CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE
2018 Healthy Soils Program Incentives Program
Applications Submitted to CDFA*

Applicant Organization	Project Description	Funds Requested	Cost Share	County	GHG Reduction Estimation ($MTCO_2$ e/year)**
3 Calhoun Sisters, LLC	This project will implement two conservation practices including compost application and range seeding to increase soil health on a 112 acre ranch. The goal of this project is to increase soil organic matter, forage production, water infiltration, and establish a native perennial grass population.	$3,308.89	$1,165.24	Alameda	14.1
A&S Enterprises	Our project will introduce a silvopasture system into grazing lands in order to enhance wildlife habitat, improve biological diversity, increase carbon sequestration and storage, and provide shade and shelter for livestock. Degraded Plum creek will be restored with a riparian forest buffer planting that will improve the hydrology of the system as well as increasing soil carbon storage. We will also mulch our hay cropland with natural materials. We will monitor soil organic carbon throughout the 3 years of this grant to assess the impact of the management practices.	$71,494.56	$15,900.00	Modoc	20.0
ACM II California Ranch 4 LLC - Victory Ranch	By applying compost C:N >11 to 40 acres of blueberries and mandarins for three years, we hope to be able to see an increase in soil and plant health that is significant enough to justify implementation to more acres and for years to come. We will gauge success by taking yearly soil sample tests and looking at SOM percentages, nutrient composition, and water drainage and holding capacity. We will plant over 4000 feet of hedgerows optimized for native pollinator habitat. The project will help increase quality and yield of blueberry and mandarin crops, preserving the soil health and carbon sequestration benefits. We will evaluate project success based on soil health, pollinator abundance and diversity, and crop quality and yields.	$72,542.16	$17,000.00	Kern	183.0
ACM Permanent Crops LLC	We will plant over 4000 feet of hedgerows optimized for native pollinator habitat. The project will help increase quality and yield of nearby crops, preserving the soil health and carbon sequestration benefits of permanent cropping systems. Success will be based on soil health, pollinator abundance and diversity, and crop quality and yields. We will also spread a total of 36 acres of compost C:N > 11 at a rate of 6 tons per acre in the alleyways of three citrus fields for three consecutive years. We hope to better the overall soil structure by adding organic matter. The additional organic matter should provide long lasting nutrients and microbial activity to these heavily farmed and malnourished soils. Success will be measured against soil quality tests, water holding capacity and infiltration tests, and possibly citrus leaf tissue tests.	$74,531.64	$12,000.00	Fresno	164.2
ACMII, California 6, LLC	the project will consist of yearly cover cropping of mixed legumes and grasses for the three-year project between rows on roughly 190 acres of table grape vineyard. This will improve water infiltration and increase organic matter content in the soil which will promote nitrogen fixation and reduce energy use. This will increase soil carbon and organic matter to avoid nitrate leaching and compete against undesirable weeds along with reducing greenhouse gas emissions. Increased soil organic matter will help the capacity of the soil to hold water in the root zone for plant utilization. The recipient will measure the effectiveness of the management practices by testing the soil health over the three-year period for the desired results.	$60,960.52	$30,000.00	Kern	37.0
Alba Good	The goal is to enrich the quality of the soil for a ten acre historic fruit grove, the grove provides oranges to the Riverside Unified School District and the citrus is enjoyed by students in elementary schools in the Riverside School District. The compost will improve the health of the the soil and keep the temperature low during the extreme hot weather in the Inland Empire. The soil quality will be more sustainable and resilient to climate changes. In the long run, the fruit production will be improved by replenishing organic matter and supplying valuable nutrients.	$45,000.00	$8,000.00	Riverside	19.0
Alexandre Dairy	Alexandre Dairy has selected 66 acres to apply Compost Application Practices and Cover Crop Practices as identified in the Healthy Soils Program Incentive Guidelines on irrigated pastures in Northern California, Crescent City. The acreage selected for practice implementation has been identified by the Dairy as most suitable for the implementation of the project years 2019 through 2021. Three to five tons per acres of compost will be spread in years 2019 and 2020 produced on site at Alexandre Dairy. The application of the compost will be followed by farming activities to integrate the compost into the soil, through harrowing, followed by aerwaying then application of the cover crop. The cover crop which will consist of Crusader rye grass seed and combination of red and white clover will be applied.	$74,944.60	$15,986.00	Del Norte	279.5
Alturas Ranches, LLC	The two practices to be implemented are cover crops and compost application. First, the wild rice fields on the ranch sit barren from about September through March. This project would allow Alturas Ranches to try planting cover crops on the rice fields after fall harvest to protect soil from wind and water erosion and to provide living roots in the soil to increase nutrient cycling as well as boost nitrogen fixation and storage. The cover crops would also be grazed which could decrease fertilizer use if the cattle manure can provide some of the needed nutrition for the following rice crop. The compost application would occur on two pieces of land that have such high alkalinity that little will grow there. The goal is for the compost to dilute the alkalinity of the ground and stimulate biological activity to get plants growing on this ground once again.	$71,987.49	$ 0.00	Modoc	117.3
Alyce LLC	While there are many practices that are associated with becoming a minimal input operation, we believe that composting is one practice that can reap a bounty of benefits. By implementing these practices every year for a minimum of three years, we will see an increase in soil organic matter, water holding capacity and drainage, amongst other benefits. We will test these characteristics at least once per year by sending soil samples to be lab tested and running water holding capability tests on soil core samples. We will define success if we see a gradual increase in these soil characteristics but also if we see a noticeable difference in tree health and nut quality.	$49,500.00	$3,150.00	Yolo	250.3

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Araceli Farms	My journey with soil structure began by our crop getting struck with Phytophthora from the nursery we purchased our plugs. In my quest to make the best of the situation I came across a soil expert and together we compiled a sustainable plan to keep our plants healthy and able to fight off disease. Years of conventional farming has depleted our soil structure and I want to work hard to create a sustainable microbiome. Thinking solely long-term and about the footprint I will lead and leave as a farmer. My goal is to create a thriving soil structure by adding fungal dominated compost to work with the land and highlight itâ€™s best features like a diverse micro biome, increased soil organic matter and nutrients. I want to share the journey with the community and our following to encourage others to adopt these practices and/or spread the word. Building our soil structure up will lead to disease prevention, long term sustainability, better drainage and efficient crops. I plan to measure the success formally by following multiple guidelines; the HSP Work Plan Template, detailed logs of plant loss to see how the disease is travelling, hysical tangible evidence (getting our hands dirty and digging to look at our soil and keeping detailed logs on activity), and by regularly sending our soil out for samples to a verified licensed testing agency. In order to protect all the work that we do we would like to fortify the barrier between our Certified Naturally Grown crop and the conventional farming being done on the remainder of our field. The cover crop would be planted in an area that stretches 954 ft x 300 ft. The cover crop will also improve organic soil matter for when we are ready to plant in that area.	$4,248.00	$950.00	Solano	12.7
AYLENE NORRIS	The recipient will enrich and protect the soil on on a 5 acre fruit orchard by implementing two conservation management practices. The goal will be pursued through the adoption of the composting and mulching to reduce Greenhouse Gases (GHG) from the operation by sequestering carbon, which will build healthy soils, increase organic matter, and enhance orchardâ€™s resilience to water shortages. The soil composition and crop yield will be evaluated before and after implementation. The project will also be measured by soil analysis and water usage comparison from the utility company for three consecutive years. There is also plans to acquire an IRROmesh logging system to track soil moisture. The outcome will be used to evaluate the adopted practices and to share the information to CDFA.	$27,632.00	$4,000.00	Santa Barbara	8.4
B&R TeVelde	This project calls for reducing tillage on 77 acres of rotating row crops and applying compost to increase organic matter and sequester carbon. The rotation of corn and winter forage will be planted along with a nitrogen fixing cover crop and utilize strip till and no till to reduce emissions caused by tractor passes in the field and increase the biomass in the soil. 4 tons of on-farm compost will be applied annually. Soil samples and organic-matter measurements will be taken at various monitoring points throughout the project life to track our progress towards these goals.	$74,998.47	$12,280.11	Kings	215.7
Bazzano Azienda LLC	To implement various new agricultural and land management practices to improve soil health, water quality, efficient water use, and increase vineyard health and production. Specifically the use of cover cropping, reduced tillage and compost application. These practices are intended to increase the health and productivity of the vineyard, as well as provide beneficial effects on surface runoff that enters into an intermittent drainage which bisects the property. Efforts will include practices to manually reduce or eradicate invasive species which have had a negative impact on both the vineyard and the drainage.	$19,347.77	$35,332.50	Contra Costa	32.5
BECKSTOFFER VYD XV, LLC	This project will reduce water and synthetic fertilizer use, improve the health of the vines and ecosystem, and improve the air and water quality for the surrounding areas for 22.39 acres of wine grapes. There are three parts to the proposed project. Part one will implement new non-legume and legume cover crop to irrigated cropland. Part 2 is to reduce tillage to no till every other row. These two practices complement each other. For one, less tractor passes will improve air quality. In addition, decreased tilling will reduce greenhouse gases that are usually released when the soil is tilled. Using a permanent cover crop will protect the soil from erosion, help regulate soil temperature and maintain soil moisture. The established roots from the cover crop will increase pore space, which will increase aeration, water holding capacity and water permeability. A permanent cover crop will also increase beneficial insects and make for a more balanced ecosystem year round. Part 3 is a compost application every year for three years at 4 tons/acre. Currently, our budget restricts us to do one application every 3 years at 2 tons/acre. Applying compost every year will increase the organic matter in the vineyard, increase biological diversity, decrease erosion, reduce need for synthetic fertilizer and create a more sustainable, resilient soil. We will measure the success of these projects by taking soil samples once a year to show that there will be an increase in organic matter over time. In addition, we will use a penetrometer to measure the soil moisture and pliability of the soil. Finally, we will assess yields by comparing yields from year to year and evaluate the overall quality.	$25,461.46	$10,075.50	Napa	112.5
Benbow Stephens	A multi species cover crop will be planted in the alleyways across 62 acres of pistachios. Compost C:N ratio of 24 will be broadcast spread at a rate of 6 tons per acre to 53 acres of the field. One of Benbow Stephens's goals is to be a model of successful holistic and sustainable farming practices at scale. While there are many practices that are associated with such a mindset and lifestyle, we believe that composting and cover cropping are two practices that can reap a bounty of benefits. By implementing these practices every year for a minimum of three years, we will see an increase in soil organic matter, water holding capacity and drainage, amongst other benefits. We will test these characteristics at least once per year by sending soil samples to be lab tested and running water holding capability tests on soil core samples. We will define success if we see a gradual increase in these soil characteristics but also if we see a noticeable difference in tree health and nut quality.	$75,000.00	$11,192.00	Yolo	275.3

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Bertagna Custom Farming, Inc.	Apply Compost to a young almond orchard to improve Organic matter in the soil and add slow release Nitrogen	$21,600.00	$9,360.00	Butte	54.1
BLOOM FARMS	Implement these programs to reduce inputs and conserve the environment	$11,250.00	$0.00	Merced	58.0
Bosque Verde, LLC	We will improve soil health within a young almond orchard by growing annual cover crops, and recycling orchard pruning brush by chopping. Improving soil management practices will lead to increased soil organic matter to help increase water infiltration rates and prevent erosion. We will establish shelterbelt/windbreaks in adjacent areas on the property to act as habitat for insects and small vertebrates in the area. Orchard edges will be planted to filter strips of annuals to increase soil stability and habitat. Orchard middles will be planted to cover crops. Trees, shrubs, and annual cover crops will provide diverse habitat for insects and vertebrates. We've developed an almond orchard from formerly cultivated hay ground and irrigated pasture. Development of agricultural property into permanent crops can lead to a reduction in biological diversity and soil health. We would like to dedicate a portion of the property to improving biological diversity and habitat through the planting of perennials and annuals that will target the health of beneficial insects and honey bees, which are kept on the property. With the implementation of these new soil practices, we hope to increase soil health as well as reduce dust created on the property, especially during harvest season. We hope to work with area UC Farm Advisers and groups interested in habitat restoration to demonstrate that projects promoting biological diversity can be implemented within and adjacent to commercial farming operations. Soil improvements will be monitored by observing trends in soil infiltration rates and runoff, and measured additionally by soil moisture monitoring and other suitable methods. Anecdotal and scientific measurements of pollinator and other beneficial insect activity and health will be monitored throughout the orchard cropped and native vegetation planted areas.	$70,759.02	$7,010.00	Glenn	77.2
Brayden Vineyards	We want to enhance the biodiversity of our vineyard as well as provide habitat for endangered pollinators. We want to plant a cover crop mix on the entire vineyard that consists of a blend of spring, summer and winter annuals. We also want to provide permanent habitat by planting a hedgerow on the non-cropped portions of the vineyard. The hedgerows will consist of woody perennials like native milkweeds and shrubs that are specifically chosen to support monarch populations. Our goal is to provide a year-round food source in the form of flowering plants which will increase the beneficial insect population, as well as provide them with areas to overwinter that's undisturbed. This will reduce our need for pesticides because we will rely more on biological controls for pest insects and weeds. We plan on comparing the insect populations on the rows with flowering mixes, to the other rows with native grasses and see how they compare. Using butterfly nets, we will sweep cover crops, identify and measure the number of species. We will work closely with non-profits like the Xerces Society and WildFarm Alliance and consult with them about further protection for pollinators and monitoring practices. These conservation projects will increase the aesthetics of the vineyard, which serves as a base for the main office and has many visitors throughout the year. These projects could serve as examples to other property owners.	$16,426.91	$9,150.00	Monterey	5.7
Brian E. Lindberg	This property has been in our family since 1875. It was cleared, tilled, and grazed for over a hundred years, and the tilled soil was finally killed with the use of chemical fertilizers and herbicides. When we acquired ownership, the land was worn out, and the creek was eroding a new bed every time it ran. We began restoration of the ecosystem and implementation of a permaculture agrarian practice 25 years ago. Ten years ago, we implemented a USDA WHIP project on the land (see Conservation Plan attached). The currently proposed project is on ground which was not included in that work (from answers to questions, I understand that this is eligible for funding). This project is a part and continuation of the ongoing process of establishing a sustainable agriculture operation within the natural ecosystem, and it provides a further means of sequestering carbon in the soil. 1) 10' x 1900' of hedgerow using local native pollinator species w/ bloom times throughout the year, in what is currently grassland along the border of field #1. This will support a diverse population of declining pollinator insects and diverse population of insect-eating birds, both supporting organic agricultural practices. Evaluation is visual. Also, it will contribute to reestablishing a mycorrhizal net on the field. Evaluation is through the appearance of mushrooms and puffballs, and increasing soil carbon through glomalin increase. 2) 1.5 acres of riparian forest on eroded grassland on the west bank of the E. Branch of the HuerHuero Creek. This will restore soil which was lost in the prior century (when the creek banks were denuded) and prevent further soil erosion in the future. It will provide habitat for bird species and the willows will provide a winter nectar source for pollinator insects.	$27,527.52	$10,000.00	San Luis Obispo	6.0
Bucio Organic Farms	This Healthy Soils Incentives project is entirely focused on Compost Application to Annual Crops (high N at 5 tons/acre) for a 10-acre vegetable row crop and strawberry farm in the Salinas Valley. The project will utilize the same application rate over three years on all of the cultivated land in rotation with a diversity of crops. The land has been farmed organically for over 10 years; however, has not received compost. The goal of the project is to improve soil and plant health. Outcomes will include increases in soil organic matter (as measured by an annual soil test) compared to a baseline measurement, and increased yield for at least two crops that will be tracked by the grower.	$7,500.00	$0.00	Monterey	21.0

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Bruce Mentzer for Farm to Fight Hunger	We have torn out 2 acres of vineyard, and are prepping the land to farm vegetables which we will be farming sustainably. All of the produce grown will be donated to the local Sonoma County food pantry's. We would like to border the entire area with native plant hedgerows to attract beneficial insects, pollinators, keep the soil covered, and to provide a small wildlife corridor across the property. These are now bare areas currently in winter legume/grass cover crop that we would like top put back into long term perennial plantings. Once established, they will be composted and mulched annually and left alone. We will also be farming with a no-till 100' row system which we will add compost to annually in the fall, and cover crop for the winter. Cover crop will be mowed in the Spring and left in place to be incorporated into the top of the beds. Not disturbing the crop rows will allow us to build the soil from season to season without disruption to the organisms below. We have a base soil test from Fall 2018, and we will be testing the soil annually in all areas of the farm to see how much we are increasing the organic matter and other macro and micro nutrients. This will allow us to better manage any needed nutrient amendments.	$12,303.84	$20,968.00	Sonoma	12.8
Bullseye Farms	A multi species cover crop will be planted in the alleyways of MB6W (a 50 acre field) and EV3 (a 42 acre field). Our calculations show that planting alleyways covers 70% of the total acreage. (70% of 50 is 35 and 70% of 42 is 30). Compost C:N 24 will be broadcast spread at a rate of 6 tons per acre to EV3, 42 acres of pistachios. One of Bullseye Farm's goals is to be a model of successful holistic and sustainable farming practices at scale. While there are many practices that are associated with such a mindset and lifestyle, we believe that composting and cover cropping are two practices that can reap a bounty of benefits. By implementing these practices every year for a minimum of three years, we will see an increase in soil organic matter, water holding capacity and drainage, amongst other benefits. We will test these characteristics at least once per year by sending soil samples to be lab tested and running water holding capability tests on soil core samples. We will define success if we see a gradual increase in these soil characteristics but also if we see a noticeable difference in tree health and nut quality.	$66,765.00	$6,000.00	Yolo	205.2
Bullseye Orchards 1 LLC	A multi species cover crop will be planted in the alleyways of the 68 acre field of almonds. Our calculations show that planting alleyways covers 70% of the total acreage. (70% of 68 is 48 acres). Compost C:N ratio of 24 will be broadcast spread at a rate of 6 tons per acre to 65 acres of almonds. One of Bullseye Orchard's goals is to be a model of successful holistic and sustainable farming practices at scale. While there are many practices that are associated with such a mindset and lifestyle, we believe that composting and cover cropping are two practices that can reap a bounty of benefits. By implementing these practices every year for a minimum of three years, we will see an increase in soil organic matter, water holding capacity and drainage, amongst other benefits. We will test these characteristics at least once per year by sending soil samples to be lab tested and running water holding capability tests on soil core samples. We will define success if we see a gradual increase in these soil characteristics but also if we see a noticeable difference in tree health and nut quality. By applying compost to 65 acres, we will be able to compare the differences in field and nut quality.	$75,000.00	$11,150.00	Yolo	277.2
C & R Ranch	The proposed project will establish 4,900 feet of riparian plantings on water ways that have been largely denuded of cover and are subject to erosion and stream bank degradation. In addition, a 2,000 foot hedgerow of tall trees and intermediate story shrubs and trees will be planted down the central, north-south access road transecting the property. The hedgerow will run perpendicular to the slope of the land. It will improve tail water percolation during the summer irrigation season and reduce the velocity of storm water run off during the winter months. The two water ways transect the property from east to west. The mixed species, riparian planting on both sides of the water ways will consist of trees, shrubs, forbs and native grasses. The planting will significantly improve the wildlife habitat on the property for mammals, reptiles and insects. Plant species will include pollinators that maintain a food source for insects throughout the summer months. The riparian plantings will create a protected corridor that facilitates the movement of endemic species of animals from the dry, pre-montane foothills immediately to the east of the ranch toward the streams and water courses flowing westward into the Sacramento River.	$75,000.00	$0.00	Butte	14.2
CGD Farms	This project will: 1) introduce multi-species cover crops of legumes, grasses, and forbs in our 30 acre organic almond orchard. 2) introduce multi-species cover crops of legumes, grasses, and forbs on 45 acres of organic annual cropland (rice/small grains rotation). 3) apply compost to both the orchard and the annual cropland at a rate of 4 tons/ac. This will improve water infiltration, increase organic matter content of the soil, promote nitrogen fixation, and reduce energy use.	$74,775.00	$26,650.00	Glenn	358.5
Clayton Handy	Recipient will apply living compost to 30 acres of soil where young walnuts have been planted. This will help inoculate the soil with an abundance of diverse microorganisms. The success of these organisms will be facilitated by a no till system and drill seeding a diverse cover crop, whose exudates will help feed the existing microbiology of the system and those inoculated by the compost. Diversity and balance of the system will be enhanced and maintained by planting a hedgerow of native woody species around the perimeter of the orchard. All these practices will increase soil health. Healthy soils equal healthy plants, animals and earth.	$39,960.00	$19,450.00	Butte	152.2

