2018 HEALTHY SOILS PROGRAM DEMONSTRATION PROJECTS

Request for Grant Applications

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The 2018 Healthy Soils Program Demonstration Projects is funded by the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access for All Act of 2018.

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BACKGROUND AND PURPOSE

The California Department of Food and Agriculture (CDFA), in coordination with the California Natural Resources Agency (CNRA) and California Air Resources Board (CARB), is pleased to announce that funding is available through a competitive grant process for 2018 Healthy Soils Program (HSP) Demonstration Projects.

The 2018 HSP Demonstration Projects is part of the HSP, which stems from the California Healthy Soils Initiative, a collaboration of state agencies and departments that promotes the development of healthy soils on California's farmlands and ranchlands. The 2018 HSP Demonstration Projects is funded by California Drought, Water, Parks, Climate, Coastal Protection and Outdoor Access for All Act of 2018 (Chapter 10, Section 80134(a and b)).

The objectives of the HSP are to build soil organic carbon and reduce atmospheric greenhouse gases (GHGs) by (1) providing financial incentives to California farmers and ranchers for agricultural management practices that sequester carbon, reduce atmospheric GHGs and improve soil health which also lead to efficient use of water, (2) funding on-farm demonstration projects that conduct research and/or showcase conservation management practices that mitigate GHG emissions and increase soil health, and (3) creating a platform promoting widespread adoption of conservation management practices throughout the state.

The 2018 HSP Demonstration Projects addresses Objectives 2 and 3. Objective 1 is addressed in the 2018 HSP Incentives Program. Request for Applications for both the HSP Incentives Program and HSP Demonstration Projects are available on the HSP website: https://www.cdfa.ca.gov/oefi/healthysoils/.

FUNDING AND DURATION

CDFA anticipates that up to $8.5 million will be awarded to projects addressing Healthy Soils Program objectives, through both Incentives Program and Demonstration Projects. Demonstration Projects grant amounts cannot exceed $250,000 for Type A projects and $100,000 for Type B projects. The maximum grant duration is 3 years and grant funds cannot be expended before July 1, 2019, or after March 31, 2022.

CDFA reserves the right to offer an award different than the amount requested.

Cost sharing (matching funds or in-kind contributions) during grant duration is not required but may receive additional consideration (See: Project Duration and Cost Sharing).

ELIGIBILITY AND EXCLUSIONS

The 2018 HSP Demonstration Projects will fund projects that implement eligible agricultural management practice(s) and conduct outreach to other farmers and ranchers at on-farm demonstration sites. Projects must showcase conservation management practices that mitigate GHG emissions and increase soil health, helping to create a platform promoting widespread adoption of conservation management practices throughout the state.

ELIGIBILITY

- Not-for-profit entities, University Cooperative Extensions, Federal and University Experiment Stations, Resource Conservation Districts (RCDs), Federal and California Recognized Native American Indian Tribes, and, farmers and ranchers in partnership with one of the aforementioned entities are eligible to apply. Individuals are not eligible to apply.
- A project must include at least one farm (privately or university/government owned) to fulfill demonstration requirements.
- CDFA will award a maximum of two applications submitted by the same applicant, but each application should be for a unique project.
- There is no limit to the number of applications which a single organization can be a collaborator.
- More than one farm may be included in a single application; however, the same farms cannot be listed on multiple applications.
- Applicants must lease, own or otherwise control the Assessor's Parcel Numbers (APNs) where project activities are proposed to occur for the entirety of the project duration. If leasing land, applicants must have documented landowner approval to implement proposed practices(s) from July 1, 2019 through March 31, 2022. If the applicants are leasing property on which practices will be implemented, the applicant is responsible for obtaining the consent of the lessor and ensuring

that project implementation does not violate the lease agreement.

- If selected for an award, applicants must be able to execute a grant agreement within 30 days of receiving a notice of award.
- The HSP Demonstration Projects funds may be combined with other funds from public and private sources as cost-share for the same project.

