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Members of the Board of Forestry

RE: change in Basal Area Stocking Standards

As the Board begins its review of Basal Area stocking standards, I would like to address several areas for potential revision as I have struggled to develop my own NTMP.

CCR 14 § 912.7(b)(3)¹ references an allowance for basal area for snags, and decadent or deformed trees of value to wildlife. The current rule language is silent as to whether this includes hardwoods as well as conifers. I believe that it has become clear that some hardwood species are important to certain avian and mammals, Great Gray Owl, California spotted owl, and fisher for nesting, denning and resting sites. I would suggest making a specific reference to hardwoods in the current rule language. It seems that the diameter and height minimums seem excessive for Site Classes I and II if larger trees are unavailable. I suggest considering the diameter and height standards of 912.7(b)(3)(C) as suitable for all site classes.

CCR 14 § 912.7(d)(1)(A-D) The current language to justify use of Group B species seems onerous for owners who wish to retain some hardwoods for aesthetic, wildlife, or other ecological reasons as explained in the THP, NTMP or similar permitting document. This section should perhaps be examined in light of the rules regarding White/Black Oak woodland management CCR 14 913.4(e and f) while permitting lower hardwood retention than the 35 sq. ft. under 913.4(f)(7).

CCR 14 § 1071(a) measures basal area for stocking purposes in stems one (1) inch and larger at dbh. PRC section 4528 defines a countable tree as one two years or older that is alive and healthy with at least one quarter of its length having a live crown. Theoretically, this would permit many understory conifers, often white fir or incense cedar, in mixed conifer stands to count towards the basal area standard although it is unlikely these trees will release and grow vigorously if dominant, codominant or even intermediate trees are removed as a part of an unevenaged stand harvest.

CCR § 1072.5 requires that each plot have the minimum basal area specified under CCR § 1071(a) [85 sq. ft. on Site I and 50 sq. ft. on Site II or lower]. Strict enforcement of this rule does not recognize the heterogeneity of vegetation, conifers, shrubs and hardwoods present on many smaller ownerships based on past management or harvesting practices, nor the potential ecological values these nonconiferous species may have for wildlife.

¹ For brevity, the FPR sections for the Northern, and Southern Forest Practice Districts are not cited, but potential changes for these parallel sections should be considered as well.

The current regeneration methods for unevenaged management CCR 14 § 913.2, 913.3, and 913.4(d) generally have basal area standards equal to or greater than the standards in CCR 14 § 912.7 or 1071(a).

While Bill Stewart's analysis of the FIA data suggests that growth continues to increase as basal area increases, for many landowners the issue is how to manage stands that do not reflect appropriate spatial distribution of coniferous stems (live healthy codominant or intermediate trees that are too close together) that have been created through natural regeneration or past management practices, including harvest, while meeting the basal area standards for unevenaged management and maintaining or increasing growth. Given the historic role of fire in the development of timber stands in much of California, there should be greater flexibility to reflect the heterogeneity of the forests. Similarly, trees meeting the diameter criteria for MSP may still produce little long-term growth because of abiotic factors such as wind damage to the upper portion of the tree bole, or management activities such as previous harvest damage to the stem or the effects of prescribed fire on tree cambium near the ground when fire metrics exceed prescriptions.

The current rules allow the RPF to propose an alternative under CCR 14 § 913.6, but the requirements of CCR 14 § 913.6(e)(3), especially for the intensive review that light touch NTMPs receive after submission, discourage use of this alternative given that there are few long-term studies of growth and yield over time (40 years or more) using unevenaged management. I believe this discourages many nonindustrial forest landowners from using the alternative because of the cost and hassle.

The dispersed variable retention option CCR 14 § 913.4(d) is a second method to reduce the residual basal area to improve tree spatial relationships and improve tree quality, but it has restrictions on stand reentry that often preclude its usefulness.

CCR 14 § 913.11 (c)(2) (MSP requirements) requires meeting the seed Tree retention standards of 913.1(c)(1)(A) of 15 sq ft. of trees 18" dbh or larger, approximately 74 ft. apart (commonly referred to as the 8 18" rule), or CCR 14 § 913.2(b)(6) -- 15 sq. ft. of trees 12" dbh or larger (a minimum of 19 trees per acre approx. 48 ft. apart) per the transition method averaged over each harvest area not to exceed 20 acres in size per CCR 14 § 913.2(b)(1) as well as the stocking standards of the selected silvicultural system. Alternatively, the plan submitter must submit a detailed analysis as required under CCR 14 § 913.11(a or b). It is unclear why the 18" dbh standard is better than some combination of smaller well-spaced vigorous conifers and/or hardwoods.

As an alternative, I would suggest consideration of a prescriptive approach that permits the RPF/landowner to propose a modest reduction in basal area (perhaps 20 percent) from the unevenaged basal area requirements, where explained in the plan or NTO (with a 10 day window for NTOs) with verification by Cal Fire representatives after field review, for the first 2 entries into an individual stand or harvest unit. If light touch forestry is the goal, it makes little sense to spend substantial time and money in inventory and written justification and modeling to do the "right thing" for both the short and long-term. This would not have to apply to all NTMPs, only

those where the landowner and RPF are willing to manage under an agreed set of provisions reflective of a particular NTMP.

I would also strongly suggest that the Board consider some type of equivalent ratio between smaller trees and basal area similar to the current system in Oregon under Oregon Forest Practice rule 629-610-0020.

My letter does not attempt to address the higher requirements associated with the Southern sub-district of the Coast District or specific County rules at this time.

Please feel free to contact me if you have any questions.

Respectfully submitted,

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CA. RPF No. 1698 and small landowner