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January 23, 2020

Gayne Sears

District Ranger Newport-Sullivan Lake Ranger Districts

ATTN: Theresa Mathis Environmental Coordinator

Colville National Forest

315 N. Warren Ave

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Dear Theresa:

On behalf of the American Forest Resource Council (AFRC) and its members, thank you for the opportunity to comment on the "Trails" Project (Trails).

AFRC is a regional trade association whose purpose is to advocate for sustained yield timber harvests on public timberlands throughout the West to enhance forest health and resistance to fire, insects, and disease. We do this by promoting active management to attain productive public forests, protect adjoining private forests, and assure community stability. We work to improve federal and state laws, regulations, policies and decisions regarding access to and management of public forest lands and protection of all forest lands. Many of our members have their operations in communities within and adjacent to the Colville National Forest and management on these lands ultimately dictates not only the viability of their businesses, but also the economic health of the communities themselves.

The Trails Project is a forest and watershed restoration project that spans multiple land ownerships and boundaries located in Pend Oreille County in northeastern Washington State, north of Newport. The planning area is approximately 90,700 acres and includes tribal, state, federal and private lands. The various acreages by landowners within the Project area includes: Colville National Forest, 41,600 acres (46%), Private Lands 37,000 acres (41%), Kalispel Tribal Lands 3,700 acres (4%), Washington DNR managed trust lands 8,200 acres (9%), and Washington Department Fish and Wildlife 200 acres (<1%).

The goals of the Trails Project are to work with each other, and across property boundaries to sustain our forests, watersheds, and other ecosystem benefits into the future. Ecosystem benefits

to be examined include: forest resiliency to extreme weather events, providing clean drinking water, maintaining and improving clean air, providing wood products, maintaining social and cultural values, and providing jobs and support for the local economies. AFRC previously submitted pre-scoping comments on this Project on January 11, 2019 and most of those comments remain pertinent.

This project has multiple purposes including: to improve forest health, address the risk of insect and disease,

reduce the risk of wildfires, improve water quality and fish and wildlife habitat, contribute to the local economy, and connect lands and people. The proposed action is being coordinated by and between the Colville National Forest, Washington Department of Natural Resources, and the Kalispel Tribe of Indians. Implementation of this project will be done under the Good Neighbor Authority and the Tribal Forest Protection Act. Although information from many landowners was considered, the draft Proposed Action only includes activities on lands managed by the Colville National Forest.

The project's proposed action is based on direction in the Colville National Forest Land Management Plan (Forest Plan, 2019) as well as consistency with the Pend Oreille County Community Wildfire Protection Plan (CWPP, 2005 as amended).

The following objectives were developed which AFRC supports to implement the needed action and treatments.

? Trend the forest to the historic range of variability, reduce hazardous fuels and improve resilience to disturbance.

? Improve water quality and aquatic/riparian habitat conditions.

? Improve habitat conditions for big game and federally protected species.

? Provide opportunities for members of the public to connect to the landscape and projects that can contribute to the local economy.

While AFRC strongly supports this project, we offer the following information, suggestions, and support that we believe could make the project better.

1. First AFRC supports this project moving forward using the Good Neighbor Authority and Tribal Forest Protection Act. The makeup and ownership of the land in the Project area lends themselves to the reasons these Acts were enacted. With both DNR and Kalispel Tribal lands adjacent to the Colville Forest lands, it will give these landowners a voice in management of National Forest lands and a chance to enhance the protection of wildfire and insect and disease from encroaching on their lands.

2. AFRC is pleased to see that one of the objectives is contributing to the local economy. We believe that harvesting timber to create jobs and maintain existing infrastructure should be a stronger part of the purpose and need for this project. AFRC has several members that depend on timber from the Colville National Forest for their resource needs. The timber products provided by the Forest Service are crucial to the health of our membership. Without the raw material sold by the Forest Service these mills would be unable to produce the amount of wood products that the citizens of this country demand. Without this material, our members would also be unable to run their mills at capacities that keep their employees working, which is crucial to the health of the communities that they operate in. These benefits can only be realized if the Forest Service sells their timber products through sales that are economically viable. This viability is tied to both the volume and type of timber products sold and the manner in which these products are permitted to be delivered from the forest to the mills. There are many ways to design a timber sale that allows a purchaser the ability to deliver logs to their mill in an efficient manner while also adhering to the necessary practices that are designed to protect the environmental resources present on Forest Service forestland. AFRC members take a variety of log types and sizes. The Trails Project has a diverse group of age classes and timber types that should be managed to provide the variety of wood needed by AFRC member sawmills. Furthermore, in this diverse landscape there is a considerable amount of work that needs to be completed during and following harvest. This work can only get done if there are enough timber receipts from the project to accomplish this work. By putting more timber up for harvest, the Forest will receive more revenues to accomplish the restoration work as outlined.

