From: Emily Buerer
To: CDFA Healthy Soil Program_Technician@CDFA
Subject: CAFF comments on HSP Incentives and Demo RFP drafts
Date: Monday, January 6, 2020 10:15:35 AM

Hello,

Please see the following for the Community Alliance with Family Farmers' (CAFF's) comments on the Healthy Soils RFP drafts. We appreciate the opportunity to put forth feedback on these programs. Thank you!

HSP Incentives:

Comments on RGA:

Pg 4: “Applicants must provide past three years’ baseline data on cropping and management histories directly related to fields identified by APNs where eligible agricultural management practices are proposed for implementation to be eligible for funding.”

- Where is there information about the requirements for baseline data?

Pg 4: “A previously implemented practice cannot be implemented on the same field or APN”

“A previously implemented practice can be implemented on a new, different field within the same APN”

- These two statements seem to conflict around the ability to implement a previously existing practice on the same APN, but on a different field within that APN. I think it would be more clear to eliminate the first sentence, or else change it to ”a previously implemented practice cannot be implemented on the same field”

Pg. 5: Residue and tillage management practices: CDFA should consider creating a practice standard specific to california as the NRCS practice standard seems to be modeled after the midwest at very large scales. In California, this practice is being implemented at small scales and yield large benefits in carbon storage. Due to payment rates being based on large scale ag, applying to HSP for this practice is not worth it to small or mid scale farmers.

Pg. 5: “If leasing land, applicants must ensure the proposed project does not violate their lease agreement and document approval by the landowner to implement proposed practices…”

- What kind of documentation is expected?

Pg. 9: Compost application rates are too low and should be more flexible. Many sustainable

organic producers regularly apply 10 tons/ acre of higher N compost.

Pg. 10: Whole Orchard Recycling: “WOR can be repeated no more than once every ten years for an APN or field.”

- Unclear if this refers to a 10 year window before implementation or after? Does this mean that if WOR was done more than 10 years ago on the APN, it is eligible for funding? (This would contradict pg 4, “A previously implemented practice cannot be implemented on same field or APN”)

Pg. 11: Non-overlapping Practices

- It should be more clear that applicants are allowed to implement practices that overlap according to these categories, but if they do, only one will be funded. In other words, they should only apply for one practice if they already implement an overlapping practice or plan to implement it at the same time as the practice they seek funding for.

Pg. 21: “CDFA will contact a subset of awarded projects to collect data...for three years after project completion”

- Many growers have cited this as a main deterrent for participating in HSP. The feedback we have received is that once the grant is completed, CDFA does not have a right to collect data on people’s farms. We understand the need to collect data, particularly carbon data, in the long term, but this seems like it would be a more appropriate action with the HSP Demo Type A projects which are focused on data collection. In any case, the additional follow up to collect data and project related documentation after the grant period should be strictly voluntary given it is outside of the grant agreement period.

Pg. 22: Detailed Scoring Criteria

- “Proposed practice not implemented in the field currently or last year?” This question seems to contradict the requirement on pg 4 that “A previously implemented practice cannot be implemented on the same field or APN”.

HSP Demo:

- Demo projects should allow for the demonstration of making compost, not just applying it

Best Regards,
Emily Buerer
Climate Smart Farming Program Coordinator
Community Alliance with Family Farmers (CAFF)
emily@caff.org

office: (530) 756-1298
cell:(925) 719-3379
www.CAFF.org

Happy holidays from CAFF! Remember your gift to the Community Alliance with Family Farmers during this season of giving.

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

Office of Environmental Farming and Innovation
California Department of Food and Agriculture
1220 N Street
Sacramento, CA 95814

January 7, 2020

Re: Healthy Soils Program Request for Grant Applications

Dear OEFI Staff:

California Certified Organic Farmers (CCOF) is a nonprofit organization that advances organic agriculture for a healthy world through organic certification, education, advocacy, and promotion. **CCOF and the undersigned businesses and organizations recommend CDFA include an Organic Transition Option in the Healthy Soils Program (HSP) in the next funding cycle**. We ask that it be included in the Request for Grant Applications that will be released in January or February 2020 (per the Healthy Soils Program timeline). An Organic Transition Option aligns with the program's mission of improving soil health, sequestering carbon, and reducing greenhouse gas emissions.

An Organic Transition Option
The Organic Transition Option would offer a stipend to farmers and ranchers to develop a plan to become certified organic as well as support them in implementing new conservation practices. The Option would offer a one-time payment of $4,300[1] for a producer to hire an organic crop consultant to help them complete an Organic System Plan. An Organic System Plan is a detailed description of the practices and procedures used to produce organic crops and livestock. With an Organic System Plan in place, a producer is ready to be certified after the ground has undergone three years of transition during which no prohibited materials are applied.

An Organic Transition Option Facilitates GHG Emission Reductions and Carbon Sequestration
Organic farming should be included in HSP because it is an investment that meets the goals of CDFA and the Greenhouse Gas Reduction Fund (GGRF) to "achieve feasible and cost-effective GHG emission reductions."[2] Scientific studies, including those conducted by UC Davis

[1] This is the amount that NRCS offers through its Environmental Quality Incentives Program (EQIP) Organic Initiative, which provides funding for producers to hire a consultant to develop a conservation plan and an Organic System Plan for the farm.
[2] California Air Resources Board. (2019). Cap-and-Trade Auction Proceeds Third Investment Plan: Fiscal Years 2019-20 through 2021-22. Retrieved from https://ww3.arb.ca.gov/cc/capandtrade/auctionproceeds/2019_thirdinvestmentplan_final_021519.pdf?_ga=2.44130916.1147759135.1574730304-744090955.1563814456

researchers, consistently find that organic farming builds soil organic matter[3]--which stores carbon in the soil--and has lower net GHG emissions.[4] Certified organic producers are required by federal law to maintain or improve their soil organic matter and must use crop rotation, so assisting producers transition to organic certification will ensure they continue to use (and earn an organic premium to help offset the cost of) healthy soils practices.

An Organic Transition Option Benefits Disadvantaged Communities

An Organic Transition Option would help the HSP meet GGRF requirements to benefit disadvantaged communities by reducing exposure to synthetic herbicides, insecticides, and fungicides in communities already disproportionately burdened by multiple sources of pollution. The Organic Transition Option would also make organic certification more accessible to limited resource, beginning, and socially disadvantaged farmers and ranchers by removing financial and technical barriers to transition.

An Organic Transition Option Maximizes Economic, Environmental, and Public Health Co-Benefits

An Organic Transition Option would meet the goal of CDFA and the GGRF to provide co-benefits because organic agriculture benefits the economy, environment, and public health. Organic agriculture creates jobs, improves soil water holding capacity, improves soil structure, reduces pollution from soil erosion and nutrient leaching, and improves environmental health. (Refer to CCOF's *Roadmap to an Organic California: Benefits Report* for detailed citations.)

Increasingly, organic farming is receiving recognition as an important strategy in preparing agriculture for climate change. The National Sustainable Agriculture Coalition (NSAC) recently published a report calling for the U.S. Department of Agriculture to "*Promote organic agriculture to make agriculture more resilient in the face of climate change while reducing GHG emissions from the agriculture production sector.*"[5]

[3] Greater carbon storage in organically managed plots has been found in numerous published studies including reports on UC Davis trials, USDA Agricultural Research Service studies in Salinas, a national soil survey, and an international meta-analysis of soil quality data. See Wolf, K., Herrera, I., Tomich, T.P., & Scow, K. (2017). Long-term agricultural experiments inform the development of climate-smart agricultural practices. *California Agriculture*, 71, 120-124; Brennan, E.B., & Acosta Martinez, V. (2017); Cover cropping frequency is the main driver of soil microbial changes during six years of organic vegetable production. *Soil Biology and Biochemistry*, 109, 188-204; Ghabbour, E.A., Davies, G., Misiewicz, T., Alami, R.A., Askounis, E.M., Cuozzo, N.P., . . . Shade, J. (2017). Chapter one - national comparison of the total and sequestered organic matter contents of conventional and organic farm soil. Advances in Agronomy, 146, 1-35; Sanders, J. & Hess, J. (Eds), 2019. Leistungen des ökologischen Landbaus für Umwelt und Gesellschaft . Braunschweig: Johann Heinrich von Thünen-Institut, 364 p, Thünen Report 65. Accessed May 2, 2019 at: https://www.thuenen.de/media/ publikationen/thuenen-report/Thuenen_Report_65.pdf.

[4] De Gryze, S., Wolf, A., Kaffka, S. R., Mitchell, J., Rolston, D. E., Temple, . . . Six, J. (2010). Simulating greenhouse gas budgets of four California cropping systems under conventional and alternative management. *Ecological Applications*, 20(7), 1805-1819.

[5] National Sustainable Agriculture Coalition. 2019. Agriculture and Climate Change: Policy Imperatives and Opportunities to Help Producers Meet the Challenge. Washington D.C.

An Organic Transition Option Ensures the Continued Use of Healthy Soils Practices
Supporting farmers and ranchers with an Organic Transition Option will make the organic transition economically feasible, provide them with experience in using healthy soils practices, and position them to become certified organic, which will incentivize the ongoing use of healthy soils practices beyond the three years of the HSP grant.

We look forward to discussing our idea with CDFA in greater depth.