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City of Riverside	The Healthy Soils Program will provide funding for the Northside Heritage Meadow (NHM) Urban Farmâ€™s establishment and implementation of soil conservation practices to improve soil health, sequester carbon and mitigate GHG emissions, and provide many ecosystem benefits. The City of Riversideâ€™s proposal seeks funding to implement five management practices at the Northside farm site, including mulching on cropland, compost applications to row and tree crops and shrub plantings, establishing a riparian forest buffer/habitat, trees and shrubs establishment, and hedgerow plantings. The goals and expected outcomes in implementing these soil conservation practices include conservation of water, controlling pests in non-toxic ways, fostering pollination, use of composted greenwaste to build soil fertility, preservation of natural resources, improving soil health, reducing erosion and runoff, building soil fertility, providing habitat for wildlife, increasing biomass and soil carbon sequestration capacity, reducing GHG emissions, and producing high quality food. HSP funding will facilitate these healthy soil outcomes by funding conservation practices in the establishment of the Northside Heritage Meadows Urban Farm. Additionally, the farm site will not only grow food to serve the local community, but be a training ground for workforce development programs (including apprenticeships and new farmer incubation) for priority populations. Annual soil analysis and technical assistance from the local Resource Conservation District and USDA NRCS conservationist will evaluate the success of the project's five management practices.	$74,958.26	$28,640.00	Riverside	112.7
Clow Ranch	Add mulch to the orchards where have had terrible drying out of the soil. Also the nutrient value may improve the trees vigor and production. We have had trees die due to lack of moisture, so I am hoping this will help.	$74,778.09	$0.00	Ventura	3.0
Cohen Valley Farms	Project includes 61 acres of compost application for a grass fed beef and lamb operation. Goal is to increase the health of the land being managed which will also increase the quality of the pastures and extend the growing season. Adding compost will boost soil fertility, increase productivity, increase water retention, improve nutritional quality of the pastures, extend the growing season and help protect against erosion.	$73,950.00	$0.00	Sonoma	274.2
Costanoa Commons, Inc.	Costanoa Commons Farm is a 3 acre parcel with diversified vegetable, fruit and flower production. Methods, though not certified yet, are organic. Farm is a non-profit operation run in part to provide socially disadvantaged, disabled emerging farmers with farm training in all aspects of production, sales, and CSA distribution. The Healthy Soils Program grant, if awarded, will be used to apply compost on our production field, as well as remove grassland and establish a permanent hedgerow on three sides of the farm, drawing beneficial insects by creating year-round habitat using a mix of native pollinators and woody plants. Finally, the grant will also fund a riparian forest buffer along the fourth side of our farm which is bordered by Pogonip Creek. Plants will be sourced from a neighboring native plant nursery (Central Coast Wilds), or equivalent business, specializing in local, native plant propagation. All work will be supervised by farm staff and implemented by both farm staff and disabled farm interns who work side by side in this innovative farm business working to provide farm training and employment opportunities to people with developmental disabilities.	$18,939.03	$12,000.00	Santa Cruz	22.5
Cowley Family Ranch	Building a wind break shelterbelt and hedgerow along a county road alongside grazing pasture land. This wind break and hedgerow will provide much needed shade, carbon sequestering, and habitat for the area.	$26,586.62	$2,000.00	Siskiyou	5.0
Cuttings Edge	The two major problems we deal with on our farm are storm water flooding from other properties and weeds throughout the growing season. This depletes our soils and takes excessive time to manage. Our neighbors have minimal infiltration, so their runoff floods our fields in the event of heavy rainfall, such as we have experienced these past few winters. We also struggle to manage weed pest populations without using fossil fueled power tools and chemical herbicides. Since we made the decision to stop using herbicides, we have been inundated with growing populations of weed species. Silt and detritus is one of the major pollutants in storm-water, causing turbidity, impacting biodiversity, and clogging drains for sewers which causes further flooding and contamination. With a wind break along the upper fence line as a hedge against erosion from our neighbor uphill, we can also be sure pollinators and beneficial insects have a place to overwinter with perennial species bearing abundant flowers in spring, summer and fall. This will also control weed species germination as most of the production areas and planted row spaces will be mulched with a 2 inch layer of wood chips each of the three years. The goals of this project are to establish Native pollinator plants to hold the soil in place in the event of a storm, new riparian forest growth to enhance wildlife habitat, compost for added soil fertility and biological benefits, and mulch to keep the weeds down. Not only is this our vision, it will give this farm the needed boost towards economic and environmental sustainability. As a student of Environmental Studies at California State University San Marcos, I hope to take ample record of our practices, as implemented, and the resulting outcomes. My main focus of study is forest and soil science.	$11,164.36	$2,800.00	San Diego	2.4

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Cuyama Lamb, LLC	Native California perennial grasslands are a threatened ecosystem. Estimates suggest native perennial grasses comprise only 1% of grassland ecosystems in California. However, these perennial bunchgrasses provide superior forage for livestock as well as wildlife, improve soil health, sequester carbon, and improve water infiltration and water quality compared with non-native annual grasses. In order to achieve the ecological benefits of these perennial grasses on our rangeland, and to improve year-round forage for our growing herd of sheep in the degraded rangelands of the Cuyama Valley, we propose the following rangeland improvement plan for reseeding native perennial grasses in the Cuyama Valley. The goals of our project are: 1) to improve perennial forage for our herd of sheep; 2) to sequester carbon; 3) to improve soil health; and 4) to improve infiltration of water into the soil. We propose broadcast seeding 90 acres of rangeland in the Cuyama Valley with a mix of native perennial bunchgrasses and legumes, using livestock impact (sheep) both before seeding to prepare the soil with hoof impact and post-seeding to press the seeds into the ground. The nature of the landscape as one heavily studded with established native shrubs limits our ability to use mechanical implements and makes sheep an ideal tool for rangeland planting on this landscape. We are partnering with Cal Polyâ€™s department of rangeland ecology to monitor the success and establishment of our plantings. We will gather data on rooted nested frequency, percent bare ground, and species composition annually and compare it with pre-trial findings. We will continue to monitor the health of the established plantings throughout their lifecycle, adjusting herd impact as determined through trial and observation. Through these means, we seek to establish thriving perennial bunchgrass stands on our rangeland, increasing forage quantity and quality, carbon sequestered, soil health, and water infiltration.	$69,667.20	$60,000.00	Ventura	41.0
David Palmerlee	Dragon Tree Ranch is a 69-acre cattle and olive ranch in the Sierra foothills of Butte County. The only source of water for cattle is a 1,500' stretch of creek along a busy road. Cattle have eroded and denuded the banks and congregate in the stream itself where their feces and urine pollute the water. Our plan includes fencing off the roughly 2.4-acres of ground along the stream to eliminate cattle access in that section. Following the fencing we would actively plant 200 native woody riparian species along the stream to protect the banks, provide habitat, and shade the stream. Plants will be protected with tree shelters, weeds controlled around each using herbicide spray, and irrigated for three-years via a drip irrigation system. Within the riparian area we will also establish conservation cover for pollinator species using a mix of native forbs, sedges, rushes, and grasses planted as plug plants along the creek system. The existing annual grass weeds will be sprayed after fall germinating rains with plug plants planted into the area. These natives will provide pollinator habitat, effluent buffer from cattle activity outside of the fenced area, and erosion protection. In between the creek and the road there is approximately one-acre of open upland ground where we would plant blue oak (Quercus douglassi), a dominant species on our ranch but one that is showing NO recruitment under the current cattle regimen. Dedicating an acre of ground will allow planting of oaks in dense pockets to ensure a viable replacement generation of trees.	$8,115.26	$6,618.64	Butte	3.1
Davis Diversified Farms, LP	The goal of this project is to improve the soil health by the addition of organic compost at the rate of 4 tons per acre per year on 155.91 acres in Madera, CA. We believe that the subject property has a significant lack of organic matter. Please see soils tests attached under section XI. While these soil tests are not recent, we believe that conditions have not changed. By the addition of organic material we hope that other challenging soil conditions will be improved. By opening the soil, salts and other unwanted elements can be more readily flushed through the root zone, water will penetrate better and stay in the root zone longer.	$75,000.00	$18,656.00	Madera	258.0
Davis Ranches	I am applying for a Healthy Soils Initiative grant for the installation of three practices on Davis Ranches: 1) a pollinator conservation cover, 2) a pollinator hedgerow, and 3) two types of cover crops (pollinator/legume mix cover crop and pollinator cover crop). At Davis Ranches, we have a diversified farm plan that includes both conventional and organic ag. Our ownership has set the goal of farming into the 22nd century and to them that means finding successful way to implement regenerative practices into the farm plant and integrate native habitat on a working ag landscape. The Kodachrome Project focuses on our regenerative and conservation practices. We are interested in finding ways to improve our soil health, reduce soil erosion, improve water quality, increase groundwater recharge, reduce the use of synthetic nitrogen and herbicides, create natural refugia and year-round pollinator habitat for the native species. We plant to use a similar pollinator seed mix for both our cover crops and our conservation cover, however, our cover crop mix will also contain legume species. We have established several hedgerows on other APNs of our ranch and will use the same technique to install the hedgerow in this proposed project. Our techniques are different than a traditional installment of a hedgerow. First, we prepare the soil and plant the potted shrubs. Then we plant the plugs and grasses. Finally, we perform weed management control to ensure our seeds have less competition and that we have higher germination rate and successful growth. In order to evaluate and measure the success of the project, photos will be taken of pre, during and post project implementation for all of our practices covering three years. In addition, soil monitoring, as part of this project, will assist in measurement of soil carbon sequestration.	$26,006.50	$5,000.00	Colusa	5.2

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Deep Roots Ranch	I am applying for a grant to fund the installation of two practices on Deep Roots Ranch: 1) a hedgerow, bordering on 1500 feet of two parcels, and 2) a riparian forest buffer on a degraded creek that flows through the property with sparse vegetation and eroding banks. Through the implementation of the riparian buffer, I will create a thriving riparian zone with trees, shrubs and wetland plants that will enhance this creek. I will include fencing in this project to protect the area from grazing livestock. Ultimately, both of these woody plantings will store carbon in the soil, stabilize streambanks, improve soil health, and increase biodiversity on the farm. Increasing the biodiversity of the ranch is a primary goal. Planting a hedgerow made up of trees and shrubs along the farm boundary will provide many benefits: protecting soil and building soil health; increasing wildlife habitat, which brings in beneficial insects, raptors, songbirds and pollinators as well as soil biological activity. Vegetation creates corridors connecting fragmented areas, as well as site-specific benefits such as shade for livestock and perching sites for raptors and insect-eating birds. Planting vegetation in hedgerows on the ranch helps to buffer extreme weather events, stores carbon, and makes the farm more resilient. Evaluating and measuring success is an ongoing activity, as I walk the hedgerow and riparian forest buffer, I will observe how well the plants are growing, the improved streambanks, and wildlife utilizing the newly planted habitat. Seeing the plants grow, observing the wildlife, watching the leaves develop and then turn color and fall to replenish the soil all are ways I will measure, evaluate, and appreciate the biological diversity that the hedgerow and riparian forest buffer bring to my farm.	$24,200.03	$6,291.00	Santa Cruz	8.0
Deitrich Zook	On a small farm we plan to enrich the soil with compost to create an environment where vegetables can be grown for market with minimal disturbance of the soil. We plan to add organic biomass to reduce or eliminate the need for tillage, provide weed control and conserve soil moisture.	$3,550.00	$500.00	Butte	6.0
Dennis M. Serpa, Jr.	Application of compost at three locations in Stanislaus and Merced Counties including 33.2 Acres Organic, 27.2 Acres Organic and 19.5 Acres Conventional totaling 79.9 acres. The goal will be to improve soil health, add organic matter, sequester carbon and reduce atmospheric GHG's by adding 8 tons per acre of compost derived from manure.	$31,960.00	$10,278.34	Stanislaus	352.0
Diamond W Cattle Company	The project will design and implement a prescribed grazing management plan using low-stress livestock handling and stockmanship to keep rangeland open and reduce the requirement for additional fencing. A prescribed grazing management plan will be developed with the assistance of a certified professional range manager in response to the climatic, vegetative and animal welfare conditions of the system and seek to address soil health, forage production, and cattle health and well-being. Implementation of the grazing management plan will seek to achieve the following goals 1) increase the organic content of the soil, 2) improve forage production and species distribution, 3) improve distribution of cattle and better stewardship of cattle, 4) improved water holding capacity of the soil and improvement of soil health. Low-stress livestock handling will be employed with the prescribed grazing management plan to move cattle in a way that improves cattle welfare, thereby increasing economic and environmental value of the operation. The project will cover the entire 12,500 acres that is currently grazed. The funding from this grant will cover 4,970 acres and three soil tests per year with the remaining acres covered in-kind by Diamond W Cattle Ranch. This further demonstrates the commitment of Diamond W Cattle Ranch to regenerative and climate smart ranching practices.	$75,000.00	$112,950.00	Los Angeles	63.0
Dirt Farmer and Company	Looking into Compost and Till/no Till practices: We have and will be continuing to planting more permanent cover crop and spread compost.	$50,000.00	$25,000.00	Sonoma	N/A
Don Schroer	This project will implement cover crops on a 54 acre walnut (30 acres) and almond (14 & 16 acres) orchard through no till drilling. The cover crop mix that will be used is a 'Seeds for Bees' Mustard Mix applied at 8 pounds/acre. Cover crops will help with compaction management, is beneficial for bees and other insects, helps suppress nematodes without the use of chemicals, and decreases runoff water. The recipient wants to be sustainable in his surface water practices.	$20,933.28	$3,450.00	Glenn	14.0
Dou Moua Lee Farms	We would like to improve our management practices in our 35-acres of Southeast Asian specialty vegetables and one acre of jujubes by incorporating 4 and 5 tons per acre compost into the soil. Compost would help to improve of soil biota, texture, fertility, and holding of moisture in the root zone area. In the winter we let 12 acres go fallow until the spring. We would like to reduce the amount of winter weeds and restore the soil nutrients by growing a winter nitrogen source legume cover crop in the fallow blocks. Implementing these two practices into our management routine should allow us to reduce our synthetic nitrogen application and become less reliant on synthetic inputs. We would focus our input labor on managing cover crops and the ongoing development of soil fertility while maintaining of conservation and agroecology management practices. The success of incorporating these practices would be the evaluation of soil composition and fertility through soil analysis. We would like to contribute to a better understanding of cover cropping and composting in southeast Asian specialty vegetable crops. As an extension of measuring these practices in our orchards and vegetable fields would be to sweep the orchard to evaluate natural enemies and pollinator populations in the habitat added.	$29,185.12	$0.00	Fresno	80.9

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DuMOL Estate Vineyard, LLC	We have three goals we hope to achieve with this project. The first is to increase organic matter and microbial biomass in the soil to improve the efficacy of (but ultimately eliminate the need for) organic fertilizers and eliminate the need for chemical fertilizers and machine cultivation in our estate owned and leased vineyards. Next we would like to increase the structural stability of the soil to prevent erosion and finally we would like to increase the water holding capacity of the soil to reduce the need for irrigation. We will gauge the success of these efforts through before and after soil studies and by tracking water usage. Note: In the Project Logistics portion of the application, the 4th APN#110-240-007 is leased land. The owner's letter of permission came password protected. I am not authorized to share the password so I copied the PDF into a Word document and attached it. As a result, his signature does not appear properly. If this is not acceptable please contact me, juile@dumol.com, and we will come up with another solution. Thank you.	$28,164.00	$22,336.50	Sonoma	71.0
Edgar Perez	Evaluate the health of the soil by growing cover crops during the rotation and applying compost and tilling it the soil to increase organic matter.	$75,000.00	$0.00	Stanislaus	166.2
Eilers Ranch LLC	In order to build organic soil quality and reduce atmospheric greenhouse gases, our farm, Eilers Ranch LLC, will plant cover crops in our walnut orchards. By doing this we will improve water penetration, weed suppression, dust control, compaction management, water infiltration and holding capacity, as well as addressing the reduction of runoff. The goal is to implement more sustainable farming practices. The project will be evaluated annually to ensure desired outcomes of increased soil health for the trees, lower greenhouse gases and improved air quality. Our family has farmed in Linden since 1850. We have worked hard to keep the farm in our family. In fact, after my father passed away 3 years ago, my husband and I quit working in our professions (engineering and anesthesia) in order to continue our farm. We have taken classes at UC Davis, where we learned about the importance of cover crops. We plan to teach our children, the next generation, about these important management practice. We currently have 55 acres planted with a cover crop and would like to expand this to include 211 new acres of cover crop. We are aware that the maximum amount funded for the grant will be reached at 169 acres, but will plant the remaining 42 acres through funding by Eilers Ranch LLC. At Eilers Ranch LLC, we offer quality jobs and increase family income with long term job retention, offering on the job training thus increasing job readiness. We offer free housing to our employees on our property thus bringing their jobs and property close together by the employees residing on our ranch. We reduce exposure to pesticides by mandating annual pesticide training. We will continue to make a difference in our community and hope to impact the world around us.	$74,829.00	$40,214.35	San Joaquin	49.0
Elke Vineyards	The hedgerow plantings and the riparian forest buffer are designed in concert to reduce run-off and soil erosion, reduce drift from chemical sprays and dust associated with normal agricultural practices, provide wildlife habit and reduce stream temperatures and improve the interactions between plant pollinators and beneficial insects, create carbon syncs in the increased woody biomass of the plantings over time. The hedgerows will be located around the perimeter of the property to reduce sediment and erosion into adjacent waterways. The riparian forest buffer will use native trees and undergrowth plants to help stabilize compromised areas of the stream bed. This will be a complete stream bank restoration from an on stream reservoir, with the goal to eventually create a seamless reconnected stream channel. The cover crop and compost component of this project is focused on soil health and proper nutrient composition of the soil. The cover crop will be selected based on its ease of cultivation and renewal year on year, as well as its soil holding properties. Cover crop being a good habitat for pollinators and beneficial insects will also be taken into account as the cover crop, compost, and perennial plants of the hedgerow and buffer, should all compliment each other.	$42,034.08	$51,475.00	Mendocino	24.6
Elkhorn Slough Foundation	This project proposes to create a riparian forest buffer at Brothers Ranch to reduce erosion and runoff from nearby fields, improve habitat for beneficial species, increase rainwater infiltration, and remove a source of invasive weeds. This project will also be used as an example of responsible land management in outreach to the public and neighboring landowners. The project will create a buffer of native hardwood trees and shrubs between the farm fields owned by the Elkhorn Slough Foundation and the nearby Carneros Creek, the largest source of freshwater and also one of the largest sources of pollutants entering into the slough. Creating this riparian forest buffer will result in improved water quality, decreased runoff, increased carbon sequestration, improved wildlife habitat, and many other positive outcomes. The Elkhorn Slough Foundation's professional land stewardship team will perform annual monitoring of: all trees planted in the project, any invasive weed resprouts, and will take aerial photos each spring to record tree canopy extent. ESF will also monitor for erosion and runoff during winter storms and will quickly deal with any rills or gullies that form. Success will be shown by tree survival rates of greater than 70%, increasing percentages for forest canopy and native plant cover, and reduced incidences of erosion or runoff.	$67,084.40	$51,022.00	Monterey	13.0
Emilio Guglielmo Winery	Since 1925 the Guglielmo Family has been growing grapes and making wine on the property here in Morgan Hill. We at the winery are aware that this is only possible through using sustainable practices. We hope to lower our GHG Emissions by implementing several new practices that we are convinced will help us achieve the goal of continuity in wine quality and production. We will be implementing a no-till system for our vineyards: we have reduced from deeper tillage to disking in the past few years and are convinced this is the next step. We also plan on implementing a dual species cover crop (some of the grant money will go to purchasing a no-till drill) and spreading compost in our ~47 acres of vineyards. We hope to boost biodiversity and raise our yields without resorting to the use of chemical fertilizers. We will sample our soils once a year, using the HSP Soil Sampling Protocol for Soil Organic Matter Analysis. One sample for our property should be sufficient as our soil is very homogenous. Another large part of measuring the success of our project will be seeing the differences in yields of our vines over the 3 years of the project.	$53,400.00	$15,000.00	Santa Clara	125.3

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Empresas Del Bosque, Inc.	Increase organic matter in soil by adding compost consistently for the next 3 year.	$72,300.00	$0.00	Merced	708.3
Eric Rubio	Compost amendment will greatly benefit the soil on this property. The soil is composed of Mottsville loamy coarse sand and Artray sandy loam. These soils naturally are low to very low in organic mater. Becuase of this these soils are highly erodible, low fertility and low water holding capacity.	$75,000.00	$14,940.00	Lassen	387.2
Ernest Righetti Corporation	Mulching is a powerful tool we want to use in our avocado orchard. Mulch improves the physical, chemical and biological characteristics of the soil and brings our mineral soil closer to the root environment to which the avocado is natively adapted. With mulching both aeration and water infiltration are improved. Three mineral elements are regarded as especially important for healthy and prolific root growth phosphorus (P), calcium (Ca) and boron (B). All three have been observed to increase under mulch. Tree stress is reduced, tree health improves, fruit size increases and yields increase. With mulching water is better retained in the soil and weed competition is drastically reduced. Mulching improves soil temperature and creates optimum environment for avocado root growth, which in turn helps the avocado tree fight off pest and disease like Phytophthora cinnamomic or avocado root rot. We will take soil samples, track yield results and photo document the project yearly. The major goal is to enhance avocado tree health and sequester carbon. We will source the mulch material just a short distance away from the ranch, stockpile the mulch and then with our own equipment we will apply the mulch to our orchards.	$59,754.96	$14,000.00	San Luis Obispo	5.0
Family of Johancharles and Susan Boers	Project will be implemented over two adjacent parcels to convert persimmon, lemon and other non-native plantings to native habitat, reduce erosive forces, revitalize stagnant declining soil health and provide forage for critically endangered San Clemente Island goats. Erosive storm water will be channeled to restore riparian habitat in low-lying seasonal wetland areas. By increasing the organic content of the soil, runoff from an uphill chemically sprayed citrus grove and vineyard can be filtered thereby improving water quality. Project is located in heart of Temecula Valley Wine Country, an area of statewide importance as unique farmland that is increasingly being cultivated with irrigated and tilled monoculture crops and non-native species. Growth of local wineries is driving a significant increase in traffic and development. These practices will also have positive benefits on the surrounding agricultural area by increasing wildlife pollinators and beneficial insects, reducing soil and wind erosion as well as pollutants in the air and water. Goats will be utilized for systematic controlled grazing of property to control invasive weeds and clear fire-prone grasses while liberally sprinkling droppings everywhere. Theyâ€™ll do this all in a completely carbon-friendly manner. No herbicides or heavy machinery required. The goats we plan to purchase have a foggy history. Lore says they were dropped off on the islands by the Spaniards as a food source, however genetic testing with Spanish heirloom goats shows no DNA connection. Their milk fat is high and their meat is mild. With all the restaurants, wineries and boutiques in the area, there is a ready market for local, heirloom meat, dairy and cosmetic products. Developing a sustainable use for this animal can actually help increase the total herd size (about 700 worldwide) by increasing demand and motivating farmers to take on this breed.	$74,927.88	$20,305.76	Riverside	5.0
Fat Uncle Farms	The goal of the Surprise Valley Regeneration Project is to implement a farm system in which natural ecosystem processes enhance the nutrient and water cycles as well as overall health and productivity of the plant community. We expect to measure annual increased total nutrient yield of the field (nutrient density x net productivity), soil organic matter, water holding capacity, and above and below ground biodiversity. The operation of the system will depend on the interaction of three components; trees, livestock, and a harvestable pasture (technically called a poly-culture pasture-crop). This grant fills the need of building and integrating the third component. Whereas previously, the field had been exclusively monocropped, now sheep and cows will be able to graze a diverse paddock of grains and legumes before and after harvest all while benefiting from the shade and deep nutrient cycling of a tree canopy, which will in turn be harvested for human and animal consumption.	$69,583.08	$4,500.00	Modoc	9.0
Ferreira Dairy	This project will implement seasonal legume cover crops on 160 acres of certified organic, grazed, irrigated pasture over three years to increase soil health and productivity. The goal of the project is to sequester greenhouse gases and improve soil health. Cover crops are expected to reduce total GHG emissions, provide n-fixation, increase infiltration, decrease compaction, and enhance diversity of wildlife habitat and water quality. Monitoring and evaluation of cover crops will be conducted ensure long term success and sustainability of the project. Landowner would like to continue using this practice after the project period.	$71,960.00	$3,000.00	Humboldt	13.0
Five Safe T LLC	We would like to mulch the 14 year old grove, to improve soil in certain places are very sandy and in other places are very clay like. It would also help the soil erosion , and improve the canopy, which would make the trees healthier, and help increase the production of avocados, and reduce water usage. This will reduce atmospheric GHG specially in the sandy soil we have.	$15,000.00	$15,000.00	Los Angeles	-
Francis J Cummins Jr	Our goal is to establish a vibrant subsurface environment and thus establish a foundation where a host of factors will be affected. This include a better soil substrate that's produces soil that is less compacted and will facilitate better water management, a more diverse fungi and bacteria environment that will symbiotically aid terrestrial ecosystem and give more nutritious outputs, and provide a supportive environment for pollinators and wildlife. These when accomplished will establish a ecosystem supporting nutritious fruits and vegetables.	$55,000.00		Solano	92.7