3. AFRC always encourages the Forest Service to treat as many acres as practical when preparing an EA or EIS, and we believe the District has done a good job in that respect. The expense of these planning documents is high and we feel it is important to get as much work done using this document. Treating more acres also adds to the timber volume that will be produced. The National Forests in Washington are very important for providing the raw materials that sawmills within the State need to operate. The timber products provided by the Forest Service are crucial to the health of our membership. Without the raw material sold by the Forest Service these mills would be unable to produce the amount of wood products that the citizens of this country demand. Specifically, studies in Washington have shown that 12 direct and indirect jobs are created for every one million board feet of timber harvested. AFRC supports the acres being treated by each harvest method and the total acres that will be mechanically treated.

AFRC strongly supports the proposed regeneration treatments in the timber harvest units. There is a need to regenerate portions or all the stands of essentially pure Douglas-fir, grand fir, and lodgepole due to the prevalence of root disease. It is our experience that an intermediate harvest would exacerbate root disease effects (through buildup in the stumps and root systems of the pathogens that cause root disease), lead to heavy blowdown, and encourage advanced regeneration of grand fir and Douglas-fir. Regeneration harvest is also an integral component of a vegetation management program that strives to ensure a sustainable supply of timber products.

AFRC also supports the Forest's findings that there is a need to increase the size and scale of treatment areas to better match the size and scale of the insect and disease present within these stands. This would result in openings larger than 40 acres in many of the proposed harvest units. AFRC would support a forest plan amendment requesting the use of openings larger than 40 acres.

5. These larger openings will also help to trend this area towards the vegetative desired conditions providing a mosaic of age classes. Hardwood, shrub, and grass species are important sources of high-quality forage for deer and elk as they prepare for winter, over winter, and in the spring as they begin to replenish lost body mass from the previous winter. This proposal would retain and enhance aspen and provide valuable forage by reinvigorating existing shrub and grass communities making them more palatable and nutritious for big game species and other terrestrial wildlife.

AFRC would like to reference a study that was completed in 2018 that looked at the relationship of forest structure to quality of elk forage. Much of the data from this study came from the Bitterroot National Forest and surrounding areas, "Evaluating & Informing Elk Habitat Management" by DeVoe et.al. In that document it states

"Forage abundance and forage quality may also be enhanced through timber harvest treatments that reduce overstory canopy cover. We suggest that focusing management treatments on public lands and in forest vegetation types that are common within a region but with lower nutritional value may be one tool available to attract more elk onto public lands during the summer and reducing the redistribution of elk to private lands prior to and during the fall hunting seasons. Managers could also consider forest treatments in areas identified as important seasonal travel corridors for elk. Combining forest treatments with other strategies, such as reducing availability of high quality nutritional resources on private lands to elk, increasing hunter access on private lands, or altering harvest regulations to more evenly distribute harvest risk across public and private lands, may provide a more holistic approach to encouraging elk to remain on public lands.

Much of the DeVoe study compares the effects of no disturbance, wildfire and prescribed burns and silvicultural treatments. One significant finding outlined includes "Across disturbance types, the highest predicted TIN (Nutritional Value)values that were significantly different from the undisturbed class occurred in areas thinned [ge]21 years prior (7.5% greater), followed by areas clearcut [ge]21 years prior (6.7% greater) and areas thinned 11-20 years (5.5% greater) prior.

Other takeaways from the study include:

? Distribution and availability of high quality nutrition provided by landscape disturbances[mdash]including prescribed fire, forest thinning and openings[mdash]strongly influenced elk distribution.

? Forage abundance and quality may be enhanced through timber harvest treatments to attract more elk onto public lands.