Thank you for your consideration,

Jane Sooby
Senior Outreach and Policy Specialist
CCOF

Additional Signatories

1. Katie Huggins, Vice President of Technical Services, Traditional Medicinals
2. Matthew Dillon, Sr. Director Government Relations, Clif Bar & Company
3. Ellee Igoe and Connor Magee, Co-Directors, Carbon Sink Farms
4. Brise Tencer, Executive Director, Organic Farming Research Foundation
5. Dave Henson, Executive Director, Occidental Arts and Ecology Center
6. Brian Shobe, Associate Policy Director, California Climate & Agriculture Network (CalCAN)
7. Jo Ann Baumgartner, Executive Director, Wild Farm Alliance
8. Sarah Aird and Jane Sellen, Co-Directors, Californians for Pesticide Reform
9. David Runsten, Policy Director, Community Alliance with Family Farmers
10. Patricia Carrillo, Executive Director, Agriculture & Land-Based Training Association (ALBA)
11. Rex Dufour, Western Regional Office Director, National Center for Appropriate Technology (NCAT)
12. Bradley Angel, Executive Director, Greenaction for Health and Environmental Justice
13. Bill Allayaud, California Director of Government Affairs, Environmental Working Group
14. Caroline Cox, Senior Scientist, Center for Environmental Health
15. Stephanie Roberson, Director, Government Relations, California Nurses Association
16. Margaret Reeves, Senior Scientist, Pesticide Action Network—North America
17. Michael Reid Dimock, Director, Roots of Change
18. Janet S Johnson, Coordinator, Sunflower Alliance

19. Lupe Martinez, Assistant Director, Center on Race, Poverty & the Environment
20. Lena Brook, Director, Food Campaigns, NRDC
21. Lisa Archer, Director, Food and Agriculture Program, Friends of the Earth - United States
22. Thomas Helme, Project Director, Valley Improvement Projects (VIP)
23. Kimberly Baker, Executive Director, Klamath Forest Alliance
24. Thomas Wheeler, Executive Director, Environmental Protection Information Center (EPIC)
25. Dan Silver, Executive Director, Endangered Habitats League
26. Ted Schettler MD, MPH, Science Director, Science and Environmental Health Network
27. Esperanza Vielma, Executive Director, Environmental Justice for Water
28. Yolanda Park, Director, EJ58 of Cafe Coop
29. Keith Schildt, Chair, Legislative Policy Committee, Slow Food California
30. Robert M. Gould, MD, President, San Francisco Bay Area Chapter, Physicians for Social Responsibility
31. Kevin Hamilton, Executive Director, Central California Asthma Collaborative
32. Nayamin Martinez, MPH, Director, Community Organizer, Central California Environmental Justice Network (CCEJN)
33. Andy Naja-Riese, Chief Executive Officer, Agricultural Institute of Marin
34. Janus Holt Matthes, Board Member, Wine & Water Watch (Sonoma County Tomorrow affiliate)
35. Sabrina Hall, Co-Coordinator, Bayview Hunters Point Mothers and Fathers Committee
36. Padi Selwyn, Co-chair, Preserve Rural Sonoma County
37. Ruthie Sakheim, OccupySF Environmental Justice Working Group

December 20, 2019

Office of Environmental Farming and Innovation
California Department of Food and Agriculture
1220 N Street
Sacramento, CA 95814

Dear CDFA Healthy Soils Program Tech:

I have provided both technical assistance and grant management for the Healthy Soils Program grant programs, Incentives Program and Demonstration Project. To date, we have two demonstration projects: a quarter-acre row crop plot in southwestern San Diego and a 1,000-acre ranch in Jamul, CA to implement prescribed grazing. At the quarter-acre Demonstration Plot, we have implemented four soil management practices, specifically compost application, mulching, legume cover crops, and non-legume cover crops. Preliminary results indicate higher crop yields in these areas in comparison to their adjacent control plot counterparts.

Our organization offers CDFA-funded assistance to agricultural producers who are interested in implementing climate-smart agriculture practices on their land. In past grant reports, we identify several issues relating to application constraints, including time and payment rates. While CDFA has considerably adjusted the timing of the grant deadline to a rolling application, it forces producers to choose between their business operations and hasty submission of this funding, therefore directly limiting the number of applications submitted in this round.

Payment rates for mulch are appropriate and worthwhile across both large and small farms (less than 10 acres in size). However, payment rates remain far too low for compost application, and more specifically for small farms. San Diego County is home to over 5,000 small farms, more than any county in the nation. There is significant potential to influence producers within San Diego County, yet such limiting options for compost application due to high delivery costs.

The payment rates for compost must incorporate both a delivery fee and the per-ton rate currently allowable, or a significantly higher per-ton rate that includes delivery fees. For example, the delivery fee for our Demonstration Plot is often over $100 from the nearest certified supplier and easily surpasses CDFA subsidies of $100 for 2 tons of compost. In contrast, the maximum load (15 tons) would subsidize $750, a better estimate of the total costs.

I urge you to reconsider these points before reopening the next round of funding.

Best,

Chandra Richards

Dr. Chandra Richards
Conservation Ecologist
Resource Conservation District of Greater San Diego County

RE: Comments on CDFA 2020 Healthy Soils Program Request for Grant Applications Draft

Our company, California Safe Soil, LLC (CSS), recycles food waste into liquid conventional and organic fertilizers using enzymatic digestion (hydrolysis), mimicking what happens during human digestion of food, namely, the breakdown of long-chain proteins, fats, and carbohydrates into short-chain amino acids, organic acids, and simple sugars. When applied, these compounds stimulate life in the soil, mineralizing additional nutrients for plants and providing plant pest, disease, drought, salt, and other stress protections.

Our goals are aligned with those of the Healthy Soils Program (HSP), which are to promote widespread adoption of regenerative agricultural practices that improve soil health, sequester carbon, and reduce atmospheric greenhouse gases (GHGs). While we commend the efforts of the California Department of Food and Agriculture (CDFA) and California Air Resources Board (CARB) to support research on a broad range of agricultural management practices, especially those without currently approved GHG quantification methodologies, we note that **"food waste hydrolysates" should be added to the list of practices eligible for Type A project demonstration funding**. Food waste hydrolysates and liquid organic products manufactured by our company, and others, represent a significant and growing fraction of fertilizers able to confer both product quality and environmental sustainability benefits. We believe the addition of food waste hydrolysates to the list of other proposed application practices (anaerobic digestates, compost teas, vermicomposts, manures, fertilizer additives, etc.), would more effectively communicate the CDFAs aim to promote research on a diversity of available and demonstrated management practices.

Since enzymatic digestion of food waste takes hours, rather than weeks as compared with composting and anaerobic digestion technologies, we believe there are direct GHG savings that can be realized over these alternatives. Additionally, co-benefits of use can include reductions in GHGs through traditional fertilizer displacement, soil carbon sequestration, soil microbial biomass accumulation, improved crop yield, reduced GHG field emissions, reduced water use and soil erosion, and herbicide and pesticide displacement. Previous CARB methodologies have quantified and included emission reductions from carbon storage in soils from organic amendments and it is becoming more widely recognized that microbial materials are an important constituent of stable soil organic matter[i].

Researchers that have measured GHG emissions from solid and liquid organic fertilizers applied to lettuce[ii] have shown that emission factors for nitrous oxide (N_2O) ranged from 0 – 0.1% for multiple application of liquid fertilizers, compared to 0.6-11% for preplant-applied solid fertilizers only. This effect is believed to be mainly from better matching of plant nitrogen requirements through the growing season. Similarly, researchers in the Netherlands[iii] have shown that organic fertilizers promote healthy soil environments which stimulate methane uptake and nutrient cycling in soils and that combinations of compost with nutrient rich liquid organic amendments can provide the optimum balance of yield increases with GHG minimization.

There is significant accumulating scientific evidence that microbial activity in the soil is the primary pathway for carbon sequestration in the soil. There is no question that a high-nutrient food waste recycling technology increases microbial activity in the soil. It follows, then, that food waste hydrolysates are an excellent pathway for carbon sequestration in agricultural soils.

Clearly, different organics recycling methods have different life cycle GHG footprints. There is a wave of productive scientific research into these issues. Applying this research to the quantitative measurement of different technologies is critical to a full understanding of how GHG's are generated and can be avoided. We believe that quantitative, scientific measurement of carbon sequestration rates from alternative recycling technologies is critical to the long-term success of California's GHG reduction leadership efforts. We are an entrepreneurial company, committed to improving our environment, making agriculture more sustainable, and reducing and sequestering GHG's in the soil.

New technologies will be critical to reducing GHG emissions and combatting climate change. CSS does do not have the resources to answer all the relevant scientific questions, but we do believe that it is incumbent on the CDFA and CARB to support a broad range of scientific research to answer these questions and aid in the development of GHG quantification methodologies that incorporates all the values described herein.

Thank you for your consideration.

Sincerely,

Steve Zicari, PhD, PE
Director of Engineering and R&D
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McClellan, CA 95652
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720-289-6598

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[i] Kallenbach, C.M. et al. (2016). Direct Evidence for Microbial-Derived Soil Organic Matter Formation and its Eco-physiological Controls. Nature Communications, Vol. 7, doi: 10.1038/ncomms13630.

[ii] Toonsiri, P. et al. (2016). Greenhouse Gas Emissions from Solid and Liquid Organic Fertilizers Applied to Lettuce, Journal of Environmental Quality, Vol. 45 (6), p. 1812-1821

[iii] Brenzinger, K. et al. (2018). Organic Residue Amendments to Modulate Greenhouse Gas Emissions from Agricultural Soils. Frontiers in Microbiology, Vol. 9, doi: 10.3389/fmicb.2018.03035.

From: Martina Skjellerudsveen
To: CDFA Healthy Soil Program_Technician@CDFA
Subject: Comments to the CDFA HSIP
Date: Monday, January 6, 2020 1:27:17 AM

Dear CDFA

I am concerned that the rolling application period will create unnecessary stress for the applicants and for the technical assistance providers helping with applications.

I would like to have a guaranteed application period, that could be extended if funds still exist. In case of a high demand of applicants requesting help from our RCD, we can work within a fixed timeframe.

I assume that late submission (while funds still exist) will **not** have a lesser chance of having their grant request funded.

Thank you,

Martina Skjellerudsveen
Agricultural Outreach Specialist
Resource Conservation District of Greater San Diego County

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California Department of Food and Agriculture
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1220 N Street
Sacramento, CA 95814
cdfa.HSP_Tech@cdfa.ca.gov

January 7, 2020

Re: Comments on the Healthy Soils Program Healthy Soils Program Draft RFP

Dear OEFI Staff,

Thank you for the opportunity to comment on the Healthy Soils Program Draft Request for Proposals (RFP). We have signed on to the California Certified Organic Farmers (CCOF) letter arguing for inclusion of an organic transition option, and we fully support the letter submitted by California Climate and Agriculture Network (CalCAN) suggesting important improvements in both practices and processes of the Healthy Soils Program. Here we add a few complementary comments.

