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CAL-FIRE – Northern Region Headquarters  
Attn: Forest Practice  
135 Ridgway Avenue  
Santa Rosa, CA 95401

Re: Bohemian Grove NTMP (1-06NTMP-011SON)

To Whom It May Concern:

I have reviewed the revised Bohemian Grove NTMP (1-06 NTMP-011SON) on behalf of Bohemian Redwood Rescue Club (BRRC) and find it still poses significant risk to Pacific salmon species that are currently listed as Threatened under the federal and California Endangered Species Act (ESA and CESA). I would like to incorporate by reference my prior comments (Higgins 2007), if older comments are not carried forward, because none of the concerns I expressed regarding resource damage and cumulative watershed effects have been addressed by the revised NTMP.

Project-related cumulative watershed effects to coho salmon (*Oncorhynchus kisutch*), Chinook salmon (*Oncorhynchus tshawytscha*) and steelhead trout (*Oncorhynchus mykiss*) will still rise to the level of a “take” due to habitat degradation to Smith Creek and the lower Russian River. I do not see a reference in the revised NTMP to the new National Marine Fisheries Service (2008) Biological Opinion for large scale water users in the Russian River that includes information on the viability of coho salmon in the basin:

“Based on its decline in abundance, restricted and fragmented distribution, and lack of genetic diversity, the Russian River population of coho salmon is likely in an extinction vortex, where the population has been reduced to a point where demographic instability and inbreeding lead to further declines in numbers, which in turn, feedback into further declines towards extinction.”

The lower Russian River sub-basin has the greatest chance of re-establishing coho salmon, but it will take additional protection of aquatic resources, not continuation of industrial logging that this NTMP represents. Although coho salmon cannot currently access Smith Creek, cold water at its mouth may provide refugia for downstream migrating coho salmon during some portions of the year and this NTMP will increase water temperatures. Data need to be collected to find out what use is not only by coho, but also steelhead and Chinook salmon juveniles and adults. Maintenance of cold water refugia is imperative when large rivers to which they are tributary are experiencing temperature pollution that will take long periods to abate (U.S. EPA 2003).

Steelhead presence is indicated within the Smith Creek basin (Higgins 2007) and the NTMP still denies it. Although their population is larger than that of coho salmon, they are trending down as their rearing habitat in the Russian River basin diminishes (Higgins 2009). Chinook salmon in the Russian River were thought to be near extinction, but have resurged in recent years. However, the increase in temperature of the Smith Creek refugia and additional sediment contributed to the mainstem by 1-06 NTMP-011SON will both cause harm and diminish their chances for survival.

In short, the revised NTMP is not significantly different in terms of anticipated environmental impacts than earlier versions and all my concerns remain relevant and unaddressed.

Sincerely,

A handwritten signature in black ink, appearing to read 'Patrick Higgins', with a large, stylized flourish extending from the end of the signature.

Patrick Higgins

## References

Higgins, P.T. 2007. Memo Re: Comments on Bohemian Grove NTMP (1-06NTMP-011SON) to Leslie Markham, CDF, Santa Rosa. June 27, 2007. By Patrick Higgins, Consulting Fisheries Biologist, Arcata, CA. 49 p.

Higgins, P.T. 2009. Comments on proposed Sonoma County Negative Declaration for the Pelton House Winery Application #PLP05-0010. Performed under contract to the Friends of Maacamas Watershed. Patrick Higgins, Consulting Fisheries Biologist, Arcata, CA. 24 p.

National Marine Fisheries Service. 2008. Biological Opinion for ESA Section 7 Consultation on Water Supply, Flood Control Operations, and Channel Maintenance conducted by the U.S. Army Corps of Engineers, the Sonoma County Water Agency, and the Mendocino County Russian River Flood Control and Water Conservation Improvement District in the Russian River watershed. NMFS, Santa Rosa, CA. 386 p.

U.S. Environmental Protection Agency. 2003. EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards. EPA 910-B-03-002. Region 10 Office of Water, Seattle, WA.