6. One of the proposed activities in the Forests strategy points out that there are opportunities for thousands of acres of commercial treatments and non-commercial fuels and thinning treatments. AFRC encourages the Forest to use silvicultural treatments that will thin stands to wider spacings for increased residual tree vigor, reduced fuels loading, and improved habitat for wildlife. During recent AFRC field trips to look at stands following harvest on the Colville, it was often the consensus among the group that more trees should have been removed. AFRC suggests thinning the residual stand to a 40 sq.ft. basal area factor which would reduce the fuels loading. Wider spacings are especially important for fuels reduction and forest health work in the WUI.

Further, the insect damage, blowdown volume and overcrowding problem in many of the stands need to be addressed, and this will require heavy thinnings or regeneration harvests to establish young disease free stands. To supplement that comment, I am including a report by R. Haugo et al. titled Forest Ecology and Management. In that report is states that approximately 41% of all coniferous forest in eastern Washington and eastern and southwestern Oregon was in need of a transition to a different s-class in order to restore forest structure to a Natural Range of Variability condition. This report points out the fact that the forests in eastern Washington need to be thinned heavily to reduce fire danger and to return these stands back to more natural conditions.

To support the level of needed restoration, the report finds: "We have identified approximately 1.7 million ha presently in need of disturbance (including disturbance then succession) to restore forest structure NRV on US Forest Service lands outside of wilderness and inventoried roadless areas. Within our analysis area the US Forest Service averaged approximately 12,000 ha per year of hazardous fuels treatments between 2004 and 2013 and had a total of nearly 19,000 ha of forest vegetation improvements in 2013 (US Forest Service Pacific Northwest Region; unpublished data). Assuming that these treatments are additive and address disturbance restoration needs identified in this study, at these treatment rates it will take over 50 years to meet the identified disturbance restoration needs on these US Forest Service lands."

7. AFRC would like to remind the Forest that the benefits of conducting a project can only be realized if the Forest Service sells their timber products through sales that are economically viable. This viability is tied to both the volume and type of timber products sold and the manner in which these products are permitted to be delivered from the forest to the mills. There are many ways to design a timber sale that allows a purchaser the ability to deliver logs to their mill in an efficient manner while also adhering to the necessary practices that are designed to protect the environmental resources present on Forest Service forestland.

AFRC has had several monitoring meetings with the Forest discussing economics of timber sales. Specifically, the projects that went no bid in FY'19 have been reworked and now moving forward in FY'20. One of the primary issues affecting the ability of our members to feasibly deliver logs to their mills are often the firm operating restrictions in contracts. As stated above, we understand that the Forest Service must take necessary precautions to protect their resources; however, we believe that in many cases there are conditions that exist on the ground that are not in step with many of the restrictions described in Forest Service EA's and contracts (i.e. dry conditions during wet season, wet conditions during dry season). We would like the Forest Service to shift their methods for protecting resources from that of firm prescriptive restrictions to one that focuses on descriptive end-results; in other words, describe what you would like the end result to be rather than prescribing how to get there. There are a variety of operators that work in the Colville market area with a variety of skills and equipment.

Developing an EA and contract that firmly describes how any given unit shall be logged may inherently limit the abilities of certain operators. For example, restricting certain types of ground-based equipment rather than describing what condition the soils should be at the end of the contract period unnecessarily limits the ability of certain operators to complete a sale in an appropriate manner with the proper and cautious use of their equipment. To address this issue, we would like to see flexibility in the EA and contract to allow a variety of equipment to the sale areas. We feel that there are several ways to properly harvest any piece of ground, and certain restrictive language can limit some potential operators. Though some of the proposal area is planned for cable harvest, there are opportunities to use certain ground equipment such as fellerbunchers and processors in the units to make

cable yarding more efficient. Allowing the use of processors and fellerbunchers throughout these units can greatly increase its economic viability, and in some cases decrease disturbance by decreasing the amount of cable corridors, reduce damage to the residual stand and provide a more even distribution of woody debris following harvest. Tethered-assist equipment is also becoming a more viable and available option for felling and yarding on steep slopes. This equipment has shown to contribute little additional ground disturbance when compared to traditional cable systems. Please prepare your NEPA analysis documents in a manner that will facilitate this type of equipment.

Since this project is going to be a GNA project in cooperation with the Washington DNR, we would hope the flexibility found in their contracts would be implemented in this contract. Revenues returning to the State under the GNA contract would increase significantly if less restrictions are in the contract.

