



June 21, 2022

California Air Resources Board (CARB)

1001 I Street

Sacramento, California, 95814

Submitted Online at <http://www.arb.ca.gov/lispub/comm/bclist.php>

Re: The 2022 Scoping Plan must include more ambitious organic agriculture and pesticide reduction targets

Dear Chair Randolph:

On behalf of Pesticide Action Network and Californians for Pesticide Reform, we thank you for the opportunity to comment on the 2022 Draft Scoping Plan. We are encouraged that organic agriculture and pesticide reduction have been included in the draft Scoping Plan for the first time, and that they have been recognized for their contributions to a safer, more climate-friendly agricultural system. The draft Scoping Plan refers to the importance of safer and more sustainable pest management, integrated pest management, pesticide use reduction, and organic agriculture in meeting California's climate goals while providing significant public health benefits. These are critical points that should remain in the Scoping Plan. We also appreciate the reference to the importance of the Sustainable Pest Management Working group's recommendations in achieving California's climate goals.

However, the level of ambition of the Scoping Plan must be increased to maximize the climate, public health and equity benefits that diversified organic agriculture and reduced pesticide use specifically provide. For instance, the organic modeling target is low and unambitious - lower than the level expected to be achieved through current market trends alone without action from the state. Meanwhile, still excluded from the draft plan is a synthetic pesticide reduction target, which would help CARB staff measure progress towards the intended outcome of reducing pesticide use mentioned in the draft plan.

The 2022 Scoping Plan must increase the rate of organic adoption, adopt a measurable pesticide reduction target, and provide support to impacted communities in order to reach the state's climate goals while addressing the environmental injustices of our agricultural system.

We urge CARB staff to adopt the following recommendations, which are described in further detail below:

- 1. Include an accelerated and more ambitious organic agriculture target of 30% of agricultural acreage being organically farmed by 2030**
- 2. Include a measurable target of reducing synthetic pesticide use by 50% by 2030 and highly hazardous pesticide use by 90% by 2050**
- 3. Exclude herbicide applications from the Scoping Plan as a climate-friendly management strategy for all land sectors**
- 4. Include a commitment to conduct further research on pesticides, while also committing to research the disparate impacts of pesticide use and provide support to communities affected by pesticides**
- 5. Remove the implication that the climate smart agriculture practices included in the model would inherently result in synthetic pesticide reductions**
- 6. Deploy direct incentives to farmers to reduce pesticide use, similar to financial mechanisms for healthy soils practices and organic agriculture**

1. Include an accelerated and more ambitious organic agriculture target of 30% agricultural acreage being organically farmed by 2030

We and our partner organizations have been submitting public comment letters the past year consistently recommending a target of 30% agricultural acreage being organically farmed by 2030, similar to the EU's Farm to Fork commitment. However, the draft Scoping Plan only includes a commitment to 20% of agricultural land being organically farmed by 2045. That would mean that conventional, industrial agriculture would still make up 80% of agricultural land by mid-century.

This target does not even keep pace with the current market growth of organic production in California, where organic acreage increased by 44% from 2014 to 2019¹, a growth rate of roughly 7.6% per year. From 2019-2020, California organic acreage grew 6% while sales of organic products increased 14%.² At these rates, organic agriculture would exceed the modest goal of 20% by 2045 even in the absence of any state-supported incentives or regulation. Therefore, the Scoping Plan must establish a target that goes beyond this baseline, and accelerate and incentivize adoption of organic agriculture to take full advantage of the public health benefits from reducing

¹ California Department of Food and Agriculture. (2020). California Agricultural Statistics Review, 2019–2020.

https://www.cdfa.ca.gov/is/organicprogram/pdfs/2019_2020_California_Agricultural_Organic_Report.pdf

² California Department of Food and Agriculture. (2021). California Agricultural Statistics Review, 2020–2021. https://www.cdfa.ca.gov/Statistics/PDFs/2021_Organics_Publication.pdf.

synthetic pesticide and fertilizer use, the feasibility of expanding organic agriculture quickly, and the significant soil carbon sequestration benefits demonstrated by CARB's modeling. We encourage CARB staff to review our previous comment letters for scientific references that demonstrate these benefits.