We welcome the state's growing recognition of the importance of healthy soils, associated with critical increased funding for healthy soil practices, but we note that the current Healthy Soils Program, as currently constituted, is a bit of a misnomer. **We believe it is time the Healthy Soils Program incentivize not just positive cultural and physical practices that help build healthy soil, but also incentivize the reduction in chemical practices that negatively impact soil health.**

We recommend the Healthy Soils Program adopt two new practices:

- First, because **soil fumigants, including chloropicrin, metam sodium and metam potassium** – approximately 20 million pounds of which are applied to California soils each year – pose serious threats to the goals of building and maintaining healthy soils and cause 7-fold to 100-fold releases of the potent greenhouse gas nitrous oxide (N_2O), **we believe the reduction of these fumigants should be incentivized by the Healthy Soils Program**.

- Second, **we wholeheartedly support CCOF's recommendation that an organic transition support package** be included within the Healthy Soils Program.

Rationale: Synthetic pesticides harm the soil biological community and its functions

According to the 2017 Human Rights Council of the UN General Assembly "Pesticides can persist in the environment for decades and pose a global threat to the entire ecological system upon which food production depends. Excessive use and misuse of pesticides result in contamination of

surrounding soil and water sources, causing loss of biodiversity, destroying beneficial insect populations that act as natural enemies of pests and reducing the nutritional value of food."[1]

Only about 0.1% of applied pesticides reach the targeted organism while the remaining amount contaminates the soil and surrounding environment. The soil biological community associated with healthy soil is extraordinarily diverse — from spatial heterogeneity and organism diversity to function (e.g. nutrient cycling and acquisition, suppression of phytopathogens, and providing resistance to biotic and/or abiotic stressors).

Ample research documents the detrimental effects synthetic pesticides have on the soil biological community and soil health. Synthetic fungicides are associated with decreases in populations of nitrogen-fixing bacteria, increased populations of denitrifiers[2], and decreases in the number and type of soil fungi and formation of macroaggregates, which are essential to good soil structure.[3] The systemic herbicide glyphosate, which is widely used in California, reduces populations of soil microbial communities and disrupts nutrient cycling processes, reducing bioavailability of essential micronutrient and macronutrients, increasing reliance on mineral fertilizers, and reducing essential nutrient content in associated food crops.[4] Applications of the common soil fumigant metam sodium has shown persistent damage (lasting at least 4 months) in various microbial-mediated functions, including nutrient cycling.[5] Neonicotinoid insecticides, which can persist in soils for years, can cause significant adverse effects on key soil organisms, including earthworms, soil microbes and decreased fungal abundance, and can lead to significant changes in levels of nitrate-N, ammonium, nitrite-N, and nitrate reductase enzyme activity, among other impacts.[6] Pesticide applications result in a population shift from beneficial soil bacteria and fungi-feeding nematodes, essential for organic matter decomposition, nitrogen cycling, and biological control, to greater proportion of plant-parasitic nematodes.[7] Several pesticides decrease reproductive success, juvenile survival, and overall development in earthworms, which are vital for good soil structure and fertility.[8]

Rationale: Synthetic pesticides, especially certain soil fumigants, contribute to greenhouse gas emissions and reduce soil carbon sequestration

Although generally excluded from state emission estimates, synthetic pesticides contribute directly to greenhouse gas emissions. Pesticide production is an energy-intensive process, with fumigant production alone (roughly 17% of California's agricultural pesticide use) utilizing approximately 500,000 gigajoules of energy per year, likely an underestimate.[9]

Nitrogenase activity, which is the key enzyme involved in nitrogen fixation has also been shown to be less prevalent in soils exposed to pesticides.[10] If N fixation is inhibited, then greater N applications will be required, and hence the probability of increased emissions of nitrous oxide or N_2O, a greenhouse gas 300 times more potent than carbon dioxide.[11]

Treatment of soils with three broad-spectrum fumigants – approximately 20 million pounds of which are applied to California soils each year – also contributes to significant greenhouse gas emissions. Fumigation with chloropicrin is associated with 7-100-fold N_2O increases,[12] with the suggested mechanism being primarily from aerobic fungal processes rather than the commonly described anaerobic bacterial denitrification as the source of N_2O.[13] Fumigation with the MITC fumigants alone (that include metam sodium and metam potassium), and in combination with chloropicrin, also increases N_2O emissions.[14] Application of all three fumigants increased N_2O

emission rates significantly when compared to non-fumigated controls, and the effects were still evident after 48 days, in contrast with fertilizer-induced N_2O emissions, which generally return to background within two weeks after application.[15]

Pesticide applications also inhibit the soil's ability to sequester carbon. Organic farming free of synthetic pesticides and fertilizers has been shown to result in higher stable[16] soil organic carbon than even continuous no till conventional farming, as well as reduced nitrous oxide emissions.[17] Highly diverse organic or similar pesticide-free cropping systems that include perennial cover crops, diversified crop rotations, organic amendments, no-till, and limited use of synthetic fertilizers and pesticides show the highest C sequestration potential, estimated at 600-1,000 lb SOC/ac-year in.[18]

We urge the Healthy Soils Program to incentive reduction of soil-harming and GHG-producing fumigants and incorporate an organic transition package

The soil biological community plays a fundamental role in nutrient cycling and soil and plant health. As such, any pesticide-mediated changes in organic matter decomposition and N and C transformations will likely also affect the use or release of N (including release of N_2O into the environment). It would be inappropriate to dismiss these detrimental impacts of synthetic pesticides on soil health. Studies from California and elsewhere have documented that even with routine tillage, organically-managed soils build more stable soil organic matter – increasing the soil's ability to sequester carbon – than continuous no-till conventionally-managed soils.[19] Reductions in soil fumigants, besides helping to keep soil resilient and ecologically diverse, will directly reduce emissions of potent greenhouse gases – a key goal of the Healthy Soils Program. We therefore strongly encourage the inclusion into the Healthy Soils Program of practices ranging from reduction in soil fumigants to organic transition as a means to protect the vital soil biological community from the negative impacts of synthetic pesticide use.

We believe adopting our recommendations will increase the impact of the Healthy Soils Program and help the program meet its full potential to support healthy soils.

Thank you for consideration of our input,

Margaret Reeves

Sarah C. Aird

Margaret Reeves, PhD
Senior Scientist
Pesticide Action Network

Sarah C. Aird, Esq.
Co-Director
Californians for Pesticide Reform

[1] Fox E, Gulledge J, Engelhaupt E, Burow ME, McLachlan JA. 2007. Pesticides reduce symbiotic efficiency of nitrogen-fixing rhizobia and host plants. PNAS vol. 104 no. 24 10283.

[2] Martınez-Toledo MV, Salmeron V, Rodelas B, Pozo C, Gonzalez-Lopez J. 1998. Effects of the fungicide Captan on some functional groups of soil microflora. Applied Soil Ecology 7: 245–255; doi: https://doi.org/10.1016/S0929-1393(97)00026-7.

[3] Kalia A and Gosa SK. 2011. Effect of pesticide application on soil microorganisms. Archives of Agronomy and Soil Science, Volume 57, Issue 6

[4] Mertens M, Hoss S, Neumann G, Afzal J, Reichenbecher W. 2018. Glyphosate, a chelating agent—relevant for ecological risk assessment? Environ Sci Pollut Res Int. 25(6): 5298–5317. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5823954/

[5] Macalady JL, Fuller ME, Scow KM. 1998. Effects of Metam Sodium Fumigation on Soil Microbial Activity and Community Structure. J. Environ. Qual. 27:54-63.

[6] Madeleine C, Kreutzweiser D, Mitchell EAD, Morrissey CA, Noome DA, Van der Sluijs JP. 2015. Risks of large-scale use of systemic insecticides to ecosystem functioning and services. Environ Sci Pollut Res 22:119–134.

[7] Yardirn EN, Edwards CA. 1998. The effects of chemical pest, disease and weed management practices on the trophic structure of nematode populations in tomato agroecosystems. Applied Soil Ecology 7: 137–147; doi: https://doi.org/10.1016/S0929-1393(97)00036-X.

[8] a. Casabé N, Piola L, Fuchs J, Oneto ML, Pamparato L, Basack S. 2007. Ecotoxicological assessment of the effects of glyphosate and chlorpyrifos in an Argentine soya field. Journal of Soils and Sediments 7:232–239; doi: https://doi.org/10.1065/jss2007.04.224.
b. Yasmin S, D'Souza D. 2010. Effects of Pesticides on the Growth and Reproduction of Earthworm: A Review. Applied and Environmental Soil Science 2010:1–9; doi: https://doi.org/10.1155/2010/678360.

[9] The range of energy required for production of some common organic chemicals ranges from 10-70 gigajoules per tonne. While we do not know the precise amount of energy consumed per tonne in the production of fumigants, approximately 13,600 tonnes of fumigants are used every year in California. A central estimate of energy use per tonne of 35 gigajoules per tonne would indicate that fumigant production alone utilizes approximately 500,000 gigajoules of energy in California. [CITATION?]

[10] Martınez-Toledo MV, Salmeron V, Rodelas B, Pozo C, Gonzalez-Lopez J. 1998. Effects of the fungicide Captan on some functional groups of soil microflora. Applied Soil Ecology 7: 245–255; doi: https://doi.org/10.1016/S0929-1393(97)00026-7.

[11] Greenhouse Gas Emissions: Understanding Global Warming Potentials, United States Environmental Protection Agency, https://www.epa.gov/ghgemissions/understanding-global-warming-potentials

[12] Spokas K, Wang D. 2003. Stimulation of nitrous oxide production resulted from soil fumigation with chloropicrin. Atmospheric Environment 37 (2003) 3501–3507. Spokas K, D Wang, Venterea. R. 2004. Greenhouse gas production and emission from a forest nursery soil following fumigation with chloropicrin and methyl isothiocyanate. Soil Biology & Biochemistry 37 (2005) 475– 485.

