July 16, 2019

Johnathan Tucker
Willamette National Forest
Middle Fork Ranger District
46375 Hwy 58
Westfir, OR 97386

In Reply To: Youngs Rock Rigdon Scoping

Dear Mr. Tucker:

American Forest Resource Council (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. AFRC represents over 50 forest product businesses and forest landowners throughout the West. Many of our members have their operations in communities adjacent to the Middle Fork Ranger District, and the management on these lands ultimately dictates not only the viability of their businesses, but also the economic health of the communities themselves. The state of Oregon's forest sector employs approximately 61,000 Oregonians, with AFRC's membership directly and indirectly constituting a large percentage of those jobs. Rural communities, such as the ones affected by this project, are particularly sensitive to the forest product sector in that more than 50% of all manufacturing jobs are in wood manufacturing.

AFRC is glad to see the Middle Fork Ranger District proposing vegetation management on lands designated as Matrix and Riparian Reserve that will likely provide useful timber products to our membership. Our members depend on a predictable and

economical supply of timber products off Forest Service land to run their businesses and to provide useful wood products to the American public. In recent years the Middle Fork Ranger District has been the leader in proposing and implementing diverse silvicultural treatments that move beyond the one-dimensional practice of exclusive thinning that has dominated the Forest Service's forest management paradigm over the past twenty years. This includes various forms of regeneration harvest in the Matrix land allocation that place an emphasis on the Forest Service's requirement to manage its timber resources in a sustainable manner. AFRC has clamored for many years that the past management regime of exclusive thinning is ultimately unsustainable in the Douglas-fir forests present on the Willamette National Forest. Some level of regeneration harvest is necessary for a sustainable timber program and we thank the Middle Fork Ranger District for continuing to be the leader on striving toward that sustainability. Implementing the types of sustainable forestry treatments discussed above starts with how the Forest Service frames each individual vegetation management project. In recent years it has been a struggle to convince the Forest Service that sustainable timber management is both a worthy goal aligned with the agency's mission and a goal that is in the public interest. We are glad to see the Middle Fork Ranger District recognize this objective in the Youngs Rock Rigdon project scoping notice. We urge the District to implement the treatments proposed in the scoping notice that meet this objective.

The treatments on the Youngs Rock Rigdon project will also likely provide short-term products for the local industry and we want to ensure that this provision is an important consideration for the decision maker as the project progresses. As we will discuss later in this letter the importance of our members' ability to harvest and remove these timber products from the timber sales generated off this project is paramount. We would like the Forest Service to recognize this importance by **adding economic viability & support to the local infrastructure to the purpose and need** of the Youngs Rock Rigdon project. Supporting local industry and providing useful raw materials to maintain a robust manufacturing sector should be a principal objective to any project proposed on Forest Service land, particularly those lands designated as Matrix.

The consideration of active management on every acre of appropriate land, regardless of its land allocation, is important to our membership as each year's timber sale program is a function of the treatment of aggregate forested stands across the landscape. Based on the scoping notice, it appears that the District is proposing commercial treatment on less than 14% of the project area. This percentage is typical of many Forest Service vegetation management projects and although AFRC would like to see the agency treat a higher proportion of the landscape, we understand the multiple directives and land management restrictions in place that make doing so difficult. Given the relatively small scale at which this project is proposed to be implemented on, we urge

the District to look for ways to maximize treatment where it ***is*** proposed and to avoid deferring units or setting aside portions of units for what is often referred to as "skips" (please consider the fact that 28,500 acres of the project area will essentially be "skipped"). Skips within the watershed are plentiful, what is not plentiful are openings. If the District truly wants to diversify the landscape, then it should focus on creating openings in the forest and minimizing untreated areas within the 4,500 acres of proposed treatment. The scoping notice indicates that gaps and regeneration harvest will be considered. We recommend utilizing these treatment types on both of the land allocations where management is proposed (Matrix and riparian reserve). The size of these cuts will have to be tailored to each land allocation, but we believe that they can be used to meet objectives for each of these three allocations. On Matrix land, large patch cuts and shelterwood could be implemented to provide early seral habitat (an objective exclusive to Matrix land), provide timber products in a sustainable manner (also exclusive to Matrix land), and diversify the vegetation type on the landscape. On riparian reserve land, small and medium sized patch cuts can be implemented to provide species and structural diversity at the stand level in otherwise uniform plantations of primarily Douglas-fir.