EXCLUSIONS

- HSP Demonstration Projects funds cannot be used to implement management practices that are not listed as Eligible Agricultural Management Practices in this grant solicitation.
- HSP funds cannot be used to fund fields or APNs with existing and ongoing implementation of any agricultural management practices listed under Eligible Agricultural Management Practices, including APNs for which a HSP Demonstrations or Incentives project was previously awarded.
- Awards made through the HSP Demonstrations Projects cannot be used as cost share for awards made through the HSP Incentives Program.
- Compost Application Practices must not be implemented on APNs consisting of soils with soil organic matter content greater than 20 percent by dry weight (in top 20 cm or 8-inch depth).
- HSP funds cannot be used for projects that use potted plants or other plant growth media.

TIMELINE

The application period begins [date will be inserted]. The deadline to submit a grant application is [date will be inserted; application period will be 8 weeks]. No exceptions will be granted for late submissions.

Activity	Tentative Date
Release Request for Grant Applications (RGA)	November 2018
CDFA Grant Application Workshops and Webinar	December 2018
Applications due (eight weeks)	January 2018
Review Period	January – March 2019
Announce and Award Funding	March 2019

APPLICATION ASSISTANCE WORKSHOPS

CDFA will conduct three workshops and two webinars on the 2018 HSP grant application process and program requirements. For CDFA grant application workshop schedule and locations, visit the HSP Demonstration Projects website: https://www.cdfa.ca.gov/oefi/healthysoils/DemonstrationProjects.html.

PROJECT TYPES

CDFA has identified two types of Demonstration Projects to facilitate a diversity of applications and promote widespread adoption of the eligible agricultural management practices. Applicants must indicate the type of project they are applying for on the application. The eligible project types are:

(i) *Type A*: Projects are required to (a) implement the selected eligible agricultural management practice(s), (b) collect data on field measurements of GHG emissions, and/or (c) conduct research to address knowledge gaps regarding implementation of specific practices identified as "research only" (See Eligible Agricultural Management Practices). In addition, the project must conduct outreach and education to other farmers and ranchers. The maximum grant award for a Type A project is $250,000.

(ii) *Type B*: Projects are required to implement the selected eligible agricultural management practice(s) and conduct outreach to other farmers and ranchers at the on-farm demonstration sites. The maximum grant award for a Type B project is $100,000.

ELIGIBLE AGRICULTURAL MANAGEMENT PRACTICES

CDFA has identified eligible agricultural management practices that sequester carbon, reduce atmospheric GHGs, and improve soil health for the 2018 HSP projects. Applicants must implement one or more of the following management practices on APN(s) where it has not been implemented previously (See Eligibility). An applicant must include the APN(s) of the field(s) where the eligible management practice(s) will be implemented. Applicants may include multiple practices on the same APN or the same practice on multiple APNs. Some practices may not be implemented on the exact same field as part of the same project. Refer to Appendix II, Document 6 for details.

The following management practices were selected from the United States Department of Agriculture

(USDA) Natural Resources Conservation Service (NRCS) Conservation Practice Standards (CPS) and CDFA specified Compost Application. HSP-specific GHG Quantification Methodology is currently available for these practices.

Note: The practices marked with an asterisk (*) below have been proposed by public and stakeholder groups for inclusion under the CDFA HSP during the public solicitation period for new practices from November 6, 2017 to December 18, 2017. Final inclusion of these practices is subject to CDFA evaluation and public comment.

Soil Management Practices

- Cropland Management Practices
    - Cover Crop (USDA NRCS CPS 340)
    - Conservation Crop Rotation (USDA NRCS CPS 328)*
    - Mulching (USDA NRCS CPS 484)
    - Nutrient Management (USDA NRCS CPS 590) (Reduce Fertilizer Application Rate by 15%)*
    - Residue and Tillage Management – No-Till (USDA NRCS CPS 329)
    - Residue and Tillage Management - Reduced Till (USDA NRCS CPS 345)
    - Strip Cropping (USDA NRCS CPS 585)*
- Compost Application Practices
    - Compost Purchased from a Certified Facility (CDFA Compost Application White Paper)
        - Compost Application to Annual Crops
        - Compost Application to Perennials, Orchards and Vineyards
- On-farm Produced Compost* (application rates consistent with those specified in CDFA Compost Application White Paper)
        - Compost Application to Annual Crops
        - Compost Application to Perennials, Orchards and Vineyards)