[13] Spokas K, Wang D, Venterea R, Sadowsky M. 2006. Mechanisms of N2O production following chloropicrin fumigation. Applied Soil Ecology 31 (2006) 101–109.

[14] Spokas K, D Wang, Venterea. R. 2004. Greenhouse gas production and emission from a forest nursery soil following fumigation with chloropicrin and methyl isothiocyanate. Soil Biology & Biochemistry 37 (2005) 475-485.

[15] Id.

[16] Most stabilized soil organic matter appears to derive from microbial processing of root exudates and other organic residues. Thus, the detrimental effect of agricultural chemicals on soil microbes undermines formation of stable soil organic matter. Paustian, K., Lehmann, J., Ogle, S., Reay, D., Robertson, G. P., & Smith, P. (2016). Climate-smart soils. Nature, 532(7597), 49-57. DOI:10.1038/nature17174. Kallenbach, Cynthia M., Frey, Serita D., & Grandy, A. Stuart. 2016. Direct evidence for microbial-derived soil organic matter formation and its ecophysiological controls. Nature Communications 7, Article number: 3630 https://www.osti.gov/pages/servlets/purl/1363941. A nationwide survey in the U.S. of 659 organic fields and 728 conventional fields showed 13% higher total SOM and 53% higher stable SOM in the organic soils. Ghabbour E, G. Davies G, Misiewicz T, Alami R, Askounis E, Cuozzo N, Filice A, Haskell J, Moy A, Roach A, and Shade J. 2017. National Comparison of the Total and Sequestered Organic Matter Contents of Conventional and Organic Farm Soils. Advances in Agronomy 146: 1-35. Greenhouse gas production and emission from a forest nursery soil following fumigation with chloropicrin and methyl isothiocyanate. Soil Biology & Biochemistry 37: 475–485.

[17] Sanders, J, Hess J (Eds), 2019. Leistungen des ökologischen Landbaus für Umwelt und Gesellschaft . Braunschweig: Johann Heinrich von Thünen-Institut, p. 364, Thünen Report 65. https://www.thuenen.de/media/publikationen/thuenen-report/Thuenen_Report_65.pdf This meta-analysis of 528 studies found that organically-managed soils had, on average, a 10% higher organic carbon content, a higher annual carbon sequestration rate of 256 kg C /ha, with 24% lower nitrous oxide emissions, resulting in a cumulative climate protection performance of 1,082 kg carbon equivalents per hectare per year.

[18] Lal, R. 2016. *Beyond COP21: Potential challenges of the "4 per thousand" initiative*. J. Soil & Water Conserv. 71(1): 20A-25A.

[19] Most stabilized soil organic matter appears to derive from microbial processing of root exudates and other organic residues. Thus, the detrimental effect of agricultural chemicals on soil microbes undermines formation of stable soil organic matter. Paustian, K., Lehmann, J., Ogle, S., Reay, D., Robertson, G. P., & Smith, P. (2016). Climate-smart soils. Nature, 532(7597), 49-57. DOI:10.1038/nature17174. Kallenbach, Cynthia M., Frey, Serita D., & Grandy, A. Stuart. 2016. Direct evidence for microbial-derived soil organic matter formation and its ecophysiological controls. Nature Communications 7, Article number: 3630 https://www.osti.gov/pages/servlets/purl/1363941. A nationwide survey in the U.S. of 659 organic fields and 728 conventional fields showed 13% higher total SOM and 53% higher stable SOM in the organic soils. Ghabbour E, G. Davies G, Misiewicz T, Alami R, Askounis E, Cuozzo N, Filice A, Haskell J, Moy A, Roach A, and Shade J. 2017. National Comparison of the Total and Sequestered Organic Matter Contents of Conventional and Organic Farm Soils. Advances in Agronomy 146: 1-35.

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ONE SHIELDS AVENUE
DAVIS, CA 95616

Jan 7th, 2020

Dear Healthy Soils Team,

My research program at UC Davis focuses on how to sustainably manage agricultural systems to improve soil health. As part of a recent CDFA Specialty Crop Block Grant, we compared how different organic amendments affected soil health measurements such as carbon, microbial biomass, and soil biology. Organic amendments tested in both field and lab experiments included compost, biochar and food waste hydrolysate. Food waste hydrolysate is a liquid amendment produced from recycled grocery store organics that have been hydrolyzed with enzymes and pasteurized.

Preliminary data indicates that while compost increased soil carbon pools immediately (likely because it is largely composed of carbon) the food waste hydrolysate had stronger effects on carbon stored in soil biology, increasing microbial biomass and populations of beneficial nematodes. At the same time, the food hydrolysate provided more nitrogen to plants, reducing the need for fertilization. More on farm research is needed to determine if food waste hydrolysate can store soil carbon, improve soil health and reduce green house gas emissions.

Scientific theories of how soil carbon is stabilized have recently undergone a paradigm shift towards soil organisms playing a more dominant role. One hypothesis is that soil amendments which provide a balanced diet for microbes sequester more carbon over long time periods. If this is the case, then practices which nuture soil biology are most likely to advance the goals of the Healthy Soil Program (HSP).
Currently, food waste hydrolysate is not listed an eligible agricultural management practice for HSP Demonstration Projects. Since this product is similar in many ways to the anaerobic digestate and compost tea practices already listed, I would urge the HSP to include food waste hydrolysate as a practice as well, perhaps under the section of Additional Practices for Demonstration and Data Collection (Type A Projects only).

Respectfully,

Amanda Hodson

Assistant Professional Researcher

Department of Entomology and Nematology

CalCAN
CALIFORNIA CLIMATE & AGRICULTURE NETWORK

California Department of Food and Agriculture
Office of Environmental Farming and Innovation
1220 N Street
Sacramento, CA 95814

January 6, 2020

Re: **Healthy Soils Program Draft RFP Comments**

Dear OEFI Staff:

On behalf of the California Climate and Agriculture Network, we submit the following comments on the Healthy Soils Program Draft Request for Proposals (RFP).

First, we wish to express our gratitude for the proactive steps OEFI took this fall to gather input from a variety of stakeholders and then summarize that input in a presentation to the Science Advisory Panel. OEFI's responsiveness to that input is greatly appreciated and clearly reflected in many of the major changes proposed in this RFP.

To that end, we strongly support the following proposed changes in the draft RFP:

1. **Instituting a rolling application submission period of up to 4 months (or until funds expended)**.

2. **Increasing the maximum grant award from $75,000 to $100,000**.

3. **Allowing previously implemented practices to be implemented on a new, different field within the same (previously funded) Assessor Parcel Number (APN)**. To avoid confusion, sub-bullet #1 on page 4 should strike "or APN" and instead read: "A previously implemented practice cannot be funded to be implemented again on the same field."

4. **Including Whole Orchard Recycling (WOR) as an eligible practice**.

5. **Instating a 25% set-aside of the total available funds for Socially Disadvantaged Farmers and Ranchers**. We strongly support prioritizing SDFRs and projects benefitting Priority Populations. Such prioritization aligns with the intentions of AB 1348 (the Farmer Equity Act) and other legislation (SB 535, AB 1550, SB 5) authorizing the expenditure of GGRF and bond dollars for climate programs. **However**, because SDFRs by themselves make up between 20-25% of all farmers in California (2017 Ag Census Data), a single 25% set-aside for *both* SDFRs and projects benefitting AB 1550 Priority Populations (categories that often do *not* overlap) will *not* ensure that SDFRs will receive a proportional share of funds. We recommend narrowing the set-aside to just SDFRs and prioritizing projects benefitting Priority Populations in a different way (e.g. a standard number of extra points in scoring).

6. **Reducing the essay-type questions in the application**.

7. **Developing a map-based integrated application input tool to reduce the number of attachments and external websites required in the application.**

8. **Collaborating with USDA-NRCS and CARB to integrate Standard Payment Rates into Comet-Planner**. Note: page 15 of the draft RFP still contains a reference to an Excel file budget worksheet, which should be removed.

9. **Providing notifications and feedback to applicants within 6 weeks**.

10. **Evaluating USDA-NRCS EQIP payment rates for 2020 in efforts to better align HSP with EQIP.**

11. **Providing sample text in the work plan template.**

The above changes will greatly improve farmers' and ranchers' experience with the program and respond to many of the concerns and recommendations we have heard over the years in surveys and interviews of stakeholders implementing this program on the ground.

Still, there are a few remaining changes we seek based on stakeholder feedback.

1. **Streamline the application and review process for making Priority Populations eligibility determinations,** which still make up 7 out of 17 pages of the application. We provide a detailed proposal and justification in the attached documents below.

2. **Establish a minimum annual payment for small farms (e.g. $1,500 per year).** Establishing a minimum annual payment of $1,500 – similar to what NRCS's Conservation Stewardship Program began offering as a minimum annual payment in 2016 – would make the program more financially viable for very small farms.

3. **Allow one-time compost applications on rangeland**. The requirement for ranchers to apply compost 3 years in a row on rangeland is cost-prohibitive and not in line with the studies conducted on rangeland compost

4. **Reduce the demonstration project farmer/rancher attendance requirement**, which is unrealistic for some regions. CDFA can survey 2017 demonstration projects to inform a new, more flexible requirement and identify ways to better support demonstration projects.

5. **Clarify the purpose and role of soil testing in the HSP program**, recognizing that incentive projects are not controlled experiments and that farmers and ranchers doing the sampling are often not trained on scientifically rigorous sampling methods

Again, we thank OEFI staff for the proposed changes above and opportunity to comment. We look forward to spreading the word about the many positive changes in this round of the program among our network of farmers, ranchers, and TA providers.

Sincerely,

Brian Shobe
Associate Policy Director

Proposed Streamlined Priority Populations Eligibility Determination Process for the Healthy Soils Program

Background

Farmers, ranchers, and the technical assistance providers (TAPs) who work with them have often expressed frustration with the length and complexity of the Healthy Soils Program (HSP) application, especially the section related to Priority Populations.

