



September 11, 2024

Kristen Lark  
Mad River Ranger District  
741 State Highway 36  
Bridgeville, CA 95526

**In Reply To:** Rattail EA

Dear Ms. Lark:

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 Mad 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.

**Purpose & Need**

AFRC is pleased to see the Mad River Ranger District proposing vegetation management off lands designated as Late-Successional Reserve (LSR) 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.

We appreciate the purpose & need's acknowledgement of the role that the timber industry has in the larger social structure of neighboring rural communities. While the EA is correct that this industry, and its associated industries, has "dwindled" over the past several decades, its current form remains important to many rural communities and the populations they support.

### **Climate Change**

We appreciate the context included in the climate change analysis related to greenhouse gas (GHG) emissions, particularly the role of carbon storage in long-lasting wood products resulting from the proposed density reduction treatments and the effects of substitution. In addition to the substance of the analysis, we also want to ensure that the District has adequately complied with the new Council on Environmental Quality (CEQ) regulations.

Those CEQ regulations pertaining to the analysis of GHG emissions have recently been updated and the Forest Service must conduct its analysis on this Project accordingly. Specifically, those regulations require that greenhouse gas emissions be analyzed for all federal actions. Those regulations also encourage federal agencies to consider the context of short-term emissions as a result of actions that will improve long term sequestration and storage.

Specifically, those regulations state that “NEPA requires more than a statement that emissions from a proposed Federal action or its alternatives represent only a small fraction of global or domestic emissions.” That guidance also acknowledges that “the rule of reason and the concept of proportionality caution against providing an in-depth analysis of emissions regardless of the insignificance of the quantity of GHG emissions that the proposed action would cause.” It is unclear to us how CEQ expects the Forest Service to apply these “rules and concepts” to a project comprised of 630 acres of thinning. However, we want to ensure that the Mad River Ranger District is aware of this guidance and takes every necessary step to finalize an EA that is defensible to potential scrutiny.

### **Riparian Reserve Management**

AFRC is pleased to see that the Forest Service is taking a proactive approach to treating riparian reserves. The undesired forest conditions that exist in the uplands also exist in the riparian reserves. In fact, given the extensive width of Riparian Reserves (two site potential trees) most, if not all, of the inner and outer zones of intermittent and ephemeral streams can be more accurately described as uplands rather than riparian. Therefore, we believe that the 80-foot “no cut” buffer applied to all non-fish bearing streams on the Rattail Project is excessive and not based on the best available science.

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. The tradeoffs to be considered 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.

### ***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.

### ***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 reassess the proposed 80-foot no-cut buffers in the Rattail EA and consider whether a smaller buffer would achieve the objectives of the ACS to a higher degree while not measurably increasing adverse effects to streams.

## Operations

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 expensive logging systems and 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 Mad River market area with a variety of skills and equipment. Finalizing 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 logging is becoming a more economical and available method of yarding on steep slopes throughout the region. The increase in prevalence and preference for tethered-assist

equipment is a function of safety and efficiency. The weight displacement provided by tethering allows tracked equipment to operate on steep ground with limited soil displacement or compaction. Standard psi levels for that tracked equipment are transferred to the tethering uphill. Other Forests in the region have permitted this equipment to be used on Forest Service thinning stands on slopes up to 70%. We urge the Mad River District to consider allowing this equipment to be used where appropriate on the Rattail Project to mitigate implementation obstacles.

### **Roads**

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. We appreciate the proposed temporary roads to facilitate conventional logging systems where feasible. Well placed roads constructed using adequate best management practices typically pose minimal resource threats.

AFRC is happy to be involved in the planning, environmental assessment (EA), and decision-making process for the Rattail EA. Should you have any questions regarding the above comments, please contact me at 541-525-6113 or [ageissler@amforest.org](mailto:ageissler@amforest.org), or AFRC's Northern California Field Coordinator, Jake Blaufuss, at 530-360-2809 or [jblaufuss@amforest.org](mailto:jblaufuss@amforest.org).

Sincerely,



Andy Geissler  
Federal Timber Program Director  
American Forest Resource Council