8. Another project objective is to improve water quality and reduce sediment sources to maintain or improve water quality and aquatic habitat as well as improving forest health. AFRC believes that managing in the riparian areas can help to achieve these goals. It has been well documented that thinning in riparian areas accelerates the stand's trajectory to produce large conifer trees and has minimal effect on stream temperature with adequate buffers. Removal of suppressed trees has an insignificant short-term effect on down wood, and ultimately a positive effect on long-term creation of large down woody debris and large in stream wood, which is what provides the real benefit to wildlife and stream health. We encourage the Forest Service to focus their riparian reserve treatments on a variety of native habitats. The ACS describes the need for treatments that meet the need of multiple habitat types and we encourage the Colville Forest to look for ways to incorporate treatments that meet those needs. Utilization of gap cuts to promote early seral habitat in the reserves, treatments to diversify all areas of the reserve, and prescriptions that account for the full range of objectives that the ACS mandates should be considered.

The tradeoffs that the Forest Service will likely be considering through the ensuing environmental analysis will be between achieving these forest health benefits and potentially having adverse impacts to streams. These impacts to streams typically include stream temperature, wood recruitment, and sedimentation associated with active management. We would like the Forest Service to review the literature cited below and incorporate its findings into your environmental analysis that will shape the level of management permitted to occur in riparian reserves.

Stream temperature

Janisch, Jack E, Wondzell, Steven M., Ehinger, William J. 2012. Headwater stream temperature: Interpreting response after logging, with and without riparian buffers, Washington, USA. Forest Ecology and Management, 270, 302-313.

Key points of the Janisch paper include:

? The amount of canopy cover retained in the riparian buffer was not a strong explanatory variable to stream temperature.

? Very small headwater streams may be fundamentally different than many larger streams because factors other than shade from the overstory tree canopy can have sufficient influence on stream temperature.

Anderson P.D., Larson D.J., Chan, S.S. 2007 Riparian Buffer and Density Management Influences on Microclimate of Young Headwater Forests of Western Oregon. Forest Science, 53(2):254-269.

Key points of the Anderson paper include:

? With no-harvest buffers of 15 meters (49 feet), maximum air temperature above stream centers was less than one-degree Celsius greater than for unthinned stands.

Riparian reserve gaps

Warren, Dana R., Keeton, William S., Bechtold, Heather A., Rosi-Marshall, Emma J. 2013. Comparing streambed light availability and canopy cover in streams with old-growth versus early-mature riparian forests in western Oregon. Aquatic Sciences 75:547-558.

Key points of the Warren paper include:

? Canopy gaps were particularly important in creating variable light within and between reaches.

? Reaches with complex old growth riparian forests had frequent canopy gaps which led to greater stream light availability compared to adjacent reaches with simpler second-growth riparian forests.

Wood Recruitment

Burton, Julia I., Olson, Deanna H., and Puettmann, Klaus J. 2016. Effects of riparian buffer width on wood loading in headwater streams after repeated forest thinning. Forest Ecology and Management. 372 (2016) 247-257.

Key points of the Burton paper include:

? Wood volume in early stages of decay was higher in stream reaches with a narrow 6-meter buffer than in stream reaches with larger 15- and 70-meter buffers and in unthinned reference units.

? 82% of sourced wood in early stages of decay originated from within 15 meters of streams.

Sedimentation

Rashin, E., C. Clishe, A. Loch and J. Bell. 2006. Effectiveness of timber harvest practices for controlling sediment related water quality impacts. Journal of the American Water Resources Association. Paper No. 01162

Key points of the Rashin paper include: Vegetated buffers that are greater than 33 feet in width have been shown to be effective at trapping and storing sediment.

Collectively, we believe that this literature suggests that there exists a declining rate of returns for "protective" measures such as no-cut buffers beyond 30-40 feet. Resource values such as thermal regulation and coarse wood recruitment begin to diminish in scale as no-cut buffers become much larger. We believe that the benefits in forest health achieved through density management will greatly outweigh the potential minor tradeoffs in stream temperature and wood recruitment, based on this scientific literature. We urge the Forest Service to

establish no-cut buffers along streams no larger than 40 feet and maximize forest health outcomes beyond this buffer.

9. The Forest is proposing to manage various Forest Service Roads to accomplish our management objectives. Most of the roads in the project area have not received any maintenance for over a decade. Some of the roads are currently open and drivable while other roads are closed with a barrier and are often undrivable because of thick brush and small trees growing in the road prism.

