



January 10, 2019

Linda Wright
Northwest Oregon BLM
Upper Willamette Field Office
3106 Pierce Parkway, Suite E
Springfield, OR 97477

In Reply to: King Mosby Scoping

Dear Ms. Wright,

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 Upper Willamette Resource Area, 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 has been advocating for sustainable timber management on O&C Lands for well over a decade. Our membership depends on a BLM timber program that is designed to sustain itself into the future. We have expressed our concerns with how the past management paradigm under the Northwest Forest Plan of exclusive thinning impacted

the BLM's ability to achieve this sustainability. When that plan was conceived in 1994, the BLM assured the public that the timber resources on O&C Lands would be managed based on the principles of sustained yield. This assurance was based on a carefully crafted harvest plan that included both regeneration and thinning treatments directed by detailed modeling effort. Those models, and particularly the regeneration harvest, were largely ignored during the 20 years following completion of the plan—regeneration harvest was deferred in favor of a management scheme based solely on thinning.

The BLM recognized this fact in a 2012 RMP Evaluation Report on the implementation of what then was their current Resource Management Plan (RMP). Among other findings, this report led the BLM to the following two realizations:

- The determination of the ASQ is based upon an assumed; mix, intensity and cycle of regeneration and thinning harvest. Adherence to the principles of sustained yield, at the declared ASQ harvest level, is based on implementation of these assumptions.
- Accelerated rates of thinning without replenishment of younger forest stands through regeneration harvest means that opportunities for thinning will eventually be exhausted. The current approach to a forest management regime that deviates so considerably from the RMP assumptions used in determination of the ASQ is **not sustainable** at the declared ASQ level.

A similar modeling effort was completed again for the 2016 RMP's, published by the BLM last summer. Once again, the BLM assured the public that their timber resources would be managed based on the principles of sustained yield as directed by the O&C Act, and this assurance was once again supported by a carefully crafted set of models that included a combination of regeneration harvest and thinning.

AFRC wants to ensure that these well documented implementation failures of the Northwest Forest Plan described above are not replicated under the current RMP. A failure to implement would be characterized by the BLM ignoring the sustained yield models and proposing treatments in conflict with those models. We urge the Upper Willamette Field Office to develop an alternative that treats the stands in the King Mosby area consistent with those vegetation models for the first decade of the plan's implementation.

The 2016 Western Oregon BLM Resource Management Plans state that O&C lands must be managed "in conformity with the principles of sustained yield". These sustained yield levels, and the subsequent Allowable Sale Quantities (ASQ), were calculated through models that indicated what level of regeneration harvest and what level of thinning would

occur on each sustained yield unit by age-class. For example, in the Upper Willamette Resource Area, the models direct the BLM to regen-harvest 4,635 acres of stands in the 40-70 year age-class and 3,786 acres of stands in the 80-110 year age-class in the Moderate Intensity Timber Area (MITA) during the first decade of the RMP’s implementation. **Adhering to what these models predicted is the only way that the BLM can meet their obligations of the O&C Act by managing their lands “in conformity with the principles of sustained yield”.** We urge the Upper Willamette Resource Area to recognize these models in the ensuing King Mosby NEPA document to justify and defend the actions being proposed and to assure AFRC and its membership that you are indeed managing consistent with the O&C Act. Below is a table compiled from BLM source databases used in the modeling for the Proposed Resource Management Plan (PRMP) and we urge the Upper Willamette Resource Area to consider including it in the King Mosby NEPA document. We applaud the Upper Willamette’s acknowledgement of the relevance of these models in the Thurston Hills EA and hope that you will do so again for the King Mosby EA.

