CCOF
Advancing organic agriculture through certification, education, advocacy, and promotion.

January 5, 2022

California Air Resources Board
1001 I Street
Sacramento, CA 95814

RE: Comment letter on the Natural and Working Lands Scoping Plan Draft Alternative Scenarios

Dear Chair Randolph:

California Certified Organic Farmers (CCOF) appreciates the opportunity to comment on the California Air Resources Board (CARB) Natural and Working Lands Scoping Plan Draft Alternative Scenarios (Alternative Scenarios) to inform the 2022 Scoping Plan.

CCOF is a nonprofit organization that advances organic agriculture through certification, education, and advocacy. Representing over 3,000 organic farms, ranches, and businesses throughout California, we appreciate that CARB includes organic agriculture as a management strategy in the Alternative Scenarios. Organic provides a suite of benefits as outlined in CCOF's August 2 comment letter to CARB on the 2022 Scoping Plan Update Technical Workshop on Natural and Working Lands. These benefits are further detailed in CCOF Foundation's *Roadmap to an Organic California: Benefits Report*.

CCOF commends CARB for offering a range of management strategies and incorporating multiple objectives, including achieving carbon resilience and reducing wildfires. However, we find the Alternative Scenarios unclear and do not understand how each scenario will inform the 2022 Scoping Plan. CCOF recommends CARB restructure the Alternative Scenarios, include organic agriculture in each scenario, and integrate methane (CH_4) and nitrous oxide (N_2O) emissions.

1. **Restructure the Alternative Scenarios to show a path toward achieving the State's multiple goals with progressive increase in management strategies**

The Alternative Scenarios do not outline steps on the path toward achieving the State's climate goals but are rather set up as potentially competing priorities. Assigning an overarching objective or focus to each scenario is confusing because it is unclear whether CARB will then choose to implement a single scenario with a single focus or include management strategies under each scenario in the 2022 Scoping Plan. The objectives outlined in the Alternative Scenarios are also incomplete. CARB must maximize multiple objectives, including wildfire reduction, climate resilience, health, equity, natural resource conservation, and biodiversity.[1] CCOF recommends CARB restructure the Alternative Scenarios to show steps along the path toward achieving these goals. For example, the Alternative Scenarios should model an increase in organic agriculture from 10% (current level of adoption) to 20%, 30%, 50%, 80% and 100% adoption. This structure of scenarios will provide a roadmap to achieving the State's numerous climate goals. Modeling 100% adoption is a helpful tool to show the benefit of maximum adoption as well as shape future policy.

2. **Include organic agriculture as a conservation management strategy and current commitment**

While CCOF commends CARB for including organic agriculture as a strategy to prioritize restoration and climate resilience and wildfire reduction, it is unclear why organic agriculture is not included in each scenario. We recommend CARB

[1] Executive Order N-82-20

consider organic agriculture a strategy to prioritize conservation and as a current commitment/plan as well. Conservation is built into organic regulations. Under the National Organic Program, organic farmers and ranchers are required to conserve or improve soil, water, wetlands, woodlands, and wildlife.[2,3] Organic agriculture is also a current commitment. The State dedicated $7 million to organic transition in the FY21-22 state budget and the California Department of Food and Agriculture includes an organic system plan in its new climate smart agriculture program, the Conservation Agriculture Planning Grant Program. While we do not recommend CARB maintain distinct priorities for each modeled scenario as we outline under our suggestion to restructure the Alternative Scenarios, we encourage CARB to consider the benefits of organic agriculture more broadly in any of its analysis.

3. Integrate methane and nitrous oxide emissions

The Alternative Scenarios do not integrate CH_4 and N_2O emissions. Agriculture is the fifth largest source of California's greenhouse gas emissions, and approximately 70 percent of the emissions from the agriculture sector are CH_4 emissions from livestock.[4] According to CARB's analysis of emissions trends, agriculture contributed 7.6 percent of statewide greenhouse gas emissions in 2019, mainly from CH_4 and N_2O.[5]

N_2O, one of the most potent emissions from agriculture, equals 298 CO_2 equivalents.[6] An evaluation of organically and conventionally managed soils at UC Davis show that conventionally managed soils release 56 percent more N_2O than organically managed soils.[7] This aligns with CARB's analysis that reductions in N_2O emissions correspond to a reduction in synthetic fertilizer use[8] since organic agriculture prohibits the use of synthetic materials with few exceptions. It is therefore important to understand the relationship across all relevant greenhouse gas emissions and integrate management strategies, including organic agriculture, that address these emissions.

Thank you for the opportunity to comment. We look forward to working with CARB to advance California's climate objectives.

Sincerely,

Rebekah Weber
Policy Director
CCOF

[2] 7 CFR § 205.200
[3] 7 CFR § 205.2
[4] Legislative Analyst's Office. (2021). Assessing California's Climate Policies – Agriculture.
[5] CARB. (2021). California Greenhouse Gas Emissions for 2000 to 2019 Trends of Emissions and Other Indicators.
[6] IPCC. (2013). Anthropogenic and natural radiative forcing. In: Stocker, T. F., Qin, D., Plattner, G.-K., Tignor, M., Allen, S.K., Boschung, J., . . . Midgley, P. M. (Eds.), *Climate change 2013: the physical science basis.* Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge, United Kingdom and New York, NY, USA: Cambridge University Press.
[7] Burger, M., Jackson, L. E., Lundquist, E. J., Louie, D. T., Miller, R. L., Rolston, D. R., & Scow, K. M. (2005). Microbial responses and nitrous oxide emissions during wetting and drying of organically and conventionally managed soil under tomatoes. *Biology and Fertility of Soils, 42,* 109-118.
[8] CARB. (2021). California Greenhouse Gas Emissions for 2000 to 2019 Trends of Emissions and Other Indicators.