have enough cones across the cuts to regenerate naturally? If tree planting is needed to meet the 5-year time frame, what will that cost?

The revised BNF LRMP of 2005, reduced the ASQ to 6.5 million board feet. However, it did not address the 2001 Roadless Acre Conservation Rule (RACR) which reduced the available commercial acres on the BNF. The BNF needs to amend the 2005 LRMP with a Forest Plan amendment to reflect the acres now in the roadless and the reduction of timber for the ASQ. In Goal 1 – Strategies 8. Maintain a forestwide system of old-growth habitat to sustain old-growth associated species and resources. Validate inventory of the Tongue River, Goose Creek and Clear Creek/Crazy Woman Creek geographic areas by 2010, (Page 1-4 of the BNF LRMP). On Page 1-27 under Biological heading Guideline 4.a: within a geographic area (9 total on Forest), maintain 10% of existing forest cover types (except for spruce-fir) in old growth, and maintain 15% of the spruce-fir cover type in old growth. How will Pole Creek comply with a sustainable harvest? Does the BNF have a current inventory of the old-growth for this project?

At the May 4, 2019 Steering Committee meeting at the Sheridan Court House, Forest Supervisor Johnson informed the attendees about the goal of selling timber in the coming years. Johnson stated the goal was at least 18,000 cunits (9MMBF) at a minimum. He continued that the Regional Office was hoping for 22,000 cunits (11MMBF). Both of those volumes exceed the ASQ set in the 2005 LRMP by significant amounts. The conversion of cunits to MMBF is based on Chris Thomas's conversions in his report for the Poison Creek project.

The scoping documents list one of the purposes and need for action in this project as "Chronic long-term impacts from dwarf mistletoe, rust fungus and overcrowding have left much of the lodgepole forest in a condition highly susceptible to bark beetle outbreaks." Dwarf mistletoe is endemic to lodgepole pines. Just as the term catastrophic wildfire is used to frighten the public, so is the mention of bark beetle outbreaks. Since the last ice age, dwarf mistletoe has existed in lodgepole pine. In RMRS-GTR-140 "Historic Range of Variability (HRV) for Upland Vegetation in the Bighorn National Forest, Wyoming" dated September 2005 on page 50 in review of dwarf mistletoe the report mentions, "While its effects can be negative for silviculture and the safety of forest visitors, mistletoe can also be beneficial for nesting birds and other animals." The RMRS-GTR-140 report analyzes the HRV for the period 1600 to 1890. It states, "Recent investigations have found that cold, high-elevation environments like much of the BNF may inhibit mountain pine beetle epidemics..." This is just a small sample of the report, as it is 105 pages long. Is there any documented evidence of mountain pine epidemics in lodgepole pine in the BNF?

Another stated purpose and need for action is "Society needs a reliable, sustainable source of timber..." In the Final Impact Statement Summary of the Forest Service Roadless Area Conservation of November 2000, on Page S-27 it states, "NFS lands satisfy approximately 5% of the nation's timber demand." What percent of the total NFS timber supply will be provided by this vegetation project?

Precommercial thinning

The proposed action for pre-commercial thinning of immature stands is concerning. First, spending an estimated \$200, my estimate, or more (this is probably very low) per acre appears to have a negative cost/benefit ratio. A previous silviculturist on the BNF projected that it takes 120 years to grow an 8-inch dbh tree on the BNF. In RMRS-GTR-140 on page 6 it states, "For example, we can say that most pre-commercial thinning prescriptions would lower canopy cover and increase the number of canopy gaps beyond the HRV in each stand thinned, at least for several decades, because no ecosystem processes mimic such an activity." What would the net present value of those funds be in 120 years versus

ecosystem processes mimic such an activity.” What would the net present value of those funds be in 120 years versus the return from the timber produced? Additionally, as this photograph shows an immature stand thinned is impenetrable to human or animal contrary to the statements made by the timber staff at the January 26 meeting.