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Four Elements Farm	In the interest of soil stewardship and long-term sustainability, and with the goals of improved weed management, reduced water use and reduced fertilizer applications, Four Elements Farm seeks funding to implement the practices of Mixed-Species Cover Cropping in our fields & orchard alleys, and Mulching with wood chips in our three orchards. We seek to farm in a way that has a positive effect on our climate, and the available funds through this incentive program further enable us to do so, by making these practices more feasible for our small, organic farm. The success of this project will be measured qualitatively and quantitatively through an evaluation of past soil samples in comparison with samples taken during and after the grant period of three years (2019-2021), and through the measurement of carbon sequestration using the greenhouse gas calculator available through the USDA's COMET Planner.	$12,645.84	$3,100.00	San Luis Obispo	2.4
Frey Vineyards, Ltd.	Frey Vineyards, Ltd. is seeking funding to establish hedgerows and riparian buffer zones along the edges of vineyards. These strips of herbaceous and woody plants will sequester carbon and create habitat for wildlife. Success of the project will be determined by the establishment of plants, and will increase as plants mature and provide greater ecosystem functions.	$25,942.77	$20,050.00	Mendocino	3.6
GEDNGM, LLC. Capricho farms	Addition of compost to improve soil in fairly rocky terrain and to sequester carbon. Clover cover crops to add nitrogen to poor soil and to prevent erosion on hilly terrain.	$24,448.44	$3,600.00	Orange	77.1
GEH Farms Inc.	This farm has been in the Hawes Family since 1863. It is on the Western side of where Cow Creek meets the Sacramento River. It is one of the last large parcels of land left for farming in our area. It has water rights from both Cow Creek and the Sacramento River. This ground has been farmed on and off by our family for over 150 years, and is need of compost to improve the organic mater of the soil. My eventual goal is to grow produce for our local farm market. Currently we are farming wheat on the property.	$65,250.00	$29,798.00	Shasta	351.2
Gerald Chooljian Farms	The project will add compost and gypsum to our sandy soils during the winter months to boost the soil profile along with planting a cover crop in the fall to give the soil some organic matter and keep the grapevines healthy.	$73,697.06	$29,655.00	Fresno	464.3
Gilardi's Family Farm	Gilardi's Family Farm is a small family-farm that raises pasture eggs from about 5,000 chickens and grazes 10 to 15 beef cows. The Gilardi's Family Farm is one of twelve Carbon Farm Plans written by the Marin Carbon Project collaborative. The farm is eager to implement their Carbon Farm Plan and this project, planting a hedgerow, would be their first step towards bringing their Carbon Farm Plan to life. The project is to install 250 native plants (trees and shrubs) to create a 751 linear-foot long hedgerow along the perimeter of the ranch. In addition to the hedgerow, the Gilardi's need to develop a water system in order to irrigate the hedgerow. The project, including the water development, was selected for State Coastal Conservancy funding through the Carbon Farming for Agriculture and Watershed Resilience Work Program through the Marin Resource Conservation District, which provides planning, design and implementation assistance to landowners. The program will provided continued support to the project with the assistance of several other local natural resources agencies all the way through the monitoring phase. The partners working on this project are part of the Marin Carbon Project collaborative, which is dedicated to helping landowners implement their Carbon Farm Plans and learning from lessons and successes in order to assist future climate-beneficial projects.	$13,170.00	$38,619.00	Marin	3.0
Giving Trees Ranch	Restoration of almond orchards ecosystem with the introduction of woody plants in a hedgerow to encourage beneficial insects, biomass, water retention, carbon sequestration, and general beautification of the land. With the proper applications of plants applied to the property to restore habitat loss for native pollinators like Leaf-cutter, bumbles, Mason, Miner, digger, carpenter bees. Providing a balanced diet of pollen and nectar from a verity of plants to help alleviate multiple stress disorder one of the leading theories behind colony collapse. Diversifying the food source for pollinators, farmers will experience less dependency on outside inputs for the crop production. Predatory insects that find refuge within the Hedgerow will help to reduce the amount of insecticide need for almond production. As the hedge row sequesters carbon it also absorbs nutrients and help retain water that would have run off taking top soil with it, all as its creating biomass for the soils food web. Educating people with field results on the importance of native plants will encourage the practice to remain established and expand to other practices. The 3 years of monitoring will prove beneficial far beyond as it becomes self-sustaining.	$67,378.74	$5,000.00	Glenn	12.0
Glenn McGourty	The project takes place on ~8 acres next to the Russian River, where the banks are receding due to erosion. This project aims to fortify the banks by establishing a riparian herbaceous cover of a native sedge grass and a riparian forest buffer of cottonwoods and oaks. In addition, this project intends to repair degraded soils in perennial vineyards through compost application of purchased compost with a C:N of >11, applied at 7tons/acre, and an incorporation of Cover Crop after compost application. Success of the project will be measured through soil tests of the banks and vineyards to determine OM levels, and visual inspection through photo monitoring of erosion damage on banks and healthy establishment of grass and tree transplants.	$29,246.66	$11,220.00	Mendocino	34.7

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Green Valley Partners	The mission of Green Valley Farm + Mill, an umbrella which hosts several regenerative agriculture enterprises, is to "reconnect people with land." Home to an organic vegetable CSA, a grass-fed cattle business, a small-scale dry-farmed vineyard, and a land-based community of 6 households, GVFAM is implementing a variety of strategies to demonstrate regenerative farming practices that strengthen the local food economy while improving the ecological quality of the land. This project will help GVFAM further their mission while beginning to implement and trial carbon sequestering healthy soils practices. Guided by a comprehensive conservation plan that was developed by a team of ecologists in late 2018, GVFAM is ready to embark upon the first phase of implementation of the plan; the Healthy Soils Initiative is an ideal funding source to help support the first phase of implementation. Goals for the GVFAM Healthy Soils Project are multiple: - to implement a variety of practices to increase soil carbon levels and soil health while improving wildlife habitat in annual cropland, rangeland, and vineyard; - to run a pilot project, documenting the experience in order to build the organizational capacity of GVFAM to expand regenerative land management practices throughout the cropland, grassland and orchards at GVFAM; - to increase volunteer engagement on the land, and build awareness in our local community about regenerative agriculture practices. The team of people at GVFAM possess a strong and diverse body of skills in land management, ecology, project management, small business administration, education and outreach, that positions them well to implement the project successfully and engage the public while doing so through a variety of local organizations and planned seasonal events on the farm. Plans for evaluating the success of the project include soil monitoring; tracking seedling establishment rates; tracking levels of volunteer engagement; tracking budgets and workplans.	$46,660.13	$4,000.00	Sonoma	55.8
Greg Hawes	We currently farm 385 acres on the Churn Creek Bottom area in Redding. The community has worked really hard on keeping the Churn Creek area from being developed commercially. The ground is nice river bottom farm land. The one thing it is lacking is organic matter. I added compost on a 40 acre piece just west of the proposed project 2 years ago and the hay production was superior as compared to the compost application. I know all of my farm ground would benefit from compost. This project is to apply over 3 years, compost on the 200 acres. The outcome will make my farm land more fertile, with better organic mater and water holding capacity. This will be measured in our yield over the 3 year period.	$65,250.00	$44,098.00	Shasta	351.2
Gresytone Equities, LLC	The project will include installing Hortau soil moisture sensors.	$10,000.00	$0.00	Los Angeles	0.5
Greystone Equities, LLC	The project will include installing Hortau soil moisture sensors.	$75,000.00	$0.00	Los Angeles	9.0
Greystone Equities, LLC	The project will include installing Hortau soil moisture sensors.	$29,000.00	$0.00	Los Angeles	2.3
Greystone Equities, LLC	The project will include installing Hortau soil moisture sensors.	$70,000.00	$0.00	Los Angeles	5.0
Greystone Equities, LLC	The project will include installing Hortau soil moisture sensors.	$17,000.00	$0.00	Los Angeles	1.6
Greystone Equities, LLC	The project will include installing Hortau soil moisture sensors.	$12,000.00	$0.00	Los Angeles	0.7
Greystone Equities, LLC	The project will include installing Hortau soil moisture sensors.	$75,000.00	$0.00	Los Angeles	9.0
Greystone Equities, LLC	The project will include installing Hortau soil moisture sensors.	$30,000.00	$0.00	Los Angeles	2.2
Greystone Equities, LLC	The project will include installing Hortau soil moisture sensors.	$23,000.00	$0.00	Los Angeles	1.4
HB Ag Investments	This project calls for the application of compost on 185 acres of almonds to increase organic matter and sequester carbon in the soil. 4 tons of compost purchased from a certified facility and applied to the fully producing almonds annually, and soil samples and organic-matter measurements will be taken at various monitoring points throughout the project life to track our progress towards these goals.	$75,000.00	$36,150.00	Kern	307.0

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Hagata Ranch	The goal with implementing the HSP program on our cattle operation is to improve the overall health and productivity of our soils. Our family ranch has solely been operated as a cattle ranch since 1904. The first step in implementing a certified grazing plan will be identifying areas in our current grazing schedule that have a negative effect on the overall productivity of the ground. A few of the many benefits of the grazing rotation would be to decrease soil erosion, reduce soil compaction, encourage the growth of native forage, and reduce noxious weeds. We will target the growth of desired plant species and improve/maintain their presence, improving the productivity of the ground for cattle and increase the feed available for wildlife. Having a Certified Range Manager help develop this plan will benefit us by identify gaps and solutions in our current practices that may have been overlooked since we haven't had any outside influence or suggestions. Another area we hope to improve our operation is by adding riparian forest buffers along waterways. We will implement two types of hand plantings; small to medium trees and small container shrubs. Adding these woody plants will improve soil health and create a habitat for wildlife and aquatic organisms by reduce pesticide drift and runoff from fields, decrease sediment runoff and soil erosion, increase carbon storage in plant biomass, and decreasing water temperatures to create shade. We will measure the success of these practices by taking soil test, measuring forage height and quality, counting native vs unwanted forage, and visual/photographic review erosion present on our grazing ground and waterways. The goal of implementing these practices is to improve soil health and longevity for our cattle operation as well as improve the health of native plants, wildlife and soil organism habitat.	$61,423.30	$7,000.00	Lassen	15.3
Hiddensprings Ranch	At Hidden Springs, we plan to continue to strengthen our existing efforts and add some new practices to further enhance the viability of our property. Existing practices have included fertigation using OMRI-approved fertilizers, and organic compost as well no till and low till cover crops, and prescribed grazing practices. We hope to further increase the organic matter and water retaining ability in our soils through additional compost and increased use of cover cropping. We also hope to prevent pierce's disease and mealy bug infestation through the use of hedgerows that will encourage native predators of the vectors. To evaluate the success of these practices, we will primarily employ soil testing before and after implementation of the various practices. We plan to monitor annually to monitor improvements. In order to measure insect populations and pierce's disease, we will employ sticky traps and ELISA testing of petioles. The sticky traps will be evaluated quarterly and petiole ELISA testing will occur annually.	$11,574.00	$12,338.00	Santa Cruz	20.2
Hikari Farms	Cover cropping of apple orchard to prevent erosion, improve soil structure, organic matter, and suppress weeds. This will also increase water holding capacity and nutrient availability. We will be cover cropping alleys of a 40 year old Fuji apple orchard with legume mix recommended by local organic orchardist consultant. A mix of bell beans and peas have been found to work well in this area. We expect legumes to reduce pest pressure as this mixture attracts many beneficial insects in the springtime. Although the orchard is on flat ground, cover cropping of alleyways will prevent erosive action of winter rains. Primary goal is to see improvement in soil organic matter after 3 years of cover cropping.	$2,134.50	$1,500.00	Santa Cruz	2.0
Holder Farms	For this project, my brother and I seek to implement cover cropping and soil sampling on our small farm near Laton, California. We are third generation farmers who took over our family's farming operation when our father passed away in 2016. We farm crops for hay and forage, primarily alfalfa, corn, and sorghum. Currently, we do not use winter cover crops on land to be planted to corn or sorghum; there are a few reasons for this. First, we lack experience in multi-cropping land. Also, several of the past few years have been very dry, meaning any winter crop would have required a costly amount of water to grow. Finally, we were unaware of many of the benefits planting a winter cover crop could confer to our soil and farm in general. By introducing a winter cover crop of wheat or oats into our cropping system, we hope to build up the organic matter in our soil. We hope this will aid water retention in the Nord Sandy Loam we have on our farm. Additionally, the winter crop will take up residual nitrates in the soil, potentially stopping them from leeching into the groundwater during wet winters. Yearly soil sampling will help us determine whether these goals are being met, and also help us ensure we are using the correct and proper amounts of fertilizer on our summer crops. The goal of this project is to increase the overall health of our soil by incorporating the leftover organic material of a winter cover crop. Funds will be used to purchase seed from local vendors, provide irrigation water, and pay local contractors to harvest.	$22,124.64	$2,680.00	Kings	13.0
Huerta Family Farms INC	The proposed project utilizes compost applications to increase organic matter, reduce synthetic N use, increase soil water and nutrient holding capacity, improve soil health and bio diversity, and increase productivity. Soil organic matter will be tracked by annual soil analysis. Nutrient management will be based on soil sampling and tissue analysis and will track mineralization rates to help ensure minimal amounts of N are applied. Nutrient management will meet NRCS 590 basic standards.	$74,174.00	$22,350.00	Fresno	239.4
Hummingbird Ranch	This project will support implementation of cover crops on 2.1 ac of our organic farm, where they have not been previously planted. The project will also support implementation of a total of 1,200ft of hedgerow (0,2ac) along the edges of three of our fields, to create habitat for beneficial insects and birds.	$12,122.10	$3,500.00	Santa Cruz	2.2

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Huerta del Valle	Huerta del Valle operates farms within socially disadvantaged communities in the Inland Empire of Southern California. Our projects support healthy environment and public health by sustainably managing farm-land in order to create healthy affordable food access. 1 in 3 families cannot make ends meet in the Inland Valley and many suffer from chronic health issues according to United Way reports. Agricultural land is rarely cultivated using sustainable best practices in this region. The implementation of sustainable BMPs and the creation of locally produced affordable food can help to alleviate both problems with one succinct solution: care for the land and the land will care for the community. Huerta Del Valle Will apply compost on 13 acres of annual crops, 16 acres of grassland, and 5 acres of orchards, apply mulch to 8 acres of farmland, and implement woody hedgerows, and strip cropping on various sites. Huerta del Valle will implement these practices over four distinct sites with distinct APNs on which these practices are not already occurring. Each site is part of Huerta del Valle's community food-systems network. Each site will support GHG reduction goals while supporting the production of vegetable and fruit crops made available and accessible to low-income communities. Local people from disadvantaged communities will be engaged and employed by Huerta del Valle to implement these strategies. The project impacts will be measured through quantitative measures looking at tonnage of food produced in treated plots, number of hours of paid work by low-income socially disadvantaged employees, engagement of volunteers and service-learners on the projects, tonnage of compost added, acreage of application of compost and mulch, acreage of hedgerow installed. Soil samples will be taken to study the impact on soil organic matter to understand the CO2 sequestration. Produce distribution will also be tracked to access by community.	$68,948.64	$15,000.00	San Bernardino Riverside	124.0
Ian Anderson Ranch	This project has a primary focus as a demonstration area of our farm operation for conservation of our soils through conversion of our conventional farming practices to minimizing our soil disturbance through no till planting our small grain crops, while at the same time improve our organic matter for improved soil health and improved water retention of our rain fed crops. This project is in conjunction with a study of improving our soil nutrition through comparing a portion of our farm with conventional fertilizing practices and comparing it to a class A bio solid application with the goal of comparing long term organic matter and crop productivity. A partial conversion to no till farming practices takes a substantial investment in equipment in which this funding source would be quite helpful. Secondarily, our farm operation has a 2,800 sheep operation that could benefit from improved pasture management practices. Some of our pastures have invasive annuals such as fox tail that becomes a late spring issue with poor utilization of pastures and becomes a health issue for sheep with the seed pots injuring the eyes of the sheep. This goal is to improve plant diversity and have higher nutrition feed available for our animals. Finally, the hedgerow planting will serve as a carbon sink and also provide wild life habitat and shade for livestock.	$67,630.62	$2,120.00	solano	60.4
Investors of America LP	Dierberg and Star Lane Vineyards (Investors of America LP) plan to implement the healthy soils practice of composting at our Drum Canyon Vineyard location. This vineyard was planted in 2006 and has not been composted since establishment. The 2016-2018 growing seasons showed Drum Canyon Vineyard experiencing vigor loss, yield reductions, as well as Ravaz index reductions. Soil analysis in 2018 showed an average of 0.9% organic matter in the 16 blocks in which we are applying for funding. The goal of this project would be to promote soil health, increase organic matter, increase water holding capacity and thus reduce water inputs on 42.34 acres of wine grapes.By applying 8 tons per acre of compost (C:N ratio >11) annually through three years, expected outcomes of the project include an increase in yields, increase in soil health parameters, decrease in water usage, and the future implementation of no till zones where soil health has significantly improved over the project time period. Data will be collected annually to monitor yields, vine vigor, and soil health (via soil sampling in 7 locations of pooled soil samples) to evaluate the success of the project. Please note that in 2018, initial compost applications were applied to blocks 1-6 and 8-11, which are not included in this funding request.	$51,858.00	$0.00	Santa Barbara	184.2
James and Carla Boldt	Soil building and water retention project utilizing bio dynamic farming practices. Project includes removal of existing avocado grove and replacing with vineyard. Practices that will be implemented will be cover crop, mulch, compost, and hedgerow planting.	$21,162.33	$50,000.00	San Diego	8.5
James Ronsse	compost for all trees, which include Apple, chestnut, figs and lavender	$800.00	$50.00	Nevada	-
Jason Bryson	Attempting to increase production of an organic almond farm with Advanced Almond Harvest. We are collaborating with University of California Davis on project evaluation.	$75,000.00	$48,489.00	Yolo	18.0
Jason Coleman	We are proposing to install hedgerow planting, conservation cover, and a windbreak shelter belt on the property. The goals are to enhance the pasture with native species that will flourish in this type of valley pastureland environment, provide habitats for beneficial insect pollinators, migratory and ground-dwelling birds, improve storm water infiltration, and be visibly attractive. The goal for the windbreak is to reduce wind velocity across the pasture toward the residence, create a privacy screen, and be attractive.	$13,013.68	$1,400.00	Solano	2.9
Jeff Elmore	The intent of the project is to sequester carbon while increasing ground water percolation and improving soil health. This intervention is necessary because previous development along Foothill Rd. forcibly ended the natural flow of a creek. As a result, the property floods whenever runoff occurs, and rainfall rates are greater than 1.5 inches per 24-hour period. Additionally, the subject property has very poor ground water recovery due to the lack of ground water percolation thru the 35-70-foot clay layer. A secondary Benefit of the proposed interventions will be increased soil percolation resulting in increased ground water recharge.	$53,126.15	$20,000.00	San Luis Obispo	0.5

