## **Projects Selected for Award: 2017 HSP Demonstration Projects Second Solicitation**

## **Updated May 11, 2018**

Applicant Organization	Project Description	Grant Funds Requested*	Estimated Cost Sharing*	County	GHG Reduction Estimation (Tonnes CO <sub>2</sub> eq/year)**
Agriculture and Land- Based Training Association	Compost Education, Demonstration, and Research for Organic Vegetable Row Crops in the Salinas Valley (CEDAR).	\$100,000.00	\$51,199.00	Monterey	52.7
Gold Ridge Resource Conservation District	The project will demonstrate benefits of implementing two conservation management practices on a certified organic dairy in western Sonoma county. Our work plan includes compost application on 30.0 acres of grassland and 1 acre of riparian forest buffers. We will engage with at least 120 ranchers and farmers through demonstration field days. The project utilizes a completed Carbon Farm Plan as our basis for implementation. The goal of the project is to increase adoption of conservation management practices that mitigate greenhouse gas emissions and increase soil health through implementation and demonstration of GHG-beneficial practices, in support of ongoing carbon farming extension and education work with local ranchers and farmers.	\$99,991.24	\$23,476.00	Sonoma	420.3
Mission Resource Conservation District (North San Diego County)	San Diego County's light textured soils found in the primary growing region of North County make adoption of healthy soil practices an important part of agricultural operations moving forward. The goal of the project is to first reduce GHG's from the operation by sequestering carbon, which will increase organic matter. The project also seeks to reduce soil salinity and improve water infiltration rates. These goals will be pursued through the adoption of the following healthy soils management practices, cover cropping, reduced tillage, composting and mulching. These goals will be measured by lab soil tests, Electrical Conductivity Mapping (for soil texture change) and Natural Resources Conservation Services, Soil Quality Test Kit tests. The outcomes identified by the project are to see the adoption of these healthy soils practices by growers in the region and to reach 120 to 140 growers through the outreach activities of the project.	\$57,754.50	\$18,554.25	San Diego	104.3

		\$549,429.98	\$614,497.75		
Upper Salinas – Las Tablas Resource Conservation District (USLTRCD)	The Upper Salinas – Las Tablas Resource Conservation District (USLTRCD) is partnering with Vineyard Professional Services (VPS) to implement conservation practices (i.e. no-till and cover crops) on multiple ranches in northern San Luis Obispo County. The project will entail a total of four (4) ranches with 419 vineyard acres. The goal of the project is to evaluate soil health, feasibility, profitability, and ecological benefits from implementing different conservation management practices. The USLTRCD will develop baseline data and ongoing monitoring of the project to measure the effectiveness of each conservation practice applied. These will then be demonstrated to other stakeholders in the area through workshops and a site-tour to each vineyard to increase the efficacy and application within the region.	\$99,643.24	\$231,257.50	San Luis Obispo	304
University of California, Davis (UCDVolder_6494)	The project will collaborate with organic growers and the regional farm advisor to better elucidate the role of cover crops in determining system carbon sequestration, greenhouse gas emissions, soil health, and tree performance. The incorporation of cover crops may improve the nutrient status of the tree, particularly in iron, since crops in the lake county region are prone to iron chlorosis. Carbon sequestration will be determined by measuring soil organic carbon and microbial biomass carbon. Greenhouse gas emissions will be assessed by measuring soil respiration, soil water content, soil oxygen concentrations, and soil temperature. Measurements of soil health include pH, nitrogen availability, and iron availability, of tree performance include mid-day stem water potential, root carbohydrates, root respiration, total leaf nitrogen, leaf iron, and chlorosis stress. An improved understanding of the effect of cover crops on the rhizosphere and soil health through advanced on-farm research will better inform management decisions to improve pear orchard yield and long-term sustainability.	\$92,213.00	\$50,580.00	Lake	4
The Regents of the University of California, Davis	The potential for cover crops to increase soil C and productivity while lowering global warming potential makes them appealing to address climate change mitigation and promote sustainable land-use. Our goal is to demonstrate successful cover cropping management for almond producers to 1) sequester C, 2) build healthy soils to enhance orchard resilience to water shortages, and 3) improve overall sustainability and productivity of almond. This project leverage an interdisciplinary assessment of various cover crops supported by the Almond Board of California. In this proposal, we propose to demonstrate the impact of winter cover cropping strategies on long term C sequestration and the implications for resource use efficiency of almond production. We will provide detailed measurement on soil C associated with planted or naturally vegetated winter soil cover, conduct a cost-benefit analysis, and host outreach events to extend information to growers.	\$99,828.00	\$239,431.00	Tehama Merced	14.4

<sup>\*</sup> Subject to change based on budget evaluation by CDFA.

<sup>\*\*</sup>Estimated using CARB GHG Quantification Methodology and tools. Subject to change based on CDFA evaluation.