Precommercial thinning in Schoolhouse Park area. Impenetrable for humans or wildlife due to pointy small stumps and tree debris on ground. Before thinning it may have been potential wildlife security cover.

Timber Economics

This information was released by Robert E. Wolf, as the BNF revised LRMP was finishing. Mr. Wolf worked for the Congressional Research Service of the Library of Congress in the Environmental and Natural Resources Division. In a letter to the BNF Supervisor, Wolf stated, “the timber cash flow for the 13 years from 1992-2004 shows that the BNF loses money on timber sales. The letter continues, “The Bighorn timber sale program is an unfailing “big-time” money loser. Sales lost an average of \$1,365 per acre logged or -\$124.79/MBF cut. Losses per unit have been growing, not decreasing. It ranks with the top money losers. For all Forests the average loss ran -\$536/acre logged or -\$70.09/MBF cut. Robert E. Wolf was a Fellow of the Society of American Foresters. Mr. Wolf has passed away so I do not have more current information. What will the cost per acre (taxpayer dollars) be for the Pole Creek project? This question was asked at the January 26, 2023 meeting, but not answered.

Wildland Urban Interface (WUI)

In review of the research paper linked below, the three headlines tell a different story about Western wildfires than what the BNF is proposing with this project.

<http://headwaterseconomics.org/wildfire/insights>

These bullet points come from the above referenced article:

1. Fuel reduction on federal lands will do little to reduce acreage burned and homes lost
2. In contrast to dry, formerly open forests, moister and cooler high-elevation forests naturally support high tree densities and fires of mostly high severity, and have changed little from their pre-suppression-era condition. In

short, not all forests are equally “out of whack” due to past fire suppression, and the need for restoration is not universal. The BNF is a high elevation forest.

3. High severity fires often have ecological benefits

The term “catastrophic wildfire” is used to scare the public. Natural fire in lodgepole pine is high intensity with a long return interval. When conditions are right, no suppression efforts can put out a stand replacement fire. The Duck burn and the Lost fire were both full suppression from the start. I was present the day the Lost Fire erupted. They still burned thousands of acres which have regenerated naturally. The Sheep Mountain fire of 1994 was human caused. An unattended campfire was the cause. The violators were identified and paid restitution.

In review of the proposed treatments, the 1/3-mile survivable space buffer area is quite concerning! U.S. Forest Service fire science research states that defensible space only needs to be 100 to 200 feet from a structure. In a USDA Forest Service Rocky Mountain Research Center article dated July 12, 2016, Jack Cohen concluded, “This area around the home that primarily determines home ignitions is called the home ignition zone (HIZ). The HIZ includes the home and vegetation, outbuildings and neighboring houses in the immediate surroundings within 100 feet of the home. Research shows that most home destruction is associated with burning embers [firebrands] and low intensity surface fires contacting the home, not the big flames of intense wildfires.” It is more likely that a shower of firebrands lofted into the air ahead of the wildfire and landing on homes or the immediate surroundings results in home destruction. Thus, reducing home ignition within the HIZ is the most effective homeowner action for preventing home ignitions during wildfires. Jack D. Cohen is a retired research physical scientist for the USDA Forest Service at the Rocky Mountain Research Station’s Fire, Fuel and Smoke sciences program. What research supports this extreme distance of 1700 feet for survivable space which is 8 to 16 times greater than the research done by the US Forest Service?

In RMRS-GTR-140, the discussion about wildfire in the BNF offers this analysis: “On a broader geographic scale, fire suppression and clearcuts (which can act as fuel breaks) appear to be less important than climate change on fuel buildup in determining the extent of the largest fires.” Historic large fires in the Bighorn NF spread to the northeast on the hot dry southwest winds. The Duck Creek Burn, Lost Fire and Gilead fire confirm this.