We recommend the District review the following PNW paper if you have not already:

Garman, Steven L.; Cissel, John H.; Mayo, James H. 2003. Accelerating Development of Late-Successional Conditions in Young Managed Douglas-fir Stands: A Simulation Study. Gen. Tech. Rep. PNW-GTR-557. U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station.

This study suggests that heavy thinning promoted rapid development of large boles, vertical diversity, and tree-species diversity, but required artificial creation of dead wood. Treatments that retained more than 40 percent of the overstory delayed attainment of late-successional conditions by 10 to 30 years but resulted in higher levels of most late-successional attributes at the end of a rotation. We would like the Forest Service to consider these two studies and to weigh these tradeoffs and consider a variety of thinning intensities to achieve desired outcomes.

We understand that portions of the project area are overlaid by the critical habitat layer for the northern spotted owl. This CHU designation does not preclude vegetation management treatments that are in line with the Matrix land allocation, and in fact encourages land managers to consider implementation of forest management practices recommended by the Revised Recovery Plan (USDI FWS 2011) to restore ecological process where they have been disrupted or suppressed, and application of ecological forestry management practices **(including regeneration harvest)** within critical habitat

to reduce the potential for adverse impacts associated with commercial timber harvest when such harvest is planned within or adjacent to critical habitat.

The Final Critical Habitat Rule recognizes the need and the appropriateness of such treatments throughout the document:

- **We recognize that ecological restoration is not the management goal on all NWFP land use allocations (*e.g.* matrix) within designated critical habitat, and we provide a discussion of options land managers could consider to tailor traditional forest management activities on these lands to be consistent with conservation of current and future NSO habitat (pg. 27).**
- **On Matrix lands under the NWFP where land managers have a range of management goals, the Service anticipates that not all forest management projects in critical habitat will be focused on the development or conservation of northern spotted owl habitat (pg. 283).**
- **Targeted variable-retention harvest could be considered where the conservation of complex early seral forest habitat is a management goal (pg. 284).**

As the second bullet point suggests, is important to note that the **CHU is not defacto LSR**. Nor does the CHU suggest that the entire unit be maintained in some level of spotted owl habitat. These are important distinctions to make and will likely drive the silvicultural prescriptions on the Youngs Rock Rigdon stands.

To fully illustrate the range of treatments that are appropriate on lands within the CHU, we encourage you to review a project that was analyzed and implemented by the Roseburg BLM District called 'Here's Your Sign', which was analyzed under the 'Camus Valley EA'. The BLM analyzed and implemented a variable retention harvest (regeneration harvest) in a 70-year old stand in Matrix lands designated as CHU. We think it's important to be aware of the full suite of treatments appropriate within this CHU, regardless of whether the Middle Fork District plans to propose such treatments.

http://www.blm.gov/or/districts/roseburg/plans/files/Heres_Your_Sign_Decision_Document.pdf

http://www.blm.gov/or/districts/roseburg/plans/files/Camas_Valley_2011_Harvest_Plan_EA.pdf

The Camus Valley project also illustrates and validates an important reality about managing within the CHU. And that is that **there is no need or requirement to maintain NSO habitat on any given acre within the NSO CHU**. This fact will be

important on the Youngs Rock Rigdon project whether the District attempts to do any regeneration harvest or not. We have seen the stand types that exist and believe that the correct treatment on the ground (heavy thinning and/or patch cuts) may require the removal of certain primary constituent elements that are often associated with owl habitat.

In addition to the affects to NSO habitat, this project may also have short-term effects to the NSO (based on the presence of actual owls) due to the assumption that any type of forest management activity, including those that maintain habitat types, will have a negative impact on owls and their prey. This assumption is typically based on a few scientific pieces of literature published over the past decade. We would like the Middle Fork District to consider a recently published study conducted by NCASI when assessing treatment areas and their potential affects to owls:

Larry L. Irwin, Dennis F. Rock, Suzanne C. Rock, Craig Loehle, Paul Van Deusen. 2015. Forest ecosystem restoration: Initial response of spotted owls to partial harvesting

Among other findings, this study concluded that partial-harvest forestry, primarily commercial thinning, has the potential to improve foraging habitats for spotted owls.