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Jeffrey McConnell	I have an Organic No Till Farm in a city where no other farms exist. It encompasses 2 parcels. I am creating an Eco-freindly, carbon neutral, educational urban market garden style farm for future generations to come and learn and eat healthier. To add additional compost to my farms will not only increase the micro organisms in the soil, increase but will hold the water longer and reduce water usage. The 5 acre parcel on 21712 Vivienda Ave. Grand Terrace is a growing farm and the 2 acre property at 12394 Michigan St Grand Terrace needs to be started from scratch due not maintained for decades.	$8,400.00	$4,355.00	San Bernardino	29.1
Jeniffer Vang Farms	We would like to improve our management practices on two of our fields of 63-acre Southeastern Asian vegetables by incorporating 4 tons per acres compost into the soil. Compost would improve the soil fertility, texture, fertility,and ability to hold moisture in the root zone area as we start to use less synthetic fertilizer. In the winter we are allowing 30 acres to go fallow, which currently has winter weeds until the spring. In order to reduce the amount of winter weeds and to improve the soil biodiversity, we would like to grow a winter legume cover crop in the fallow spaces. Managing both compost and cover crops into our routine should allow us to reduce our synthetic nitrogen application and become less reliant on synthetic inputs. As we continue to apply compost and cover crops, we will be building the soil health and lessening water usage and synthetic fertilizer application, reducing weed populations,and sustaining a biodiverse agroecology within our seasonal southeast Asian crops. Soil sampling analysis would need to be done year over year to observe the health and fertility of the soil and the organic matter content.	$51,330.00	$0.00	Fresno	142.1
Jensen Farms	Previously, 20 acres of stone fruit and pecan orchards were managed with high use of inputs, with some fallow land.Over time,we pulled out several acres of trees and disked the soil to plant winter mixed vegetable crops for farmers markets. We kept 2 acres of stone fruit stock, and added an additional 4 acres of mixed stone fruit trees while transitioning the remaining 14 acres into vegetable production with fertilizer inputs to establish a spring and winter vegetable rotation. We would like to add 4 to 5 tons per acre of compost to the soil to restore the soil back to health. Following compost, we would like to add an annual pollinator cover crop to the orchard block with reduced tillage to suppress weeds, and build the biodiversity and habitat for pollinators and beneficial insects. In the vegetable crops,we would like to add nitrogen fixing cover crops in the winter fallow blocks,rotating them every year from spring and winter,incorporating buffer cover crops between blocks to enhance disease suppression, reduce insect damage, and improve soil texture, moisture holding, and fertility. Our ultimate goal would be to learn from these healthy soils management practices as we establish the early stages of transitioning to organic certification. This would help us better understand how multi-layering of compost, cover cropping, reduced tillage and rotation in a multi-cropping system would create an agroecological system for healthy soil profiles, suppression of disease, and weeds as well as the reduction of problematic pests without chemical inputs as the soil nutrient profile improves year over year. Soil analysis would show the improvement of the soil, and we would also sweep the orchard for beneficial insects, as well as monitoring the amount of water being applied to the field.	$24,470.60	$0.00	Fresno	43.0
Jensen Ranch	This conservation and healthy soils practice implementation is part of a larger carbon farm planning effort being taken on by a 6th generation sheep and cattle ranch near Tomales. A conservation plan with NRCS is in progress and includes several additional conservation practices. The objective of this specific application and practice is includes No-till seeding of a diverse pasture mix including legumes on approximately 77 acres to increase perennial species while promoting diversity. A no-till seeder will be used to plant two different areas on the ranch in different pastures under managed grazing. Prescribed grazing will be implemented following the seeding to ensure establishment and management.	$4,264.00	$9,718.00	Marin	100.0
Jeret Rogers	The agriculture operation is dedicated to improving soils, reducing erosion, and saving water. Currently there is very low organic matter in the soil, the erosion level is high, and the soil cannot hold and conserve water efficiently. The water bill is an obstacle in making the farm more efficient and profitable. Through conservation measures, the soil biomass, the soils ability to retain water, and plant health and vigor can be greatly improved, and soil erosion can be greatly reduced. Our goal is to improve soil health by increasing soil organic matter, improve the soils ability to retain water and use it more efficiency, and prevent erosion. Mulch is the chosen practices to achieve these goals. Mulch increases the input of biomass in the soil, provides a protective layer so the soil can hold water and use it more efficiently, and prevents erosion. Mulch will cover the soil and therefore decrease loss of carbon from the soil (decrease carbon oxidation) and evaporation of soil moisture, and will prevent erosion. Increased soil organic matter will further increase the capacity of the soil to hold water in the root zone for plants to utilize. The outcome of this farming practice is increased plant health and vigor, reduced water usage, and reduced erosion. Soil samples will be taken every year to measure the increase in soil organic matter, and recording water usage will show a reduction in water use. This grant is needed to help purchase the mulch and equipment for spreading. Co-benefits of this measure include reduced weed abatement cost and labor, which lowers the use of gas powered weed abatement equipment such as weed whips and chainsaws, thereby lowering GHG's. In addition, on site mulching will reduce the need to burn plant material which also will reduce GHG's	$72,059.88	$1,500.00	San Diego	3.0

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Jld farms	This field will be regenerative, meaning it will grow cover crops to supply the nutrients that the crops used for feeding the dairy will need to grow. Also reducing/eliminating the need for synthetic fertilizers/chemicals by means of cover crops and by the management of said cover crop, leaving cover crop in the field to suppress weeds and provide more nutrients for crop. While also reducing the cultivation passes made by tractors further reducing the fuel/comapaction of field. I am implementing reduced tillage practices, reducing the greenhouse gases produced by multiple tractor passes. These conservation tillage practices will reduce the fuel consumption of the high horsepower tractors. Minimizing soil disturbance combined with less tillage passes will almost eliminate the dust produced by the tractor passes and wind erosion. Increasing water infiltration and maintaining crop residue in the field will also increase water holding capacity while reducing water run off from the field.	$74,400.00	$0.00	Kings	89.0
John and Carmen Berns	Procure a chipping machine to provide on farm produced mulch to improve soil structure, reduce water requirements, protect the farm from the introduction of invasive pest, and reduce greenhouse gas emissions. The typical soils in the region only contain between .5 and 2% organic matter. This necessitates that farmers actively pursue soil health practices that lead to an increase in organic matter and improved biological activity in the soil. The goal of the project is to increase the soil organic matter by 1 to 2% over the 3 year period, which would increase the water holding capacity of the soil by 1 to 2â€ per foot of soil. The project would also sequester 3 metric tons of CO2 through the adoption of healthy soil practices called for in the proposal. This project is sustainable beyond the project period. The sequestration of CO2 will continue for many years beyond the project completion date. A chipping machine will provide a long term means beyond the three year grant period to continue to produce mulch for the farm. The alternative means to obtain mulch is more costly and presents a potential threat of introducing invasive pests like the shot hole bore beetle. The excessive amount of wood waste produced on the farm during the process of annually stumping, pruning, and eliminating and replacing orchards provides a ready store of mulching materials. Wood waste left to accumulate in the orchards presents a fire hazard and breeding ground for vertebrate pests. Transportation of orchard wood to waste facilities or sale is uneconomical and restricted because of the threat of the shot hole bore beetle. Annual soil analyses will be used to measure the increase in soil organic matter and water usage records will be monitored for a sign of decreased irrigation needs.	$65,010.71	$17,400.42	Riverside	3.0
John Hanson, Jr. - Willow Creek Ranch	Willow Creek Ranch will plant 14.8 acres of woody plant cuttings under the 'Woody Cover Establishment' riparian forest buffer practice in a grassland area along two waterways in order to sequester carbon, increase plant diversity, provide riparian shade and ground cover, increase rooting diversity to support soil microbial populations, and provide wildlife habitat. Through the establishment of riparian woody plants above ground and below ground carbon stores will be increased. Monitoring will be conducted to assess plant sustainability and natural recruitment following the initial plantings. Organic soil carbon levels will be measured pre and post-planting, along with standardized avian point counts to determine habitat functionality. In addition to this practice, 38.8 acres of dactylis glomerata, festuca arundinacea, trifolium spp species will be planted under the 'Cropland to Herbaceous Cover' forage and biomass practice in order to protect soil from wind, decease erosion, and improve soil and water quality.	$73,751.89	$14,600.00	Lassen	27.5
John Muir Land Trust - Family Harvest Farm	Family Harvest Farm will employ traumatized, aging out foster youth (ages 18-22) and give them a place to heal as they transition into independence and adulthood. Family Harvest also will give the local community restored habitat at the farm site in Pittsburg and a place for members of the community to learn how to sustainably grow healthy food. The farm will grow organic vegetables and flowers and use no-till practices to build healthy soil and sequester carbon. The high quality food grown at the farm will both be sold at affordable prices to the local community and donated to health clinics and food banks for use by community members who cannot afford to buy high quality food. Historically this was a hayfield. Pacific Gas and Electric Company acquired the site to run transmission lines through the site. The land has recently been fallow. We want to bring it back into production. Using no-till techniques, extensive cover cropping, and composting, the farm will build the soil from its current 3% organic matter to a goal of 8- 10% in organic matter. To restore native habitat, wildlife, pollinators and birds, we will plant hedgerows both in the 3 acre growing area and the outside of the growing area. There is a seasonal creek along one side of the property and we will both protect and enhance that area with native plants and shrubs. The farm will also involve the local community, including schools, by educating them in sustainable horticultural practices and the benefits of plant-based nutrition. The founders are Master Gardeners of Contra Costa County and the farm manager has extensive experience both at the Santa Cruz Homeless Garden Project and commercial farms.	$14,286.78	$1,961.00	Contra Costa	12.0
John Vang Farms	Our current management practices rely on the input of synthetic fertilizers in 39 acres of Southeast Asian specialty vegetable crops. We would like to transition and incorporate management practices of adding compost to the soil and adding cover crops during the fallow winter season. Amending the soil with compost would build the soil fertility, increase biodiversity, and improve soil moisture making it available to the vegetable plants and suppressing weeds and diseases. In the winter we currently turn 15 acres into fallow, which has winter weeds until the spring. In order to reduce the amount of winter weeds and to continue to restore the soil biota,we would like to grow a winter nitrogen-fixing legume cover crop in the fallow spaces. Managing both compost and cover crops into our routine should allow us to reduce our synthetic nitrogen application and become less reliant on synthetic inputs. As we continue to apply compost and cover crops year over year, we will build the soil health,lessening water usage, synthetic fertilizer application, and weed populations,and sustaining a biodiverse agroecosystem within seasonal southeast Asian specialty crops. Soil sampling analysis would need to be done year over year to observe the health of the soil as well as measure the reduction of fertilizer inputs.	$30,315.00	$0.00	Fresno	89.0

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Joshua Neil Marcus	We would like to add three to four inches of a composted mulch to improve the soil and reduce water losses.	$4,800.00	$480.00	San Diego	6.4
JSM Organics	The project will install hedgerows on approximately 0.8 acre, and pollinator-attracting riparian herbaceous cover on another 0.6 acre of an organic-certified farm in Royal Oaks, Monterey County. The project includes five distinct hedgerow installation sites. Altogether, the hedgerows will bound half the perimeter of approximately 25 acres of row crop vegetable production. An additional hedgerow will provide a buffer between the crop production field and an adjacent landowner's animal production operation. The producer wishes to introduce a buffer between both the animal operation as well as the natural riparian areas adjoining the other sections of these production fields. It is anticipated that more habitat diversity provided by the hedgerows and herbaceous riparian cover will increase the amount and diversity of beneficial insect species and support integrated pest management, ultimately benefiting crop productivity and overall ecosystem health. It is also anticipated that the permanent vegetation at the boundary of the field nearest the riparian area will help to prevent soil erosion and improve water infiltration during occasional inundations from creek overflow into the field. As part of the match for this project, the producer will first install a berm along a section of the field boundary into which one of the hedgerows will be planted. The improvement in soil health from the establishment of hedgerows and permanent herbaceous cover in proximity to the production field will also have a long term benefit in terms of climate adaptation and resilience for the farming operation. The producer is in the process of developing a Conservation Plan with help from NRCS, but it is not ready to include with this application.	$41,129.10	$27,000.00	Monterey	6.1
Justen Cole	I recently purchased this small walnut farm that has been famed conventional. I would like to transition all 17 acres of Hartley walnut to a certified Organic farming practices. This includes the application of organic compost to meet nitrogen demands. The compost will be purchased locally and certified organic. The application rate will be determined based crop production and checked by annual leaf and soil sample laboratory results. A cover crop mixture comprised primarily of vetch and clover, will be planted to maximum biomass and nitrogen. This cover crop will grow during walnut tree dormancy when water use by the trees is very low. Topping methods will maximize nitrogen production while minimizing weeds and water use. These toppings will be timed to coincide with the times that the trees need nitrogen and water. Final mow down of the cover crop is delayed until after seed production occurs. This late mow also provides habitat for beneficial insect pollinators while creating mulch for water conservation and weed suppression. Mowing of the cover crop occurs early enough to allow decomposition prior to harvest. The use of compost and a cover crop will completely replace to use of UAN 32 fertilizer on the farm.	$17,655.36	$0.00	Solano	26.0
JW Farms	This project will support implementation of a 0.5ac hedgerow (2,450ft x 8ft) along the two longer edges of a 14ac organic farm with a multi-crop rotation including strawberries, row vegetables and cover crops. Hedgerows will attract pollinators and beneficial insects for pest control, will retain soil in the farms, filter runoff, and will result in approximately 4 Metric Tonnes of carbon sequestration and greenhouse gas emission reductions per year within our farm.	$21,471.00	$3,000.00	Santa Cruz	4.2
Kandarian Organic Farms	Enhance the farm with ecological protection measures to push towards regenerative organic certification. This project will take place in 3 fields of sizes 1.5 acre, 5 acres, and 11 acres. The soil health practices for implementation include a monarch species mix, winter cover crop mix, reduced tillage, conservation crop rotations, and rotational grazing. Our goals are to store carbon in the soil, improve the health of our plants through improvement of soil health, incorporate greater biodiversity on our farm, and be an exemplar of agriculture GHG reductions.	$13,288.44	$6,000.00	San Luis Obispo	13.7
KB Farms	We currently grow 40 acres of Southeast Asian Spring and Winter specialty vegetables surrounded by almond production. We would like to add 6,000 feet of windbreak trees around our farm to protect our vegetable production from dust and pests during the almond harvest season. Within the 40 acres,we would like to add 4 tons to the acre of compost to 40 acres of spring and winter vegetable production to improve soil fertility.Very little information is available for using trees as windbreaks in the Central Valley. We would like to see if incorporating these management practices would help us better understand the nutrition and health of the soil as well as reduce the amount of synthetic fertilizer and water application by conservation of soil moisture. Managing both compost and cover crops should conserve water moisture in the soil, provide better water infiltration through the soil profile and provide water to the root zone area. As we continue to apply fertilizer and cover crops, we will be building the soil health profile lessening water usage and synthetic fertilizer application, reducing weed populations,and sustaining a biodiverse agroecology within a multilayered agroecosystem of seasonal southeast Asian crops and windbreak tree species. Soil sampling analysis would need to be done year over year to observe the health of the soil. We also would try sweeping for insects to quantity and diversity of beneficial predators, parasitoids,and pollinators in the windbreak trees.We would also monitor survival and establishment of native plant species in the windbreaks.	$40,951.20	$0.00	Fresno	416.5

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King & King Ranch	This project is a key element in King & King Ranchâ€™s comprehensive management plan to reestablish a 32-acre field leased for the past 17 years to a conventional seasonal row crop grower. In taking back management of this field, the overarching goal is to rebuild soil health, depleted from years of chemical inputs and heavy tilling, and undergo an ecological transition to a thriving organic avocado orchard. The overall management plan includes cover cropping to restore soil nutrients and structural integrity, ceasing tilling operations, and establishing windbreaks to protect future avocado trees and increase habitat for pollinators and birds. This project specifically addresses the practices of converting to a no-till operation and the establishment of windbreaks. By converting to a no-till operation, King & King Ranch seeks to increase carbon sequestration in the soil, build soil organic matter, improve soil stability and structure, and reduce greenhouse gas emissions that result from tilling. To monitor the success of implementing this practice, the operation will take soil samples prior to starting the practice and subsequently throughout the duration of the grant. In addition, there is a demonstration project pending approval that will measure greenhouse gas emissions reductions, soil nutrient changes, and tree growth of planted avocados. The goals of establishing the windbreaks are to shelter avocados from the pervasive Santa Ana winds, provide habitat for local pollinators and bird species, increase carbon sequestration in woody planting, and improve soil organic matter and structural integrity through root growth. Success will be measured through soil sampling per CDFAâ€™s recommended protocol, bird surveys taken with the local Audubon societyâ€™s members, and pollinator surveys done with recommendations from project partner University of California Cooperative Extension. In addition, this project offers both living wage jobs and on-the-job training for alternative farming methods in low-income, priority communities.	$6,794.94	$3,040.00	Ventura	12.6
Kistler-Santo Domingo Ranches Inc.	Compost Application to Irrigated Pasture at Kistler-Santo Domingo Ranch is an investigation into the lasting environmental and land use benefits of compost to ranch land at an application rate of 6 tons/acre. As a longstanding farm in the Oakdale area, Kistler Ranch sees a great opportunity to utilize CDFA funding to implement management practices including compost application to complement current management practices. Goals for the project include compost application to a total of 92 acres (83 acres through CDFA funding, plus 9 acres through in-kind and match funding) of land throughout the ranch, resulting in carbon sequestration, improved soil health and water retention, improved water efficiency throughout ranch operations, and circular benefits to other lines of business (ie. grass fed beef operations). Additionally, compost application will allow Kistler Ranch to increase stock revenue per acre because of increased grass production, and reduce the need for future application of manures or fertilizers because of the slow release and lasting benefits of nutrients from compost on the soil. We plan to measure success of the project throughout the three-year reporting period, tracking post-application soil organic matter. If successful, we hope to continue compost application as a management practice on Kistler Ranch in the future.	$74,850.00	$4,720.72	Tuolomne	397.0
La Familia II, LLC	La Familia plans to plant range land with diverse grasses, legumes, and broadleaf species and create a riparian forest buffer for a seasonal stream that flows from a nearby reservoir. These practices will transform this land which currently consists of Sage Brush, Junipers, and intermittent grasses and turn it into a sheltered waterway with more dense grazing for cattle, wild horses, deer, and antelope. SL Ranch will perform the work as the Lessee but La Familia is the applicant and owner of each APN. Landowner Agreement is attached with APN information.	$62,480.40		Modoc	39.0
Lanza Musto Vineyards LLC	Three years of compost application to vineyards.	$36,300.00	$13,500.00	Solano	133.2
Lanza Vineyards Inc.	Three years of compost application to vineyards.	$74,700.00	$68,700.00	Solano	714.8
LaRocca Vineyards	We have been implementing a no till system and I feel that the vines need to be aerated, hence, I would like have a 3 year plan to till approximately 35 acres at a time and then plant a cover crop by broadcast plant in the said tilled rows to help reduce erosion and generate soil health. We would also like to implement a composting program to feed the soil and help revive our high quality old vines, applying on top of the soil for the 100 acres for 3 years.	$69,885.00	$66,800.00	Butte	203.0
Las Piletas Ranch, LLC	Currently there are 2 sections (1,280 acres) of relatively level land that is being dry-farmed (organic) for barley (half the land per year, the other half fallowed). During this process there is a lot of erosion do to rain run-off and wind. To preserve the life of the soil and it's nutrients I would like to replace the dry-farming with rangeland grazing for livestock. I will need to replace the soils with seed stock that will grow and replace itself naturally.	$75,000.00	$5,000.00	Santa Barbara	354.0
LF Vineyards LLC	Three years of compost application to vineyards	$42,300.00	$15,750.00	Solano	162.2
Linda Chu	our farm's north side(6000 feet) is next to the Miller's canal north of San Benito County. Miller"s Canal is connected to the Pajaro River. Year after year(close to 20 years) I see soil from our farm washed in the canal especially burring the winter season . By apply compost to our annual crop(Asian Greens) to the 700 acre(willow clay soil) along the canal reduce the need for applications of chemical fertilizer, use less water, herbicide and pesticide, the most hopeful is to reduce soil erosion. It will also benefit the root system through increase of biomass. I had done a trail of applying compost to our field, and the out come obvious, plants are vibrate , soil structure is improved, and healthier. we will measure the benefit of composting by comparing the water usage, the amount of chemical fertilizer we use and the herbicide, pesticide we apply to our vegetable on our growing season, and the severity of soil loss to the canal during winter storm season.	$75,000.00	$10,000.00	San Benito	750.0

