AGRICULTURAL MANAGEMENT PRACTICES ELIGIBLE FOR FUNDING THROUGH THE CDFA HEALTHY SOILS PROGRAM (HSP)

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CDFA has identified eligible agricultural management practices that sequester carbon, reduce atmospheric GHGs, and improve soil health, for funding through the Healthy Soils Incentives Program, Healthy Soils Block Grant Program and Healthy Soils Demonstration Program. These practices were selected from the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Conservation Practice Standards (CPS) and CDFA specified practices such as compost application and whole orchard recycling. HSP- specific Quantification Methodology and tools to estimate GHG reduction and Co-Benefits developed in collaboration with the California Air Resources Board (CARB) and USDA NRCS are currently available for these practices.

Eligible practices are categorized based on agricultural systems where they can be implemented. They are divided into three categories below.

I. Cropland

- 1. Alley Cropping (<u>USDA NRCS CPS 311</u>)
- Compost Application (<u>USDA NRCS CPS 808</u>)
 - Compost Purchased from a Certified Facility
 - o On-farm Produced Compost
- 3. Conservation Cover (<u>USDA NRCS 327</u>)
- Conservation Crop Rotation (<u>USDA NRCS 328</u>)
- 5. Contour Buffer Strips (<u>USDA NRCS CPS 332</u>)
- 6. Cover Crop (<u>USDA NRCS CPS 340</u>)
- 7. Field Border (<u>USDA NRCS CPS 386</u>)
- 8. Filter Strip (<u>USDA NRCS CPS 393</u>)
- 9. Forage and Biomass Planting /Pasture and Hay Planting (USDA NRCS 512)
- 10. Grassed Waterway (<u>USDA NRCS CPS 412</u>)
- 11. Hedgerow Planting (USDA NRCS CPS 422)
- 12. Herbaceous Wind Barrier (USDA NRCS CPS 603)
- 13. Mulching (<u>USDA NRCS CPS 484</u>)
- 14. Multi-story Cropping /Forest Farming (<u>USDA NRCS CPS 379</u>)
- 15. Nutrient Management (<u>USDA NRCS CPS 590</u>) (15% reduction in fertilizer application *only*)

- 16. Residue and Tillage Management No-Till (USDA NRCS CPS 329)
- 17. Residue and Tillage Management Reduced Till (USDA NRCS CPS 345)
- 18. Riparian Forest Buffer (USDA NRCS CPS 391)
- 19. Riparian Herbaceous Cover (USDA NRCS CPS 390)
- 20. Strip Cropping (<u>USDA NRCS CPS 585</u>)
- 21. Tree/Shrub Establishment (USDA NRCS CPS 612)
- 22. Vegetative Barriers (601) (USDA NRCS CPS 601)
- 23. Windbreak/Shelterbelt Establishment (USDA NRCS CPS 380)

II. Orchard or Vineyard

- 1. Compost Application (USDA NRCS CPS 808)
 - Compost Purchased from a Certified Facility
 - On-farm Produced Compost
- 2. Conservation Cover (USDA NRCS 327)
- 3. Cover Crop (USDA NRCS CPS 340)
- 4. Filter Strip (USDA NRCS CPS 393)
- 5. Mulching (USDA NRCS CPS 484)
- 6. Hedgerow Planting (USDA NRCS CPS 422)
- 7. Nutrient Management (<u>USDA NRCS CPS 590</u>) (15% reduction in fertilizer application *only*)
- 8. Residue and Tillage Management No-Till (USDA NRCS CPS 329)
- 9. Residue and Tillage Management Reduced Till (USDA NRCS CPS 345)
- 10. Whole Orchard Recycling (USDA NRCS CPS 808)
- 11. Windbreak/Shelterbelt Establishment (USDA NRCS CPS 380)

III. Grazing Land

- 1. Compost Application (USDA NRCS CPS 808)
 - Compost Purchased from a Certified Facility
 - On-farm Produced Compost
- 2. Hedgerow Planting (USDA NRCS CPS 422)
- 3. Prescribed Grazing (<u>USDA NRCS CPS 528</u>)
- 4. Range Planting (USDA NRCS CPS 550)
- 5. Riparian Forest Buffer (USDA NRCS CPS 391)
- 6. Silvopasture (USDA NRCS CPS 381)
- 7. Tree/Shrub Establishment (<u>USDA NRCS CPS 612</u>)
- 8. Windbreak/Shelterbelt Establishment (USDA NRCS CPS 380)

Additional Practices for Demonstration and Data Collection

In addition to the above listed practices, additional practices are eligible for funding through the Healthy Soils Demonstration Program Type A projects. A GHG

quantification methodology is not currently available for these practices; therefore, field GHG measurements must be included as part of the proposed projects. Projects proposing these practices are required to collect scientific data to fulfill the following priorities and to inform development of implementation standards for these practices in the long-term:

- (i) Demonstrate soil organic carbon sequestration and GHG reduction potential of the practice in diverse California climate types, soil types and crop types, through collection of data including but not limited to field measurement of GHG emissions and soil health indicators.
- (ii) Address knowledge gaps regarding environmental and eco-system impacts and co-benefits resulting from implementation of these practices at field-scale.
- (iii) Develop and/or standardize methodology for practice implementation, and, formulation and characterization of material(s) needed for implementation of practices including but not limited to vermicompost and microbial inoculation with compost tea.

The practices eligible under this category are:

I. Cropland, Orchard and/or Vineyard

- 1. Anaerobic Digestate Application: Cropland application of solids generated from anaerobic digestion of organic materials.
- 2. Microbial Inoculation with Compost Tea: Cropland application of diluted compost steeped or brewed in water with aeration/stirring (i.e. compost tea).
- 3. Mycorrhizal Application: Incorporating soil with fungi that form a symbiotic relationship with roots of crop plants.
- 4. Nutrient Management (CPS 590) (Replacing Synthetic N Fertilizer with Soil Amendments such as beef feedlot manure, chicken broiler manure, chicken layer manure, other manure, dairy manure, sheep manure and swine manure).
- 5. Nutrient Management (CPS 590) (Use of Nitrification Inhibitors).
- 6. Nutrient Management (CPS 590) (Use of Slow-Release Fertilizers).
- 7. Vermicompost Application: Application of compost produced from organic materials using various species of worms.
- 8. Biochar Application: Application of biochar produced from organic materials to soil.
- 9. Food Waste Hydrolysate Application: Application of hydrolysate product produced from food waste treatment to soil.
- 10. Re-Saturating Delta Peat Soils through Rice Cultivation (Cropland only)

II. Grazing Land

1. One-Time Compost Application with Higher Rates for Grazed Grasslands: Application of compost to grazed grasslands at rates higher than currently supported by Healthy Soils Program once every ten years.