CCOF

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

June 24, 2022

California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: CCOF Comment on Draft 2022 Scoping Plan Update

Dear Chair Randolph and Members of the Board:

California Certified Organic Farmers (CCOF) appreciates the opportunity to comment on the California Air Resources Board's (CARB) Draft 2022 Scoping Plan Update (Draft Update).

CCOF is a nonprofit organization that represents 3,000 organic farms, ranches, and businesses across California. We commend CARB for including an organic acreage target and for recognizing the climate benefits of organic agriculture in the Draft Update. Thirty years of peer-reviewed research demonstrates that organic agriculture sequesters carbon and reduces greenhouse gas (GHG) emissions.[1] CARB's modeling further highlights that the scenario with the highest organic adoption corresponds with the greatest increase in carbon stocks.[2] We appreciate the inclusion of organic in the modeling, even though the benefits of organic agriculture were not fully captured because synthetic fertilizers were not included in the modeling, and the use of synthetic fertilizers is prohibited in organic agriculture. An evaluation of organic and conventional soils at UC Davis show that conventional soils release 56% more nitrous oxide, a potent GHG associated with synthetic fertilizer use,[3,4,5] than organic soils.[6]

CCOF strongly recommends CARB increase the organic target to 30% of California's agricultural acreage by 2030. The Draft Update represents an opportunity to take bold action to drive carbon neutrality. However, a target of increasing organic acreage to 20% by 2045 represents a Business-as-Usual approach, does not align with the expanding market for organic products, and misses the opportunity for California producers to meet U.S. demand.

CARB's organic acreage target should go beyond a Business-as-Usual approach

California is on track to reach the Draft Update's current target of 20% organic by 2045. As outlined in Table 1 below, California loses on average 200,000 agricultural acres per year. At the same time, organic acreage increases by an average of 65,079 acres per year. Rather than reflect a Business-as-Usual approach, CARB should set a meaningful target that will accelerate the transition to organic agriculture because of the climate benefits established in CARB's modeling and ongoing peer-reviewed research.

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[1] Benador, L., Damewood, K., & Sooby, J. (2019). *Roadmap to an Organic California: Benefits Report*. Santa Cruz, CA: California Certified Organic Farmers (CCOF) Foundation.

[2] California Air Resources Board, 2022 Scoping Plan Update Initial Modeling Results Natural and Working Lands, Retrieved from 2022 Scoping Plan Update Initial Modeling Results (March 15, 2022) (ca.gov).

[3] Vitousek PM, Porder S, Houlton BZ, Chadwick OA (2010). Terrestrial phosphorus limitation: mechanisms, implications, and nitrogen–phosphorus interactions. Ecol Appl 20:5–15.

[4] Galloway JN, Townsend AR, Erisman JW et al (2008) Transformation of the nit. en cycle: recent trends, questions, and potential solutions. Science 320:889–892.

[5] IPCC (2006) Guidelines for National Greenhouse Gas Inventories. N2O emissions from managed soils, and CO2 emissions from lime and urea application, institute for global environmental strategies (IGES) for the IPCC
(2006) 4-88788-032-4.

[6] 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.

Table 1.

Year	Total Acreage	Average Loss of Acreage	Organic Acreage	Average Organic Increase	Organic Percentage of Total Acreage
2045	19.1 million[7]	200,000 acres per year[8]	3,813,526[9]	65,079 acres per year[10]	20%
2030	22.1 million[11]		2,837,341[12]		13%
2020	24.3 million[13]		2,186,551[14]		9.0%
2019	24.3 million[15]		2,064,883[16]		8.5%
2018	24.3 million[17]				
2017					
2016					
2015					
2014	25.5 million[18]		1,796,080[19]		7.0%

CARB's organic acreage target should reflect the expanding organic market

"[D]espite increasing consumer demand for organic food and farm products and double-digit annual sales growth, U.S. organic production is currently flat and unable to meet demand."[20] While California production is not flat (see Table 1), the state is poised to expand organic acreage further to meet growing demand. The University of California Giannini Foundation of Agricultural Economics concludes in a 2021 report that "as the market for organic foods expands – based on trends to date – California is well-placed to continue to increase organic production and remain the U.S. leader."[21] CARB's organic acreage target should reflect the expanding organic market and capitalize on growing consumer demand for organic products. Indicators of organic market expansion include:

- For the past decade, nationwide demand for organic has increased by 9% per year, on average.[22]
- Organic crop sales in California increased 14% from 2019 to 2020.[23] Sales of organic processed foods in California more than doubled between 2020 and 2021, from $14.8 billion to $34.5 billion.[24]