Structures Identified for WUI mitigation

- Goal 2 – Objective 2.a: Strategies 3. Prepare 2 vegetation management plans for developed recreation sites within 15 years, (Page 1-6 of the LRMP).

Many of the identified structures are either in an opening or do not exist! They include:

- the abandoned Kingsbury/Todd cabin at the end of FR 401,
- the decommissioned Crazy Woman Campground,
- Muddy Guard Cabin (non-forested),
- WYDOT Pole Creek Maintenance camp (edge of meadow)
- Muddy Cow Camp (edge of meadow)
- forest boundary areas of Poison Creek, Doyle Creek, Upper Doyle Creek (treated in a previous WUI project),
- Leigh Creek Dump Station,
- Sheep Mountain Lookout (on an open mountain top)
- Any of the campgrounds.

Both Muddy Guard Cabin and WYDOT’s Pole Creek camp are on the north sides of open meadows. Any wildfire burning in the historic northeast direction should pose little threat to them.

Campers visit campgrounds to enjoy the outdoors in the shade. Removal of trees as was done in Tie Hack campground leads to wind throw. This opens up the canopy making wind throw more likely and creates unpleasant conditions for camping. Creating a windfall hazard in a developed site would appear to expose the BNF to the liability of injuring visitors, or worse. In developed sites the BNF needs to practice tree management not timber management. The proposed partial harvest and WUI treatments near the Doyle Creek Campground will lead to wind throw in this area. The cuts will obliterate the ATV trails east of the Campground. These were created in the Clear/Crazy TM EA to provide visitor access while closing the road which paralleled Doyle Creek. Closing the road along the creek reduced sedimentation into the creek. The BNF should prepare the vegetation management plans listed in the LRMP as a goal if they have not done so for Doyle Creek Campground. The public does not want to camp in a timber sale or the resulting opening due to the blowdown. Has the BNF prepared any vegetation management plans for developed recreation sites? That would appear to make more sense than just going in a developed site and reducing canopy cover as this picture shows the result of that action.



Blowdown occurring into Tie Hack Campground from cutting and pile burning.

The burning of the hand piles after the thinning for WUI causes the mortality to the residual overstory. Examples include the hillside of dead trees south of the Hunter Summer Home group. The entire hillside is dead trees. Another example is south of the private inholding along North Clear Creek just east of the Hunter Road junction.



Hunter Summer Home Group hillside after pile burning.



Resulting clearing after the hand piles were burnt and the scorched trees are gone.

Roads

Desired Condition of the Forest:

- Goal 1 – Strategies 6. 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 analysis in travel and vegetation project management decisions to increase availability, where feasible, (Page 1-3 of the LRMP).
- Goal 2 – Objective 2.c: Strategies Short Duration Roads 1. When constructing new roads for projects, minimize the creation of permanent roads by using short duration roads where public need does not warrant permanent roads, (Page 1-9 of the LRMP).
- Goal 4 Objective 4.a: 11. Identify and decommission 4 miles of system or non-system road, annually, (Page 1-11 of the LRMP).

On page 1-14 the second paragraph of the LRMP states, “Approximately 40 miles of unneeded roads and user-created routes will be decommissioned at the end of the first decade to reduce resource damage.” On Page 1-19 the LRMP states, “The road system will meet public and resource management access needs and maintain valuable wildlife security areas. All forest system roads will be maintained to standard.”