These benefits can be achieved without sacrifices to competitive yields or profitability. California Certified Organic Farmers (CCOF) has compiled multiple scientific articles demonstrating that organic agriculture can be adopted while maintaining competitive crop yields.³ Furthermore, a recent review of about 17,500 articles demonstrates that organic agriculture typically outperforms conventional agriculture economically because of lower production costs and higher premiums.⁴ Therefore, transitioning to organic agriculture results in economic benefits for farmers as well.

2. Include a measurable target of reducing synthetic pesticide use by 50% by 2030 and highly hazardous pesticide use by 90% by 2050

We appreciate the inclusion of pesticide use reduction as an intended outcome of transitioning the state towards climate-smart agricultural practices and organic farming (p. 65). However, in order for CARB staff to evaluate whether this outcome is being achieved, both a target and progress towards that target must be measured. We continue to advocate that the Scoping Plan include the [European Union's Farm to Fork's target](#) of a 50% reduction in chemical pesticide use by 2030. We also support a target of a 90% reduction in highly hazardous pesticide use by 2050.

These targets would ensure that the intended outcome of reducing pesticide use is met, while maximizing the climate, public health and environmental justice benefits of transitioning away from toxic chemical pesticide use. We encourage CARB staff to review our previous comment letters for scientific references that demonstrate these benefits.

3. Remove herbicide applications as a climate-friendly management strategy from Scoping Plan for all land sectors

We remain concerned that herbicide applications and chemical management were modeled in the forest, shrublands and grasslands sectors. CARB staff's recommendation to reduce pesticide use to achieve climate change and public health benefits in the agricultural sector should apply to other sectors as well. The dangers of

³ California Certified Organic Farmers.(2019). Roadmap to Organic California: Benefits Report. <https://adobeindd.com/view/publications/08d24118-8d54-474d-8c2e-1f49328d429b/1/publication-web-resources/pdf/CCOF-RoadmaptoOrganic-Report-11-2019-Reprint.pdf>.

⁴ Durham, T. C., & Mizik, T. (2021). Comparative economics of conventional, organic, and alternative agricultural production systems. *Economies*, 9(2), 64. <https://www.mdpi.com/2227-7099/9/2/64>.

chemical pesticide use to the environment, human health and the climate are significant for all land sectors. In the forestry sector, glyphosate is the most commonly used pesticide according to the [UC Davis PUR data tool](#). Glyphosate has well-documented negative health and environmental consequences. Most notably Bayer - the manufacturer of glyphosate - has recently been ordered to pay three CA residents [more than \\$100 million](#) collectively in damages after they developed cancer after using glyphosate or RoundUp, and was [previously ordered to pay](#) Dewayne “Lee” Johnson - a California groundskeeper - \$20.5 million. Thousands of similar cases are currently making their way through the US court system.

The good news is many other safer and more ecologically-friendly management strategies exist to reduce the spread of invasive species in the forest, shrubland and grassland sectors.⁵ And wildfire risk can be mitigated through other effective strategies, such as [Indigenous cultural burns](#). Therefore, we recommend that CARB staff turn to these alternative, safer and more sustainable management strategies for all land sectors to avoid incentivizing increased pesticide use and their associated risks in the Scoping Plan.

4. Include the commitment to conduct further research on pesticides, while also committing to research the disparate impacts of pesticide use and provide support to communities affected by pesticides

We appreciate the draft Scoping Plan’s commitment to “conduct research on the intersection of pesticides, soil health, GHGs, and pest resiliency via a multiagency effort with DPR, CDFA, and CARB.” We have long advocated for more research to be conducted on pesticides and their impacts, and this commitment is an important start to closing this research gap. However, this research must also focus on the disparate impacts on communities of pesticide use. The health impacts of synthetic pesticide exposure continue to fall primarily on residents of color in California.⁶ At a minimum, CARB staff as part of the 2022 Scoping Plan must analyze health impacts of proposed strategies on residents in California as recommended by the Environmental Justice Advisory Committee, particularly on people of color that bear the brunt of many negative air and water quality impacts.