AFRC is concerned about the possible large cost for Road Management activities. AFRC encourages the Forest to be cognizant of the cost of road work and road storage and not to overload the project with these expenses. An intact road system is critical to the management of Forest Service land, particularly for the provision of timber products. Without an adequate road system, the Forest Service will be unable to offer and sell timber products to the local industry in an economical manner. The road decommissioning proposed in the Trails scoping notice likely represents a permanent removal of these roads and likely the deferral of management of those forest stands that they provide access to. The land base covered in this Project area are to be managed for a variety of forest management objectives. Removal of adequate access to these lands compromises the agency's ability to achieve these objectives and is very concerning.

We would like the Forest to carefully consider the following three factors when making a decision to decommission any road in the project area:

? Determination of any potential resource risk related to a road segment

? Determination of the access value provided by a road segment

? Determination of whether the resource risk outweighs the access value (for timber management and other resource needs).

We believe that only those road segments where resource risk outweighs access value should be considered for decommissioning.

Additionally, the Forest has on its 10-year plan the concept of fuel breaks along strategic roads within the Colville National Forest. AFRC supports this concept and suggests that these breaks be included as part of the Dollar Mountain Project, especially with the adjacency to the Colville Indian Reservation. At a minimum, these breaks should be 300 yards wide on either side of those roads. The stands within those fuel breaks should be thinned to a wide spacing and low basal area to reduce the threat of a crown fire going through the area. The purpose of the fuel breaks is to get the fire to lay down on the ground for suppression purposes. These fuel breaks were used on the recently sold Pass timber sale.

Another factor contributing to timber sale economic viability is rock source for required and/or optional road work. Costs associated with hauling rock long distances has been escalating in recent years and often represents a significant cost in timber sale implementation for our members. In fact, this spike in cost has recently been identified by several purchasers in Region 6 as a primary contributor to sales going no-bid. Quarry development (new or existing) on in close proximity to the Trails project should be considered if available. The value of having a good rock source close to future timber sales should be strongly considered.

10. AFRC believes that DXP could be an effective tool in this project. The current species composition is dominated by grand fir and lodgepole pine. A desired condition for the Colville Forest Plan is to have more forest dominated by ponderosa pine, Douglas-fir and western larch. This change in stand composition does not reflect the desired condition of the forest and has made these stands more susceptible to disease and disease related mortality. AFRC believes a DXP prescription could be used over a large part of the treatment area to achieve the

desired species composition and be a cheaper method for designating harvest trees.

11. We would like to encourage the Colville Forest to consider several documents related to carbon sequestration related to forest management.

McCauley, Lisa A., Robles, Marcos D., Wooley, Travis, Marshall, Robert M., Kretchun, Alec, Gori, David F. 2019. Large-scale forest restoration stabilizes carbon under climate change in Southwest United States. Ecological Applications, 0(0), 2019, e01979.

Key points of the McCauley paper include:

? Modeling scenarios showed early decreases in ecosystem carbon due to initial thinning/prescribed fire treatments, but total ecosystem carbon increased by 9-18% when comparted to no harvest by the end of the simulation.

? This modeled scenario of increased carbon storage equated to the removal of carbon emissions from 55,000 to 110,000 passenger vehicles per year until the end of the century.

? Results demonstrated that large-scale forest restoration can increase the potential for carbon storage and stability and those benefits could increase as the pace of restoration accelerates.

We believe that this study supports the notion that timber harvest and fuels reduction practices collectively increase the overall carbon sequestration capability of any given acre of forest land and, in the long term, generate net benefits toward climate change mitigation.

Gray, A. N., T. R. Whittier, and M. E. Harmon. 2016. Carbon stocks and accumulation rates in Pacific Northwest forests: role of stand age, plant community, and productivity. Ecosphere 7(1):e01224.10.1002/ecs2.1224

Key points of the Gray paper include:

Although large trees accumulated C at a faster rate than small trees on an individual basis, their contribution to C accumulation rates was smaller on an area basis, and their importance relative to small trees declined in older stands compared to younger stands.

? Old-growth and large trees are important C stocks, but they play a minor role in additional C accumulation.

We believe that this study supports the notion that, if the role of forests in the fight against climate change is to reduce global greenhouse gasses through maximizing the sequestration of carbon from atmospheric CO2, then increasing the acreage of young, fast growing small trees is the most prudent management approach.

Thank you for the opportunity to provide scoping comments on the Trails Project. I look forward to following the implementation of this project as it moves forward to the Draft EA period.

Sincerely,

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