**Comments on the Colville National Forest Revised Plan and Draft Environmental Impact Statement**

Bauman, Shannon; Jourdan, Katherine; Kvernvik, Carolyn; Tischer, Veronica

*Gonzaga University Environmental Studies,* Dr. Gregory Gordon

Monday, April 25, 2016

**Livestock Grazing:**

Specifics of the proposal state that within 15 years of plan implementation, there would occur recondition or reconstruction of an average of 1 to 4 percent of the existing range infrastructure on National Forest System lands annually. Such range would include water developments, livestock handling facilities and fences.

Livestock practices intersect with the natural environment at a variety of crucial points, including wildlife, watershed functions, vegetation and soil health. We’ve compiled a list of some of the adaptive management techniques/implementations that you’ve described in your EIS and Draft Plan to reduce the environmental impacts of livestock, especially in riparian areas. These are: off-stream/off-site water developments, salting in upland areas, construction of fences, construction of livestock holding facilities, providing adequate forage for wildlife, larger riparian buffer zones, rest/recovery rotation techniques, altered distribution of livestock and discouraged trail construction via relocation. While many of these techniques address livestock issues in creative and commendable ways, we feel that some are not fully explained or examined for their potential environmental and managerial repercussions. Here are some specific examples to demonstrate our point:

* Off-stream/off-site water developments: Because livestock are drawn to the areas with high water availability, alternate water developments are needed to protect riparian areas. However, the construction of these developments was never discussed with regard to the watershed. How would they add to or alter runoff? Would the water developments run off of a well or pipe system? How might changes in water flow effect sedimentation issues?
* Providing adequate forage for wildlife: Line 1987 of the Draft Plan reads, “Livestock should be managed within range allotments so that adequate forage is available for deer and elk on summer and winter ranges.” This is a good idea in theory, but we wonder how you would actually quantify how much forage goes to wildlife and how much to livestock. It seems like deer and elk population numbers will be the best way to monitor their food availability, yet these amounts can fluctuate due to other factors that will need to be accommodated for. Also, your plan focuses heavily on updating livestock infrastructure in measureable benchmarks over the next 15 years. How would increasing the use of fences limit wildlife availability to forage resources?
* Altered distribution of livestock: The Affected Environment section of the EIS stated that the CNF revision “would not change the number or grazing intensity, but would alter the distribution of livestock to protect some unique habitats.” We understand these unique habitats to include places such as riparian areas, but what exactly does it mean to “alter” livestock distribution? If livestock will have less access to riparian and other areas, won’t that increase their density in the places they can occupy and correspondingly increase grazing intensity? And isn’t overgrazing a major concern of 19th and 20th century livestock in the CNF area that continues to affect soil, vegetation and overall ecosystem health? The most direct way to address the density/distribution problem seems to be to alter the number of livestock permitted. We suggest reevaluating your stance on keeping livestock numbers unchanged because it could provide a viable way with which to regulate livestock impacts on the landscape.
* Cattle and sheep allotments: On line 9394, the Proposed Management Plan states that "approximately 363,845 acres (33 percent) of the Forest are classified as capable for cattle grazing, and 448,160 acres (41 percent) are suitable for sheep grazing. There are a total of 58 allotments on the Forest; 42 are active, and 16 are not currently grazed. Of the 16 vacant allotments, 7 are likely to be used again in the foreseeable future. An animal unit month (AUM) is the amount of forage used by a cow and a calf, one horse, or five sheep or goats for one month. AUMs have fluctuated between approximately 28,000 and 33,000 over the past 10 years (Fletcher 2015), and forest plant alternatives do not propose changes to allotment boundaries, use, or AUMs." This appears to translate as a general guideline for areas which are current grazing allotments for sheep and cattle, with the intent to not change the current status of those allotments. However, on line 18,050, the Plan states that "today almost all permitted grazing is for cattle with only one sheep allotment (currently vacant) remaining." These two passages fail to clearly state which grazing allotments are designated as cattle grazing and which are specifically for sheep. Clarification would better enable the reader to understand the ramifications of the Plan.

**Minerals:**

 Minerals provide opportunities for continuing exploration, development, and production of mineral resources. As stated in the DRAFT Colville National Forest Proposed Revised Land and Resource Management Plan: “The revised forest plan makes no change in mining laws or regulations. Mining activity and mineral exploration will continue to be regulated by provisions of the 1872 mining law and existing regulations (36 CFR 228). The Forest Service has rules and procedures for the surface use of National Forest System lands that continue to apply as well.” Therefore, from our understanding there are not separate alternatives as pertaining to minerals, but only one mineral plan for all the proposed alternatives for the Draft Colville National Forest Plan. However, there are 11 prescriptions within the mining alternative. In these following comments we will remark on prescriptions agreed with and recommendations.

* The EIS states "Salable mineral materials, particularly sand, gravel and stone, are widely available throughout the Forest. Demand for saleable minerals is expected to grow with increased land development." Currently Draft Colville National Forest Plan, "includes management areas that emphasize managing for old forest habitats. Saleable mineral activities are not allowed in these areas. Mineral resource exploration and development would include reasonable requirements to protect old growth wildlife habitat." Therefore, we commend the plan for putting restrictions on salable mineral materials. There may be a greater demand for saleable materials, but by not allowing their extraction Colville National Forest it will ensure the health of habitat and wildlife. However, we would also like to comment that overall the Draft Plan for the Colville National Forest is unfortunately not user friendly. It would be difficult to restructure, but it would be helpful so as to avoid confusion.
* Mining covers a lot of area in the Colville National forest. According to the EIS, there are about 744 mining claims covering 14,980 acres. Though the alternatives related to mining do address some very good points such as requirements to protect old growth wildlife habitat and no mineral disposal sites within the area to name a couple, there are still areas that are not addressed clearly and without any motive to address the issue.
* Mining impacts many different areas that create negative effects on wetlands, animal habitats, water quality, and hydraulic function just to name a few. These all create ripple effects for greater issues at hand. The issues are repeated multiple times, but never give any motive to address the issue. On line 9118 in the EIS, it states "degraded riparian conditions are influenced by mining," but there is no alternative that addresses how this issue could be improved. And starting at line 12919 in the EIS, the sentence, "In Canada, timber harvesting, oil and gas development and coal mining have and would continue to affect lynx habitat,” was repeated at least twelve times in the Cumulative Effects section, but there seems to be no management direction that could help prevent this issue. The EIS clearly shows that many areas regarding mining are creating negative effects, but they are only listed and no solutions are addressed.