

June 24, 2022

California Air Resources Board  
1001 I Street  
Sacramento CA 95814

RE: Comments on 2022 Draft Scoping Plan

Dear Chair Randolph and other Board Members,

### **Introduction and General Statement of Support**

Placer County Air Pollution Control District (District) appreciates the opportunity to provide comments on the 2022 Draft Scoping Plan (Plan). To begin, the District was very encouraged to see that California Air Resources Board (CARB) staff has recognized the importance of forest health and management as it relates to wildfire reductions and public health improvement. The District also posits that such reductions are needed for the State to reach its climate change goals. The District's comments will be focusing on the role of black carbon within the context of public health and climate change, as well as a few issues related to the working lands analysis as it relates to forests.

Before the discussion on the suggested improvements, the District would like to commend CARB staff for its excellent work on the Proposed Scenario (modeling scenario Alt 3) and to use it as the preferred choice. The District agrees "it prioritizes both GHG and air pollution reductions, ecosystem health and resilience, and implementation and technological feasibility and cost-effectiveness." The District also agrees that CARB is correct when it notes that "reducing forest management is counterproductive as described in Alternative 1." The comprehensive use of the REHSS model, as described in Pages 28-102 of Appendix I, as well as LANDFIRE and other models, creates a robust basis for CARB's decision to move forward with the Preferred option. As mentioned, "(f)or the purposes of climate planning, it is best to focus on carbon stock changes over longer periods rather than focusing on sequestration or emissions on shorter time frames." This has been a message the District has been trying to convey for many years, and we are in full support of CARB making these well substantiated findings within the Plan. This is also consistent with your UC Merced meta-analysis findings (reported in Appendix I.1) that "In the Sierra Nevada, forest management increased carbon stocks relative to the baseline, and the effect increased over time" (page 224), "... continuing current business-as-usual scenarios or scenarios with similar level of intensity would be more likely to turn forest lands into carbon sources" (page 225), and that "higher (forest management) intensity is associated with more carbon benefits" (page 226).

Additionally, the District strongly supports the use of BECCS and agrees that using that methodology is the only way that California will meet its 2045 Carbon Neutrality goals. Also, it is a cheaper option than direct air capture. Utilizing organic waste for energy and then utilizing carbon capture and storage

is referenced in the Getting to Neutral report<sup>1</sup> and by many climate professionals<sup>2</sup> as a very positive way forward. Also, the District points out that the development of these facilities can incorporate advanced emissions control technology to help with other pollutant emissions (criteria and air toxics), making them extremely clean and efficient.

In conclusion, the District is very pleased with the direction of the Plan and provides these targeted recommendations that we believe would only improve the Document.

### **Recommended Changes by the District**

#### *The Importance of Black Carbon from Wildfire as a Component of Public Health (Page 14-15 of Plan)*

The early sections of any document are often the most important because they are generally the most read, and they are understood as the foundation of the work ahead. On pages 14-15 of Appendix I is the summary of the health impacts associated with the Scoping Plan work. The District requests that a summary of the excellent work found in Pages 95-98 of Appendix I is put into pages 14 -15. The District would like to see CARB highlight this very important information in the Body of the Scoping Plan so that more education about the health impacts of black carbon from wildfire can be more generally understood.

#### *Black Carbon as a Short Lived Climate Pollutant (Page 32-39 of Plan)*

The early section of the Plan discusses efforts underway to reduce short lived climate pollutants. Throughout these pages there are semantical challenges. The District suggests that CARB steer away from using the term “non-anthropogenic” when describing emissions associated with forests. The Oxford Dictionary defines “Anthropogenic” as “chiefly of environmental pollution and pollutants caused by human activity”. CAL FIRE identifies every year which fires in the state are caused by humans, and also the intentional use of “prescribed” fire fits under this well-established definition. The fact that many fires are caused by humans is not changed by the fact that any given forest is, or is not, overstocked, or properly versus improperly managed. The fire finds the forest however it is, and if that fire was set by a human, it is anthropogenically caused.

The District understands, however, that CARB made a choice some years back to separate forestry and burning emissions into a different track from the SLCP strategy (the law enacting SLCP did not explicitly include emissions from fires), and instead is considering such emissions in the context of the working lands strategy. Based on this choice, there is no reason for CARB to keep using the term “anthropogenic” incorrectly. The District recommends CARB refer to emissions as “forest related” and “non-forest” related emissions. Second, the District recommends a small addition to clarify that black carbon is not a gas, and that a baseline from which to work was difficult to develop, which are the reasons why it is not included in SB or AB 32. And last, the District suggests the removal of the word “nonagricultural” on Page 37 as describing “prescribed fire”. Prescribed fire is “agricultural

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1 <https://www.llnl.gov/news/moving-carbon-neutrality-one-year-later>

2 <https://www.csgcalifornia.com/blog/>

burning” under the law,<sup>3</sup> and nonagricultural burning has a different meaning that is located at 41800 et. Sec. of the Health and Safety Code.