Establishment of Herbaceous Cover on Cropland Practices:

- Conservation Cover (USDA NRCS CPS 327)*
- Contour Buffer Strips (USDA NRCS CPS 332)
- Field Border (USDA NRCS CPS 386)
- Forage and Biomass Planting (USDA NRCS 512)*
- Grassed Waterway (USDA NRCS CPS 412)*
- Riparian Herbaceous Cover (USDA NRCS CPS 390)
- Filter Strip (USDA NRCS CPS 393)
- Vegetative Barriers (USDA NRCS CPS 601)
- Herbaceous Wind Barrier (USDA NRCS CPS 603)

Woody Cover Establishment on Cropland Practices:

- Alley Cropping (USDA NRCS CPS 311))*
- Hedgerow Planting (USDA NRCS CPS 422)
- Multi-story Cropping (USDA NRCS CPS 379)*
- Riparian Forest Buffer (USDA NRCS CPS 391)
- Tree/Shrub Establishment (USDA NRCS CPS 612)*
- Windbreak/Shelterbelt Establishment (USDA NRCS CPS 380)

Grazing Lands Practices

- Compost Application to Grassland
    - Compost Purchased from a Certified Facility (CDFA Compost Application White Paper)
    - On-farm Produced Compost* (application rates consistent with those specified in CDFA Compost Application White Paper)
- Nutrient Management (USDA NRCS CPS 590) (Reduce Fertilizer Application Rate by 15%)*
- Prescribed Grazing (USDA NRCS CPS 528)*
- Range Planting (USDA NRCS CPS 550)*
- Silvopasture (USDA NRCS CPS 381)

Research Practices (Type A Projects only)*

In addition to the above practices, additional practices are eligible for funding through Type A projects. Projects proposing these practices will be required to collect scientific data to fulfill the following research priorities and to inform development of implementation standards for these practices in the long-term:

(i) Demonstrate carbon sequestration and GHG reduction potential of the practice in diverse California climate types, soil types and crop types, through collection of data including but not limited to field measurement of GHG emissions.

(ii) Address knowledge gaps regarding environmental and eco-system impacts resulting from implementation of these practices at field-scale.

(iii) Develop and/or standardize methodology for practice implementation, and, formulation and characterization of material(s) needed for practice implementation, including but not limited to vermicompost and microbial inoculation with compost tea.

The practices eligible under the research category are:

- Anaerobic Digestate Application: Cropland application of solids generated from anaerobic digestion of organic materials.
- Microbial Inoculation with Compost Tea: Cropland application of diluted compost steeped or brewed in water with aeration/stirring (i.e. compost tea).
- Mycorrhizal Application: Incorporating soil with fungi that form a symbiotic relationship with roots of crop plants.
- Nutrient Management (CPS 590) (Replacing Synthetic N Fertilizer with Soil Amendments such as beef feedlot manure, chicken broiler manure, chicken layer manure, other manure, dairy manure, sheep manure and swine manure).
- Nutrient Management (CPS 590) (Use of Nitrification Inhibitors).
- Nutrient Management (CPS 590) (Use of Slow Release Fertilizers).
- One-Time Compost Application with Higher Rates for Grazed Grasslands: Application of compost to grazed grasslands at rates higher than currently supported by HSP Incentives Program once every ten years.
- Vermicompost Application: Application of compost produced from organic materials using

various species of worms.

- Whole Orchard Recycling: Grinding of whole trees and incorporating into soil during orchard removal.

CDFA HSP Demonstration Projects will not support the development of proprietary products. Information and data generated as a resulted of funded research projects must be made available publicly. Publication in peer-reviewed and open-access scientific journals is strongly encouraged.