Eugene SYU

HMP Desc	Age Grp 2013	GIS Acres	First Decade	First Decade
			Regen	Thinning
Low Intensity	1) 0-30	2,456		
	2) 40-70	3,989	314	424
	3) 80-110	3,323	660	
	4) 120-150	79	0	
	6) 200+	6	6	
	Total Low Intensity		9,854	981

Based on BLM stand data and the language in the scoping notice, the stands being considered for treatment in the King Mosby project area fall within two distinct age-classes: 40-70 and 80-110. We would like the BLM to clearly identify in the EA the age of each stand analyzed for treatment. **It is critical that any stands that fall within an age-class above 80 years are only treated with regeneration harvest as stands in that age class were not modeled to be thinned in the first decade.** Prescribing thinning treatments to stands in the 80-110 age class would, over time, compromise the District’s ability to sustainably offer their declared ASQ value, which was calculated based on the implementation of the above models.

Based on our field visits and review of stand age data, it appears that the 1,500 acres being analyzed in the King Mosby project are missing the mark set by the models. The models direct the SYU to focus its treatments in the LITA in stands in the 80-110 age class, particularly for regeneration harvest. Two-thirds of the regen harvest should be in

this age-class and nearly half of the total treatments (thinning and regen) should be in this age-class. Yet, the majority of the stands identified for treatment in the King Mosby project are in the 40-70 age-class. The most puzzling aspect of this is that there is no shortage of stands in the 80-110 age-class in this planning area in the LITA. The majority of T21S R02W Section 27 and T21S R01W Section 31 fit this description, yet not treatment is being prescribed there. **We would like the field office to strongly reconsider where it is focusing its treatments for this project and to consider expanding/relocating some treatment areas from the 40-70 age-class stands to the 80-110 age-class stands.** Furthermore, we would like to request that the ensuing NEPA document clearly describe the age and treatment type of each stand analyzed for treatment.

Specific objectives for the project were not described in the King Mosby scoping notice. In past recent projects on the Upper Willamette field office, the objective of “contributing to the ASQ” has been a primary project driver on projects in the HLB. We would like to urge the BLM to consider the distinction between “contributing to the ASQ” and **“managing forest stands to achieve continual timber production that can be sustained through a balance of growth and harvest,”** which is a clear objective in your RMP for the HLB and also the essence of the O&C Act, and to include the latter in the project’s purpose & need statement. There is difference between simply selling volume off lands designated as HLB (which the BLM refers to as “contributing ASQ volume”) and managing sustainably to meet the purpose of the O&C Act. The SYU’s ASQ of 53 MMBF wasn’t pulled out of thin air, it was *carefully calculated*. The only way the BLM can produce this ASQ annually without compromising its ability to produce it in the future is to follow the vegetation models that were used to calculate it. **If the Upper Willamette Field Office believes that it can assuredly manage its HLB to achieve continual timber production that can be sustained through a balance of growth and harvest *without* following the vegetation models, then we would like you to explain in the ensuing environmental document prepared for the King Mosby project how you plan to do so.**

We would like the BLM to consider “tiering” the King Mosby analysis as much as possible to the recently completed PRMP/FEIS. This four-volume document analyzed the impacts of implementing the actions in the selected alternative at length. Reanalyzing the impacts of what was already analyzed at length would be redundant and unnecessary.

The relevant regulations on tiering read as follows:

Agencies are encouraged to tier their environmental impact statements to eliminate repetitive discussions of the same issues and to focus on the actual issues ripe for decision at each level of environmental review ([§ 1508.28](#)). Whenever a broad environmental impact statement has been prepared (such as a program or policy

