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To: California Department of Forestry and Fire Protection

From: *Gregory A. Giusti*
Gregory A. Giusti
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Re: Bohemian Grove NTMP [1-06NTMP-011SON]

I have been asked to provide an assessment of the proposed activities described in the current draft of the NTMP aimed at reducing the risk of catastrophic fire within the ownership.

- 1) FRAP assessment. I have reviewed the current CDF FRAP fire risk assessment maps for western Sonoma County. None of the department's current assessments indicate that the ownership is located in a region of severe fire risk. The three documents used to validate this assessment include a) CDF FRAP fire severity map; b) CDF FRAP fire frequency map; and c) CDF FRAP Sonoma County fire map. Based on FRAP's assessment, and the controlled egress and ingress from the property, the risk of catastrophic fire does not appear to be relatively higher than the surrounding area of the county.
- 2) Silviculture. The silvicultural practices being proposed include group selection and variable retention. Both practices, as stated in the NTMP, will require subsequent herbicide use to control the intrusion of fine fuels that will occupy the site following the disturbance and removal of the existing canopy. Secondly, there is not a body of scientific literature for coastal redwood that implies or suggests that variable retention silvicultural practices will reduce the chance of catastrophic fire.
- 3) Canopy Gap Creation. The manipulation of the canopy, creating gaps in an existing contiguous canopy, will result in two different ecological consequences. The first, and most pertinent to this assessment, is the change in ambient atmospheric moisture currently being retained by the overstory. The canopy's ability to trap and retain understory moisture (fog drip, increased ambient humidity during summer months, etc) is well documented in the literature pertinent to coastal redwoods. The removal of overstory trees in the manner being proposed will increase evaporation and ambient temperatures on the site while creating a hotter and dryer site throughout the period of time when fires are most probable and severe. The second issue of canopy gap creation has to do with increasing the amount of edge thereby exposing canopy nesters to a higher risk of avian nest predation over time. I suggest that the letter submitted by CDFG regarding this NTMP (December 1, 2006) be given very serious consideration as the consequences from these proposed silvicultural actions will be persistent for a very long period on obligate cup nesters and other species attempting to nest on the site.

I find the proposed management particularly disturbing in light of the stated desired goal of reducing catastrophic fire risk on the property. In every case, the proposed actions are moving the stand(s) away from this desired future condition and are in fact creating a situation similar to the post war era when catastrophic fires were common in coastal redwoods. **The proposed silvicultural changes in the amended NTMP contradict the conventional wisdom among academics, researchers, practitioners and conservationists as how to best minimize the risk of coastal redwoods to catastrophic fire.** As an example I propose examining the Canoe Fire, a recent wildfire that occurred in Humboldt Redwoods State Park in 2003. This was the largest wildfire in old-growth and second-growth redwood stands in 50 years. Though the fire was started from a lightning storm, flame lengths were 6-12 inches in the redwoods stands and only caused scorch and some torch of Douglas-fir stands along the ridges. The impacts to the existing late seral conditions were minimal.

The literature as reviewed by Noss and others (2000) clearly demonstrates that older forest stands are less at risk than younger stands dominated by fine fuels and open canopies. The proposed actions in the NTMP are proposing to move the stand(s) toward a set of conditions that favor wildfire starts while increasing management costs over time.

It strikes me that the advice being given to the landowner committee and the RPF is outdated, out of touch with current scientific literature regarding coastal redwood ecology and will be responsible for a shift in management direction that is completely out of sync with the stated desired goals.

Reference:

Noss, R. F. (ed). 2000. The Redwood Forest: History, Ecology and Conservation of the Coast Redwood. Island Press. Washington DC. 340 pp.