



October 25, 2017

Ms. Clare Jahns
Assistant Secretary for Natural Resources Climate Issues
California Natural Resources Agency
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

RE: CALAND Model Development and Next Steps

Dear Ms. Jahns:

On behalf of California's urban forestry non-profits who are committed to greening our golden state and reducing greenhouse gas emissions, we are writing to provide comments on the 2nd Draft of the CALAND Model presented on October 13th in Sacramento.

The recommendations provided in this document will help guide California natural resources planning efforts and infrastructure investments needed to meet the ambitious 2030 GHG reduction targets set forth in Executive Order B-30-15 and SB 32. While it is important to recognize that the Executive Order proclaims "Natural infrastructure solutions should be prioritized," we must acknowledge that the primary source of carbon sequestration and carbon sinks will come from the State's forest and urban forests. Although California's urban forests occur on only 5% of the state's land area, they sequester 7.2 million metric tons of carbon per year with another 1.3 million metric tons of carbon dioxide emissions avoided (attributed to modeled reductions in building energy use). Hence, their health and resilience is extremely important to meeting the state's GHG reduction targets.

With respect to how the CALAND Model approaches the role of urban forests in the overall process of contributing to GHG reductions and climate resilience, we raise the following questions and concerns:

1. Methods are unclear.

The method for evaluating the Urban Area, as described on page 21 of the technical document, is not clear. It indicates use of a constant carbon density value for the Urban Area (0.93 MgC/ha/yr), and states that this rate is "linearly scaled from its initial value proportionally to the linear change in urban forest fraction." Yet, current and target urban forest fractions (i.e. percentage urban tree canopy) are never presented. What are these values? Are these statewide values, or based on mapped values for each Urban Area?

The technical document further cites Bjorkman et. Al. as the source for the Urban Area input carbon densities. However, comments made in October, 2017 by one of the authors of that report – Dr. Greg McPherson – have directly informed the above questions related to modeling and method.

2. Uncertainty regarding new data.

The CNRA document dated September 22, 2017 that outlines CALAND Model Development and Next Steps highlights that Version 2 "incorporates new data and refined methods for the conservation, management, and restoration activities identified in Version 1." In the case of urban forestry (or Urban

Area as delineated in the technical document), there are a few qualitative comments made in the 59-page report, but quantifiable data and/or targets are difficult to ascertain. In fact, there appears to be potentially more data and targets relating to urban forestry in Version 1 (i.e. management scenarios that include quantifiable urban tree canopy fraction targets for 2020 and 2030.)

3. Management of existing urban forest.

The few references to urban forests that are included in Version 2 intimate an exclusive focus on new tree canopy and biomass. Such an approach would marginalize the immense value and need for maintain the existing urban forest and the quantifiable GHG reductions that come with it. Impacts of alternative management strategies to address important threats to urban forests and carbon they store are not modeled. These include:

- Different rates of mortality and canopy loss associated with invasive pests, drought, peri-urban development, and in-fill development
- Different rates of afforestation and canopy gain associated with various policies and associated levels of tree planting and stewardship activities
- Impacts of vibrant urban wood utilization on carbon dioxide beyond biomass

This document should be aimed at not only maximizing the sequestration values of the urban forest, but also improving the quality of the existing urban forest. Consideration of age and species diversity, and tree health is critical, and how these components directly correlate to addressing the Urban Heat Island effect and avoided emissions that complement sequestration.

Conclusion

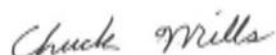
Mature trees are the number one carbon sequestration mechanism in our disadvantaged communities, and they are vital to California for contributing to our 2030 GHG reduction targets. Consequently, there must be a set of strategies in place to address how we protect and improve the management and increase the health and longevity of our existing mature trees while simultaneously increasing our urban tree canopy fraction.

Several documents, including Cal Fire's Forest Carbon Plan draft, are building that framework. As one of the few state-level reports to explicitly highlight the need to protect our existing greenspace and tree canopy, we wholeheartedly support this goal. Similarly, we support quantifiable goals and data presented in that document that should be carefully considered for integration into the CALAND model as the process moves forward.

As the Administration noted almost two years ago, the 2030 GHG reduction targets established under the Executive Order are "the most aggressive benchmark enacted by any government in North America to reduce dangerous carbon emissions over the next decade and a half." CALAND could serve as a component of that roadmap to success for maximizing the GHG reduction values of our rural and urban forests, but currently requires significant additional scope and modeling to get there.

Thank you for the opportunity to provide written comments and for your efforts in reflecting the vital role urban forestry plays in meeting California's GHG reduction goals.

Sincerely,



Chuck Mills
Director, Public Policy and Grants