AFRC would like to remind the District that this planning area is nearly 100% Matrix land and your LRMP does not have specific objectives in this land allocation to develop the level of late seral habitat that this project is proposing. Regardless, the scoping notice indicates and emphasis on creating late seral habitat. With that said, AFRC would at least like the District to develop an alternative that treats the proposed stands to maximize attainment of the conditions described in the purpose & need. **Specifically, we would like to see an alternative where silvicultural prescriptions are designed to "create late seral open forest" uninhibited by the canopy cover limitations that are typical of Forest Service projects in the range of the NSO.** There should be no reason why the District should be modifying unit prescriptions in the Matrix land allocation to retain a higher level of canopy than is needed to meet the desired end results. We made site visits to proposed treatment units that warrant heavy removal of Douglas-fir "in-growth" in order to meet the outcomes described in the scoping notice. Artificial sideboards on residual stand density would retard the ability of the stand to attain the results described. **Please develop an alternative that does not impose these sideboards.**

During our site visits we also noticed previously managed stands in the stem exclusion phase of seral development that were ***not*** identified for treatment on the enclosed scoping map. We believe that these stands warrant treatment to either increase the amount of early seral habitat in the planning area through regeneration harvest

treatments or to increase stand-level diversity and structure by applying density management as described in the scoping notice. Photographs of these stands are below to illustrate the conditions we noted. We would be happy to visit these stands with District staff to discuss treatment options.

* Stand located NE of Unit 2602 & 2357 along the 2129 road

* Stand located east of unit 2626 on the 5293 Road

AFRC is glad to see that the Forest Service is taking a proactive approach to treating riparian reserves. After visiting several stands proposed for treatment it's clear that the undesired forest conditions (overly dense and uniform stands) that exist in the uplands also exist in the riparian reserves. The forest health benefits that you expect to attain through upland treatments can therefore also be achieved in riparian areas with similar active management prescriptions, and so we urge the Forest Service to strive toward maximizing the acres of riparian reserve treated to meet those objectives. 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 Middle Fork District 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.

Benda, L.D. Litschert, S.E., Reeves, G. and R. Pabst. 2015. Thinning and in-stream wood recruitment in riparian second growth forests in coastal Oregon and the use of buffers and tree tipping as mitigation. *Journal of Forestry Research.*

Key points of the Benda paper include:

- 10-meter no-cut buffers maintained 93% of the in-stream wood in comparison to no treatment.

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.

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.

The primary issues affecting the ability of our members to feasibly deliver logs to their mills are firm operating restrictions. 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 Middle Fork 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.

Constructing forest roads is essential if active management is desired, and we are glad that the Forest Service is proposing the roads that are needed to access and treat as much as the project area as possible in an economically feasible way. Proper road design and layout should pose little to no negative impacts on water quality or slope stability. Consistent and steady operation time throughout the year is important for our members not only to supply a steady source of timber for their mills, but also to keep their employees working. These two values are intangible and hard to quantify as dollar figures in a graph or table, but they are important factors to consider. The ability to yard and haul timber in the winter months will often make the difference between a sale selling and not, and we hope that the Middle Fork District is working to accommodate this.

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 Youngs Rock Rigdon 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 to us.

Recommendations provided in the Road Investment Strategy (RIS) will likely be a starting point for the District to consider road infrastructure needs. The RIS directs the agency to analyze roads for decommissioning where *"the resource risk from these roads potentially outweighs the access value and the road is very unlikely to be needed for administrative use in the future."* The Strategy also directs the agency to analyze roads

for closure where *"the resource risk from these roads potentially outweighs the access value, but the road may be needed for administrative use in the future."*

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

1. Determination of any potential resource risk related to a road segment
2. Determination of the access value provided by a road segment
3. 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. We would like the District to develop action alternatives that provide the decision-maker with options on whether to maintain, store or decommission each road segment analyzed.

AFRC is happy to be involved in the planning, environmental assessment (EA), and decision-making process for the Youngs Rock Rigdon EA. Should you have any questions regarding the above comments, please contact me at 541-525-6113 or ageissler@amforest.org.

Sincerely,

Andy Geissler
Federal Timber Program Director
American Forest Resource Council