In the specific Management area direction, Category 4, 4.2 Scenery Desired Condition Recreation: A diversity of recreation opportunities are available, ranging from nonmotorized (such as hiking, horseback and cross-country ski areas) to motorized (auto travel, ATV and motorcycle riding), both in the summer and winter (Page 2-43). Chapter 3 Geographic areas in the narrative for the Clear Creek/Crazy Woman Creek Geographic Area, the LRMP provides detail about the historic timber activities in this area. It states, “Historically, this geographic area has had more road construction and timber harvest than any geographic area on the Forest, with impacts originating in the tie hack era.” The narrative continues, “It is also the subject of the recently completed travel management planning effort (Clear/Crazy Designated Motorized Trail System Environmental Assessment), due to higher road densities and previous off-road travel opportunities.” (Page 3-3)

As outlined in Chapter 3 of the LRMP, this area of the Forest is the most heavily roaded geographic area. The Clear/Crazy Travel Management EA showed there was 2.5 miles of road per square mile in this area. Approximately 90% of the area was within one mile of a road. The few roads to be closed in the decision only reduced the density to 2.25 miles per square mile. The road closure goal of the LRMP would appear to support more closures in this analysis. Additionally, the LRMP discourages new permanent roads such as the Level 1 road proposed near Doyle Creek Campground

In July 2015 the BNF completed a Travel Analysis Report (TAR) reviewing every road on the Forest. The key results and findings provided by the Interdisciplinary Team (IDT) ranked routes based on their risks to natural, social, economic, and cultural resources and their benefits to recreation use, stakeholder access, timber management access, and emergency access. Each road was then further evaluated to determine if it was needed as part of the minimum road system.

Opportunities for changes to roads were identified. A summary of these findings follows:

- 175 miles of roads in the current system have a greater risk than benefit and should be considered for decommissioning, closure, or mitigated to reduce resource risk.
- 726 miles of roads in the current system have high to medium benefits and should be considered for regular maintenance to mitigate and prevent resource risk.

- 153 miles of system roads are recommended to be decommissioned and removed from the system or converted to motorized trails.

The Summary of Issues on Page 1 states, “Insufficient resources for maintenance of existing system of roads.” Page 22 and 23 of this report show there is a possibility to reduce Maintenance Level (ML) 1 and 2 roads on the Powder River District. ML 2 roads show a potential reduction of nearly 27 miles and ML 1 a potential reduction of nearly 45 miles. The TAR report shows Road Maintenance Budget on Page 37. The forest appropriated budget allocation for road maintenance and management of roads was \$558,000 in fiscal year (FY) 2013, \$590,00 in FY2014, and projected to be \$519,000 in FY2015. In prior years, appropriated road funding was supplemented by road construction and maintenance work performed by timber purchasers through the commercial timber sale program. This program has steadily declined over the past 20 years thus increasing demands on appropriated dollars for road maintenance. The maintenance costs shown on Page 39 show a spread of over \$800,000 per the Engineers’ and the INFRA estimate of \$2,600,000. The proposed addition of the ML 1 roads in three locations and the ML 2 road off of Pole Creek are in direct conflict with the 2015 TAR report. Has the IDT reviewed Table 12 on pages 52 – 56 detailing the specific recommendations for the Powder River Ranger District? Does the BNF receive enough funding to meet the LRMP stated goal of maintaining roads to standard in light of the statement under Summary of Issues? Will the Pole Creek Vegetation project implement recommended closures within the project area?

Pole Creek Nordic Area

- Goal 2 – Objective 2.a: Improve the capability of the Bighorn National Forest to provide diverse, high-quality outdoor recreation opportunities. (Page 1-5)
- Goal 2 – Objective 2.c: Strategies Tourism and Recreation 1. Coordinate with local government entities on tourism or recreation opportunities. (Page 1-9)

This has been used as a Nordic ski area for 50 years! The Powder Pass Nordic club has invested hundreds of hours of volunteer time to provide this recreational opportunity. It was originally chosen because there was a parking lot adjacent to US 16. This part of the forest receives just enough snow to provide a quality skiing experience if the high tree canopy is maintained. Any loss of tree cover through either timber harvests, WUI treatments, aspen cutting or thinning will eliminate it as a Nordic ski area. This is in direct conflict with Goal 2 recreation and tourism opportunities of the LRMP. For many years the BNF visitor map shows this area as S5. The S5 provision is “Closed to motorized vehicles, including snowmobiles from Dec 1 to May 1, unless revoked earlier due to lack of snow. This definitely indicates that management of this area is to promote and protect the Nordic ski trails. The BNF should change the Management Area Prescription for this area, the Powder Pass S5 area and Willow Park S5 area to a winter sports prescription when revising the LRMP. On February 16, I skied Pole Creek Nordic Area and it was obvious it had been warm enough already to begin melting snow from the trails. Has there been coordination with local government entities?

