

# Washington Forest Protection Association (Darin Cramer)

Thank you for the opportunity to comment. Darin Cramer,  
Washington Forest Protection Association.

I'd like to highlight a few key technical issues in the Tier II analysis. First, the analysis misrepresents and omits critical findings from the CMER hard rock and soft rock studies while the report emphasizes better thermal performance for the 100% buffers, it fails to mention that other buffer treatments often performed similarly. In both studies some of the coolest post harvest sites have partial buffers and performed similarly to the reference sites. And more than 90% of temperature observations across all treatments in both studies were well below the designated use aquatic life temperature criteria of 16 degrees Celsius.

Second, the method of counting all temperature increases greater than 0.5 degrees Celsius as equal is highly misleading, failing to reflect ecological relevance. Additionally, first year post harvest temperature responses in both studies did not have any relationship with canopy closure, percent of channel width buffer or total buffer length. This suggests stream temperature response and NP streams is more complex than with buffer length and width alone and the analysis does not at all reflect that complexity.

Third, the Tier II analysis draws inappropriate conclusions about the influence of sites specific variables that were not directly manipulated in the studies. These studies allow inference about average treatment effects across very specific conditions not causation from untested variables.

Fourth, the analysis overreaches by applying study results to the broader area of landscape, the broader landscape, without scientific justification.

Both studies were limited in geographic and ecological scope and findings cannot be generalized to all managed forests in Western Washington.

2 independent assessments found that less than 2% of routine harvest activities in Western Washington matched the treatments implemented in the hard rock study.

Finally, the analysis attempts to predict future responses using narrative matching of physical features rather than established predictive tools. For example, there was no consistent relationship between canopy cover and temperature change above 70% shade. And yet the report recommends changes to buffer rules based on canopy metrics alone. And the claims of about downstream benefits and 303d listings are speculative and unsupported with any data.

In summary the technical components of the Tier II analysis dropped conclusions not supported by the science it cites. It omits relevant data, misinterprets scope of inference, and relies on very weak prediction methods.

We urge the Department of Ecology to abandon this misguided effort and refocus on finding science based collaborative solutions for NP streams in Western Washington which balance environmental and economic benefits.

Thank you again for the opportunity to comment.