April 15, 2019

Jim Roden
Clackamas River Ranger District
Mt Hood National Forest
595 NW Industrial Way
Estacada, OR 97023

In Reply To: North Clack Preliminary Assessment

Dear Mr. Roden:

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 Clackamas River 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 Clackamas River RD proposing vegetation management treatments on their Matrix, Late Successional Reserve, and Riparian Reserve Land Allocations that strives to provide a sustainable and reliable supply of timber products in an economically viable manner. The long term sustainability of these timber products are crucial for the long term viability of our membership and the communities they support, and the Matrix land allocation is the only portion of the National Forest System where

timber management can be relied upon. We appreciate the Clackamas River RD proposing treatments that will yield wood products our members can utilize, as well as treatments that will address the sustainability of the timber resources by implementing regeneration harvest. We also applaud the Clackamas River Ranger District for being one of the first and only districts in western Oregon to see the shortcomings of the current "thinning only" management paradigm that has dominated the Forest Service's vegetation management program in the Pacific Northwest for decades by breaking out of that mold and prescribing regeneration harvest. Opponents of this type of treatment will likely accuse the District of "going backwards" to management styles of prior years. However, AFRC knows that the District is actually blazing a path ***forward*** to inform other Region 6 Forests how to fully implement the ***current*** land management plans that simply were never implemented since their inception. Finding creative ways to integrate sustainable timber management needs with the plethora of other resource needs is forward thinking indeed.

We are glad to see a purpose & need that clearly describes the statutory direction that the USFS is under that requires timber resources to be managed in a sustainable manner. **Based on fundamental forestry principles and the ecology of Douglas-fir forests, it is impossible to manage timber resources sustainably in this region in the absence of regeneration harvest.** The Forest Service cannot thin forever. Ultimately the Forest Service will run out of stands to thin, and by that point the forest age-class distribution will be far out of balance to the point where the reliability and sustainability of its timber supplies will be compromised. We urge the District to fully describe these realities in the ensuing Environmental Assessment. We also would like the District to include in this EA a breakdown of how many acres of regeneration harvest have been implemented on the District since the inception of the northwest forest plan. Our assumption is that this total will be quite small. This review of past management activities will illustrate the fact that there is indeed a ***backlog*** of regeneration harvest needed to meet the Forest plan—such a backlog will emphasize the appropriateness of implementing Alternative 2 described in the PA, which considers 116 acres of additional regeneration harvest acre.

We would like the District to consider supplementing some of the Purpose and Need described in the PA. On page 5 of the PA, the District describes the Need to "have forest stands that can provide wood products now and in the future." We recommend you consider expanding on this need by including the need to develop a management strategy that can "deliver this provision of wood products now and in the future." Such a strategy should include a ***balanced combination*** of both thinning and regeneration harvest.

Page 11 of the PA states that "timber emphasis land allocation across the District is restricted by an overlay of Critical Owl Habitat." AFRC would like the District to articulate and characterize the intent and the relevance of the CHU appropriately. The intent, as it was written, of the CHU was not to prohibit regeneration harvest or to establish treatment thresholds across all 9 million acres of the unit. Nor did the CHU in any way modify the Forest's existing LRMP. In fact, the Fish & Wildlife Service was explicit in prescribing the opposite:

- **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).**

We would like the District to consider including some of this information into the North Clack EA to illustrate the role that the CHU actually plays in land management decision making for the District. The CHU should not, as the PA states, "restrict" the C1-Timber Emphasis area at all.

We appreciate the District taking a informed look at the impacts of the treatments on the northern spotted owl (NSO). In particular, we are glad to see that the District is considering the amount of dispersal habitat needed in the project area for NSO movement. Page 46 states that "dispersal habitat is not a limiting factor in the project area." We urge you to consider quantifying in the ensuing EA how much dispersal habitat (including NRF and other habitats that can also be used for dispersing owls) there is—including how much more dispersal habitat there is today versus how much there was at the inception of the northwest forest plan (if that data is available). We have noticed other Districts in the Region take a oversimplified approach to dispersal needs where ***any*** removal will result in an adverse effect to owls, rather than taking an informed approach that considers current inventory and actual needs. It's refreshing to see the Clackamas River RD take the informed route.

We are glad to see the District considering a range of thinning prescriptions, including one that proposes heavy thinning in the Matrix land allocation. We also urge

the District to consider a range of thinning intensities when developing prescriptions to create diversity across the landscape and to accelerate the development of late-seral habitat conditions. 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 this study and to weigh these tradeoffs and consider a variety of thinning intensities to achieve desired outcomes.

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 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 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 thinning 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 dense, uniform forest stands accelerates the stand's trajectory to produce large conifer trees, vertical diversity, and tree-species

diversity (Garman, Steven L.; Cissel, John H.; Mayo, James H. 2003.); all characteristics that we assume are desirable in riparian areas as much as they are desirable in the uplands.

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.

We would also like to 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 District to look for ways to

incorporate treatments that meet those needs. The Warren paper cited above notes the benefits of gap creation in riparian reserves. Utilization of gap cuts to promote early seral habitat in the reserves should be considered.

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 Clackamas River 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. It appears, based on the PDF supplement to the PA, that the District is striving toward such an EA focused on flexibility and end-results as opposed to one that imposes firm non site-specific requirements. We appreciate this approach and urge the District to maintain this level of flexibility through the EA development.

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 District is working to accommodate this. This is particularly critical when offering timber sales that include a component of helicopter yarding. Securing helicopters in the summer months is extremely difficult for our membership, primarily due to competing needs for fire suppression. **Ensuring that roads that access helicopter units are rocked to permit wet season hauling is critical to the successful implementation of those units.**

We see in the PA that the District is considering road system modifications based on the 2015 TAR, including the potential for decommissioning and storage. AFRC is particularly concerned about an in-tact road system that facilitates the active management on appropriate lands, specifically those lands designated as Matrix where sustainable timber management is required. Sustainable timber management is unlikely to occur in an economical manner without a quality road system in place. The Road Investment Strategy 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."* The future management implications of closing a road versus decommissioning a road are significant. Decommissioned roads will likely never be reopened again, whereas stored roads may be used in the future. **We would like the Forest Service to recognize the difference between these two road management recommendations and to consider roads in the North Clack project area that are at risk of resource damage for *both* decommissioning and closure, based on the future management needs.**

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 follow 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.

AFRC is happy to be involved in the planning, Environmental Analysis, and decision-making process for the North Clack project. 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 Manager
American Forest Resource Council