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LMP Vineyards LLC	Three years of compost application to vineyards.	$48,300.00	$18,000.00	Solano	181.2
Lohse Ranch	The Lohse Ranch grant application proposes to apply and average of 4 tones of compost on 100 acres of walnut orchards for three years, while applying cover crops and mulch as a match and in kind contribution to the project, to the same acres. This grant would be a great opportunity for Lohse Ranch because we are currently searching out alternative means of meeting the micro and macro nutrient demands of the crops grown on our fifth generation family farm. We are very fortunate to have the opportunity to farm in such a fertile regain, however our current farming practices are having a negative effect on soil. Based on current poor quality soil samples, I feel this would be the ideal opportunity to implement the compost application to a replanted orchard and a 9th leaf orchard. Following project implementation, we will pull multiple soil and leaf samples and compare to previous analyses taken from the same field to test for adequate available nutrients. One of our goals is to improve soil permeability and tilth, which will be tested using a soil auger before and after irrigation sets throughout the year. After applying compost over the course of this proposed project I would expect to see our moisture holding capabilities improve drastically. To test this theory, we will cross check pressure chamber readings with neighboring orchards in same soil profile to compare stem water potential data. Theoretically over time, the orchards included in this project will require less water and conventional fertilizer. The application of compost instead of conventional fertilizer should in fact have a positive impact on soil ecosystems and the environment as a whole. We anticipate that applying compost to our orchards will increase carbon sequestration, improve soil health, reduce water use and increase groundwater recharge.	$74,696.88	$142,800.00	Glenn	153.2
Lola Sonoma LLC dba "LOLA Sonoma Farms"	The proposed project improves soil health and ecological impact through cover cropping, mulching, compost application and hedgerow planting on a 12-acre diversified farm.	$42,404.26	$0.00	Sonoma	19.4
Lone Willow Ranch	I am applying for a grant to fund the installation of three hedgerows, bordering three fields of my organic 20-acre farm parcel. Here I rotate cover crops (fall and winter peas, vetch, clovers and winter rye) and grow domestic barley, the ancient grains Kamut and Sonora wheat, corn, alfalfa, dry beans, and melons. As part of the rotation, I graze these fields with livestock (heritage pigs and goats). The hedgerows will be installed on the Carey Ranch, one of several parcels that make up Lone Willow Ranch. The Columbia Canal on the westside of the parcel provides water for the site. The flood irrigation runs west to east and drains to the north. Increasing the biodiversity of the ranch is a primary goal of our farm, in a region where much of the native habitat has been removed and replaced with large agricultural operations. Planting trees and shrubs along the farm boundaries provides many benefits: protecting soil and building soil health; increasing wildlife habitat, which brings in beneficial insects, raptors, songbirds and pollinators as well as soil biological activity. Vegetation creates corridors connecting fragmented areas, as well as site-specific benefits such as shade for livestock and perching sites for raptors and insect-eating birds. Planting vegetation in hedgerows on the ranch helps to buffer extreme weather events, stores carbon, and makes the farm more resilient. Evaluating and measuring success is an ongoing activity, as I walk the hedgerows, observe how they are becoming established and growing, ensuring they are properly irrigated, and replanting where necessary. Seeing the plants grow, observing the wildlife that come to the hedgerows, watching the leaves develop and then turn color and fall to replenish the soil all are ways I measure and evaluate and appreciate the biological diversity that the hedgerows bring to my farm.	$22,492.02	$5,580.00	Fresno	4.0
Lor Vang Farms	Spring and winter Southeastern Asian specialty crops are grown throughout the year on this small 3-acre farm and sold at local farmers markets. We would like to add 4 tons per acre of compost to the soil in order to improve the health of the soil for growing seasonal southeastern Asian specialty vegetable crops. Building a healthy soil profile would allow us to reduce fertilizer inputs in our production while maintaining yields and plant health. In the winter we would have one acre left fallow that we would like to try using a legume cover crop to add nitrogen during the winter that would suppress winter weeds. As we continue to apply compost and cover crops, we will be building the soil organic matter and lessening water usage, future synthetic fertilizer application, and weed populations. Compost and cover crops will help us to sustain soil biodiversity within seasonal southeastern Asian crops. Soil sampling analysis would be done year to year to observe the organic matter and overall fertility of the soil.	$2,391.00	$0.00	Fresno	7.0
Lucas Wilson / Manzanita Roots	Project will entail implementing healthy soils practices on farm to increase soil health which will increase soil biology diversity, increasing plant health and need for synthetic fertilizers and sprays, and decrease water demand for permanent crops.	$63,870.29	$2,900.00	Butte	110.0
Machado Family Farms Inc	Current farming practice is to remove and minimize vegetation between tree rows, This has created water penetration problems, reduced organic material in the soil and increased reliance on inorganic fertilizer. Proposed project is to increase water penetration through root penetration, biomass on mow down to increase organic material and using winter legumes to fix nitrogen. An additional benefit from increase soil organic matter is an increase in soil carbon sequestrations which over time affects greenhouse gases. Increasing the biomass will also reduce dust emission. Inter plant would be every other row alternating every year, this allows for any cultural work needed.	$75,000.00	$18,894.00	San Joaquin	43.0

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Magruder Ranch LLC	Compost application to rangeland shows promise as both a climate change adaptation and prevention strategy. Thus far, however, most experimentation has taken place on gentle slopes in peri-urban areas. GIS vector analysis has allowed us to identify sub-15 degree slopes within a rugged topography more typical of California's working landscapes, and the application of compost to these areas will help provide the fertility to complement our rotational grazing strategies leading to a perennialization of some of our annual grassland landscapes. This will theoretically increase the soil's capacity to hold carbon and water. Partnership with Scripps Oceanography Center for Western Weather and Water Extremes will provide a data set capable of approximating soil moisture holding capacity at a watershed scale. This data set includes 5 digital rain gauges measuring orographic rain variability, sub-surface soil moisture sensors, and a digital hydrograph meter as well as web-enabled wind and humidity sensors and stable isotope analysis of creek, rain, and spring water. In capable hands, the hydrograph resultant from this data set can be compared to the theoretical (soil and plant community independent) hydrograph and the disparity can be understood as a totalized quantification of ecosystem services. In other words, the time it takes for a raindrop to make it from hillside to creek results from a complex interaction between soil infiltration rate, soil organic matter, residual dry matter and tree and ground cover species and density. The difference in the theoretical and real lag-time between an anomaly in rainfall intensity and correlating anomaly in hydrograph is a quantitative measure of soil and plant community health.	$73,500.00	$0.00	Mendocino	26.0
Marie Hoff	To produce food and clothing while reducing GHG emissions overall, we propose an integrated crop and livestock system (ICLS), as demonstrated in the research of Dr. Amelie Gaudin through UC Davis. We hope to improve forage for our already existing sheep, as well as increase the productivity of our land by integrating fruit trees into the sheepâ€™s pasture, which will then sequester carbon out of the atmosphere. The pasture was only mowed by tractor for 15 years prior to our ownership in June 2017. Since then, we have had the goal of improving the compacted soil, low soil organic matter, and poor forage quality. We will implement the following four practices in this project: compost application to grassland, range planting, silvopasture, and a multi-species hedgerow. By adding fruit trees, applying compost, planting a pollinator-friendly hedgerow, and broadcasting native grass seed, we hope to remedy the poor pasture quality and broaden the productivity of the land to encompass not just wool, but also fruit and flowers. Ideally, we would increase soil organic matter, reduce soil compaction, increase water retention and water holding capacity, improve forage, produce wool, fruit, and flowers, and increase the aesthetic beauty of our land. Soil compaction, soil organic matter, forage quality, and water holding capacity we can measure using tools and tests through our local Resource Conservation District. We can measure the amount of wool we produce at shearing time each year, and take photos of the fruit tree maturation and flowers, as well as document the aesthetic beauty via before and after photos.	$2,928.28	$1,100.00	Mendocino	10.4
Marilyn Erdman	Newly planted orchard with no/little vegetation between tree rows. Erosion and soil compaction is of concern. Planting a cover crop in the rows between the trees in late fall, followed by mowing in the summer for maintenance.	$19,712.70	$12,560.70	Yolo	11.0
Markstein Organic Family Farms	This project explores sustainable methods for improving organic soil health through organic composting. Located in the north fork of Honcut Creek, the farmland is adjacent to sensitive waterways and fosters diverse wildlife. I am the operator of Markstein Organic Family Farms who will take over the lease of the farmland from the current tenant: JCM Equipment Leasing, Inc. I am also the President of JCM Equipment Leasing, Inc. My family has farmed this property for approximately two decades. Beginning in 2016, I decided to go organic and began the process to certify Markstein Organic Family Farms as USDA and/or CDFA organic. The goal of Markstein Organic Family Farms is to obtain organic certification and to continue farming rice while employing sustainable organic methods which improve soil health, reduce the needs for pesticides, and leave the land in the most pristine condition possible. Given the proximity to sensitive habitats, Markstein Organic Family Farms is keenly aware of the intersection of wildlife and production agriculture. Through this project, Markstein Organic Family Farms will show the vitality of sustainable organic farming methods to protect the land, sustain wildlife populations in close proximity, and to improve soil health through composting. I will show that continued application of compost to annual crops is a sustainable method of improving soil health on sensitive organic farm operations. Through a grant award, Markstein Organic Family Farms will apply organic compost to its operations on a yearly basis and will conduct soil tests to monitor soil health, and any changes thereto, throughout the three-year grant project. I hypothesize that the use of composting will mitigate erosion. I will monitor pre and post application effects of organic compost application through vigorous soil testing. By monitoring soil health, I will provide quantifiable date to support or reject the projected outcomes.	$74,880.00	$8,856.00	Butte	403.2
Maskell Growers	Maskell Growers core objective in participating in this program, is to improve the long term sustainability of the grove through the implementation of various conservation management practices that improve soil health, reduce run off, and mitigate the proliferation of weeds. This particular grove has been a commercial grove for more than 50 years, but the prior owners(s) did not utilize any conservation and sustainability practices, as there is excess erosion, and run off into a local lake. In addition, weed control was handled by sparing herbicides (round up) which probably impacted the commercial bee operation on the adjoining property. In is our intent to improve soil conservation through the use of mulching, which has added benefits of increased nitrogen utilization, and greatly diminish the presence of weeds under the avocado trees. Finally we are looking to utilize conservation cover plants to both reduce run off and erosion along the boundary of our property.	$26,802.98	$7,997.02	San Diego	1.2

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McIntyre Vineyards	We want to enhance the biodiversity of our vineyard as well as provide habitat for endangered pollinators. We want to plant a cover crop mix on the entire vineyard that consists of a blend of spring, summer and winter annuals. We also want to provide permanent habitat by planting a hedgerow on the non-cropped portions of the vineyard. The hedgerows will consist of woody perennials like native milkweeds and shrub that are specifically chosen to support monarch populations. Our goal is to provide a year-round food source in the form of flowering plants which will increase the beneficial insect population, as well as provide them with areas to overwinter that's undisturbed. This will reduce our need for pesticides because we will rely more on biological controls for pest insects and weeds. We plan on comparing the insect populations on the rows with flowering mixes, to the other rows with native grasses and see how they compare. Using butterfly nets, we will sweep cover crops, identify and measure the number of species. We will work closely with non-profits like the Xerces Society and WildFarm Alliance and consult with them about further protection for pollinators and monitoring.	$31,882.74	$10,000.00	Monterey	16.8
Meadow Farm Community Land Trust	Meadow Farm Community Land Trust is a 501(c)3 public benefit corporation that for the past 5 years, with the help of local volunteers and Workaways, has been gradually expanding its capacity to grow organic vegetables & fruit with which it feeds itself and shares with the community and other non-profits such as the local Food Bank and Senior Center. Cognizant of the global climate crisis (CC), we want to increase production to provide for resiliency in face of the likelihood of disaster, man-made or natural. Carbon sequestration is vital to ameliorate CC's worst effects. However we are extremely limited in our ability to achieve our aims because of the poor quality of our soil which contains little carbon. We could have a significant impact on sequestering carbon with the addition of compost and mulch and cover-cropping. We also want to plant more herbaceous plants to provide habitat for pollinators, birds and other beneficial wildlife. Planting cover crops & applying compost & mulch will enrich the soil with much-needed nutrients, conserve water, & suppress dust, weeds/pests. The garden has never been subjected to chemical treatments of any kind nor do we disturb the soil more than the minimum required, mostly without the use of gas-powered equipment. Currently, the area under productivity is only 3 acres. We would like to get the entire meadow area, approximately 6 acres into production. Being awarded this grant would contribute to that goal. We will be successful when the soil of the entire 6 acres is carbon-rich and in production, allowing us to feed more people and offer more opportunities for local folks to learn how to grow their own food and provide more wildlife habitat. We keep a garden log of our activities.	$17,765.11	$5,502.00	Mendocino	27.6
Melinda Nickler	In this project we will reduce chemical fertilizer use with compost applications and cover cropping to improve soil health. We will also apply mulch to tree berms to conserve moisture and further enhance soil biology. A hedgerow would be established along the north and west sides of the orchard to create habitat for beneficial insects, reducing the need for pesticide use.	$60,852.08	$0.00	Tehama	8.4
Michelle Rossow Farms	This project will implement the following practices on 2 irrigated cropland fields that consist of 46 acres. The recipient will incorporate 5 soil management practices: testing soil annually for organic matter, creating a nutrient management plan with a 15% reduction in nitrogen fertilizer application, planting a multi-species legume cover crop annually, spreading compost evenly across the field annually, and residue and tillage management of intensive to reduced till on irrigated cropland. The goal of the project will be to improve plant health and yields, increase water infiltration and retention, reduce greenhouse gases, sediment erosion and dust, improve water and air quality, and improve biological diversity and wildlife habitat.	$74,966.28	$5,219.16	Merced	218.1
Miranda Dairy	We will be no till seeding cover crops for the purpose of erosion, higher yields, and reduced emissions from less farming and increase infiltration and water holding capacity, but will also release compaction with the deep rooted species. Goal is to create quicker regrowth and increase yield outputs by increasing the number of days of rotational pasturing, while reducing the need for irrigation, and save water, and time and expense for fuel and labor of conventional farming. We will be able to measure our success by the number of days for regrowth for pasturing and by times we have to irrigate. By shortening the grazing rotation we hope to achieve a more natural fertilization program where the cows are putting the nutrients down rather than having to mechanically apply. We will look toclovers and grasses with deeper root systems to be able to tap into the moisture that is 4" below the surface.	$67,191.00	$21,600.00	Humboldt	13.0
Mission Ranches Company, LLC	This project will consist of growing three different types of cover crops which include barley, sudangrass, and mustard. They will be grown on four farms totaling over 132 acres. These cover crops will be grown to increase soil tilth and organic matter, reduce wind and water erosion, scavenge nitrogen from the soil, suppress weeds, and manage soil moisture. Among the many other benefits, the barley will also be harvested to provide fodder for cattle. These cover crops will be planted for three consecutive years.	$51,271.97	$51,500.00	Monterey	45.0
Morning Glory Organics	Applicant seeks to apply compost to 4.5 acres of row crop land to improve soil structure, reduce erosion sequester carbon, reduce volitilization of ammonia gas, output of N2O and increase crop production. For the last several years, Applicant has been utilizing black plastic mulch for weed suppression. Applicant seeks to replace the use of plastic mulch with straw mulch to improve the biology in the soil as well as the soil structure in the produce rows as well as between rows. The use of black plastic mulch tends to solarize the biology in the first inches of soil and, while it does suppress weeds, removal of the plastic mulch tends to leave soil subject to winter erosion. The soil on Applicant's farm tends to be predominantly clay and the addition of compost will improve the friability of the soil, imporve the crop yield and sequester carbon. Outcomes will be measured by increased soil stability and increased produce yields. Yields will be measured by increased weight and volume of the produce as well as measurement of increased soil depth. In addition, Applicant seeks to implement hedgerows on the East, West and South (on Field #1) borders of the property and utilize cover crop to improve soil structure and add organic matter.	$17,247.45	$5,525.00	Butte	3528.8

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Moua Lee Vang Farms	We would like to improve our management practices by transitioning to compost and cover crops in our 20 acres of Southeast Asian vegetables by incorporating 4 tons per acre of compost into the soil. Compost would assist in improving the soil biology, texture, fertility, and ability to hold moisture while reducing the amount of synthetic inputs. In the winter,we allow 10 acres to go fallow until the spring, and winter weeds grow on the fallow land.In order to reduce the amount of winter weeds and to continue improving the soil health and fertility, we would like to grow a winter nitrogen-fixing legume cover crop in the fallow areas. Implementing these two practices into our management routine should help us to reduce our synthetic nitrogen application. Overall, we would like to see our soil health improve year over year, as well as our management practices by increasing organic matter fertility and improving soil structure. Year to year we would like to see the improvement of our soil nutrients through soil sampling analysis, and the reduction in cost for purchasing fertilizers. We would also monitor whether reduction of weed sand water usage would occur as a secondary benefit to improving soil fertility in winter and spring southeast Asian specialty vegetable production.	$17,415.60	$0.00	Fresno	46.3
Mountain Wolf Ranch	The project will implement three conservation management practices on a ranch in western Sonoma county. The work plan includes compost application and mulching on 10.0 acres of grassland, and 25 acres of rangeland planting. The project will work to increase adoption of conservation management practices that mitigate greenhouse gas (GHG) emissions and increase soil health through implementation GHG-beneficial practices, in support of ongoing farming and environmental mitigation efforts. These goals will be measured by lab soil tests, Electrical Conductivity Mapping (for soil texture change) and applications of the Natural Resources Conservation Services Soil Quality Test Kit. We have done much to improve our ranch in the last 7 years. While this ranch has been in my family for three generations, it was rented out from 1995 to 2012. The renters were poor land stewards who overgrazed the pasturelands and mismanaged riparian areas, which resulted in poor compacted soil and stream erosion. When we returned in 2012 we began to take stock of the condition of the 100 acres and its 5 streams. While our project list is long, we have worked continually to improve the land and waterways. Efforts have included reseeding of more than 40 acres of pastureland, installing more than 6,000 feet of fencing to keep livestock out of protected riparian areas, installation of bat and owl boxes for pest control, planting willow in erosion areas, and the addition of more than 1,500 feet of water line to keep animals off sensitive areas. Soil tests show that our soil is 100 times more acidic than average California pastureland, therefore along with the application of compost we will be including 20 tons of lime. Having put into place healthy land management practices at the ranch, we are poised to make a positive impact on soil recovery through this grant.	$25,893.50	$6,120.00	Sonoma	57.6
Mt. Whitney Dairy	The reason this project is being proposed is to begin change on a conventional farm. The addition of multi-species cover crops has the ability to improve soil health and provide an environmental benefit as well. With the help of funding, we are able to make that change and mitigate our risk in doing so. The goals that we have for this project are to increase the soil health by: improving the soil structure, increase the soil organic matter, increase the water infiltration rate, and increase nutrient availability in the soil. We hope to see the multi-species cover crop do this in the soil. To evaluate these goals, we will do side by side observations with fields adjacent to these project fields and visually observe soil texture. We will also compare the infiltration rate of water to adjacent fields that are not part of the project. In order to evaluate the soil organic matter and nutrient availability, we will analyze the soil samples that we take on the project fields and compare them to soil samples from years prior to the project implementation. This project has the capacity to introduce cover cropping on a farm that has never done so.	$74,940.00	$1,188.00	Fresno	81.0
Nagata Bros Farms Inc	5 Acres of waterways run through the field mainly as ditch and rain water management. The ditch has been eroded by the recent rains of 2019 and are in need of reconstruction along with plantings of grasses to maintain the area from erosion. This will stabilize and reduce erosion allowing for water to capture the solids and nutrients flowing in the waterway. The planting of vegetative landscape will establish a permanent stable environment along with the required with stone checks every 100',	$16,860.00	$3,000.00	San Diego	0.4
Nai M Saechao	Nai is an ethnic Mien (hilltribe from SE Asia) and grows strawberries on 2+ acres of ground. Because of the limited space available, he and his wife are not able to effectively rotate strawberries to another crop. Compost will improve the ability of the degraded soil on his farm to infiltrate and store water and cycle nutrients, and produce a healthy crop. He is willing to apply compost to half his farm for three years in a row in order to observe the benefits this practice might provide.	$1,350.00	$0.00	Sacramento	4.9
Nao Pao Vang Farms	We would like to improve our management practices by transitioning to compost and cover crops in our 20 acres of southeast Asian specialty vegetables by incorporating 4 tons per acre of compost into the soil. Compost would assist in improving the soil biota, texture, fertility, and ability to hold moisture.In the winter we allow 10 acres to go fallow until the spring, and winter weeds grow on the fallowed land. In order to reduce the amount of winter weeds and improve the soil health we would like to grow a winter nitrogenâ€“fixing legume cover crop in 10 acres of fallow land. Overall, we would like to see our soil health improve, as well as our management practices by increasing organic matter fertility, improving soil structure, and reducing reliance on synthetic fertilizers. From year to year we would like to see the improvement of our soil nutrients through soil sampling analysis. We would also monitor whether reduction of weeds and water application would be additional benefits to improving soil fertility in winter and spring southeast Asian specialty vegetable production.	$17,415.60	$0.00	Fresno	46.3

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Navarro Vineyards LLC	We feel that we have a strong sustainability program implemented throughout our farms. Composting is an area of farming we would like to improve upon due to the number of benefits it provides. Our goal is to improve overall farm health from the ground up over a three year period, while learning how to build upon our own onsite compost program post-project. We anticipate that our success and observations will be steady and seasonal. Annual soil samples of the designated compost fields and vineyards will help us to assess the changes and impacts of the project. We will also be recording seasonal observations of vine and grassland health, changes in our irrigation practices (using less water), cover crop vigor, soil erosion, and water permeability during the rains.	$74,338.00	$39,045.00	Mendocino	262.4
Oaklea Vineyards	The project will implement soil practices including reduced tillage and cover cropping in a hillside newly planted vineyard setting. The vines are to be planted in June 2019 on 10 acres in a 6â€™ x 8â€™ spacing (907 vines/acre) on land that was formerly a walnut orchard until 2016, whereupon the trees were removed. For the next two years the walnut wood and brush were piled and burned, then the land was deep-ripped in 2018, with 2 tons per acre of gypsum applied pursuant to soil tests. Straw covered the soil in winter 2018-19 to diminish erosion. The land is to be tilled and leveled later this spring and the vines planted (Sauvignon Blanc on 1103P rootstock, but with five 20 vine areas, each, of nematode resistant GRN 2 and GRN 3 Rooted Sauvignon Blanc for comparison). Soil samples at planting will establish baseline soil health values. After planting, a multi-species cover crop of grasses, legumes and radishes will be seeded down the mid rows in the late summer prior to the first rains. This cover will be maintained until late spring-early summer of the next year 2020, whereupon it will be terminated and worked into the soil in one tillage operation. Each succeeding late summer and early fall for the next two seasons after 2020 the same cover crop will be reseeded and tilled once in the next late spring of the succeeding year, as before. Annual soil sampling will be done after tillage each season to assess changes in soil health. In addition to the five 1103P rooted sample areas, for comparison the five sample areas of the GRN 2 and GRN 3 rooted vines will be sampled the same way, along with 5 areas where a native cover crop has been maintained instead of the seeded one.	$5,373.00	$1,500.00	Lake	9.6
OLAM Farming, Inc	We will be applying compost with a C:N<11 at 4tons/acre across our Nevada ranch which consists of 8 fields totaling 1,048 acres. We are requesting funding for 125 acres worth of material ($75,000). OLAM is in control of all operations on the ranch, and thus, controlling the timing, efficiency, and accuracy of the application will be easy. Additionally, OLAM is equipped with a Farm Operations Manager who is in charge of procuring all materials, as well as, an inhouse agronomist. Having this team in place ensures an accurate and efficient application of the new practice, resulting in valid analysis of results. We believe compost can help to increase soil organic matter, aide water penetration, increase the soils cation exchange capacity, and provide a heathier environment for soil microbes. Additionally, this compost application will reduce GHG emissions and increase water use efficiency, making the ranch more sustainable and efficient. An added benefit of applying compost is the slow release of nutrients, which provide prolonged nutrition for the soil and orchard, leading to healthy soil, and in turn, a healthier tree which is then better able to fight off pests and diseases naturally, avoiding the need for chemical applications.	$75,000.00	$560,184.00	Fresno	1682.0
Oro Verde Ranch LLC	A multi species cover crop will be planted in the alleyways of the 146 acre field of pistachios. Our calculations show that planting alleyways covers 70% of the total acreage. (70% of 146 is about 100 acres). Compost C:N ratio of 24 will be broadcast spread to the NE portion of the field at a rate of 6 tons per acre, for a total of 34 acres. Oro Verde Ranch believes that composting and cover cropping are two practices that can reap a bounty of benefits. By implementing these practices every year for a minimum of three years, we will see an increase in soil organic matter, water holding capacity and drainage, amongst other benefits. We will test these characteristics at least once per year by sending soil samples to be lab tested and running water holding capability tests on soil core samples. We will define success if we see a gradual increase in these soil characteristics but also if we see a noticeable difference in tree health and nut quality.	$74,700.00	$5,150.00	Yolo	177.2
Oryza Partnerhsip	We are going to use NRCS practices to build our soil health and quality on a conventionally farmed rice field. This field is 78 acres in Meridian California. We will use a vetch and oats cover crop planted in the fall, that will grow throughout the winter. This crop will be planted straight into the rice straw after the rice is harvested. Usually after the rice is harvested we chop and incorporate the straw into the ground. By planting a cover crop we hope to avoid any fall tractor work. In the spring we will terminate the cover crop by chopping, then work the rice ground, The hope is that we can avoid at least two passes with cultivation equipment in the spring. For our fertilizer we will be starting by adding 4 tons of compost per acre. We will then add a reduced rate of aqua ammonia with no dry starter fertilizer, This should be about a 20% reduction in nitrogen.	$74,706.55	$5,497.44	Colusa	184.6
Oya Organics	I am applying for a Healthy Soils Initiatives grant to employ several soil conservation practices to improve soil resiliency at Oya Organics, a small 26 acre organic farm in Hollister, CA. We will apply compost and plant cover crop in our annual crop fields to improve soil nutrient and water holding capacity, protect soil aggregation, reduce weed pressure, and sequester carbon. We will plant native trees along the riparian area of an intermittent creek to prevent bank erosion, capture irrigation run-off into the waterway and provide wildlife and pollinator/beneficial insect habitat and capture carbon. We will also plant hedgerows along some of the field borders to adjacent conventionally managed orchard and fields to provide a barrier to pesticide drift, wind and dust, as well as capture irrigation run-off, attract insects and wildlife, provide soil cover, and sequester carbon.	$53,766.64	$56,945.00	San Benito	73.0