TECHNICAL SPECIFICATIONS FOR ESTIMATION OF GHG BENEFITS

To estimate the net GHG benefits due to a practice implementation, the expected life of the practice is as follows:

Eligible Agricultural Management Practice	Practice Lifespan*
Soil Management Practices	3 Years
Cropland to Herbaceous Cover Practices	3 Years
Grazing Lands Practices, except Silvopasture	3 Years
Woody Cover Establishment Practices and Silvopasture	10 Years

*Practice lifespan for the HSP is different from that required by USDA-NRCS.

Compost Application Rates Eligible for Funding:

Crop Type	Compost Type	Dry Short
Annual Crops	Higher N (C:N ≤ 11)	2.2 – 3.6
	Lower N (C:N > 11)	4.0 – 5.3
Tree / Perennial	Higher N (C:N ≤ 11)	1.5 – 2.9
	Lower N (C:N > 11)	4.0 – 5.3
Rangeland	Lower N (C:N > 11)	4.0 – 5.3

*Compost application rates eligible for funding through this program were developed under the guidance of the Environmental Farming Act – Science Advisory Panel (EFA-SAP) and are published in a white paper report titled "Compost Application Rates for California Croplands and Rangelands for a CDFA Healthy Soils Incentives Program" (abbreviated as Compost Application White Paper) by CDFA.

* If compost being applied is purchased: Compost must be produced by a facility permitted or otherwise authorized by state and local authorities that can demonstrate compliance with all state

regulations. STA (US Composting Council's Seal of Testing Assurance Program) or CDFA-OIM (Organic Input Material) Program certified compost is recommended.

* If applying on-farm produced compost: Plant and animal materials must be composted through the processes outlined below and a farm log must be maintained to document the process:

1. In-vessel or Static Aerated Pile System: Maintained a temperature of between 131°F and 170°F for 3 days;
2. Windrow Composting: Maintained a temperature of between 131°F and 170°F for 15 days. The materials must be turned a minimum of five times.

C:N ratio and moisture content of the compost to be applied must be verified through laboratory testing before application.

Compost used in this practice must be produced at the agricultural operation that the project is located on. Externally sourced compost must be purchased from a certified facility.

Compost used in this practice cannot be vermicompost.

Assistance in selecting species to be planted when implementing cover crop, herbaceous, and woody cover establishment practices is available through the USDA NRCS California e Veg Guide, at https://www.calflora.org/nrcs/.

There may be additional requirements or guidelines for implementation of specific practices in addition to those provided in the respective USDA NRCS CPS documentation. Refer to Appendix II, Document 7 for guidance.

Feet-to-Acre Conversion for Eligible Agricultural Management Practices

Several of the eligible agricultural management practices supported by the HSP Demonstration Projects are implemented by length (in feet). However, applicants must enter the total acres of management practice implementation into the into the GHG reduction estimation calculator tools (See GHG Reductions Estimation) to estimate project GHG reductions. A methodology to convert feet of practice implementation to acres is included in Appendix II, Document 3.

PROGRAM REQUIREMENTS

- Eligible agricultural management practices can be implemented alone or in combinations, except

where specified, on one APN or several APNs. Specific fields within each APN where agricultural management practice(s) will be implemented should be named Field 1, Field 2, Field 3, etc.

  - All fields must have the selected agricultural management practices implemented each year for the duration of the project term.
  - Implementations must begin prior to the end of each project year.
  - Multiple management practices may be included within the same APN.
  - Once awarded, recipients may not change the APNs included in the grant application through the duration of the project.

- Awarded projects must post signage on nearest cross street informing the public that the project received funds from the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018 for the duration of the project. Approved specifications for the signage will be provided by CDFA at the time of award.

PRACTICE IMPLEMENTATION REQUIREMENTS

For the purpose of this program, a Treatment field (T) is defined as a field where at least one of the Eligible Agricultural Management Practices, that has not been implemented previously, will be implemented; a Control field (C) is defined as a field which includes the current management practices being implemented on the project site, to serve as a comparison to T.

