

CDFA Healthy Soils Program (HSP)
New Management Practices Proposals
Recommendations for Public Comment

Proposals to suggest new management practices for potential inclusion under the HSP were accepted between June 29, 2020 and August 28, 2020. Comments are due by 5:00 p.m. PT on August 27, 2021 via email to CDFA.HSP_tech@cdfa.ca.gov.

	Practice Proposed/Submitting Individual or Entity	Technical Sub-Committee Evaluation	CDFA Staff Recommendation	Additional Considerations and Explanation
1.	Re-saturating Delta peat soils through rice cultivation or construction of managed wetlands to reduce the emissions of CO ₂ from microbial oxidation and reduction of subsidence. (Prof. W. Horwath, UC Davis)	Can be included under the HSP Incentives Program as this practice is covered under existing USDA NRCS Conservation Practice Standard (CPS) 657 - Wetland Restoration.	Practice would be included under the HSP Incentives Program and HSP Demonstration Projects – Type B in future rounds of HSP (after FY 2021-22).	<ul style="list-style-type: none"> USDA NRCS CPS 657 is not currently included in COMET-Planner and quantification of estimated GHG reductions is not available. Time is needed to update CDFA HSP COMET-Planner and CDFA HSP RePlan Tool to accommodate the new practice in collaboration with USDA NRCS and CARB. Therefore, practice cannot be included in the 2021-22 round of HSP. Once quantification is available, practice would be funded for one-time implementation. CDFA would consider payment scenarios consistent with USDA NRCS such as levee or dike removal, deleveling, riverine channel and slough restoration and complex restoration.

2.	<p>Biochar Application (including livestock manure derived biochar).</p> <p>(Multiple proposals submitted by Monterey Pacific, Inc.; Prof. S. Parikh, UC Davis; Agricultural Waste Solutions, Inc.)</p>	<p>Can be included under the HSP Demonstration Projects – Type A with additional data collection requested as part of grant application.</p>	<p>Practice would be included under the HSP Demonstration Projects – Type A, starting 2021-22 round of HSP.</p>	<ul style="list-style-type: none"> • Properties of biochar vary depending biomass feedstock and the operating parameters. Biochar may not provide production benefits, depending on biochar properties, soil conditions, and cropping systems. Biochar application research in CA has been on limited biochar feedstock, soil, and crop type. More data is needed for model estimation of GHG reduction benefits. Additionally, a carbon offset protocol for biochar application is not available as an additional reference to allow for development of a GHG quantification methodology. • Therefore, project experimental design submitted by applicants must include but is not limited to information regarding: <ul style="list-style-type: none"> ○ Biomass feedstock ○ Application rate and method ○ Soil characteristics and crop type ○ Any restrictions or limitations with implementation of biochar ○ Applicants would be required to include data collections on ○ Biochar C, N, P and K contents and pH ○ GHG emissions ○ Crop yield and economic analysis ○ Co-benefits and/or adverse impacts
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3.	<p>Food waste hydrolysate application to soil.</p> <p>(California Safe Soil, LLC)</p>	<p>Can be included under the HSP Demonstration Projects – Type A with additional data collection requested as part of grant application.</p>	<p>Practice would be included under the HSP Demonstration Projects – Type A, starting 2021-22 round of HSP.</p>	<ul style="list-style-type: none"> • A standardized protocol for making food waste hydrolysate across various feedstocks is needed so as not to incentivize a single proprietary product. Quality of food waste hydrolysate may vary, which may impact crop yield and GHG emissions differently. Insufficient studies are available on the effects of food hydrolysates on soil C and reductions of GHG emissions. • Therefore, project experimental design submitted by applicants must include but is not limited to information regarding: <ul style="list-style-type: none"> ○ Protocol for food waste hydrolysate production ○ Practice implementation guidelines ○ Applicants would be required to include data collections on ○ Hydrolysate properties such as C, N, P and K contents and pH ○ GHG emissions ○ Crop yield or economic analysis ○ Co-benefits and/or adverse impacts
4.	<p>Soil application of humates.</p> <p>(Blue Seed Technologies)</p>	<p>Should not be included under the HSP.</p>	<p>Practice will not be included under the HSP.</p>	<ul style="list-style-type: none"> • The proposal does not provide a clear definition of humates or description of practice implementation. • Only a few published studies conducted in different climate regions while crop yields are highly unpredictable.

				<ul style="list-style-type: none"> No study conducted on impacts on C sequestration or GHG reductions was included.
5.	<p>Biochar based product for land application (biomineral fertilizer)</p> <p>(Plant Nutrition Technologies Inc.)</p>	Should not be included under the HSP.	Practice will not be included under the HSP.	<ul style="list-style-type: none"> The proposed product is not commercially available. No scientific studies have been published on the effects of this mixture on soil health, carbon sequestration, or GHG reductions.
6.	<p>Organic residential compost sharing</p> <p>(Keith & Robin Gemmill)</p>	Should not be included under the HSP.	Practice will not be included under the HSP.	<ul style="list-style-type: none"> Proposal did not include clear description of practice and did not meet submission requirements. Proposal is a one-page outline of a potential study; does not meet submission requirements. Compost production is beyond the scope of HSP; proposed project may be eligible for funding under the Community Composting for Green Spaces Grant Program administered by CalRecycle.
7.	<p>Manure Application (including no-till pasture seeding)</p> <p>(Constance Jones)</p>	Should not be included under the HSP.	Practice will not be included under the HSP.	<ul style="list-style-type: none"> Proposal did not meet submission requirements. The proposal is a grant application to implement practices already eligible under the HSP.