In the previous round, nearly half the application – 28 questions and prompts, which made up 7 out of the application's 16 pages when printed out, *not* including supporting documentation – consisted of questions to determine if an applicant's project provides benefits to Priority Populations. This section daunted and confused many applicants and TAPs, to the point that many who knew they were located in Priority Populations areas told us they just gave up on answering them. This has resulted in an undercount of projects that are providing meaningful benefits to Priority Populations. Some of the questions also required farmers, ranchers, or TAPs to write about and provide scientific rationale on issues (e.g. air quality) far outside of their expertise.

The process of reviewing and verifying responses and supporting documentation for these questions is also time-consuming for CDFA staff and reviewers, requiring them to read lengthy documents and make subjective interpretations of their content. This seems antithetical to the Priority Populations Evaluation Criteria's intent to *"enable administering agencies to readily make an objective 'yes' or 'no' decision* about whether a particular project provides a benefit to a priority population."

Below, we propose a streamlined application and review process for making Priority Populations eligibility determinations. Our goal in proposing this is to:

1. reduce the burden on time-constrained applicants, CDFA staff, and reviewers;
2. remove barriers to non-English speaking and limited resource farmers and ranchers;
3. achieve a more objective and accurate count of projects providing meaningful benefits to Priority Populations

While this proposal is presented as a whole, it is important to note that each suggestion to streamline a Step in the process can be evaluated and adopted independently. Any improvements to streamline the process would be welcomed by farmers, ranchers, and reviewers. To that end, we are flexible in our approach to this challenge and eager to work with ARB and CDFA to find appropriate solutions.

The following process follows the steps outlined in the California Climate Investments 2018 "Evaluation Criteria for Providing Benefits to Priority Populations"[1] for the Healthy Soils

[1] Available at: https://ww3.arb.ca.gov/cc/capandtrade/auctionproceeds/ccidoc/criteriatable/criteria-table-healthysoils.pdf?_ga=2.219304784.813990947.1574095422-330010414.1502383553

Program. For each step, we describe the instructions as they might appear on the application, then instructions for reviewers, and finally an explanation for the changes we proposed.

Step 1 (Identify Priority Population)

Instructions on Application:
Using the proposed project's location and the Priority Populations Map[2], check all boxes that apply for the proposed project. Note: The majority of the project must be located within a disadvantaged or low-income community census tract.

- ☐ Is the project located within the boundaries of a disadvantaged community census tract?
- ☐ Is the project located within the boundaries of a low-income community census tract?
- ☐ Is the project located outside of a disadvantaged community, but within ½-mile of a disadvantaged community and within a low-income community census tract?

If you did **not** check any boxes in Step 1, **stop here – the proposed project does not meet priority populations requirements.** If you checked at least one box, continue to Step 2.

Instructions for Reviewer:
If the applicant checked any of the boxes, verify their response is correct using the project's location and the Priority Populations Map[3].

Explanation for Changes:
We removed Criterion D – "Is the project located within the boundaries of a low-income household?" – because Healthy Soils projects cannot physically be located within a household.

Step 2 (Address a Need)

Instructions on Application:
No information is required for this step. CDFA has determined that all Healthy Soils practices meet at least one of the common needs for priority populations in CARB's Funding Guidelines Table 5 of 2018 Funding Guidelines for Agencies that Administer California Climate Investments (https://ww2.arb.ca.gov/resources/documents/cci-funding-guidelinesadministering-agencies).

Instructions for Reviewer:
Refer to the table below and check all boxes that the proposed project's practices address.

- ☐ PH 1: Reduce health harms (e.g., asthma) suffered disproportionately by priority populations due to air pollutants.

[2] Available at: https://ww3.arb.ca.gov/cc/capandtrade/auctionproceeds/communityinvestments.htm
[3] Available at: https://ww3.arb.ca.gov/cc/capandtrade/auctionproceeds/communityinvestments.htm

- Env 1: Reduce exposure to local environmental contaminants, such as toxic air contaminants, criteria air pollutants, and drinking water contaminants (e.g., provide a buffer between bike/walk paths and transportation corridors).
- Env 4: Greening communities through restoring local ecosystems and planting of native species, improving aesthetics of the landscape, and/or increasing public access for recreation.

HSP Practice	Step 2 – Table 5 Need(s) Addressed
Cropland Management Practices	
Cover Crop	PH 1, Env 1, Env 4
Conservation Crop Rotation	Env 1, Env 4
Mulching	PH 1, Env 1, Env 4
Nutrient Management	Env 1, Env 4
Residue and Tillage Management – No-Till	PH 1, Env 1, Env 4
Residue and Tillage Management – Reduced Till	PH 1, Env 4
Compost Application	Env 1, Env 4
Herbaceous Cover Establishment on Cropland Practices	
Conservation Cover	PH 1, Env 1, Env 4
Contour Buffer Strips	Env 1, Env 4
Field Border	PH 1, Env 1, Env 4
Filter Strip	Env 1, Env 4
Forage and Biomass Planting	Env 1, Env 4
Grassed Waterway	Env 1, Env 4
Herbaceous Wind Barrier	PH 1, Env 4
Riparian Herbaceous Cover	Env 1, Env 4
Vegetative Barriers	Env 1, Env 4
Woody Cover Establishment on Cropland Practices	
Alley Cropping	PH 1, Env 1, Env 4
Hedgerow Planting	PH 1, Env 1, Env 4
Multi-story Cropping	Env 4
Riparian Forest Buffer	Env 1, Env 4
Tree/Shrub Establishment	Env 1, Env 4
Windbreak/Shelterbelt Establishment	PH 1, Env 1, Env 4
Grazing Lands Practices	
Compost Application	Env 1, Env 4
Prescribed Grazing	Env 1, Env 4
Range Planting	Env 1, Env 4
Silvopasture	Env 4

Explanation for Changes:

Step 2 states that "agencies can use a variety of approaches" to "identify a need that the project will address." The two "Recommended Approaches" A and B require direct engagement of surrounding communities, which is impractical and infeasible for farmers and ranchers. Of the two "Alternative Approaches," D is the simplest for CDFA to readily and objectively answer "yes" or "no." Alternative Approach D requires CDFA to confirm that the project addresses at least one listed need in the list of common needs in CARB's Funding Guidelines Table 5 (below).

Based on a review of the benefits listed in the NRCS practice standards in the California Field Office Technical Guide[4], which are developed based on extensive scientific literature review, all currently eligible HSP practices address at least one of the "Common Needs of Priority Populations" in Table 5. For reporting purposes, we compiled which practices address which needs in the table above, which enables reviewers to swiftly and objectively assess and report the needs the project will address based on well-documented scientific evidence. This would relieve farmers, ranchers, and TAPs from needing to write about issues that are outside their area of expertise, write subjectively about the benefits they believe their project will have, and/or compile and summarize scientific evidence that has already been well-established. This also would relieve reviewers from having to subjectively evaluate each applicant's case and later summarize the benefits for reporting purposes.

[4] Available at: https://efotg.sc.egov.usda.gov/#/

Table 5. Examples of Common Needs of Priority Populations

Public Health
1. Reduce health harms (e.g., asthma) suffered disproportionately by priority populations due to air pollutants. 2. Reduce health harms (e.g., obesity) suffered disproportionately by priority populations due to the built environment (e.g., provide active transportation, parks, playgrounds). 3. Increase community safety. 4. Reduce heat-related illnesses and increase thermal comfort (e.g., weatherization and solar energy can provide more efficient and affordable air-conditioning; urban forestry can reduce heat-island effect). 5. Increase access to parks, greenways, open space, and other community assets.
Economic
1. Create quality jobs and increase family income (e.g., targeted hiring for living-wage jobs that provide access to health insurance and retirement benefits with long-term job retention, using project labor agreements with targeted hire commitments, community benefit agreements, community workforce agreements, partnerships with community-based workforce development and job training entities, State-certified community conservation corps). 2. Increase job readiness and career opportunities (e.g., workforce development programs, on-the-job training, industry-recognized certifications). 3. Revitalize local economies (e.g., increased use of local businesses) and support California-based small businesses. 4. Reduce housing costs (e.g., affordable housing). 5. Reduce transportation costs (e.g., free or reduced cost transit passes) and improve access to public transportation (e.g., new services in under-served communities). 6. Reduce energy costs for residents (e.g., weatherization, solar). 7. Improve transit service levels and reliability on systems/routes that have high use by disadvantaged and/or low-income community residents or low-income riders. 8. Bring jobs and housing closer together (e.g., affordable housing in transit-oriented development and in healthy, high-opportunity neighborhoods). 9. Preserve community stability and maintain housing affordability for low-income households (e.g., prioritize projects in jurisdictions with anti-displacement policies). 10. Provide educational and community capacity building opportunities through community engagement and leadership.
Environmental
1. Reduce exposure to local environmental contaminants, such as toxic air contaminants, criteria air pollutants, and drinking water contaminants (e.g., provide a buffer between bike/walk paths and transportation corridors). 2. Prioritize zero-emission vehicle projects for areas with high diesel air pollution, especially around schools or other sensitive populations with near-roadway exposure. 3. Reduce exposure to pesticides in communities near agricultural operations. 4. Greening communities through restoring local ecosystems and planting of native species, improving aesthetics of the landscape, and/or increasing public access for recreation.

<u>Step 3 (Provide a Benefit):</u>

Instructions for Application:

Projects must satisfy at least one of the of the following three criteria to receive Priority Populations status. CDFA will evaluate whether your project satisfies Criterion A based on your proposed practices and their projected air quality impacts in the budget worksheet and/or the existing scientific literature on the practices' air quality impacts.

For Criteria B and C, check applicable box(es) and provide justification and/or documentation (e.g. farmers' market certificate, donation receipts, a letter of support from schools or non-profits) to support the claims below.

Criterion A: Project significantly reduces exposure to dust and airborne particles to residents, relative to pre-project levels. ***Note*: CDFA will determine; no additional information needed.**

☐ Criterion B: Project increases food access to priority populations through regular farmers markets, donations to food banks or distribution centers serving residents of disadvantaged or low-income communities, or low-income households.