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Pacific Realty Associates L.P. dba: M&T Chico Ranch	The Soil Recovery Project is intended to increase soil organic matter in our existing walnut orchards, 112 acres, where organic matter has been depleted by natural or agricultural actions. The goal is to improve the soil quality lab analysis throughout the acreage requested for the applications. According to the web soil survey 53 percent of the proposed application site consists of Ingord fine sandy loam which equates roughly to 100 acres of what we consider to be the largest problem area. In order to accurately monitor progress we have chosen to use the conducted soil samples for this grant and use it as a baseline for the ongoing analysis of this project.	$67,000.00	$0.00	Butte	164.9
Page's Organics	Mulch for fruit tree basins and row crops.	$3,500.00	$0.00	San Diego	0.80
PALMER WESTBROOK INC	This project will incorporate seeding of forages on grazed rangeland to improve soil health and rangeland condition, conversion of annual cropland to pasture, and planting a pollinator friendly hedgerow. This project will benefit pollinators and decrease the need for synthetic fertilizer and insecticide use, increase overall soil health leading to increased infiltration, decreased compaction, and increased water holding capacity, increase pasture and rangeland productivity, and decrease GHG emissions. Healthier more resilient soil should result in lowering use of synthetic fertilizers, other compounds, and off farm feed inputs; as well as sequestering carbon, and reducing nutrient run-off.	$71,033.74	$7,663.00	Del Norte	47.0
Pamela Posey/Allen Harthorn	This project is designed to rebuild the health of the soil on a two acre walnut farm on the urban edge of Chico California. As many techniques as are financially feasible will be completed with approved funds and landowner match. This property has been managed in a non-organic manner for most of the history of the 40+ year old walnut trees. We purchased the property in December 2017 and have been managing it using only organic practices since that time. Only organic fertilizers have been utilized and no pesticides. The goal of this project is to completely rebuild the soil and increase the biodiversity of the farm. The outcomes will be the establishment of a minimal input, self sustaining cover crop, a rich bio-diverse soil profile, and a healthy mix of native plant hedgerow and windbreak areas. Evaluating and measuring the success will be done by ensuring 90% success rate for plants, self reproducing cover crops, and a significant increase in organic matter in the soil. Creating a healthy soil and plant community is critical to the continued profitability of this small agricultural property. Being on the border of the City of Chico, the County of Butte has established a "greenline" where agricultural land can not be developed for urbanization. For larger agricultural parcels, the economies of scale allow continued normal production practices. For this particular 2 acre piece, purchasing the equipment to manage a walnut orchard is simply not feasible. Minimizing the need for expensive equipment by minimizing the need for regular mowing, supporting beneficial insect habitat, reducing the need for pesticides, and diversifying the cropping pattern, as well as buffering the parcel from neighboring activities will enhance the sustainability of this small parcel.	$8,912.40	$1,500.00	Butte	3.7
Pellegrini Ranches	The aim of this project is move Pellegrini Ranches further along the path towards regenerative agriculture by focusing on improving soil health and vitality. By adding a consistent annual application of certified and tested compost, Pellegrini ranches will be able to reduce the use of applied nutrients such as Nitrogen. The application of compost is anticipated to raise the percentage of soil organic matter, improve water holding capacity, and increase the population and diversity of soil microbiota. Over time, the successive applications of compost will play a key role in moving towards a minimal input system. Success of this project should manifest itself in a reduced severity of disease pressure due to the combined effects of increased nutrient availability, increased drought resistance, and an increase in the diversity of biorganisms and microbiota in the vineyard. The overall goal of this project is the have an environmentally positive impact in the field, as well as on local and global levels.	$73,800.00	$59,760.00	Sonoma	270.2
Peng Eng Chang Farms	In 15 acres of a mixed specialty fruit(jujube, guava, citrus, peaches and passion fruit) orchard and in half an acre of mixed vegetables,we would like to improve the soil health by adding Healthy Soil Focus: compost to the soil before the spring growing season to improve soil fertility in specialty Asian fruit trees and vegetables. After the addition of compost into the soil, we would like to implement a mixed pollinator cover crop in which would establish pollinator and parasitoid habitat, while suppressing weeds in our orchards. Very little information is available for using these management practices in specialty fruit trees grown in the Central Valley. We would like to see if incorporating these management practices would help us better understand the nutrition and health of the soil as well as reduce the amount of synthetic fertilizer and water application by conservation of soil moisture. Applying these two methods we expect to see the reduction of synthetic fertilizer, and improved weed management. The cover crop should establish a habitat for beneficial insects to pollinate fruit trees and mitigate problematic pests. Managing both compost and cover crops should conserve water moisture in the soil, provide better water infiltration through the soil profile,and provide water to the root zone area. As we continue to incorporate cover crops, we will be building the soil health and lessening water usage, synthetic fertilizer application, and weed populations. Soil sampling analysis would need to be done year over year to observe the health of the soil. Sweeping for insects to quantity and diversity of beneficial and pollinators would be conducted	$39,196.80	$0.00	Fresno	26.1

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Phen Vue Farms	We currently grow spring and winter Southeast Asian vegetable crops on 17 acres where we would like to better understand the production using alternative practices. We would like to add 4 tons per acre of compost, building the soil fertility year over time. Applying compost in the soil would improve the soil biology, texture, fertility, and ability to retain soil moisture for our Southeast Asian specialty vegetable crops. In the winter we let 8 acres go fallow until the spring. We would like to reduce the amount of winter weeds and improve the soil fertility by growing a winter nitrogen-fixing legume cover crop in the fallow blocks. Implementing these two practices into our management routine should assist us in better understanding the importance of soil health as it improves the production of our vegetable crops.Little information is known about soil health and conservation practices in Southeast Asian specialty vegetable crops grown in Fresno County. The success of incorporating these practices would be the evaluation of soil organic matter composition and fertility through soil analysis to create a greater understanding of cover cropping and composting in southeastern Asian crops.	$16,021.12	$0.00	Fresno	38.9
Randi Thompson	This project will install 3,277' of native plant hedgerow around the perimeter of our ranch, and improve the 17.5 acres of grazing land by seeding a mix of annual and perennial forage species. Hedgerow: The establishment of perennial trees and shrubs will improve infiltration of storm water and provide habitat for animals and insects. Rangeland Planting: Providing high quality forage increases animal health and reduces the need for expensive supplemental feed. Rangeland planting provides great year-round cover for the soil, which will increase soil organic matter over time, improve water infiltration and reduce erosion from water and wind. Planting the rangeland with desirable forage species will greatly help reduce weed populations and hopefully prevent them from getting out of control	$37,682.21	$2,624.00	Solano	11.0
RBG Farming	This project calls for the application of compost on 265 acres of almonds to increase organic matter and sequester carbon in the soil. 4 tons of compost purchased from a certified facility and applied to the fully producing almonds annually, and soil samples and organic-matter measurements will be taken at various monitoring points throughout the project life to track our progress towards these goals.	$75,000.00	$84,150.00	Kern	431.0
Rebekka Siemens	I plan to use mulch, poly-crop cover, compost, silvopasture and adaptive grazing to turn a desertified Central California monocrop into a dry-farmed almond orchard layered into a diverse grazed and harvested pasture.	$71,937.01	$40,000.00	Kern	37.3
Red Creek Farm	This project will be conducted on a farm raising a 50-head flock of dual purpose (meat and fiber) sheep, within Potter Valley of Mendocino County, on APNs 173-030-06 and 173-030-12. The parcels contain 3.5 acres of irrigated pastures and 4 acres of non-irrigated range land accessible to equipment. The project will involve the application of compost to both the irrigated pastures and the non-irrigated range land, as these fields have not received any soil amendments for over ten years other than manure from grazing sheep. The goals and objectives of this compost application project are to increase soil organic matter content and build soil fertility, structure, and biodiversity. Expected outcomes include increased hay production, increased animal health and productivity, reduced irrigation needs, and increased carbon sequestration. The primary method of evaluation will be annual soil testing in Field 1 and Field 3 at the same locations within each field. Additionally, project evaluation will include the comparison to past records of hay crop, qualitative observation of the vigor of vegetative growth compared to past years, visually comparing the health of the sheep to previous years, and comparing irrigation needs to previous years' irrigation schedule.	$9,300.00	$7,980.00	Mendocino	33.2
Red Tower Farms	This project will allow us to experiment with various new management practice to enhance our operation's sustainability: financially, ecologically, and socially. We plan on implement a variety of new practices with the help of the Healthy Soils Program funding. Expanding to a more diversified cropping system by using multistory and alley cropping systems. Establishing a windbreak to protect our crops and farm infrastructure from wind damage while also creating wildlife habitat on our working lands. Incorporating cover cropping into our system to increase soil available nitrogen and improve soil organic matter content. And experiment with combining mulching with compost application for weed control and erosion mitigation. Our hope is that cover cropping and the windbreak establishment will help prevent soil erosion that we are observing on our fields. We hope to determine if a thick layer of wood chip mulch will immobilize nitrogen that could reduce yields in both our annual and perennial crops. We are looking to see if the benefits from composting and mulch application outweigh the drawbacks. This will be determined by the cash crop yield. We believe that mixing these practices together has the potential to improve soil fertility, water infiltration, cation exchange capacity. This project also aims to help minimize sediment and nutrient runoff into an on-site pond and decrease our pesticide usage.	$26,913.02	$20,070.00	Sacramento	17.6
Regli Jerseys	This project will increase soil health and address compaction issues through the use of cover crops. The project area lacks sufficient organic matter within the soil and is suffering from compaction issues due to intensive grazing. Due to these issues, the overall health, permeability, and productivity of the soil has continued to decline and the project area can no longer produce sufficient yields of quality feed to support the grazing needs of the dairy. Soil samples and soil density tests will be used to evaluate the project's success on an ongoing basis.	$29,397.30	$20,000.00	Humboldt	8.5
Ridge Vineyards, Inc.	Hedgerows consisting of native plant species shall be planted along drainage swales between Ridge Vineyards Lytton Springs vineyard blocks to offer habitat for beneficial insects and predators as part of our integrated pest management. These hedgerows will offer habitat to native pollenators, shade ephemeral watercourses, sequester carbon, intercept airborne particulate matter, and limit or reduce chemical drift. Hedgerow plants will be monitored and replanted, weeded, and irrigated as needed. Photos and evaluations of the hedgerows will be done by Sonoma Resource Conservation District partners.	$60,188.40	$37,600.00	Sonoma	14.0

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Rincon Farms Inc.	I am applying for a Healthy Soils Initiatives grant for the installation of four practices on 5 APNs: 1) compost application, 2) cover crop, 3) hedgerow, and 4) mulch application. Preserving our farmland for the future is important to our family farm. The purpose of this project is to enhance the conservation and create a multi-functionality of our land to better the environment, our soils, and our crops. The goals are to create a hedgerow along the border of our vineyard with a base of mulch/wood chips. This will provide habitat for beneficial insects like pollinators, prevent run off and increase soil moisture retention, and attract predator insects to help mitigate pest pressure in our wine grapes. By implementing a cover crop and compost plan on our annual crop fields we will increase organic matter and water retention and prevent soil erosion. Our evaluation process to measure the success of this project is through visual monitoring and recording on a yearly basis for soil health as well as continual maintenance throughout the year to check on hedgerow plant health.	$72,278.75	$148,597.00	Monterey	221.2
River Garden Farms Co	This project will compare the performance and response of establishing walnut trees planted in areas with cover crops and those planted in areas with no cover cropping. River Garden Farms intends on installing 309 additional acres of walnuts in 2020. The middle rows of 259 acres of the new walnut planting will have 20ft strips of a legume mix cover crop and a control area of 50 acres will receive no cover crop planting. Initially, during the first year, soil health will be monitored through soil sample analyses to monitor any potentially differences between cover cropped and non-cover cropped (control) acreage. During the second and third years, a pressure chamber will be used to compare any differences in irrigation needs or leaf water potential between the cover crop and control areas. Additionally, visual assessments will be done annually to note any difference in soil erosion between the cover cropped fields and the control fields. In an approximately 10.5-acre portion of the walnut planting, hedgerows will be planted, instead of tree berms, that are comprised of beneficial shrubs, herbaceous beneficial plants, native grasses, and western monarch habitat. Between the hedgerows, conservation cover, in the form of native a grassland, will be established. This habitat planting will connect to other habitat restoration areas creating a nearly 1 mile long continuous corridor of wildlife and beneficial habitat.	$75,000.00	$67,408.44	Yolo	51.5
River Valley Ranches	River Valley Ranches plans on applying compost to our future, newly planted alfalfa fields, approximately 250 acres. The compost will help stabilize the soil nutrient deficiencies and produce a high yielding, healthy alfalfa crop. We have applied compost to alfalfa many times in the past with great results. A fuller, healthier crop will increase the yield of every harvest, making every cutting much more efficient. The high yield will help lower our carbon footprint by harvesting a full crop, compared to harvesting a crop with low yields. The healthier crop will possibly allow us to harvest one more time this year. The compost will help produce a strong crop giving the crop the nutrients it needs to survive a hot summer. We plan on measuring our future results through soil sampling to ensure there are no deficiencies or excess nutrients. We will also continue to analyze our yield (tons/acre) as we have done for many years. Our tons/acre results help us understand and distinguish which farming practices/fields will produce the healthiest crop.	$75,000.00	$108,109.50	Imperial	902.0
Robert Carter	The Recipient will improve soil health by incorporating multi species cover crops into their orchard to increase water holding capacity and infiltration, compaction management, and integrate bees and other beneficial insects naturally in the orchard. Adding a cover crop will also help control/reduce nematodes without the use of chemicals, leaching of important minerals, and will help regulate weed suppression. Soil health will be measured by conducting annual soil samples and recipient will let cover crop go to bloom and reseed each year as necessary.	$6,632.92	$1,200.00	Glenn	4.3
Round River Farm, Erica Lundquist and Charles "Randy" Krag, owners	The main objective of this project is to build soil organic matter and create â€œtight nutrient cyclingâ€ in our organic walnut orchard. We apply chicken manure for fertility, and the nitrogen availability from this manure may not match the timing that trees require, creating the potential for nitrogen loss. By building soil organic matter, and in particular by adding a high C:N ratio compost, we hope to build a carbon â€œspongeâ€ to hold onto nitrogen. Along with a California soil test lab, A& L Lab in Modesto, we plan to use the Oregon State University Soil Health Assessment which provides numerous biological tests that will help to document changes in our soil. These include total carbon, total nitrogen, permanganate oxidizable carbon, respiration burst, and potentially mineralizable nitrogen. By measuring nitrate-nitrogen and total carbon immediately before compost application, one year after the first application, one year after the second application, and one year after the third application, we hope to get an idea of whether less nitrate and more carbon and organic nitrogen are present. We will also sample walnut leaf blades to see whether the trees have sufficient nitrogen. We send these to A & L Lab. In addition, we want to plant a pollinator hedgerow of native plants with a wide variety of bloom periods, including some milkweed, and nectar providing plants. This hedgerow will have shrubs for woody biomass to sequester carbon while also providing habitat for monarch butterflies, native bees and other beneficial insects.	$44,874.00	$27,023.00	Lake	64.2
Ryan Christopher Bell (Hummingbird Ridge Farm)	The goal of this project is to improve the soil and ecosystem health of 15 acres of dry-farmed walnuts in El Dorado County. New practices include: compost application, cover cropping, native riparian forest buffer installation, native hedgerow installation, and mulching. These practices will increase soil available nutrients and organic matter, sequester carbon and reduce GHGs, increase soil water-holding capacity, increase water infiltration rates, limit nutrient runoff, reduce erosion in the orchard, create wildlife habitat, support pollinator species, and establish a more diverse agricultural ecosystem. Soil tests will be conducted annually for organic matter content, nutrient availability, and soil structure. Observational data will be recorded on a regular basis for yield, landscape changes, and wildlife activity. Project success will be determined by crop quality and yield, soil health, and ecosystem services.	$43,963.81	$23,250.00	El Dorado	71.1

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Saint Marie	Saint Marie Vineyard was planted by the renowned grapegrower Richard Sauret in 1965. The vineyard was abandoned in 2013 due to the economic and environmental stresses related to the drought. In 2018, the new owner began work on revitalizing the vineyard. Soil testing in 2018 showed a calcareous clayey loam soil with extremely low organic matter and lacking macro and micro-nutrients, typical of an over-farmed, nutrient-deprived Nacimiento soil. The project's goal is to restore this historic heritage vineyard by focusing on rebuilding the soil's biology and creating healthy soils. The net result is to increase grape yield and help the environment by employing management methods that sequester carbon.	$11,692.80	$8,850.00	San Luis Obispo	55.1
Sally Negroni	I set aside an area when planting my walnut orchard in 2016 for a future hedgerow and native grass and pollinator planting. I have been managing the area by mowing since then along with mowing my orchard cover. crop. The project consists of a Conservation Cover and Hedgerow Planting. A successful Conservation Cover planting requires at least a year of weed control before planting; therefore, I will begin pre-plant weed control in July 2019 and continue through the Fall of 2020, when the Conservation Cover will be planted. Conservation Cover practice (NRCS Practice # 327) will be planted in Fall 2020 on the south border of my walnut orchard, APN 00112-020-070, Tract 4220, Field 3. The cover area will be 29' wide x 1200' long (0.8 acre), and will be seeded with pollinator forbs and native perennial grasses to provide pollinator habitat. After planting the Conservation Cover in the Fall of 2020, the Hedgerow Planting (NRCS Practice # 422, Hedgerow Planting, single row with wind protection) will be installed in the Fall 2020 and Winter 2021 into the conservation cover planting area, providing 1200' of hedgerow. The hedgerow will provide pollinator and beneficial insect habitat. Predominately native species will be selected, but introduced species that provide timely periods of flowering may also be selected. A single line of trees and shrubs will be planted at this time.	$11,703.50	$3,680.00	Solano	7.1
Sang Seok Nam	This project is to implement the following practices on an avocado orchard that consists of 20 acres. The practices include 1) testing soil annually for organic matter, 2) planting non-legume seasonal cover crop annually, 3) adding mulch annually, 4) implementing nutrient management, 5) implementing tree/shrub establishment, and 6) developing contour buffer strips. This project enables the applicant to sustain the orchard operation that is economically profitable, environmentally healthy, and socially equitable for a longer-term period (more than 3 years). The goal of the project is to improve soil health, sequester and reduce greenhouse gases (GHG), improve water and air quality, and restore local ecosystems. Implementing these practices is to improve soil health and crop yields. It is also anticipated to reduce electricity usage, sediment erosion and dust, and annual nitrogen application rate. Monitoring and evaluation of impacts of the practices will be conducted for ensuring long-term success and sustainability of the project. A comprehensive soil test will be conducted prior to practice implementation, and every year after practice implementation to measure soil organic matter content.	$72,283.22	$8,700.00	San Bernardino	28.1
Saul Perez	To implement the use of cover crops during the winter months in order to reduce soil erosion. The addition of compost during the growing season in order to increase organic matter content, thus increasing microbiological activity. The introduction of a hedgerow that consist of natural pollen rich species to increase bee population and establishment.	$68,719.00	$ 0.00	Merced	156.3
Scott Berndt dba Fox Farm	Fox Farm is a 2.5 acre orchard with .5 acres dedicated to arowing flowers and vegetables as a supplier to RUSD (Riverside Unified School District) is a school district that feeds 42,000 students and day with a 67% qualify for free or reduced lunches. RUSD has a well know Farmers market salad bar in 33 elementary schools which offer a salad bar with a large selection of fruits and vegetables. The soil at Fox Farm has poor nutrient levels and needs improvement in soil health. The urban farm with is completely surrounded by housing tracts was a walnut orchard in the 20's and 30's. There hasn't been any chemical pesticides or fertilizers used on the farm in the last 25 years. I am continuing that program by utilizing OMRI approved farming methods. I plan on mulching the orchard with compost to improve the soil health and improve water retention to reduce my water bill. I also will utilize much under a pilot program to replace plastic mulch for weed control with a thick later of compost on my rows of annual vegetables. I hope to plan seeds and seedling directly into the compost which I believe is possible. I also work for RUSD as the Food Hub Coordinator which was a CDFA and USDA funded pilot project to utilize school facilities to support local farmers with marketing and distribution. I work closely with farmers and will promote my results to other farmers. Our compost has a glut of compost and I believe this would be a good use for the large amount of available quality compost.	$3,300.00	$750.00	Riverside	3.7