For both Type A and Type B projects:

- A Project must include at least one of the Eligible Agricultural Management Practices to be implemented on T where it has not been implemented previously.
- A Project must also include C to serve as a comparison to T.
- T and C should be located side-by-side, and differ from each other with respect to the presence (or absence) of new management practice(s) implementation while keeping all other field activities the same as much as possible.
- When selecting locations in the APN to layout T and C, ensure field conditions such as soil properties, drainage, landscape, and cropping and management histories and size are as similar as possible.
- T and C must not be changed to a different location within the APN during the complete project

term, (i.e., July 1, 2019 through March 31, 2022).

For all Type A projects:

- Each T must have a corresponding C.
- Plot size of T and C must be equal and large enough to allow meaningful data collection and farming operation based on practice(s) selected.
- A minimum of three replicates for each T and C is required.

DATA COLLECTION REQUIREMENTS

The following data collection will be required for both T and C in each APN identified in the project (and Project Reporting Requirements):

- Required for both Type A and Type B projects:
    - Soil organic matter from each APN that is part of the project:
        - Prior to initial implementation of funded practices (2019, baseline data)
        - One year after implementation of funded practices (2020)
        - Two years after implementation of funded practices (2021)
        - Three years after implementation of funded practices (2022)
- Required for Type A projects:
    - Measurements of GHG emissions on T and C project sites where Soil Management Practices are implemented. GHG measurements from other eligible management practices are optional, as applicable.
    - Crop yield data.
- Optional for both Type A and Type B projects:
    - Additional data on soil health[1], co-benefits, and/or ecosystem services.
    - Detailed economic analyses on production profitability for selected practice(s).

[1] To determine what kinds of data may be considered indicators of soil health, please see Table 2.02 in the Comprehensive Assessment of Soil Health: The Cornell Framework (2017) at http://www.css.cornell.edu/extension/soil-health/manual.pdf. Additional soil health data are also listed in Appendix II, Document 5: Soil Sampling Protocol for Soil Organic Matter Analysis.

OUTREACH REQUIREMENTS

Outreach requirements apply to both Type A and Type B projects. All outreach events being conducted as part of awarded projects will be posted online on CDFA HSP Demonstration Projects website. Recipients must notify CDFA of the events being conducted at least 30 days prior to event date. In addition to providing event date, time and location, Recipients will be required to designate a project representative whose contact information will be published on CDFA's HSP website. The designated project representative will be responsible for managing public inquiries about the demonstration site, including attendance of interested parties at outreach events, and ensuring sufficient availability of the demonstration site to meet the outreach and education requirements of the program.

A minimum of 120 different individual farmers and/or ranchers for three years from July 1, 2019 through March 31, 2022 (i.e., 40 per year) must attend the demonstration project site(s) so the Recipients can showcase the project benefits and co-benefits and share information on the implemented management practice(s). CDFA encourages creative approaches (e.g., holding outreach events multiple times in a year) to attract new individuals and support those already familiar with Eligible Agricultural Management Practices to the sites in order to share knowledge and benefits of eligible agricultural management practices. Approaches such as using SMART (Specific, Measurable, Achievable, Relevant and Time-bound) goals are encouraged.

Recipients will be required to provide documentable outreach and attendance records as part of the project reporting to CDFA (See Project Reporting Requirements). Failure to meet outreach and education requirements may be considered grounds for termination of the CDFA HSP Demonstration Projects Grant Agreement. Projects that fail to meet outreach and education obligations will not be considered for future HSP Demonstration Project funding.

PROJECT DURATION AND COST SHARING

The HSP Demonstration Projects will provide funds for the grant duration beginning July 1, 2019 to March 31, 2022.

Though not required, applicants are encouraged to provide cost share to the project through the grant duration. Cost share can be in the form of matching funds or an in-kind contribution. Matching funds refers to a dollar amount committed to a project from a source other than the HSP Demonstrations Project. An in-kind contribution is the estimated dollar value of any time, property, or supplies donated to a project, including costs associated with labor for work involved in the implementation of the proposed project. (see table below). Applicants are required to certify that cost-share, if provided, has been secured at the time of application submission.

Timeline for funding expenditures of awarded projects is provided in the table below.

