June 3, 2019

Sherri Chambers
Umpqua National Forest
North Umpqua Ranger District
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Glide, OR 97443

In Reply to: Swamp Creek GNA Categorical Exclusion Scoping Document

Dear Miss Chamber:

Introduction

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

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 North Umpqua Ranger District (NURD), 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 61,051 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.

Purpose and Need

AFRC is glad to see the NURD proposing vegetation management on their Northwest Forest Plan Matrix and 1990 Umpqua Land and Resource Management Plan MA11 (Big Game Winter Range and Timber) lands 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

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(FS) land to run their businesses and to provide useful wood products to the American public. The treatments on the Swamp Creek GNA Project will 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 appreciate the FS for recognizing the land use allocations and incorporating production of wood products for the economy as part of the **purpose** of the Swamp Creek GNA 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 FS land, particularly those lands designated as Matrix.

NEPA is a procedural statute. It requires only that environmental consequences of an action be analyzed and disclosed. A project designed to produce timber production is entirely consistent with NEPA. In addition, this Project is being analyzed under the §220.6 (12) categorical exclusion (CE). CEs do not require comment periods, especially not a scoping period. In the future, AFRC suggests efficiently completing NEPA projects through the processes required in the Act. The point of completing a CE is to increase efficiencies through completing projects that are routine in nature and/or with predictable effects.

Maximizing Treatment Area

AFRC understands that the CE being utilized restricts treatment acres to no more than 70, so we urge the FS to implement a full 70 acres. The first phase of the Project analyzed 130 acres with the intent to utilize the best 70 acres for the Project. AFRC suggests defining "best" through the purpose and need of the Project. The acres that have the greatest ability to **improve stand growth and vigor** while **producing wood products for the economy** are the acres that should be included in the final 70 acre CE.

Economics and Operating Restrictions

AFRC would like to pose a few issues to the FS.

1) How would the proposed activities affect the socioeconomics of the local communities?
2) How would the proposed activities be paid for?
3) How would the proposed activities allow for a sustainable flow of timber?

The timber products provided by the FS are crucial to the health of our membership and local economy. Without the raw material sold by the FS, 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 FS 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 FS forestland. Logging contractors must average 10 months of work per year in order to be profitable. To be clear, we are advocating that you consider the economic viability of the Project and make sure that it is designed in a way that makes sense for the market.

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 FS must take necessary precautions to manage 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 FS NEPA and contracts (Ex. dry conditions during wet season). We would like to see the NURD shift their methods for protecting resources from that of firm prescriptive restrictions to ones that focus on descriptive end-results. There are a variety of operators that work in the NURD market area with a variety of skills and equipment. Developing a NEPA document and contract that firmly describe 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. 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 proposed area is planned for cable harvest, there are opportunities to use certain ground equipment such as feller bunchers and processors in the units to make cable yarding more efficient. Allowing the use of processors and feller bunchers 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.

The newest operating system is tethered logging. This system allows ground based equipment to operate on slopes greater than 35% by decreasing the PSI of the machine and therefore the ground disturbance. The Region 6 soils cadre is developing a better understanding of tethered logging. Please do not write yourself out of using this innovative technology. **We recommend phrasing the language in your ensuing NEPA document to focus on desired end results for soil conditions rather than prescribing the type of equipment necessary to meet those conditions.**

Roads

Constructing forest roads is essential if active management is desired, and we are glad that the FS 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 are glad the NURD is working to accommodate this by proposing rock application to roads that include cable yarding systems.

Riparian Area Treatment

AFRC urges the FS to consider taking a proactive approach to treating riparian reserves. We are glad to see that some units have started incorporating this into their projects. 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 FS 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 FS will likely be considering through the ensuing NEPA document 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 FS to review the literature cited below and incorporate its findings into your NEPA document 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 point 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 un-thinned 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 un-thinned 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 point 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 point 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.

Dry Forests

Messier, Michael S., Shatford, Jeff P.A., and Hibbs, David E. 2011. "Fire Exclusion effects on riparian forest dynamics in southwestern Oregon". *Forest Ecology and Management*. 264 (2012) 60-71.

Key points of the Messier paper include:

- Fire exclusion has altered the structure, composition, and successional trajectory of riparian forests in fire-prone landscapes.
- Fire exclusion has been associated with increase in tree density and recruitment of shade-tolerate species that may replace large diameter, more decay-resistant Douglas-fir trees.
- A hands-off management regime for these riparian forests will have ecologically undesirable consequences.

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 FS 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 FS to focus their riparian reserve treatments on a variety of native habitats. The Aquatic Conservation Strategy applicable to units managed under the NWFP describes the need for treatments that meet the need of multiple habitat types and we encourage the NURD 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. We urge the NURD to review two recent vegetation management projects from the Willamette National Forest that both implemented gap-cuts in the outer portions of the riparian reserve network. The first, located on the Detroit Ranger District called Highway 46, is proposing treatment of 934 acres of riparian reserve thinning, including riparian stands over the age of 80 and implementing gap cuts. The

second, located on the McKenzie River Ranger District called Green Mountain, is proposing treatment 901 acres of riparian reserve including gap cuts.

NSO Canopy Condition

Among other findings, a Northern Spotted Owl (NSO) Canopy Condition study concluded that partial-harvest forestry, primarily commercial thinning, has the potential to improve foraging habitats for spotted owls. The treatments being proposed will likely affect NSO habitat to some degree. Often this level of effect is quantified by the amount of forest canopy that remains following thinning treatments. AFRC has general concerns with how the FS has been measuring these effects to NSO habitat, specifically regarding canopy cover/closure. There is no scientific or biological justification for canopy closures greater than 40% regarding providing dispersal habitat for the northern spotted owl.

Effects on NSO

In addition to the effects 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 NURD 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.

In addition, tall patches of trees may be more important for the vitality of NSOs. We suggest looking at this article to understand why downgrading habitat may be better than maintaining canopy cover.

North, M. P., Kane, J. T., Kane, V. R., Asner, G. P., Berigan, W., Churchill, D. J., . . . Whitmore, S. (2017). *"*Cover of tall trees best predicts California spotted owl habitat*". Forest Ecology and Management*. 405, 166-178. doi:10.1016/j.foreco.2017.09.019

Key Points:

- Focus on preserving patches of large/tall trees rather than canopy cover
- High canopy cover does not incorporate important habitat components

Monitoring

AFRC recognizes all the demanding work put into completing NEPA. Therefore, we would like to see a detailed monitoring methodology for implementation and post implementation (pre-sale and post cut-out). It is not always clear if and how all the arduous work on the front end is coming to fruition. It is paramount quality control occurs. If site specific prescriptions are not written correctly or if those prescriptions are not implemented correctly, then all the work put into the NEPA is moot. Due to this Project being the first NEPA completed through the GNA process, monitoring of costs will also be necessary to understand the pros and cons of utilizing GNA in this capacity. Additionally, AFRC is interested in knowing what is planned for the additional 60 acres that were analyzed during Phase 1 of this Project that do not end up being utilized for the CE.

Thank you for the opportunity to provide scoping comments on the Swamp Creek GNA Project. We look forward to following the implementation of this Project as it moves forward.

Sincerely,

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