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Scott Yenni	I currently run a small herd of black angus cattle on my family farm in Sonoma. I maintain 12 cow-calf pairs plus 1 bull and 2 to 3 steers to be fed out on grass only to butcher size. The remaining calves are sold at weaning through a typical livestock auction. I sell USDA quality beef from my store on the farm. We will improve the carbon sequestration potential of our small grazing operation with range planting and compost application. Range planting will be done using a mix similar to Rangeland North Coast Dryland Mixture (calFlora) and a range drill (specifically designed for planting seed into range soil that has not been prepared into a seedbed). Compost application will be 6 tons/acre, using compost from a local provider that meets the requirements of the project. By applying compost to the rangeland, we expect to see an increase in soil microbial activity leading to increased soil fertility, increased root growth and an increase of overall vegetation. The benefits of compost application will aid in the establishment of new species introduced in range planting. The long-term goals of the project are: 1) increase the amount of atmospheric carbon placed back in to the soil every year; 2) improve the long-term diversity and stability of the grazing operation. With the proposed project, we estimate up to 10,246 pounds of carbon stored per acre per year, a significant increase in forage plant diversity, and a significant improvement in the resilience of the rangeland. Effects will be monitored through a combination of soil and water testing, phenology monitoring, and biodiversity monitoring. We expect the results of the tests 1 year following the project-end compost application in 2022 to support these expectations and provide direction for continuing sustainable management.	$71,502.70	$6,732.00	Sonoma	333.3
Seth Rossow Farms	This project will implement the following practices on 2 irrigated cropland field that consists of 43 acres. This project will include 5 soil management practices. The practices include testing soil annually for organic matter, creating a nutrient management plan-improving nitrogen fertilizer management on irrigated cropland and reducing nitrogen fertilizer by 15%, planting a multi-species legume cover crop annually, spreading compost evenly across the field annually, and residue and tillage management of intensive till to reduced till. We anticipate to improve soil health by implementing these practices. Monitoring and evaluation of the practices will be conducted for ensuring long term success and sustainability of the project. The goal of the project will be to improve plant health and yields, increase water infiltration and retention, sequester and reduce greenhouse gases, reduce sediment erosion and dust, improve water and air quality, and improve biological diversity and wildlife habitat.	$74,998.74	$5,107.54	Merced	198.9
Shinta Kawahara Company	This project will support implementation of about half an acre of hedgerow plantings (2,500ft x 8ft) along two field edges within our property. It will also support application of compost on 62% (17ac) of the acreage we manage non-organically, to which we have never applied compost. Together these two practices will result in approximately 62 Metric Tonnes of carbon sequestration and greenhouse gas emission reductions within our farm. Compost application will also contribute to increase soil organic matter and stimulate soil microbial activity and its associated benefits. Hedgerow plantings will also act as wind and dust barriers, and will help slow down and filter storm runoff from our fields.	$42,600.00	$8,500.00	Santa Cruz	74.2
side hill citrus	Replace old fallow cropland with native oak woodland riparian habitat and and creating mix of native grass and forbs for wildlife pollinators and ecosystem restoration. The existing cropland will serve as a great location for native species habitat. Given its location near a riparian area, a diversity of fauna will benefit from the expanded habitat. Project lead will conduct periodic revision of plant success and irrigation. Replanting as necessary.	$55,836.07	$11,100.00	Placer	16.0
Silvia Organic Farm	This project will support implementation of a 1,400ft long hedgerow (0.25ac) around my 2ac farm; as well as incorporate a cover crop rotation into my small multi-crop operation. These two practices will benefit the productivity of my farm while enhancing the soil and helping to store carbon.	$13,451.40	$7,250.00	Los Angeles	2.5
Siong Farms	In 20 acres of a jujube fruit tree orchard,we would like to apply 5 tons per acre of compost into the orchard floor to increase the fertility of the soil. Following compost, we would like to apply a year-round cover crop to reduce weeds and soil compaction, and to maintain soil moisture while establishing a pollinator habitat. Little is known about the agroecology and fertilization requirements of jujube fruit tree orchards in California, but there is some information that pollination increases yield. We would like to use little to no synthetic fertilizers or pesticides in our orchards and observe year over year the quality and quantity of jujube production with the incorporation of compost and cover cropping. Increasing the biodiversity and pollinator habitats could increase the yield of jujube trees and encourage natural biological control.Establishing these alternative management practices long term would reduce time and money spent on inputs and refocus time in the maintaining of conservation and agroecology management practices. The success of incorporating these practices would be the evaluation of soil organic matter composition and fertility through soil analysis as well as the increase in yield as it improves the economics of jujubes production.To measure these practices in our orchards we would sample the orchard to evaluate natural enemies and pollinator populations. Monitoring	$52,012.40	$0.00	Fresno	34.0
SL Ranch	SL Ranch desires to turn fields of annual rye, which is tilled prior to planting, into perennial pasture. The project will include a no-till rye crop the first year and will be seeded to perennial grasses and forbs in fall or winter, after the rye is grazed. Cattle will be kept off for a year following the planting of perennial pasture mix but will then be used for holistic grazing the landscape for years to come.	$29,573.10	$0.00	Modoc	22.0
SoMar Farms	Project includes 52.5 acres of compost application and 62.5 acres of range planting for grass fed beef and lamb operation. Goal is to increase the health of the land being managed which will also increase the quality of the pastures and extend the growing season. Adding compost and perennial grasses will boost soil fertility, increase productivity, increase water retention, improve nutritional quality of the pastures, extend the growing season and help protect against erosion.	$74,518.75	$1,950.50	Sonoma	268.3

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Spenker Family Farm	The total acreage for the operation is 61.2 acres. Included in the acreage is vineyards, roadways, buildings and equipment storage. 57.5 of the 61.2 acres is farmed and will be utilizing the practices. Both parcels for a total of 57.5 acres will have a cover crop consisting of legume seasonal multi-species mix established on the irrigated vineyard and in-field roadways. On one parcel of 17.5 acres, certified compost from our goat operation will be added to that vineyard parcel.	$33,832.50	$0.00	San Joaquin	56.0
Sran Farms	For this project we are trying to rebuild our soil organic matter while building soil organic carbon as well as reducing our atmospheric greenhouse gases emissions at our Sanger Ranch. Our Sanger Ranch is a 179.6 acre, third leaf almond orchard, irrigated by a micro sprinkler drip irrigation system. We are wanting to implement practices like drilling cover crop and spreading compost for half of the ranch (89.8 acres) to give us nutrients, build up our soil organic matter and increase soil organic carbon instead of using synthetic fertilizers. We are also wanting to reduce tillage on all 179.6 acres by mowing continuously when needed instead of tilling frequently. Lastly, we are also wanting to make better nutrient management practices on all 179.6 acres to reduce fertilizer applications by 15% by making more frequent but smaller duration irrigation events as well as applying fertilizer based on soil test analysis and University of California recommendation rates or crop removal rates. We hope all of these practices in return will reduce nutrient leaching, reduce our need of synthetic fertilizers, reduce our atmospheric greenhouse gases emissions and build up our soil organic carbon as well as soil organic matter. We plan on evaluating and measuring the success of this project by taking one soil sample a year. One soil sample will be between September and March of each year to see how much soil organic carbon, organic matter as well as nutrients is gained and available for the almond orchard. We hope this project will show us that by making better nutrient management practices, reducing tillage, applying compost and drilling cover crops we can build up our soil organic matter, increase our soil organic carbon, reduce our atmospheric greenhouse emissions as well as give our orchard enough nutrients to sustain a significant yield.	$73,809.78	$38,044.24	Fresno	177.2
Staunton Farms LP	Soil health is very important to Staunton Farms LP. Our goals are to use a crop rotation and compost applications to make our soils "healthier" while also having helpful impacts on the environment and surrounding community of individuals who live nearby. We plan to do this on 160 acres, and will use soil tests, tissue cultures, and crop yield and quality information to measure performance of this program. As this is a small acreage in regards to our farm's total size, we hope that the results will encourage our operation to do similar compost programs on more of the farm's acreage.	$73,800.00	$48,960.00	Siskiyou	319.4
Ste. Michelle Wine Estates	The project will consist of removing one acre of vineyard and replanting it to native vegetation. The area will serve as a buffer strip for high water flows on Suisun Creek and protect the bank from erosion. Planting native trees and shrubs will increase carbon storage, improve soil health, and help protect water quality. The riparian buffer strip will provide wildlife habitat. This site has been participating in FFF and is a water quality monitoring site for steelhead- stream gages are there and temp loggers.	$3,749.36	$9,350.00	Napa	2.1
Stemple Creek Ranch	Under the 2018 HSP Incentives Program guidelines we can reach our goal to continuously utilize more conservation management practices to sequester carbon on our land.This project is on APN 100-060-13 on the corner of Gericke Road and Fallon Road in Tomales, CA. The proposed project consists of implementing three conservation practices consisting of compost application, range planting, and a hedgerow. Certified compost will be applied on 49 acres throughout fields 7b and 7c in year one through three of the proposed project. The range planting, a mixture of rye grass, clover, chicory, and plantain seed, will be broadcast seeded across 141 acres of the parcel on fields 7a, 7b, 7c, 7d, 7e, and 7f. The proposed hedgerow will be installed along the west border of field 7f. The hedgerow of 77 linear feet will consist of a variety of approximately 25 native shrubs with a spacing of three to five feet. Anticipated outcomes of this project include carbon capture, improved soil water holding capacity and health, enhanced wildlife and pollinator habitats, increased and improved production of the pastures, and improved animal nutrition. With assistance from the HSP Incentives Program, Stemple Creek Ranch can implement these extremely beneficial practices properly and to the full potential to benefit our land, animals and the environment around it.	$74,929.56	$0.00	Marin	275.4
StoneRoot Field and Sea	StoneRoot Field and Sea is working on a project in the Green Valley in Solano County California known as the "Middle Green Valley Specific Plan". The ultimate goal of the MGVSP is to create a model for development that integrates open space conservation, beneficial environmental practices, regenerative agriculture and human community. StoneRoot Field and Sea was brought to the MGVSP project to ensure that the ecological and agricultural goals of the specific plan are met. As part of the process, StoneRoot has leased 50 acres within the project that will focus on long-term improvement of soil health and wildlife habitat. The 50 acres, which was traditionally used for annual, conventional hay farming, will be converted into perennial pasture. We will also integrate planting of hedgerows including native trees and plants to support wildlife habitat and biodiversity. We are using farming practices such as composting, no-till, rotational grazing and drip irrigation to support our effort. Long-term goals of the project are to conserve land, build soil health, create wildlife habitat and build a productive,regenerative farming platform. Our goal is to produce a model of how to integrate land, animals and agriculture. For the Healthy Soils program success will be measured ongoing via consistent monitoring, testing and reporting. Methods will include empirical measures of soil health and improvement, crop health and animal health. We will also monitor installation of hedgerows throughout our 3-year project period to understand which species are most successful, implement re-plant programs where needed etc to ensure plants thrive long-term. We will also track costs of implementing the project to understand long-term viability of the project.	$73,436.08	$2,504.00	Solano	243.3

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Straus Home Ranch	1. To repair a cut in above our dam, with steep hillsides, that is eroding and needs planting. Planting approximately 1 acre will help stabilize soils and hillside. 2. To spread 1/4" of compost on one section of pasture, specifically Pasture 205.	$20,801.82	$18,184.00	Marin	65.0
Strong Roots	This project will be conducted on a certified organic farm that consists of 7 acres of annual vegetable crops (fields #2 and #3) and 23 acres of irrigated perennial grass hay (field #1), located in Potter Valley, APN174-170-01-00. Compost from a local organic source will be purchased at $60/ton + delivery, and applied at 8 tons/acre annually to the 7 acres of vegetable crops and the 23 acres of grass hay; none of which has received compost within at least the past 10 years (maybe never). The goal is to increase soil organic matter and and build soil fertility, structure, and biodiversity. Expected outcomes include increased hay production, increased vigor, nutrient density, production in vegetable crops, reduced irrigation needs, greenhouse gas reductions, and increased carbon sequestration. The primary method of evaluation will be annual soil testing in the annual crop area and in the hayfield, at the same locations using the same methodology each year. Additionally, evaluation will include (1)comparison to past hay yield records, (2)qualitative observation of the vigor of vegetative growth compared to past years, and (3)comparison of water usage with previous years.	$36,300.00	$32,865.00	Mendocino	10.0
Stubbs Vineyard LLC	Stubbs Vineyard is a 600 acre property in West Marin County. Nearly 20 years ago, the vineyard was planted in an 11 acre field on the property. We produce well known and loved Pinot Noir and Chardonnay wines from the grapes we grow on site, in the unique cool climate of West Marin County. The vineyard has been tilled over the years. It has been certified organic in the past, but is not currently certified. We use various fertilizers to provide nutrients to the vines. The vineyard soil consists of clay / sand soil type. The application of compost on a large scale has not been practiced on the vineyard and could be an important method to improve soil health, sequester atmospheric carbon, and reduce GHGs. We are also looking to add a cover crop application which has not previously been implemented on Stubbs Vineyard, to improve soil health, sequester atmospheric carbon and reduce GHGs. We hope to improve the overall heath of the vineyard by the application of compost and cover crops, providing essential nutrients to improve soil health. The overall land ethic on Stubbs Vineyard has been based in sustainability and we see these practices as a next step in our vineyard management practices. We will measure the effectiveness of the management practices by testing soil health over the three year duration of the compost and cover crop application period. We will measure the amount of crop production to see if these management practices improve our yield and how it effects the characteristics of our wine. We will also calculate the amount of atmospheric carbon we are able to sequester along with GHG reduction and share this information with the public who visit the property to try our wines.	$15,651.00	$12,850.00	Marin	51.8
Sunny Acres Farms	Through a series of interventions, we seek to increase the soil health of Sunny Acres farm. The addition of grassed waterways, the conversion of crops to riparian herbaceous cover, and the increasing of organic content through mulching will help to rejuvenate the soils, to increase water percolation and hopefully to return some of the soils' capacity to hold water as it has been severely depleted. We plan to assess the success of the project through the annual soil samples in each of the different treatment areas as well as areas outside of the treatment areas to provide true baseline data. The performance of the different interventions will also be monitored on the farm during times of flood and drought with the use of digital monitoring and inspection wells.	$73,258.14	$0.00	San Luis Obispo	1.8
Sunrock Farm	I am applying for a Healthy Soils Initiative grant for the installation of four practices on Sunrock Farm: 1) a conservation cover, 2) hedgerows, 3) compost application, and 4) mulch application. These practices are proactive solutions. As organic food production farmers, we are becoming increasingly aware of the negative impacts that climate change is having on our planet. We see these impacts every day, and feel empowered to know that there are numerous things that we can do right here on our farm, to help alleviate this dire situation. By adding compost to our fields, we will be facilitating the storage of carbon in the soil. Since our clay soils currently only contain 3.9% organic matter, the addition of compost will be a win win situation for us and the planet. By Increasing the total organic carbon in our soil, there should be a decrease in atmospheric carbon dioxide and this will increase our soil quality.In addition, our conservation cover, which will contain plants that attract Monarch butterflies, will increase the total nitrogen quantity as well as increase organic matter. Various species of Milkweed will be in the mix, as this plant is of utmost importance to the survival of the Monarchs. Since we are selecting plants native to this growing region, the perennial hedgerows, bordering our orchards and growing fields, will also be beneficial to Monarch butterflies and numerous other pollinator insects. The hedgerows will also use very little irrigation water once they are established. Reducing our water use will help us build resilience to climate change. For this reason, we are also implementing the addition of wood chip mulch around the bases of all our fruit trees. In addition to slowing down moisture evaporation from the soil, it will increase organic matter.	$15,235.28	$15,020.00	Nevada	7.9
Susan Estrada	Avocados are very expensive to grow in our region of California. Our water cost is huge at about $1500/acre foot. It is imperative for us to implement the best agricultural practices to manage water use through increasing the health of the soil. Our goal is to utilize mulching and cover crops to manage weeds and herbicide use as well as retain water in the soil. Mulching is also recommended for fighting root rot, which is prevalent in our older trees, and for ameliorating some of the avocado pests such as thrips. We are converting about an acre of former avocado and citrus to lavender to lower our water usage, but continue farming a viable cash crop. The lavender will also be mulched. We plan to mulch 3 acres of trees, some old and some young, plus one acre of lavender. We plan to use cover cropping in two areas covering approximately 2.5 acres of the grove to support young tree development. The success of the project will be measured by our fruit yield, lessening of root rot, and overall water usage.	$16,961.76	$4,320.00	San Diego	1.30

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Sweet Spot Farm LLC	Sitting at the edge of a large grassland preserve, Sweet Spot Farm is a project dedication to land restoration and ecological agriculture. The projects plan includes replacing previously deforested and overgrazed land with riparian buffers, along with hedgerows that will provide buffer from the surrounding harsh climate, increase soil health and create habitat for local and migrating wildlife. Adding native and climate appropriate trees and shrubs to degraded land will improve the soils capacity to hold moisture and increase its ability to store carbon. An increase in carbon sequestration will encourage systemic ecosystem regeneration.	$34,288.14	$4,500.00	San Diego	7.0
Sycamore Marsh Farm	The project has identified several fields that have issues including severe erosion, low organic matter, low water infiltration, and high sediment load during winter runoff. Currently, the fields have unplanted winter beds and the fields are low in organic matter. The Recipient will plant a cover crop mix of hairy vetch and triticale to reduce soil erosion, fix nitrogen, add organic matter to the soil, and reduce flood related fallowing and sediment load in drain water. Field B3 has been subject to severe erosion during wet years because the adjacent canal overtops its banks, washes away beds and damages the irrigation system. Damage from flooding and erosion prevented planting this field in 2017 and may prevent planting in 2019. Field B4 is subject to seepage from the adjacent irrigation canal, which results in an uneven soil moisture profile so that spring field operations can compact low lying areas. Planting a cover crop will address environmental concerns and minimize runoff and erosion associated with heavy winter rain. The grasses will use excess nitrogen left from the summer crop and the legume will fix nitrogen which will reduce fertilizer application for subsequent crops. The cover crop will also manage the soil moisture so that spring field operations will not compact low lying areas. Incorporating the cover crop will add organic matter and invigorate the soil by increasing microbial biodiversity, aerating the soil profile and redistributing nutrients from lower soil levels, particularly phosphorous and nitrogen. The cover crop will hold soil in place if the canal overtops its banks in the future. The success of the project will be measured by comparing soil health throughout the project and comparing crop yields before and after the project. The ability to farm field B3 after a wet winter will be a key measure of success.	$71,296.59	$69,064.71	Colusa	37.0
Table Bluff Farm LLC	Our Project Goal is to secure funding for materials to implement a biodynamic permaculture principled regenerative soils program for our irrigated cropland and non-irrigated rangeland mixed-use, small scale 2.89 acre farm based on an integrated three part program of regenerative cropland soil practices, regenerative pollinator friendly, no-till rangeland practices, and wind/water erosion hedgerow planting. Our approach to mixed-use, small scale, bio-intensive farming means we are a wildlife friendly, pollinator friendly farm that focuses on ecological sustainability and economic returns through biodynamic irrigated cropland use, and pastured livestock for meat and eggs. Our current goals include 1) hedgerows for wind/water erosion control for both irrigated cropland and no-till rangeland to increase soil productivity, create wildlife sanctuaries and pollinator friendly barriers, while creating perimeter controls for our crops, livestock, and poultry. Controlling wind erosion will help with rangeland soil erosion and protect irrigated crops in our high-wind, coastal region. 2) A Soil regeneration program for crop production and fallow cropland include increased High Carbon compost application, forage seed for crop rotation "Green Manure" cover crops, assistance with our irrigated cropland and rangeland reduced till/ no till practices that improve biodynamic nutrient management while growing top soils. Adding "High Carbon Mulch" along with introducing perennial pollinators and perennials to irrigated cropland and borders of pastureland to regenerate top soil, minimize erosion. Rangeland improvement program focused on ecological function with economic return using mixed seeding of soil-regenerative forage seed, and native perennial grasses that benefit pollinators, livestock and promote rangeland soil conservation and regenerative growth. Measurable outcomes and evaluations of success will be based on continued soil tests for rangeland and cropland areas, expanded pollinator/wildlife friendly hedgerows, accumulation of compost and mulch materials for rangeland and cropland, increased wildlife and pollinator populations, reduction in tilling for irrigated cropland, and implemented compost program.	$28,000.00	$0.00	Humboldt	1.2
Tchieng Farms	We would like to improve our management practices on our 17-acre specialty Asian vegetable farm by incorporating 4 tons per acres compost into the soil.Compost would help us to improve our soil fertility, organic matter, and moisture holding capacity.In the winter we are allowing 8 acres to go fallow until the spring. In order to reduce the amount of winter weeds and to recharge the soil nutrients we would like to grow a winter legume cover crop as a nitrogen source in the fallow spaces. Implementing these two practices into our management routine should allow us to reduce our synthetic nitrogen application and become less reliant on synthetic input. Overall, we would like to see our soil health improve year over year, by increasing organic matter fertility, improving soil structure, reducing pesticide inputs, and reducing fertilizer costs. In our flood irrigated fields,we would like to see if these practices reduce water use due to the amount of moisture being retained by the soil. Year over year we would like to see the improvement of our soil nutrients through soil sampling analysis, and the reduction in cost for purchasing fertilizers.We also want to know if reductions in weeds, water usage,and pests and diseases would occur as a secondary benefit to improving soil fertility in winter and spring specialty Asian vegetable production.	$14,605.26	$0.00	Fresno	39.2
Tehachapi Grain Project (TGP)	Golden Hills is a municipally controlled parcel that has a long agricultural history. We will use no-till, mulch application and cover-crop establishment to build up a strong soil and pair with our cooperative grain farming initiative. This site is one of several in Kern County and we hope to replicate the practices implemented here. Also, this site has been a popular destination for chefs and consumers and will serve as the hub for many discussions about how to better grow our staple crops.	$31,344.46	$16,000.00	Los Angeles	46.5

