December 6, 2021

California Air Resources Board
1001 I Street
Sacramento, CA 9814
VIA Website Download at:
RE: Comments on Natural and Working Lands, 2022 Scoping Plan Update

Dear Air Resources Board and Staff:

Please accept these comments on the Natural and Workings Lands, 2022 Scoping Plan Update as presented in the Technical Workshop on December 2, 2021.

The December 2021 presentation seems little changed from the July 2021 version in two key areas. ARB accounting of forests and forest products simply does not align with US EPA accounting that is done to current IPCC standards. IPCC standards require tracking forest based carbon through the whole supply chain (forest, initial use, eventual landfill or burning) and not just in-forest carbon stocks. This goes against the IPCC reporting standard that the US EPA (U.S. Environmental Protection Agency 2020) meets in their annual reports.

Recent IPCC documentation is quite clear on the problem of forest carbon sink saturation as well as the benefits when carbon is transferred into harvested wood products. The following quote summarizes some key points.

"B 5 4 Sustainable forest management can maintain or enhance forest carbon stocks, and can maintain forest carbon sinks, including by transferring carbon to wood products, thus addressing the issue of sink saturation (high confidence). Where wood carbon is transferred to harvested wood products, these can store carbon over the long-term and can substitute for emissions-intensive materials reducing emissions in other sectors (high confidence). Where biomass is used for energy, e.g., as a mitigation strategy, the carbon is released back into the atmosphere more quickly (high confidence). (Figure SPM.3) {2.6.1, 2.7, 4.1.54.8.4, 6.4.1, Cross-Chapter Box 7 in Chapter 6} (p 21 in IPCC 2019).

Under IPCC accounting where the climate benefits of products are counted and assumed to be potentially increase with technological innovations and better prices (Hepburn et al. 2019, Smith Pete et al. 2016, Smith P., J. Nkem, K. Calvin, D. Campbell, F. Cherubini, G. Grassi, V. Korotkov, A.L. Hoang, S. Lwasa, P. McElwee, and E. Nkonya 2019), the potential climate benefits of more managed forests are even better. Recently published research for California provides a good estimate of additional potential benefits from using more harvested carbon in building materials (Cabiyo et al. 2021). Utilizing these potential pathways toward more wood used in buildings (and therefore less emission producing cement and steel) would have added benefits of reduced overall emissions. It would also sync well with the very well documented higher levels of annual carbon sequestration in privately managed forests compared to the federal forests that have much higher carbon inventories on forests with similar site quality.

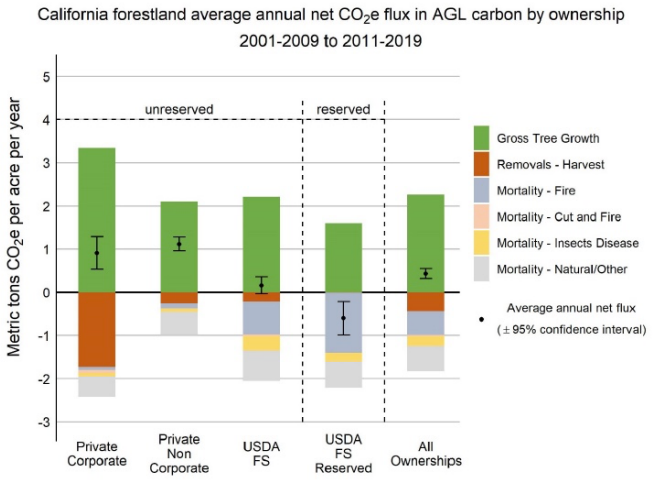

Figure 4.4a. Average annual net CO2e flux per acre in aboveground live tree carbon pool from growth, mortality and harvest by ownership and land status of California's forests (MT CO2e/acre/year), 2001-2009 to 2011-2019. The "all ownerships" category includes all other state and federal agencies managing fewer overall acres of forest land in California. The error bars represent the 95% confidence interval of net change. Figure derived from Appendix 2, Table B12.

From Christensen et al. 2021

Basically, the IPCC measures forests like they measure coal plants – with annual emissions or reductions – rather with carbon stocks. Adding both wood products (and the substitution benefits that come with using more advanced technologies) and the well-known problem of carbon saturation (and potential major losses from the increasing wildfires we are experiencing) would significantly increase the policy relevance of this effort.

Sincerely.

/s/

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