



November 15, 2021

Via e-mail

California Board of Forestry and Fire Protection
POB 944246
Sacramento, CA 94244-2460

RE: Request for Regulations and Priority Review

Chairman Gilliss and Members:

Myriad issues have arisen during the course of 2020 and 2021 while fires ravaged private forest land where operations are subject to the Forest Practice Rules (FPR's). What follows are FPR sections we suggest be examined in light of what we've learned.

Watercourse and Lake Protection Rules

Under Article 6, Section(s) 916 (936, 956) et. seq., generally summarized as follows, the FPR's require practices that prevent machinery in the protection zones, require dense post-harvest over-story and understory retention as well as the retention of large trees for future deposition into watercourse. The intentions were to prevent soil deposition into watercourses, retain habitat elements and protect microclimate, among others.

Results in the Field Post-Dixie Fire

The results post-fire reveal a different outcome adverse to intentions. During our own post-fire evaluations, Collins staff foresters routinely discovered that fire intensity and associated resource losses were highest near watercourses afforded FPR protections.

Solutions

We suggest a re-examination of watercourse protections and new rules that allow for vegetative fuel reduction, mosaic vegetation patterning, scarified soil created by machinery and fuel discontinuity to better protect watercourse related resources during fire events.

Post-Harvest Stocking Standards

Research is now showing that stand density and composition on un-harvested lands in the early 20th century were much lower than today (Collins et al, 2020). Research seems to suggest that forests with basal area near 68 sq. ft. per acre and tree counts in the range of 40-70 trees per acre are more fire resilient.

Collins and the Dixie Fire – Our Experience

Collins has managed under an uneven-aged scheme for almost 80 years, usually leaving more than 75 sq. ft. basal area. The residual stands are made up of free growing trees of varying age classes and sufficient aggregations (cohorts) of sub-merchantable poles, sapling and seedlings to achieve full site occupancy and continuous growth.



Collins successfully created a model for uneven-aged management, yet we recognized as fire behavior changed over the last 15 years that Collins also needed to reduce stand density and re-balance species composition.

In response, we changed our marking and logging practices and aggressively thinned our stands using our biomass facility as an outlet for materials.

The Dixie Fire proved to be a demonstrative check against both the FPR's and our revised practices. Even in stands where Collins managed fuel continuity and distribution significantly, vegetation continuity led to rapid fire spread horizontally and vertically in the stands. We expect the same lessons were learned on other ownerships.

Solutions to Becoming More Fire Resilient

We suggest that the Board continue to work with the Uneven-Aged Stocking Working Group formed under the Management Committee's oversight. These issues have already naturally been topics of discussion there.

Specifically however, we do suggest these general post-harvest stocking standard themes for uneven-aged forestry:

- Post-harvest stocking standards should be reduced to levels reflected in recent research; and
- Should reflect combined basal area and stem count and/or a measure of site occupancy that encourage fuel *discontinuity*; and
- Stocking standards be met at the time of the *next harvest entry* not immediately after harvest, to encourage long-term, outcome based prescriptions.

Maximum Sustained Production (MSP)

The fires of the last two years have set private forest lands back considerably in terms of timber production. As a result many owners, including those of us with approved Sustained Yield Plan (SYP) documents, are re-visiting MSP compliance at considerable cost while our owners are reeling from losses sustained.

Further, the fire provoked considerable thought among foresters and landowners alike about their choices to reduce the impacts from fire – choices that inevitably include:

- Deciding not to reforest burned areas – particularly areas that:
 - Have burned more than once in the last 20 years; and/or
 - Are adjacent to USFS lands
- Strategically creating more large openings to disconnect fuel;
- Keeping firebreaks constructed during recent fire-fighting campaigns free of vegetation and open to re-use;
- Lowering tree densities and decreasing forest fuel across all species and sizes (grass--brush-trees);
- Creating defensible zones near property lines;



- Creating defensible zones along ignition sources like powerlines, roads and rail roads.

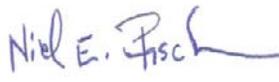
The result from these choices may be acres that may no longer achieve maximum growth in a traditional FPR sense.

Proposed Solutions

It seems to us that the need, purpose and efficacy of the MSP rules has changed significantly since the mid-1990's when they were enacted; how do the MSP Rules affect foresters' ability to adjust to a changing fire regime? In any event, contemplated in the Uneven-aged Working Group should be incorporated into the discussions accordingly.

With these dynamic times comes an opportunity to re-examine the status quo. Thank you for the opportunity to provide input.

Sincerely,

 11/15/21

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