[7] Calculated based on average acreage loss of 200,000 acres per year.
[8] Calculated based on available data.
[9] Calculated based on average organic increase of 65,079 acres per year.
[10] Calculated based on available data.
[11] Calculated based on average acreage loss of 200,000 acres per year.
[12] Calculated based on average organic increase of 65,079 acres per year.
[13] California Department of Food and Agriculture. (2021). California Agricultural Statistics Review 2020-2021. https://www.cdfa.ca.gov/Statistics/PDFs/2021_Ag_Stats_Review.pdf
[14] California Department of Food and Agriculture. (2021). California Agricultural Organic Report 2020-2021. https://www.cdfa.ca.gov/Statistics/PDFs/2021_Organics_Publication.pdf
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[16] California Department of Food and Agriculture. (2021). California Agricultural Organic Report 2020-2021. https://www.cdfa.ca.gov/Statistics/PDFs/2021_Organics_Publication.pdf
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[19] California Department of Food and Agriculture. (2020). California Agricultural Statistics Review 2019-2012. https://www.cdfa.ca.gov/Statistics/PDFs/2020_Ag_Stats_Review.pdf
[20] Stephenson, G., Gwin, L., Schreiner, C., & Brown, S. (2017). *Breaking New Ground: Farmer Perspectives on Organic Transition.*: Oregon Tilth.
[21] Goodhue, R., Muramoto, J., Sumner, D., & Wei, H. (2021). California's Organic Agriculture: Diverse and Growing. *Agriculture and Resource Economics: Update*, Vol. 24, No. 2. Nov/Dec 2021. https://s.giannini.ucop.edu/uploads/pub/2021/12/20/v25n2_QjY8JJ1.pdf
[22] Organic Trade Association. (2022). Organic Industry Survey. https://ota.com/organic-market-overview/organic-industry-survey
[23] California Department of Food and Agriculture. (2021). California Agricultural Organic Report 2020-2021. https://www.cdfa.ca.gov/Statistics/PDFs/2021_Organics_Publication.pdf
[24] California Department of Public Health. (2022). Organic Processed Product Registration Program Report. https://www.cdph.ca.gov/Programs/CEH/DFDCS/CDPH%20Document%20Library/FDB/FoodSafetyProgram/Organic/CDPHOrganicReport2022.pdf

- Californians are willing to pay a premium for local, organic foods because it aligns with their values.[25] Today, 90% of California shoppers buy some amount of organic.[26]
- To meet changing consumer preferences, conventional grocery stores who historically did not sell large amounts of organic are now rapidly scaling up their organic selection while small retailers who have always focused on organic are expanding into new locations.[27]
- California's Farm to School Program is incentivizing schools to purchase organic foods to serve their students, as part of the program's goal of building climate resilience.[28]
- Hospitals like Kaiser are setting ambitious procurement targets to increase food purchases from local farms that use sustainable practices, including organic.[29]

CARB's organic acreage target should incentivize California organic production over organic imports

The U.S. imported $25 billion of organic crops in 2020, up 42% from 2016 according to the U.S. Department of Agriculture (USDA) Foreign Agricultural Services (FAS) Global Agricultural Trade System (GATS). In 2021, the U.S. imported $649 million worth of blueberries, strawberries, raspberries, blackberries, avocados, and peppers from Mexico, Peru, Ecuador, and Chile.[30] All of these crops are grown in California.

A Berkeley Food Institute concludes that "[i]n recent years, the market demand for organic products and ingredients has accelerated, outstripping domestic supply. Imported foods are increasingly filling the gap, which has led to lost market opportunities for domestic producers."[31] At the same time, "[o]rganic food manufacturers and other buyers have reported difficulty sourcing enough certified organic food ingredients domestically."[32] CARB should set an organic acreage target that incentivizes California organic production.

CCOF recommends CARB establish a target of transitioning 30% of California's agricultural acreage to organic by 2030 to go beyond a Business-As-Usual approach, to meet the growing demand for organic products, and to incentivize domestic organic production. We also welcome further discussion with CARB on organic transition and cost metrics. Thank you for your consideration of CCOF's comment.

Sincerely,

Rebekah Weber
Policy Director

[25] Soto, E., Kitchens, J., Kiesel, K., and DeBates, M. (2022, May 18). Briefing on California's Organic Marketplace [Virtual briefing]. https://www.youtube.com/watch?v=6coP0D4OW0o&t=2638s&ab_channel=CCOF
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[30] United States Department of Agriculture Foreign Agriculture Service Global Agricultural Trade System. *Searchable databases, GATS home.* https://apps.fas.usda.gov/GATS/default.aspx
[31] Driscoll, Laura, and Nina F. Ichikawa. "Growing Organic, State by State: A Review of State-Level Support for Organic Agriculture." Berkeley Food Institute, University of California, Berkeley, September 2017. https://food.berkeley.edu/organicstatebystate/
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