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Teixeira and Sons, LLC	This project will consist of applying compost to 78 acres of annual cropland on the Turner Island Ranch in Merced. Teixeira and Sons will utilize farm-made compost, applying compost at 6 tons/acre for 3 years. The goals of the project are to positively effect crop yields and quality through soil building, with a primary goal being to increase the soil organic matter over 2 percent. Compost applications will enhance the beneficial bacteria and fungi in the soil that break down organic matter into humus. Improving soil biology and increasing organic matter levels in the soil lead to benefits of improved water holding capacity, reduced run-off, improved nutrient availability, and improved soil tilth. Soil samples will be taken before the project start, and annually through the project duration. Success will be measured looking at the soil organic matter levels, NPK on soil tests, as well as evaluating irrigation costs and amount of fertilizer needed.	$70,440.00	$6,376.00	Merced	340.6
Terranova Ranch, Inc.	Establishment of hedgerow native pollinator habitat along the levy of the north fork of the Kings River in Fresno County. This will provide habitat and food for native pollinators along with nesting sites and cover for small birds that frequent the area. The project will also provide for reduced erosion from rainfall and maintain integrity of the steep slopes. This project will also show neighbors the possibilities that can be achieved and coexist within a intensively farmed area.	$64,724.68	$0.00	Fresno	25.6
Thaoxaochay Farms	In four acres of specialty fruit trees (jujubes, guava, and persimmons) and 16 acres of Southeast Asian specialty spring and winter vegetable crops and flowers, we would like to build the health of the soil by integrating compost into the soil. We would like to establish 4 acres of annual cover crops in the orchards for pollinator habitat and soil improvement. The establishment of deep roots from cover crops would allow deep water infiltration to the root zone areas of guavas and persimmons for better health while suppressing disease and weeds. We would like to see if pollinator cover crops would bring in pollinators for the guava and persimmons as well as establish a beneficial insect habitat to control scales, thrips, whitefly, and mealybugs. In the 16-acre spring and winter Southeast Asian vegetables and flowers,we would like to integrate seasonal cover crops on fallow land during the winter to suppress winter weed seeds and increase soil fertility. Year over year we would like to see the improvement of our soil nutrients through soil sampling analysis and the reduction in cost for purchasing fertilizers. We would be curious to know if the reduction of weeds, pests,and diseases would occur as a secondary benefit to improving soil fertility in winter and spring Southeast Asian vegetable production for farmers markets.	$22,918.48	$0.00	Fresno	44.0
The Abundant Table	Through this CDFA grant, we plan to elevate the health of our soil to a top priority within our operation for the near future. Specifically, we intend to accomplish the following goals: to increase the legume cover crop acreage in each seasonal rotation and give fields that have been in intensive production a time to rest, sequester precious water from the winter rains, and protect the land surface from the stripping qualities of the yearly Santa Ana winds; to source high-quality compost for application to fields that have been producing heavy-feeding crops; to convert the borders of our production fields into environments that encourage the proliferation of native plant species and pollinators; and finally to create hedgerows that physically block the drift of unwanted particulates from conventional neighbors and the nearby freeway onto our field microcosm. We are hopeful that the past half of a decade of learning, tracking, and experimenting with this land has prepared us to implement these practices in a way that will supplement our work flow and even increase productivity in the long-term. We have a well-rounded understanding of how the complex web of relationships within our fields function at this point in time and plan to track the success of each undertaking within our existing record infrastructure.	$23,589.79	$0.00	Ventura	42.2
The Ecology Center	The Ecology Center is a non-profit 501c3 organization that models creative solutions for thriving on planet Earth. On a 28-acre ecological education site with an organic community farm and farm stand in San Juan Capistrano, our work seeks to inspire, educate, and engage community members to make strong connections between where our food comes from, how it is grown, and how we prepare it, for our individual, collective, and environmental health. Through trainings and apprenticeships, our farm is a model to educate future farmers on sustainable practices and shift the culture of food and agriculture. Our goal is to preserve the last organic farm in Orange County and nourish the 3 million people that surround it with fresh, local, sustainably grown, organic produce. Prior to acquiring this farmland in October 2018, it was a conventional organic farm. The land has worked hard for the last 25 years with a demand for quick production and sales of produce, but this business model did not allow time or resources for the soil to rejuvenate. Now more than ever, we need to build the soilâ€™s health through regenerative organic conservation practices for our overall environmental health. Outcomes of sequestered carbon, improved air quality, decreased water use and increased soil health will be measured through quantifiable GHG reductions and soil samples to measure organic matter, while also assessing the quality and quantity of produce grown on the farm. As a training farm for future farmers, this project will not only benefit our immediate community, but will inspire the next generation to use sustainable farming practices and transform the way our region grows and eats food.	$49,519.44	$5,000.00	Orange	3.0

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Thomas D. Donati	Sutter County rangelands have faced unprecedented droughts in the past 8 years. This project will apply compost in the Buttes of Sutter County and investigate the local benefits of the conservation practice. The mutli-generational ranch uses the project site seasonally as part of a rotational livestock grazing system. They intend to apply compost in the fall to rangeland to improve soil health. The project will reduce emissions by sequestering carbon in the soil, while supporting a local company who manufacturers compost from municipal green waste. Soil management strategies, such as compost application on rangelands, are increasingly recognized as an important part of the solution to climate change and Californiaâ€™s severe drought conditions. By improving soil health, the family ranch can increase soil organic matter, improving the ability of the site to sequester atmospheric carbon and retain moisture. Research has found soil organic matter can enhance soil water holding capacity providing flood control and can contribute to increased forage production, providing an economic benefit for the livestock operation. In addition, the project should improve the drought resilience of the family ranch. This project would study the limited number of compost applications occurring in Northern Californiaâ€™s Central Valley. A partnership has established between the ranching community, UC Cooperative Extension, Point Blue Conservation Science and NRCS to investigate and share the economic and ecological outcomes from the project.	$74,700.00	$0.00	Butte	286.4
Tiessen and Waegell Ranch	Our sustainable teff hay production project will convert 45 acres of irrigated ag land from intensive tillage to no-till production of teff hay. We currently grow 200 acres of intensively tilled teff hay per year. To further the sustainability of this project we will apply compost and plant a fall cover crop. The goals of this project are to reduce greenhouse gas emissions; and improve soil health, air quality, and water use efficiency while maintaining our gross margin in teff. According to the CDFA HSP-COMET PLANNER this project will reduce greenhouse gas emissions by 214 tons. Additionally these management practices will yield an increase in teff hay production while maintaining quality and will improve foraging opportunities for our sheep. This project will be tracked using both economic and biological data. Economic data collected for comparison will include: input costs, amount of teff hay produced, gross margin, tractor hours and horsepower, and animal unit days of sheep grazing. Biological data collected for comparison will include soil organic matter and NPK; and hay protein, sugars and key nutrients at time of harvest. The project will be considered successful if the gross margin of the teff hay stays constant or improves, organic matter of soil increases, tractor use hours decrease, and sheep grazing unit days improves.	$68,843.70	$29,125.00	Sacramento	214.9
Tolay Springs LLC	We currently farm 113 acres of high quality wine grapes in Southern Sonoma Valley. The soils are a heavy clay type and would benefit from additions of organic matter. By converting to a no-till ground management plan we hope to reduce erosion. The results expected are increased root and vegetative growth. The advantages will be the ability to establish a permanent cover crop that is compatible with wine grapes, eliminate the need for tillage, reduced dust, reduced erosion, better water retention, increased soil microbial activity and increased soil fertility.	$59,172.36	$25,000.00	Sonoma	158.7
Tria Vang Farms	We would like to improve our management practices in our 40-acre southeast Asian vegetable farm by incorporating 4 and 5 tons per acres compost into the soil bi-annually. Composting would improve the soil fertility, as we transition from using less synthetic fertilizer. In the winter we let 20 acres go fallow, and the fallowed land grows winter weeds until the spring where we disk, add a pre-emergence herbicide, and establish our spring crops. We would like to reduce the amount of winter weeds and boost the soil fertility by growing a winter nitrogen-fixing legume cover crop in the fallow areas of our farm. Implementing these practices into our management routine would allow us to reduce our synthetic fertilizer input. As we build the soil health, we would focus on the management of winter cover crops and incorporating compost.Using cover crops would reduce winter weeds and reduce pre-emergence herbicide use as part of our conservation practices. The success of incorporating these practices would be the evaluation of soil organic matter composition and fertility through soil analysis.	$32,970.00	$0.00	Fresno	91.0
True Grass Farms	The Salmon Creek Sanctuary project wants to increase habitat diversity and wildlife food sources on the Salmon creek watershed. It wants to increase soil water infiltration capacity and organic matter on the land base in order to provide more clean water to it's various springs and watershed during the year and help provide a stable habitat for trout, salmon, monarch butterflies and numerous other wildlife.	$44,499.94	$9,500.00	Sonoma	9.1
Tunitas Creek Family Farm	We are an organic farm certified by CCOF. We have been organically farming 6 acres at 333 Tunitas Creek Rd for the past 20 years and 10 acres at 1451 Lobitos Creek Cut-off for the past 3 years. These soils exist in a summer dry climate and are grown in the absence of irrigation. This leaves the us to primarily nourish the soil in the fallow months of the wet season. We presently rotate our crops annually between pumpkins and squash, peas and beans and corn or wheat. We would like to obtain a base-line soil test in the Fall of 2019. Certified organic cover crops will be planted accordingly. Soil tests would be taken each year at the end of each harvest season (September). The goal is to improve soil fertility by primarily increasing Nitrogen availability, organic matter and soil moisture retention. This would result in healthier more vigorous plants and fruit production. Additionally, the soils tests should note an improvement in the measuring metrics.	$7,506.00	$7,800.00	San Mateo	4.6
University of California, Riverside	At UC Riverside we have recently expanded our community farm crop production acreage.. Currently, we have two areas for crop production. One part is dedicated to organic farming and the other conventional. In order to become certified organic, we will establish a barrier to prevent drift from spraying that occurs in the conventional farming areas. Following the establishment of the hedgerow, we will seek organic certification from the USDA as a means to measure the success of the project. One of our goals is to select plants for the hedgerow that promote pollination and biocontrol of pests and develop workshops for the public and the local farming community about hedgerow establishment.	$2,423.40	$6,045.00	Riverside	0.2

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Vangone Vineyards LLC	The HSP Agricultural Management Practices to be implemented include Windbreak/Shelterbelt Establishment, Riparian Forest Buffer, Tree/Shrub Establishment, and Compost Application to Vineyards. The Windbreak/Shelterbelt will be established on the upper block with native trees and a wind protection fence to protect plants from wind related damage, reduce soil erosion from wind, enhance wildlife habitat, and increase carbon storage in biomass and soils. The Riparian Forest Buffer and Tree/Shrub Establishment will be established with native plants on the lower block to reduce excess amounts of sediment and organic material runoff and improve water quality up-gradient to Rector Reservoir, control erosion, create and improve habitat for desired wildlife species, and increase carbon storage in plant biomass and soils. Compost will be applied to newly established vineyard blocks on both the upper and lower blocks to improve soil quality.	$11,487.28	$0.00	San Diego	30.3
Vreseis	Vreseis has long been committed to soil carbon farming and is eager to implement new practices that increase soil organic matter and reduce greenhouse gas emissions. This project will incorporate three new management practices to achieve those goals: the application of compost to 30 acres of grazed rangeland, 30 acres of range planting, and cover cropping on 40 acres of cropland. This project will provide the opportunity to better understand the implications of compost application to grazed rangeland and range planting. Rangeland health will be measured through soil testing for soil organic matter and through observations of the rangeland plant community: species richness and composition, presence of desirable vegetation and presence of weed species. Through soil testing, this project will measure the increase in soil organic matter after the implementation of cover cropping on 20 acres of irrigated cropland and 20 acres of non-irrigated cropland and compare the two. Measuring the effects on soil health after the implementation of cover crops will also be achieved by observing yields of the cash crops planted in succession and the amount of flooding during the wet season. The desired outcome of this project, in addition to increasing soil organic matter and reducing greenhouse gas emissions, is to increase the rangeland species richness and composition, increase desirable vegetation for the grazing herd, and a decreased presence of weed species. This project will hopefully help increase yields of the cash crops, alfalfa and cotton, and increase the water holding capacity of all 70 acres of project land.	$50,243.40	$9,000.00	Yolo	153.4
Webb Ranch, Inc.	The goal of this project is to enhance the current soil management and sustainability practices to improve soil health and plant yield, increase water retention, and reduce soil erosion, sediment runoff and greenhouse gases. The project will be implemented on 29 acres of certified organic cropland by collecting and analyzing soil samples, planting seasonal cover crops and applying compost produced on farm each year.	$42,411.00	$61,200.00	San Mateo	146.2
Willow Bank Farms LLC	C:N ratio of 24 greenwaste compost will be broadcast spread across 57 acres of walnuts at a rate of 6 tons per acre. We will spread the compost from the furthest east side of the field and work inwards. A multispecies legume cover crop will be planted in the alleyways of 74 acres of walnuts. Because we are only planting in the alleyways, the total acreage planted will be 52 acres (70% of the total acreage). We are asking for CDFA to cover 50 acres worth of cover crop. One of Willow Bank Farm's goals is to be a model of successful holistic and sustainable farming practices at scale. While there are many practices that are associated with such a mindset and lifestyle, we believe that composting and cover cropping are two practices that can reap a bounty of benefits. This project will be the first implementation of compost on this field and we hope to see differences in the field portions that will be covered compared to the portions that will not be covered. By implementing these practices every year for a minimum of three years, we will see an increase in soil organic matter, water holding capacity and drainage, amongst other benefits. We will test these characteristics at least once per year by sending soil samples to be lab tested and running water holding capability tests on soil core samples. We will define success if we see a gradual increase in these soil characteristics but also if we see a noticeable difference in tree health and nut quality.	$74,232.00	$5,150.00	Yolo	269.3
Wilson Family Farm	Improve overall soil health @ all property locations. We've been farming for nearly 40 years at these locations, with generic fertilizing and weed control, without really building the soil health and biology. So we've seen production and plant health deteriorate over time, so our goals are to increase production, plant health, and overall soil biology health. We track our production, plant health satellite imagery to show dark green (healthy) and red (poor health).. by observing annual infrared image changes, we'll be able to see that the plant are healthier, soil samples, - we are trying to cut down on our fertilizer and spray costs, be enhancing the quality of the soil.	$39,645.36	$4,650.00	Butte	81.3
Winterport Farm	Winterport Farm produces grassfed beef on forage produced with limited irrigation. This project emulates one of the regenerative agriculture practices (no till) used by Gabe Brown on his North Dakota Ranch. Cover cropping is currently being practiced as well. Regenerative agriculture produces multiple environmental and economic benefits including reduced soil erosion and soil compaction, increased water infiltration and preservation of soil moisture, increased quantity and diversity of soil life, increased crop production, reduced need for herbicides and pesticides, and greenhouse gas reduction. These environmental benefits mean greater economic returns and stability for the producer from reduced costs and greater production. The increased water infiltration and preservation of soil moisture achieved by regenerative agriculture provides resiliency in agriculture by enabling farmers and ranchers to better withstand these periods of drought. The goals of this project are to conserve and enhance agricultural resources, increase farm profitability and resilience, and reduce atmospheric greenhouse gases. Desired outcomes over the three years of the project are increasing soil organic matter by 50%, and increasing water infiltration rates by 50%. Soil organic matter will be measured by soil testing performed by A&L Laboratories, and water infiltration rates will be measured at the start and end of the project using NRCS procedures.	$14,028.30	$0.00	Amador	7.0

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Wood Cattle Ranch Inc	Prescribed cattle grazing on irrigated pasture and non irrigated rangeland. Pasture rotation, stubble height monitoring, and rangeland condition monitoring will be used to help us best manage the health of the soils on our property.	$54,765.75	$10,000.00	Lassen	13.1
Woods Conservation Inc.	Woods Conservation Carbon Sequestration Project will provide increased ecosystem services by capturing atmospheric carbon and improving soil and water quality on the Pinto Lake watershed. Pinto Lake is an 8,000 year old lake that is an important water resource in our area. Two public parks border Pinto Lake. Pinto Lake has been identified as a heavily impaired water body and nutrient contamination of surface and ground waters are primary resource concerns. Woods Conservation's soil management practices of mulching, reduced-till, no-till, cover cropping, crop rotation, strip-cropping, conservation cover and installment of a riparian forest buffer will directly benefit Pinto Lake through improved soil stability and soil and water quality. Storing atmospheric carbon in soil will lead to increased invertebrate soil life, improved soil structure, aeration and water holding capacity. As photosynthesizing plants pull in atmospheric carbon to build plant root carbohydrate exudates, soil organism populations will increase and soil life levels deepen. Sequestering atmospheric carbon in this way will improve air quality. Soil organisms and mycorrhizal networks developing in minimally tilled soil will facilitate nutrient provision to plants. Healthier plants mean better nutrition for everyone. Woods Conservation employs young farmers who research and apply ecological farming practices. After practices are implemented, information will be gathered through qualitative observation and quantitative soil tests. Surrounding community will benefit from enhanced natural habitat, improved water and air quality, pollinators, beneficial insects and native birds.	$3,399.95	$3,799.90	Santa Cruz	1.1
Yael Zaidman, Terra Corazon Farm	Our farm project aims to be a showcase of the best practices in waterwise farming and soil carbon farming practices for the region of San Diego. We are converting a water intensive avocado grove into a diverse polyculture of low water farm products and enterprises that build soil and habitat every year. We are seeking to not only implement many different soil carbon building practices on the farm, but also use this as an opportunity to educate other farms, farmers, and other gardeners in the region. We have a current partnership and sit on the board with a local non-profit organization, The San Diego Sustainable Living Institute, who utilizes the farm as a teaching space for sustainable and regenerative farming practices; including agroforestry, healthy soils, carbon sequestration, permaculture, water conservation, rainwater harvesting, watershed restoration and more. Through this partnership, we organize numerous farm events per year including hosting the â€œSan Diego New Farmers Guildâ€□, farm tours, farm dinners, and we also bring in expert instructors in soil health, such as Elaine Ingham. We estimate about 300-500 people a year will visit the farm over the next few years. To evaluate and measure the success of this project we will be monitoring: -Soil carbon through yearly soil testing, -Analysis of soil biology through microscopic qualitative soil testing, -Health of plants and photo documentation using aerial imagery, -Production of crops, -Follow communications with those involved in our education programs that engage in the farm soil education programs to see what practices they are implementing.	$74,466.42	$22,200.00	San Diego	19.9
Yangs Capital, LLC / Shine Ranch	Transit from conventional agriculture practice to organic agriculture practice for the entire 7 acres of avocado grove. 1. To plant Hedgerows and ground covers along the north side of the grove next to the neighborâ€™s non-organic grove and next to the El Calama Road for protection from pesticides and drift mitigation, and to provide shelter for pollinators and beneficial insects. 2. To apply wood chips mulching on entire avocado grove, but will not apply the mulch within 12 inches of the plant.	$50,990.00	$15,252.00	Riverside	11.0
Yee Vue Farms	We currently farm 10 acres of Southeast Asian winter and spring vegetable crops with an annual rotation. We apply synthetic fertilizers and occasionally apply pesticides to control weeds, insects and a few diseases. We would like to try alternative management practices by transitioning to compost and cover crops on our 10 acre farm.We would like to see our vegetable production improve with the implementation of compost as it restores our soil fertility.Compost would assist in improving the soil biota, texture, fertility, and ability to hold moisture.In the winter we would like to try nitrogen-fixing legume cover crops on 5 acres of fallow land until the spring. Implementing these two practices into our management would improve soil health by increasing organic matter and fertility, and improving soil structure.We would like to see the improvement of our soil nutrients through soil sampling analysis. We would also monitor whether reduction of weeds and water use would be additional benefits to improving soil fertility in winter and spring southeast Asian specialty vegetable production.	$8,782.80	$0.00	Fresno	23.3
Zia T Xiong Farms	We farm 38 acres of Southeast Asian Specialty Crops, in the spring and winter. We currently apply synthetic fertilizers and fallow 15 acres during the winter, and we have weeds on the fallow areas. As a part of improving our management practices we would like to see how our soil health improves our vegetable production. We would like to incorporate compost into the soil to add to the fertility and health of the soil profile, improving soil biology, texture, and fertility. In the winter we would like to try cover crops on winter fallow land until the spring. We would like to see soil health continually improve with the addition of compost and cover crops. Implementing these two practices into our management routine should improve our soil and also our vegetable production. Overall, we would like to see our soil health improve by increasing organic matter and fertility, and improving soil structure. We plan to monitor the improvement of our soil nutrients through soil sampling analysis.	$29,565.00	$0.00	Fresno	87.0

** The 2018 HSP Incentives Program application information was extracted from the online application system as submitted, therefore, CDFA cannot guarantee accuracy of the information.*
*** Total emission reduction is estimated by the applicant and has not been verified.*