TreePeople

January 5, 2022

Ms. Shelby Livingston
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Dear Ms. Livingston,

Thank you for the continued work and effort you and the California Air Resources Board have committed to fully integrating natural and working lands in the 2022 Scoping Plan. Data presented at the December 13 Natural and Working Lands (NWL) Scenarios Technical Workshop demonstrate a genuine desire to be more inclusive of these valuable resources as California develops solutions to meet both short-term and long-term climate objectives. We strongly support this goal and are hopeful that many tools available to the Board will be utilized to inform this process, including the State's upcoming Extreme Heat Framework.

With regard to the five NWL Draft Scenarios presented to stakeholders at this workshop, we must respectfully raise concerns related to urban forestry and what appears to be a significant marginalization of this critical resource within this framework.

These scenarios will help guide California natural resources planning efforts and infrastructure investments needed to meet the ambitious greenhouse gas (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 rural and urban forests. Although California's urban forests occur on only 5% of the state's land area, they sequester two million metric tons of carbon per year, with another 400,000 metric tons of carbon dioxide (CO_2) emissions avoided (attributed to modeled reductions in building energy use)[1]. Hence, their health and resilience is extremely important to meeting the state's GHG reduction targets.

Unfortunately, all scenarios presented at the workshop for urban forestry boiled down to one of two recommendations to plant some trees or plant lots of trees. While this activity is warranted and supported by the urban forestry and environmental justice community, the most pressing issue confronting California's urban forest is not addressed – maintaining the health and sustainability of our existing urban trees.

Over three years ago, the urban forestry community provided written comments on the 2nd Draft of the California Natural and Working Lands Carbon and Greenhouse Gas (CALAND) Model that apply today to the NWL Scenarios presented in on December 13 that included the following observation:

[1] California Forest Carbon Plan; May 2018, page 110.

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 to 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.

Sadly, all of the issues and recommendations are still exceedingly pertinent, yet none of them are reflected in the draft scenarios. This is in dramatic contrast to the actions taken by the Administration, Legislature and scientific community over the last three years concerning the need for maintaining our existing urban forest. This includes:

- Release of the final Forest Carbon Plan by Cal EPA and CNRA that identifies as the State's top priority for urban forests *protecting the existing tree canopy through policies and programs targeting ongoing maintenance and utilization of industry best management practices*[2].
- Allocation of General Funds for *the purpose of curing or suppressing diseases associated with the spread of the Polyphagous and Kuroshio Shot Hole Borer invasive beetles…in urban forest areas*[3] .
- A published study on the structure, function, and value of urban forests in California communities that explicitly includes *strategies to reduce the risk of catastrophic loss by increasing the resilience of California's urban forests*[4].

Both the publications and actions highlighted above reflect a very clear understanding and need to maintain and protect our existing urban forest. They are also the strongest and most comprehensive argument for maintaining our existing urban forest, not only from the economic and environmental perspectives, but also through scientifically sound risk assessments.

TreePeople Recommendation: **expand the scope of "Settlements" to include urban soils; and urban forest actions to include maintaining and protecting the existing urban forest and fully integrate into *all* scenarios.**

Another area overlooked entirely is urban soils. There are numerous GHG reduction benefits related to urban healthy soils, yet they are completely absent from the Settlements scenarios. Forty-four percent of LA County is covered by bare soil, which could be restored or sustainably managed. Soils sequester more carbon than the atmosphere and terrestrial vegetation combined. For example, TreePeople's urban carbon farm demonstration site (located at Griffith Park in Los Angeles) is exploring the impacts of

[2] California Forest Carbon Plan; May 2018; page 42.
[3] Senate Bill 840 (Mitchell) – Budget Act of 2018 as amended June 10, 2018.
[4] E. Gregory McPherson, Qingfu Xiao, Natalie S. van Doorn, John de Goede, Jacquelyn Bjorkman, Allan Hollander, Ryan M. Boynton, James F. Quinn, James H. Thorne (2017). The structure, function, and value of urban forests in California. *Urban Forestry and Urban Greening.*

mulching and composting on carbon sequestration, especially in urban settings. Urban carbon farms can be used in other public parks or other land use types to build healthy soils and sequester carbon.

With respect to trees, California's existing urban forest contains 173.2 million trees[5] and store an estimated 28 MMT of C, including both above and below ground components[6]. The annual value of ecosystem services is estimated at $8.3 billion and the urban forests asset value is $181 billion[7]. And these mature trees are at great risk. In fact, trees are the only infrastructure that grows in value over time.

The Administration's own Forest Carbon Plan notes the following:

> *Urban forests in California, like wildland forests, are being impacted by climate change and drought. Elevated temperatures, reduced precipitation, and reduced landscape watering all contribute to mortality and health issues.*

Dramatic losses from these cumulative threats obliterate the urban forestry baseline. The decreasing carbon sink value will take decades to replace if increased tree planting is the only urban forest activity recognized and adopted in the final 2022 Scoping Plan.

However, the Air Resources Board is in a very strong position to reverse this trend by integrating maintenance and protection of the existing urban forest into the modeling, which should include:

- Adopting quantification methodologies for GHG emission reductions resulting from maintenance and protection of the existing urban forest.
- Model the potential impacts of alternative management strategies to address important threats to urban forests as discussed.

In addition, wildfire prevention is key to preserving urban forests. The guidelines should include a comprehensive wildfire mitigation program to accelerate fire prevention projects that protect communities.

Part of the challenge in offering robust comments on the scenarios presented is the lack of substance on which to comment. There are the slides offered at the workshop that sketch some metrics at the 30,000-foot level, but quantifiable data and/or targets are difficult to ascertain. Given the limited information available regarding what the final scenarios will include, it makes sense to capture and record recommendations and modeling from other sources. In the case of Urban Forestry, California's 2018 Forest Carbon Plan offers modeling on urban heat island impacts, and how urban forests can be utilized to address extreme heat and urban heat island (UHI) effect. It also offers a wealth of management actions that could strongly inform the existing activity of increasing the urban tree canopy and the recommended additional activity of maintaining and protecting the existing urban forest.

As the Administration noted more than four years ago, the 2030 GHG reduction targets established under the Executive Order (and codified in SB 32) are "the most aggressive benchmark enacted by any government in North America to reduce dangerous carbon emissions over the next decade and a half." The 2022 Scoping Plan will be the pivotal piece of that roadmap to success for maximizing the GHG reduction values of our rural and urban forests. Consequently, the inclusion of maintaining and

[5] McPherson, et. al., 2017.
[6] Forest Carbon Plan. May 2018. Page 110.
[7] McPherson, et. al., 2017.

protecting our existing urban forest and urban soils in the scenarios is required if the state is going to maximize the value of our urban resources accurately and successfully in the NWL equation.

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,

Manny Gonez
Director of Policy Initiatives
TreePeople