A Community Support Fund directed by the Department of Pesticide Regulation that provides direct prevention and protections from synthetic pesticide use should also be

⁵ Cal-IPC 2020. Best Management Practices for Non-Chemical Weed Control. Report to California Department of Pesticide Regulation under grant number 18-PML-G002. 291 pp. <https://www.cal-ipc.org/resources/library/publications/non-chem/>

⁶ Cushing, L., Faust, J., August, L. M., Cendak, R., Wieland, W., & Alexeeff, G. (2015). Racial/ethnic disparities in cumulative environmental health impacts in California: evidence from a statewide environmental justice screening tool (CalEnviroScreen 1.1). *American journal of public health*, 105(11), 2341-2348.

included in the 2022 Scoping Plan. Decisions on how the fund is spent should be left to community members most impacted by synthetic pesticide use. Examples of protections include enforceable buffer zones, indoor home air purifiers/filters, tarping of all fumigations to prevent emissions, personal protective equipment and other actions that minimize synthetic pesticide exposure for residents of California.

5. Remove the implication that the climate smart agriculture practices included in the model would inherently result in synthetic pesticide reductions

The draft Scoping Plan states that “climate smart practices can improve public health; for example, by reducing synthetic fertilizer and pesticide use” and “moving to an agricultural system that improves soil health and water holding capacity, reduces over-application of nitrogen, [and] reduces the use of pesticides.”

However, it’s critical to note that none of the climate smart agriculture practices modeled in the Scoping Plan guarantee pesticide reduction except organic farming. In fact, as mentioned, certain agricultural practices modeled by CARB in the Scoping Plan, such as no-till farming, are made possible in conventional, industrial farming by synthetic herbicides. This point is made clear by the [USDA](#): “Herbicides such as 2,4-D, atrazine and paraquat enable farmers to manage weeds with less tillage... And in the absence of tillage, farmers depend more heavily on herbicides to keep weeds at bay... Cost aside, greater reliance on agrichemicals may adversely affect nontarget species or contaminate air, water and soil.” While reducing tillage can have benefits, it must not result in an increase in reliance on synthetic pesticide use, which would have negative impacts on the climate, environment and public health. Ecological pest management, pesticide reduction, and organic farming must therefore be simultaneously incentivized and adopted to ensure increase in reliance does not occur.

Therefore, “climate smart practices”, especially when adopted individually, do not necessarily result in pesticide use reduction, and may even increase it. This is why we need strong organic farming and pesticide reduction targets included in the Scoping Plan along with direct incentives for farmers to adopt more ecological pest management practices. Furthermore, while building healthy soils is foundational to sustainable pest management, reducing pesticide use directly [results in myriad soil health benefits](#). We think it’s critical that this reciprocal relationship also be acknowledged in the Scoping Plan.

6. Deploy direct incentives to farmers to reduce pesticide use, similar to financial mechanisms for healthy soils practices and organic agriculture

We are excited to see that the draft Scoping Plan highlights the importance of financial mechanisms to support organic farming. Similarly, we need financial support for farmers

to experiment with and transition to ecological pest management practices. We recommend that the draft Scoping Plan include a commitment to also provide financial mechanisms to farmers, particularly small producers and BIPOC producers, to reduce pesticide use. Furthermore, many farmers receive technical assistance on their pest management practices from Pest Control Advisors (PCAs), many of whom are employed by pesticide manufacturers or distributors. There is an overwhelming need for more PCAs and other technical assistance providers with a background in ecological pest management and organic farming. Therefore, financial mechanisms must be provided to support increased technical assistance to reduce pesticide use, as well as direct incentives for farmers.

Thank you for considering our recommendations. We would be happy to discuss them with CARB staff.

Sincerely,

Asha Sharma, Organizing Co-Director, Pesticide Action Network

Margaret Reeves, Senior Scientists, Pesticide Action Network

Angel Garcia, Co-Director, Californians for Pesticide Reform, EJAC member

Jane Sellen, Co-Director, Californians for Pesticide Reform