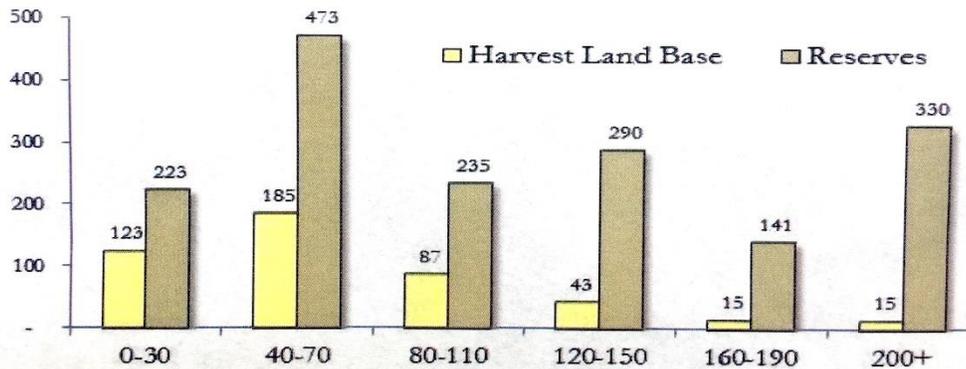
statement) and a subsequent statement or environmental assessment is then prepared on an action included within the entire program or policy (such as a site specific action) the subsequent statement or environmental assessment need only summarize the issues discussed in the broader statement and incorporate discussions from the broader statement by reference and shall concentrate on the issues specific to the subsequent action. The subsequent document shall state where the earlier document is available. Tiering may also be appropriate for different stages of actions. [40 CFR 1508.20]

We urge you to review the recently completed “Groovy Tunes” EA by the Cascades Field Office. Here, the BLM significantly eliminated redundant analysis by tiering to the PRMP/FEIS to describe the impact to numerous resources already analyzed.

Management direction and land use allocations in the 2016 NWO ROD/RMP are intended to constitute the BLM contributions to the recovery of the northern spotted owl. The ROD explicitly describes how this direction does so on pages 22-24. In summary, the ROD describes this contribution via: **a.) maintenance of a network of large blocks of forest to be managed for late-successional forests; b.) maintenance of older and more structurally-complex multi-layered conifer forests; c.) timber harvest in the HLB consistent with the concepts of Ecological Forestry, and d.) mitigation of the effects of the barred owl by avoiding the incidental take of NSO’s until implementation of a barred owl management program.** In other words, the fact that the BLM placed the vast majority of O&C Lands into reserves, including nearly *all* of the older stands (see the table below), along with “lighter-touch” silvicultural prescriptions in the HLB, should allow for implementation of sustained-yield timber management on remaining O&C Lands in the HLB unencumbered by NSO concerns. **Incidental take avoidance should be the only reason why treatments in the HLB get deferred for NSO considerations.** AFRC would like the Upper Willamette Resource Area to explicitly describe in the ensuing NEPA document, if and why stands identified for treatment in the scoping document are deferred from treatment. This includes stands deferred due to incidental take concerns, where we would appreciate an account of how and why treatment on those stands would result in take.

Western Oregon - Age Class and Allocations

Graphic 1 – 2,162,000 Forested Acres – (1,000s)



This table illustrates the disproportionate manner in how stands were designated by their age-class

AFRC urges the BLM to take 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 BLM 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 BLM 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 BLM 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 BLM to establish no-cut buffers along streams no larger than 40 feet and maximize forest health outcomes beyond this buffer.

Having spent a considerable amount of time visiting BLM timber sale projects, we are aware that the stream layers incorporated into much of the BLM’s planning documents often do not reflect the actual location of real streams in the woods. **We ask that the**

BLM take a close look in the field to determine whether mapped streams are actually present. We noticed, based on field visits, that several streams identified on the Row River project maps and ensuing timber sale maps were not evident on the ground—meaning there was not sign (scour or deposition) of a stream’s presence. We expressed these findings to the field manager and the ID team last fall and requested then that a thorough field review occur on all mapped streams to ensure that these acres are being delineated with the correct land allocation.

The timber products provided by the BLM are crucial to the health of our membership. Without the raw material sold by the BLM 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 BLM 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 BLM 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 BLM 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 BLM EA’s and contracts (i.e. dry conditions during wet season, wet conditions during dry season). We would like the BLM 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 Northwest BLM 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 BLM 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 BLM is working to accommodate this. The recently completed London Road EA identified the provision of winter operations a “need” of the project. We appreciate this effort by the Upper Willamette field office and urge you to consider doing the same on the King Mosby project.

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

Sincerely,

Andy Geissler
Western Oregon Field Forester
American Forest Resource Council