☐ Criterion C: Project provides regular and ongoing educational opportunities through partnerships with schools or non-profit organizations located in disadvantaged or low-income communities and site access to residents of these communities.

Instructions for Reviewer:
Criterion A – Option #1: Review the budget worksheet to determine if the project will have an estimated net reduction in NOx, NH_3, and PM 2.5 emissions.[5] If **yes**, the proposed project **meets** Criterion A.

Criterion A – Option #2: Does the project include any of the following practices[6]?

- ☐ Cover Crop
- ☐ Mulching
- ☐ No-Till
- ☐ Reduced-Till
- ☐ Conservation Cover
- ☐ Field Border
- ☐ Herbaceous Wind Barrier
- ☐ Alley Cropping
- ☐ Hedgerow Planting
- ☐ Windbreak/Shelterbelt

[5] The budget worksheet estimates the NOx and NH_3 impacts of the following practices: cover crop, reduced fertilizer application, reduced- or no-till, and compost application. The budget worksheet also estimates the PM 2.5 impacts of reduced- or no-till. However, the worksheet does *not* account for the air quality benefits of many other practices, including mulching, windbreaks, and hedgerows, all of which reduce wind erosion and dust.
[6] Based on benefits listed in NRCS practice standards in the California Field Office Technical Guide, these practices meet benefit criteria A in Step 3: "significantly reduce exposure to dust and airborne particles to residents, relative to pre-project levels." We estimate the *vast* majority of HSP projects include at least one of these practices, but could do an analysis of previous awards to determine the exact percentage.

If **yes**, and the proposed project does ***not include compost application***[7]*,* the proposed project **meets** Criterion A.

Criterion B and C: Did the applicant check boxes B and/or C? If yes, review their supporting documents to verify their project will provide the benefits they claim.

Explanation for the Changes:
Criterion A again requires farmers, ranchers, and TAPs to write about air quality impacts of their proposed practices and reviewers to then subjectively evaluate their case. We propose two ways CDFA could more readily and objectively assess the project. The first is to use the estimated NOx, NH_3, and PM 2.5 emissions in the budget worksheet. The second is to simply check if the project includes one of ten practices the NRCS practice standards indicate have an air quality benefit. These options are not mutually exclusive.

Criteria B and C are the same. We simply suggest providing examples of the kinds of documents (e.g. farmers' market certificate, donation receipts, a letter of support from schools or non-profits) that could be used to support the claims.

Why We Propose Removing the Job Training and Workforce Development Questions

The previous HSP application included questions from the Jobs Training & Workforce Development "Evaluation Criteria for Providing Benefits to Priority Populations."[8]

HSP projects are *very unlikely* to meet the criteria outlined in Step 3 of that document because:

- A grant of $75,000 – most of which pays for materials (e.g. compost, seed, transplants, mulch), equipment (e.g. no-till drills, compost spreaders, chippers), and services (e.g. compost or mulch delivery, contracts for conservation plantings), and is often spread out over 3 years – cannot reasonably be expected to "provide high-quality (e.g. local living wages, *health insurance, paid leave*) jobs to priority populations." (Criterion A, emphasis added)
- We are not aware of any farms or ranches that provide "job training to priority populations that is part of a program with *an established placement record*" (Criterion B, emphasis added) or "job training to priority populations that includes capacity building *that leads to industry-recognized credentials* (e.g., certifications, certificates, degrees, licenses, other documentation of competency and qualifications)." (Criterion C, emphasis added)

[7] According to CDFA OEFI staff, compost may increase dust, so could negate the impact of the above practices which have demonstrated air quality benefits.
[8] Available at: https://ww3.arb.ca.gov/cc/capandtrade/auctionproceeds/ccidoc/criteriatable/criteria-table-jobs.pdf?_ga=2.238927817.813990947.1574095422-330010414.1502383553

Thus, **we recommend removing these questions** from CDFA Priority Populations from the application. This change alone would alone reduce the Priority Populations section of the application by 2 ½ pages.

CARB's Healthy Soils Program Reporting Template[9] does require CDFA to calculate "Modeled Jobs" using the "Jobs Co-benefit Modeling Tool." However, the inputs required for the Modeling Tool can be derived directly from the proposed project's budget. I.e. no additional information is required from the applicant. The Reporting Template also has a "Jobs tab," but indicates that filling out the tab is *only* required for "projects *with a total project cost of greater than $1 million* awarded after August, 2018 or *any project claiming priority population benefits based on jobs benefits*. The jobs tab is for information on actual jobs supported by the project funds in the current reporting period" (emphasis added). Given that *no* HSP project has a project cost greater than $1 million and individual HSP projects are *very unlikely* to create actual jobs, it is unlikely CDFA needs to fill out this tab.

[9] Available at: https://www.arb.ca.gov/cc/capandtrade/auctionproceeds/ccidoc/reportingtemplate/landcseq_healthysoils.xlsx?_ga=2.171294697.813990947.1574095422-330010414.1502383553

Proposed Streamlined Application Questions for Priority Populations

Priority Populations

Priority populations include residents of: (1) census tracts identified as disadvantaged by California Environmental Protection Agency per SB 535; (2) census tracts identified as low-income per AB 1550; or (3) a low-income household per AB 1550. See Section VII.B of CCI Funding Guidelines (https://www.arb.ca.gov/cc/capandtrade/auctionproceeds/draftrevisedfundingguidelines.pdf) for more information on the definitions of priority populations.

To qualify as providing "direct, meaningful, and assured benefits to priority populations," a project must complete 3 steps. To streamline this process for applicants, CDFA will complete Step 2 for your project and evaluate your project for Criterion A in Step 3.

Step 1 – Identify the Priority Population(s)

Using the proposed project's location and the Priority Populations Map[10], check all boxes that apply for the proposed project. Note: The majority of the project must be located within a disadvantaged or low-income community census tract.

- ☐ Is the project located within the boundaries of a disadvantaged community census tract?
- ☐ Is the project located within the boundaries of a low-income community census tract?
- ☐ Is the project located outside of a disadvantaged community, but within ½-mile of a disadvantaged community and within a low-income community census tract?

If you did **not** check any boxes in Step 1, **stop here – the proposed project does not meet Priority Populations requirements.** If you checked at least one box, continue to Step 2.

Step 2 – Address an important need for community or household.

No information is required for this step. CDFA has determined that all Healthy Soils practices meet at least one of the common needs for priority populations in CARB's Funding Guidelines Table 5 of 2018 Funding Guidelines for Agencies that Administer California Climate Investments (https://ww2.arb.ca.gov/resources/documents/cci-funding-guidelinesadministering-agencies). **Continue to Step 3.**

Step 3 – Provide a Benefit.

[10] Available at: https://ww3.arb.ca.gov/cc/capandtrade/auctionproceeds/communityinvestments.htm

Projects must satisfy at least one of the of the following three criteria to receive Priority Populations status. CDFA will evaluate whether your project satisfies Criterion A based on your proposed practices and their projected air quality impacts in the budget worksheet and/or the existing scientific literature on the practices' air quality impacts.

For Criteria B and C, check applicable box(es) and provide justification and/or documentation (e.g. farmers' market certificate, donation receipts, a letter of support from schools or non-profits) to support the claims below.

Criterion A: Project significantly reduces exposure to dust and airborne particles to residents, relative to pre-project levels. ***Note*:** CDFA will determine, no additional information needed.

☐ Criterion B: Project increases food access to priority populations through regular farmers markets, donations to food banks or distribution centers serving residents of disadvantaged or low-income communities, or low-income households.

☐ Criterion C: Project provides regular and ongoing educational opportunities through partnerships with schools or non-profit organizations located in disadvantaged or low-income communities and site access to residents of these communities.

Additional documents:

Click here to upload supporting documentation if you checked Criterion B and/or C in Step 3 above.

Upload 1

Upload 2

Upload 3

From: Jan Dietrick
To: CDFA Healthy Soil Program Technician@CDFA
Subject: Healthy Soils Program Draft RFP Comments
Date: Tuesday, January 7, 2020 5:01:23 PM

January 7, 2020

California Department of Food and Agriculture
Office of Environmental Farming and Innovation
1220 N Street Sacramento, CA 95814

Re: Healthy Soils Program Draft Comments from Dietrick Institute for Applied Insect Ecology

In general we endorse the comments from CalCAN applauding draft program improvements and specifying more improvements. We have additional recommendations from our perspective of promoting ***agroecological practices*** to support climate mitigation and adaptation as well as reduction of toxic pesticides that harm carbon sequestering biology.

Biodiversity is a fundamental principle that is barely included among the practices that are rewarded in the Healthy Soils Program, i.e. whole systems enhancement and conservation of adequate numbers and diversity of species in plant communities. The Jena Experiment from Germany and a few other studies and the extensive observations reported by Christine Jones, Australian soil ecologist, show a strong correlation between number of species in plant communities and amount of soil carbon accumulation.

There is an overall upward one to one relationship with each additional plant species contributing to an increasingly diverse, biologically productive rhizosphere. Early in the curve there is what is referred to as a "community tipping point" that correlates with faster rates of increase in carbon sequestration. Generally that tipping point requires at least five species, but it is being suggested that at least eight species in community are a rough estimate for *a minimum requirement to release the full potential of natural systems* that includes all soil fertility as well as production of stable carbon compounds and the humic acid to make healthy soil. Therefore, the practice of cover crops, pasturage, and living mulches that contain less than five species may only be as much as 15 per cent of the carbon holding of such practices that involve 16 or more plant species. A more pronounced linear increase continues upward of 30 species in community after the community tipping point is reached..

The implications are vital and monumental for carbon farming. We must invest immediately with farmers who are ready to develop the fullest potential for carbon sequestration on both degraded land and on land where they have only understood one size fits all types of cover crops of less than five species. They need to be helped to plant cover crops of 8+ and 16+ species in cover crop mixes for hedgerows, borders, interplantings, orchards or vineyards with

resources of soil carbon testing to gather feedback on their efforts. There is promise also from attention on protocols for no-till annual systems planted into cover crops of 8+, 16+ and 32+ species that farmers should be encouraged to explore based on the existing knowledge.