Aspen Treatment

The desire to maintain the aspen component of the forest vegetation on the BNF is commendable. The method of dropping the encroaching conifer in and around the aspen stands and leaving the limbs and tops on the trees is, however, unsightly. This is especially an issue in the Management Area (MA) Prescription for 4.2. The theme for 4.2 states, “Areas are managed for scenic values and recreation uses. It continues under the Desired Condition heading for Scenery which states the landscape has a predominately natural appearance. The conifer cutting should include slash reduction in the 4.2 MA prescription. How will the aspen treatments be implemented in the 4.2 to maintain the scenic integrity along US 16?

Log staging or reload sites

Log accountability would be an issue with this proposal. The transfer of ownership of the logs by temporarily allowing either state, private or federal timber would be complicated. Is it legal to shuttle federal timber to a staging area and later reload for hauling off of the National Forest? Or timber from state or private temporarily stored on National Forest lands? Who ensures ownership of the timber is maintained correctly?

Cumulative Affects: What would the affects be if the proposal is fully implemented considering past, present and future actions?

Summary of issues:

With sales done from the 1990s to the current time, is timber harvesting sustainable while meeting the other goals and objectives of the LRMP? (Page 1)

How many acres have been harvested in this area since the 1980s? (Page 1)

What is the volume removed from this area since the 1980s to the present including the Buffalo Municipal Watershed project? (Page 1)

Are the maps available for review? (Page 2)

Does this proposal plan any harvests above the 9200-foot elevation or below the 7400-foot elevation? (Page 2)

Will the units have enough cones across the cuts to regenerate naturally? (Page 2)

If tree planting is needed to meet the 5-year time frame, what will that cost? (Page 2)

How will Pole Creek comply with a sustainable harvest? (Page 2)

Does the BNF have a current inventory of the old-growth for this project? (Page 2)

Is there any documented evidence of mountain pine epidemics in lodgepole pine in the BNF? (Page 2)

What percent of the total NFS timber supply will be provided by this vegetation project? (Page 2)

What would the net present value of those funds be in 120 years versus the return from the timber produced? (Page 3)

What will the cost per acre be for Pole Creek project? (Page 3)

What research supports this extreme distance of 1700 feet for survivable space which is 8 to 16 times greater than the research done by the US Forest Service? (Page 4)

Has the BNF prepared any vegetation management plans for developed recreation sites? (Page 5)

Has the IDT reviewed Table 12 on pages 52 – 56 detailing the specific recommendations for the Powder River Ranger District? (Page 7)

Does the BNF receive enough funding to meet the LRMP stated goal of maintaining roads to standard in light of the statement under Summary of Issues? (Page 7)

Will the Pole Creek Vegetation project implement recommended closures within the project area? (Page 7)

Has there been coordination with local government entities? (Page 8)

How will the aspen treatments be implemented in the 4.2 to maintain the scenic integrity along US 16? (Page 8)

Is it legal to shuttle federal timber to a staging area and later reload for hauling off of the National Forest? (Page 9)

Or timber from state or private temporarily stored on National Forest lands? (Page 9)

Who ensures ownership of the timber is maintained correctly? (Page 9)

What would the affects be if the proposal is fully implemented considering past, present and future actions? (Page 9)

Sincerely,

A handwritten signature in cursive script that reads "Craig Cope". The signature is written in black ink and is positioned to the left of the typed name.

Craig Cope

Concerned Citizen