The District would also like to emphasize how important it is for the State to consider the impacts of forest related black carbon on climate change. Black carbon has a significant climate forcing potential.<sup>4</sup> As we learn more about the critical role that managed fire plays in a healthy ecosystem, it becomes even more important that we steer away from using open pile burning as a convenient way to dispose of mechanical treatment forest wastes. In this way there are more opportunities to do prescribed fire projects without detrimental smoke impacts from both burning forest waste and conducting health understory burns at the same time. Utilizing the correct biomass management tools are critical to moving towards fewer smoke-filled days in California.

*Biomass Mobilization Appendix I (Page 102-120)*

The District appreciates that CARB is being proactive to consider where biomass waste could be derived from across the state. In order for this work to be as detailed as it needs to be, the District strongly recommends a workshop that would focus specifically on this Section of Appendix I. There are several key issues that should be the focus of such a workshop. Note that this Section has never been the subject in any previous workshop. Specifically, the use of the C-BREC model and its basic assumptions, the age of its datasets, and its range of uncertainty should be explored.

First, the basic assumption that only 70% of biomass can be removed on any given acre (which is a base assumption within the C-BREC) should be carefully considered against actual in practice data from forest land managers and professionals.<sup>5</sup> Also, the data set of tree locations from 2001-2013 is significantly outdated. Currently there are several ongoing research projects that are identifying the location of biomass from fuel reduction projects that take into account the fires we have had in the State since 2013 – and these studies are projecting the generation and need to dispose of much more non-merchantable biomass compared with the C-BREC result. Finally, the District cautions against taking a broad average of treatment scenarios and averaging them across the state. More specific data about which treatment scenarios are happening should be considered at a regional level, and at least the use of a standard deviation should be in play when determining treatment scenario outcomes.<sup>6</sup>

The District would also like to suggest that exposure to PM2.5 and economic costs are not the only two factors (social costs) that should be considered when deciding which biomass should be utilized. Forest health, water quality and recreational/aesthetic value of our lands are other factors to measure, not to mention the economics for local communities and independent power management that could spring from biomass mobilization. Also it appears the Plan is recommending as a “nonburn” option that wood products are the better path compared with bioenergy, but that is only mentioned briefly, and it is unclear whether the Plan is recommending the utilization as a wood product over decay. Practically, non-merchantable forest waste residuals have very limited and low value use for wood products. The Plan should be clarified on these points.

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3 Health and Safety Code 39011

4 See Figure 4-14, 900 GWP of Black Carbon.

5 <https://www.csocalifornia.com/blog/>

6 reference to the soon-to-be released [Roadmap to a Million Acres \(RMA\) Strategy](#) would be helpful.

Ultimately the outcomes in Table 34 are not well enough detailed to justify the significant impact those conclusions would have on decision-making related to whether wood waste is better open burned, used for energy or a wood product, or left to decay. While it has been suggested that certain methods of chipping or piling can lead to reductions in methane, that research is ongoing and must be completed before the sweeping recommendations in Table 34 can be confirmed.<sup>7</sup>

While we applaud CARB for tackling this issue, there should be more work done before this Plan prognosticates how very regional decisions about its waste stream should be made. There are other issues with assumptions and how the various models interact that we believe other parties will comment on. We sincerely hope this work can be separately covered before the Plan is finalized.

*Support the Use of Woody Forest Waste to Liquid and Biogas Fuels (Support Biomass Within the LCFS)*

The Scoping Plan has limited evaluation on the use of woody biomass waste for liquid or gaseous fuel production. Particularly, the Plan focuses on biomethane from non-woody sources (including food, ag, and landfill/sewage waste sectors). The Plan states that “Biomethane currently displaces fossil fuels in transportation and will largely be needed for hard-to-decarbonize sectors but will likely continue to play a targeted role in some fleets”. The Plan lacks significant mention of forest wood waste, urban wood waste and agricultural wood waste, for good use as liquid or biogas fuel, which could further the state’s climate goals, including the waste diversion goals of SB 1383. The District encourages CARB to consider the value of all types of bioenergy, not just in the context of BECCS, and in particular within the LCFS program.

The District again thanks CARB Staff for the excellent draft document, and appreciates the opportunity to offer these comments. We hope that these narrow changes and suggestions will be considered in the final document.

Sincerely,



Erik C. White  
Air Pollution Control Officer

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<sup>7</sup> CAL FIRE funded research by SLO APCD , See [https://www.fire.ca.gov/media/0tohqk20/wpb\\_2022q1\\_grantaward\\_list\\_20220526.pdf](https://www.fire.ca.gov/media/0tohqk20/wpb_2022q1_grantaward_list_20220526.pdf)