Regarding plant species, there is a many-fold increase in biological activity from planting natives and this must be rewarded along with the degree of biodiversity in the plantings. Beyond the functionality of native plants in ecosystems to host insects, birds and other higher trophic levels, the exact species does not appear to be that important so long as there are a few legumes, a few forbs and a few grasses included, ideally as many natives as possible. What farmers call weeds are soil indicators and contribute to the biological activity in the rhizosphere. Farmers must be rewarded for not using herbicides and for managing these contributions from the early succession plants that appear on their degraded, uncovered lands.

The value of native plants in hedgerows and perennial covers and grasslands cannot be overstated not just for the direct biochemical interactions among the microbes in the rhizosphere, but the research from Doug Tallamy of University of Delaware shows that there is a many-fold increased insect and bird diversity supported by native plants compared to exotic plant species. The value is that the natural enemy complex is much more enhanced to suppress plant pests. Therefore less pesticides and chemical fertilizers are needed. ***The significance of pesticide use reduction also cannot be overstated for carbon sequestration in that you will never experience the full potential carbon sequestration from soils exposed to toxic pesticides.***

This leads to our major overriding disagreement with your Healthy Soils Program rule that a farmer cannot apply to do more of certain practices on the same land. ***Science and common sense suggest that some farmers who have been doing some practices and achieving some increases in soil carbon could double, triple or even quadruple the soil carbon by enhancing diversity in those agroecological systems.*** Those enhancements cost them money and may deliver more return on the state's investment than the investments on currently degraded lands by new carbon farmers. Society must extend HSP to farmers for doing *more* of existing practices and enhanced versions of those practices, mainly more biodiverse cover crops. *If not we are essentially settling on what is currently being done as the highest standard.* Instead we should urge farmers who have already reaped the benefits to push their current practices and create an even higher, more effective model that can then be considered for demonstration projects.

The HSP program currently does not attempt to motivate use of practices that maximize carbon sequestration on farms. Moreover it has failed to engage farmers at scale. We need investment in far more farmers who have been farming biologically for years--the early adopters of carbon farming. They are currently rudely dismissed and excluded from your program and the program suffers tremendously because they are rightfully the pioneers and

discoverers in their regions and we need them to be able to continue to learn and inspire and engage other farmers. We do not need elaborate demonstration programs. Farmers learn every few days at the coffee shop and from neighbors and at farmer meetings. We need support--financial and technical assistance--based on the very latest science to demonstrate how incremental increases in biodiversity and related new layers of practices pay off for climate mitigation as well as the obvious benefits for adaptation to drought, floods, heat waves, and the elimination of the need for artificial nitrogen and other fertility inputs in highly biodiverse systems.

Please allow and encourage and spotlight many more of the early adopters of agroecological practices to apply for funds who will talk with their neighbors about their results for the climate when they take their systems to the next level. It is THEY who will lead in showing that healthy soils pay off moreso than the limited demonstration projects.

Sincerely,
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Office of Environmental Farming and Innovation
California Department of Food and Agriculture
1220 N Street
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January 7, 2020

Re: Comments on Draft Solicitation Documents for the Healthy Soils Program (HSP) Incentives Program and Demonstration Projects

Dear OEFI Staff,

Thank you for the opportunity to comment on the draft solicitation documents for the Healthy Soils Program. It is exciting to see the changes already made to simplify the application process for the HSP Incentives Program, and I look forward to assisting farmers to apply in the next round. Below are a few recommendations for both the HSP Incentives Program and the HSP Demonstration Projects.

HSP Incentives Program:

- **Allow viewing of submitted applications and/or enable export of the submitted application.** It would be helpful for applicants and technical assistance organizations to be able to view (but not edit) submitted applications in the online system after submission, and after the application deadline has passed. In the last round, submitted applications could no longer be viewed after the deadline. Alternatively, an option to export the application as a pdf or other document for the applicant's records could serve as a record of the submitted application.

- **For questions where the applicant must choose between two options by clicking to fill in a bubble, enable unchecking of the bubble or add a third option such as "N/A".** In the last round, there were questions where the applicant accidentally clicked on a bubble but could not un-click it if they wished to leave the question blank.

- **Allow additional contact information for alternate contacts.** For many of the socially disadvantaged farmers that UCCE Fresno County assists, it would be beneficial to allow adding more than two contacts. Farmers could then include themselves, a relative with good email access, and their technical assistance provider (TSP) as contacts. This is especially important for processing grant agreements if a project is funded, as the farmer and/or their secondary contact may miss the emails. Including multiple contacts and including the TSP helps ensure that the grant agreement can be promptly returned to CDFA.

- **Remove the requirement for a letter of permission from the landowner for projects on rented land, for practices that are part of standard crop management.** Applying compost or seeding cover crops are practices that do not normally require landowner permission to implement. Given the global environmental challenges associated with climate change and the urgency of implementing agricultural practices that sequester carbon and reduce GHGs, it seems imperative to reduce any unnecessary barriers to implementation of Healthy Soils practices. Equity considerations are also important to address, as many socially disadvantaged farmers lease farmland. Some landowners are absentee and can be difficult to contact in time to submit the HSP application. It makes sense to require landowner permission for HSP Demonstration Projects,

since those are associated with potential liability for events such as inviting visitors to the farm. However, practices such as cover crop seeding and incorporation and application of compost are standard agronomic practices that would not usually be addressed in a lease agreement or require landowner permission, and it should not be necessary to obtain landowner permission to implement these practices.

- **Provide more information on expectations and best practices for taking soil samples for HSP projects with multiple practices on different sub-sections of a parcel**. Current recommendations state that "it is up to each producer to determine the size of the land area they would like to monitor. To the producer's best knowledge, all soil samples should come from the same uniform soil, as well as uniform management history and yields as determined by the producer." More specific guidelines and expectations would assist farmers in determining the optimal number of soil samples to measure changes in organic matter content of soil, especially on projects that implement different practices on different sub-sections of a farm.

HSP Demonstration Projects:

- For the following question in the online application, it looks like the text should read: "*If no, provide a letter of agreement from the land owner*". A letter of agreement should be required for an HSP Demonstration Project if the applicant does not own the land:

"Does the applicant's organization own the land where the project will be impacted?
Yes No *If yes, provide a letter of agreement from the land owner.*

Thank you again for the opportunity to comment. Should you have any questions, I can be reached at 559-241-7513 or rdwillard@ucanr.edu.

Sincerely,

Ruth Dahlquist-Willard, Small Farms and Specialty Crops Advisor
University of California Cooperative Extension, Fresno and Tulare Counties

CALIFORNIA FARM BUREAU FEDERATION
GOVERNMENTAL AFFAIRS DIVISION
1127-11TH STREET, SUITE 626, SACRAMENTO, CA 95814 · PHONE (916) 446-4647

January 7, 2020

Submitted via email: cdfa.HSP_Tech@cdfa.ca.gov

Office of Environmental Farming and Innovation
California Department of Food and Agriculture
1220 N Street
Sacramento, CA 95814

RE: Healthy Soils Program Application Comments

To whom it may concern:

The California Farm Bureau Federation (Farm Bureau) is writing to provide comments on the Healthy Soils Program (HSP) draft Incentives Program and Demonstration Project applications. Farm Bureau represents more than 33,000 members as it strives to protect and improve the ability of farmers and ranchers engaged in production agriculture to provide a reliable supply of food and fiber through responsible stewardship of California's resources. The HSP offers opportunities for California farmers and ranchers interested in financial assistance towards their efforts to increase carbon sequestration rates on their farms and ranches. Farm Bureau appreciates the chance to comment on the draft applications for the HSP.

California agriculture provides significant opportunities for increases in carbon sequestration through management of soils. Ensuring that the funds available through the HSP are fully utilized should be a top priority. A significant impediment to greater acceptance by California's farmers and ranchers has been the complexity of the application process. Farm Bureau appreciates the changes that have been made to the draft application to attempt to address these concerns and would offer the following comments with a recognition of all the work that has already gone into revising the application.

Request for Grant Applications

The Incentives Program Request for Grant Applications excludes projects "that use potted plants or other plant growth media" from funding under the HSP. It would be helpful to define "other plant growth media" to make it clear what projects can and cannot be funded under the program.

The requirement that projects proposing to implement prescribed grazing include a grazing management plan completed by a Certified Rangeland Manager is likely to limit applications from socially disadvantaged ranchers and smaller ranchers with limited resources. The costs associated with development of a grazing management plan are not insignificant and the HSP could be improved by funding the development of grazing management plans with additional funding available to implement the recommended practices identified in a grazing management plan.

Both the Incentives Program and Demonstration Projects Request for Grant Applications state that "projects are not required to provide benefits to priority populations. However, the projects that are determined to be providing benefits… will be prioritized for funding." There is not a description included in the Request for Grant Applications for how funding would be prioritized. It is important that funding selections be transparent. A clear description of how projects that benefit priority populations will be selected should be added so that applicants and the general public can understand why projects may or may not receive funding through the HSP.

The Request for Grant Applications requires soil samples be taken annually for the three-year life of the project. Many of the practices are likely to take much more than three years to have a significant impact on soil quality. For longer-term practices (e.g., Riparian Forest Buffer) it would reduce costs for participants if they were only required to take a sample at the beginning and end of the project.

Farm Bureau appreciates that the Demonstration Projects Request for Grant Application includes funding eligibility for the use of nitrification inhibitors, use of slow release fertilizers, and one-time compost application with higher rates for grazed grasslands. All of these practices show benefits to our climate and, while Farm Bureau would have preferred their inclusion in both the Incentives Program and Demonstration Projects, it appreciates their inclusion as eligible projects in the Demonstration Project.

Application Questions

Significant work has gone into simplifying the HSP application and Farm Bureau appreciates these efforts and the significant effort that went into the public process requesting feedback on the HSP. Farm Bureau would like to offer a few additional comments on potential improvements that could be made to further simplify the application process.

It appears unnecessary to request applicants look up and report their Assembly Member and Senator. This information is available to CDFA through the applicant's address and its removal would simplify the application without preventing CDFA from obtaining the information.

Farm Bureau would recommend including a reminder in the Incentives Program application that only non-overlapping practices can be funded in the same application. This reminder will be helpful to ensure applicants aren't surprised if they are denied funding for overlapping practices.

The Incentives Program application appears to simplify the budget calculations by automating many of them. Farm Bureau appreciates this simplification and is hopeful that it will lead to greater participation by California's farmers and ranchers.

The questions included to determine whether an application will benefit priority populations are extensive and likely to lead to applicants self-selecting against identifying projects that may benefit priority populations. Farm Bureau would recommend working to simplify the questions to determine priority population benefits. Additionally, Farm Bureau reiterates its request that funding priority for projects benefitting priority populations be explained to help applicants understand how their applications will be ranked.

Farm Bureau appreciates the opportunity to provide comments on the HSP. It is important to increase participation by California farmers and ranchers in the HSP and working to simplify the application process is one of the biggest opportunities to increase interest and participation. There are many opportunities to improve soil health, reduce carbon emissions, and increase carbon sequestration and increased participation in the HSP will help on this front. California farmers and ranchers are leaders in innovative agricultural practices and the HSP is just one way of further illustrating this innovation. The proposed revisions will help expand the HSP to more farmers and ranchers throughout the state. Farm Bureau appreciates the efforts that have been taken to date to implement the HSP and looks forward to greater participation.

Sincerely,

Noelle G. Cremers
Senior Policy Advocate

Resource Conservation District
Mendocino County

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January 7, 2020

California Department of Food and Agriculture
Office of Environmental Farming and Innovation
1220 N Street
Sacramento, CA 95814

Re: Healthy Soils Program Draft RFP Comments

Dear OEFI Staff:

On behalf of the Mendocino County Resource Conservation District, we submit the following comments on the Healthy Soils Program Draft Request for Proposals (RFP).

First, we wish to express our gratitude for OEFI's responsiveness to the input they received. It is greatly appreciated, and we support the proposed changes to the 2020 HSP Incentives Program.

There are a few additional changes we would still very much like to see:

- Allow one-time compost applications on rangeland. The requirement for ranchers to apply compost 3 years in a row on rangeland is cost-prohibitive and not in line with the studies conducted on rangeland compost.
- Allow one-time compost applications on perennial crops, particularly vineyards. Vineyard owners/managers are often concerned about compost promoting excessive vine vigor that could impact grape quality and create additional labor costs.
- Consider including cannabis growers in the HSP Incentives Program. We have the opportunity to work with cannabis growers in our region, and we would like to be able to extend the HSP Incentive Program financial assistance to them as well.

In addition, we have noticed a discrepancy between the original COMET-Planner and the CDFA HSP COMET-Planner that we would like to see rectified:

- The CDFA HSP COMET-Planner is missing the option for Reduced Till to No Till in all scenarios under the Residue and Tillage Management- No-Till (CPS 329).

Thank you for your consideration.

Sincerely,

Katy Brantley
MCRCD Soil Program Manager

American Farmland Trust
SAVING THE LAND THAT SUSTAINS US

California Department of Food and Agriculture
Office of Environmental Farming and Innovation
1220 N Street
Sacramento, CA 95814

January 7, 2020

Re: Healthy Soils Program Draft RFP Comments

Sent via Email: *cdfa.HSP_Tech@cdfa.ca.gov*

Dear Office of Environmental Farming and Innovation Staff:

American Farmland Trust (AFT) is the only national conservation organization dedicated to protecting farmland, promoting environmentally sound farming practices, and keeping farmers on the land. Since 1980, AFT's innovative work has helped to permanently protect more than 6.5 million acres of farmland and ranchland and led the way for the adoption of conservation practices on millions more. The State's Healthy Soils Program provides financial incentives to California growers and ranchers to implement conservation management practices that sequester carbon, reduce atmospheric greenhouse gases (GHGs), and improve soil health. We are pleased to offer our comments to the California Department of Food and Agriculture's (CDFA) Healthy Soils Program Draft RFP.

First AFT would like to express its appreciation for CDFA's leadership and stewardship on Climate Smart Agriculture programs that truly make a difference for farmers and ranchers on the working landscapes of California. AFT supports the following and meaningful changes to the Healthy Soils Incentives Program:

1. Increasing the maximum grant award from $75,000 to $100,000.
2. Allowing for a previously implemented practice to be implemented on a new or different field within the same (previously funded) Assessor Parcel Number (APN).
3. Incentivizing Whole Orchard Recycling (WOR) as an eligible practice under the HSP.
4. Creating opportunities for 25% of the total available funding to be awarded to Socially Disadvantaged Farmers and Ranchers, and projects that provide benefits to AB 1550 Priority Populations.
5. Reducing essay-type questions from the application.

6. Integrating the development of a map-based application input tool to reduce the number of attachments and analyses to be performed on external websites that were previously required for the HSP Incentives Program application.
7. CDFA is collaborating with USDA-NRCS and CARB to integrate Standard Payment Rates for the HSP Incentives Program in the Comet-Planner tool for the HSP, reducing the number of attachments required with the application.
8. Modifying the time frame for providing notifications and feedback to applicants to within 6 weeks, to allow award of successful applicants within the rolling application submission period.
9. Evaluating USDA-NRCS EQIP payment rates for 2020 in efforts to better align the HSP with EQIP.
10. Moving to a rolling 4-month window for applications.

As CDFA continues to refine this program, we urge it to consider working towards maintaining a simplified process for farmers, ranchers and technical service providers to more efficiently meet programmatic outcomes while supporting the intent of the Healthy Soils Program. AFT appreciates the success of this program through the investments made by the State to support climate smart solutions on agricultural lands. Should you have any questions regarding these comments, please contact me at (916) 448-1064.

Sincerely,

Katie Patterson

State Policy Manager

From:	Bill Rice
To:	CDFA Healthy Soil Program_Technician@CDFA
Subject:	Public Comment on Proposed Program Changes
Date:	Thursday, December 19, 2019 5:18:20 AM

I think the changes are fine with the following comments:

1. Selfishly, I would like to see some sort of financial incentive for elderly farmers. I am not socially disadvantaged as you define it, but I am handicapped by age at 77.

2. I have one experience with EQIP and it was disappointing in part. I don't know who sets prices, but they are ill-informed. The program set a reimbursement price of $745, to be a 50-50 split, for laying down 3-inches of mulch over one acre. I had lots of wood that I needed to use, burn or throw away. In our area, burning permits are hard to get and are a dangerous proposition. I had more than 800 avocado trees to use or throw away. Anyway, I chipped the cut stumps myself with a splitter. Then I rented a chipper and hired two men to operate it with me. We chipped all day and managed to spread the chips on only 1/3 of an acre. The chipper cost $340 for one day, the men $120 each, and this does not include fuel. So, for one day, the cost was $580 for 1/3 of the job. For an entire acre the cost would have been $1,740. Those economics are hard to accept, but the chipped wood mulch did the job to stop erosion and encourage better soil health through water retention for starters.

3. You need to know that as soon as California set the minimum wage increase, to be stepped gradually to $15/hour by what? 2022? Day workers around here immediately raised their demands for that rate as well as to be provided lunch, to be paid for the time taken for lunch, and to have two 20-minute breaks a day. These costs are real and need to be factored into your reimbursement pricing.

SAN MATEO RESOURCE CONSERVATION DISTRICT

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January 7, 2020

California Department of Food and Agriculture
1120 N Street
Sacramento, CA 95814

Re: 2020 CDFA HSP Incentives Program- Request for Grant Applications Draft for Public Comment

To whom it may concern:

Thank you for the opportunity to share our comments on the 2020 Request for Grant Applications Draft for the Healthy Soils Incentives Program .

We are very appreciative of the changes included in this version of the Request for Grant Applications, including that previously implemented practices can be implemented on a different field within the same Assessors Parcel Number; a reduction in essay-type questions; setting goals to reduce the number of attachments required for the application; and allowing producers to be funded more than once if on different fields.

There are two recommendations we have that we hope you will consider. First, the cost of implementation of projects (materials, labor, transportation, etc.) is higher in San Mateo County and in other high-cost counties, than most other places in the state, so average reimbursement rates rarely cover the total cost of projects in those areas. While we appreciate that CDFA is working with NRCS to align reimbursement rates to the Environmental Quality Incentives Program, we hope you will also consider that merely doubling their reimbursement rates will not always be sufficient to cover project costs in high-cost areas, such as San Mateo County.

Second, the Compost White Paper lists "conservation lands" as ineligible for rangeland compost application. A good portion of rangeland in San Mateo County is owned by conservation landowners with grazing tenants. Both the tenants and landowners are interested in the rangeland compost practice. Where we have recommended compost application in our Conservation and Carbon Farm Plans developed for conservation lands, all other factors for compost application on rangeland eligibility are met, but because they are conservation lands they cannot utilize HSP for implementation. Furthermore, measures to prevent inappropriate application of this practice on conservation lands are already in place: CDFA recommends working with a professional to consult on the rangeland compost application; and other criteria for eligibility make sensitive habitats, like coastal prairie, ineligible for this practice.

Additionally, please consider rewording the following “Exclusions” section on page 5 of the Request for Proposals. As written it says:

> HSP Incentives Program funds cannot be used to fund fields with existing and ongoing implementation of any agricultural management practices listed under Eligible Agricultural Management Practices including fields for which a HSP Demonstration or Incentives project was

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previously awarded. New fields within a previously funded APN, or new practices to be implemented on previously funded fields are eligible.

We think that the intent of this paragraph is to say that a *specific practice* that is listed under Eligible Agricultural Practices and has been previously used or is currently part of the management for a field is not eligible for funding. The wording above could be interpreted to mean that a field with *any* practice listed under Eligible Agricultural Practices that has been previously or is currently used is not eligible for funding of any other practice listed under Eligible Agricultural Practices; for example: a field with a hedgerow would not be eligible for cover crops.

Thank you for considering our recommendations. Please feel free to reach out to me if you have any questions.

Adria Arko
Climate and Agriculture Programs Manager
San Mateo Resource Conservation District

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