Project Year	Duration of Project Year	Implementation Must Begin No Later Than
1	July 1, 2019 - June 30, 2020	November 30, 2019
2	July 1, 2020 – June 30, 2021	November 30, 2020
3	July 1, 2021 – March 31, 2022	November 30, 2021

ALLOWABLE AND UNALLOWABLE COSTS

Allowable Costs

Project costs must be itemized and clearly support implementation of eligible agricultural management practices including supplies, special purpose equipment, labor, and any other allowable costs necessary for project implementation. Project costs must be reasonable and consistent with costs paid for equivalent work on non-grant funded activities or for comparable work in the labor market. Applicants should utilize equipment or tools they already have on-hand to implement the proposed project.

Examples of allowable costs include but are not limited to:

- Cost of implementation of proposed eligible agricultural management practices.
- Cost associated with on-farm GHG measurements for Type A projects.

- Cost of data analyses for soil organic matter content, other soil health data, ecosystem service and/or yield data.
- Costs of meals/snacks/refreshments may be allowed when reasonable and necessary for hosting an official demonstration of the project's eligible agricultural management practices (excluding travel meal costs). Expenses must be reasonable and appropriate for the purpose and nature of the meeting. Allowable costs should follow California State Human Resources (CalHR) policy except for awards to the Regents of the University of California (UC) which should follow the established UC policy.
- Cost of materials needed for outreach activities (e.g., printed handouts or brochures).
- Cost of signage informing the public that the project is funded by the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018 for the duration of the project.

Unallowable costs

Unallowable costs include, but are not limited to:

- Costs incurred outside of the grant duration (i.e., July 1, 2019 – March 31, 2022).
- Training costs to obtain professional certification and certification costs for project award recipients.
- Costs covered by another State or Federal grant program.
- Pre-development costs for project design, grant application preparation, and other activities that occur prior to July 1, 2019.
- General purpose equipment which is not specific for the proposed research, scientific or technical activities specific to project needs and not utilized for other purposes (e.g., office equipment and furnishings, or farm equipment used for non-project purposes).
- Purchasing project-specific tools and equipment with a useful life of less than two years.
- Expenditures for purchasing or leasing land or buildings.

BASELINE DATA

Applicants must submit the following baseline data at the time of application. Required baseline data

include:

- Cropping history in the past three years (October 2015 – October 2018) in all APN(s) included in the application.
- Management practice history in the past three years (October 2015 – October 2018) in all APN(s) included in the application.
- Applicants proposing to include Compost Application Practices in their projects must submit major soil type (soil series) name and soil organic matter content for each APN where Compost Application practices will be implemented. The UCD Web Soil Survey at https://casoilresource.lawr.ucdavis.edu/gmap/ must be used to identify major soil type and soil organic matter content. Instructions to use Web Soil Survey are provided in Appendix II, Document 4. Compost Application is not allowed on an APN that has soil organic matter content greater than 20 percent by dry weight for a 20 cm (or 8 inch) depth.

GHG REDUCTIONS ESTIMATION

An estimation of the reduction in GHG emissions from the selected eligible agricultural management practices must be calculated using the Quantification Methodology (QM) and calculator tools developed by the CARB (See: Eligible Agricultural Management Practices). The QM and calculator tools used for this program can be accessed at the CARB Quantification Materials website: https://www.arb.ca.gov/cc/capandtrade/auctionproceeds/quantification.htm.

Once on the website, click on the QM for instructions on how to use the GHG reduction calculation tools for the selected type of management practice (as indicated below). The web links to the GHG calculator tools are provided in the QM. The current version of the QM is available at https://www.arb.ca.gov/cc/capandtrade/auctionproceeds/cdfahsfinalqm16-17.pdf.

There are two GHG reduction calculation tools as part of the QM:

- Compost-Planner QM and Tool (this will be used to estimate GHG reduction from Compost Application Practices), and
- Comet- Planner QM and Tool (this will be used to estimate GHG reduction from all other eligible agricultural management Practices).

A Carbon Sequestration and GHG Estimation Report will be generated upon completion of the calculation. One Compost-Planner Carbon Sequestration and GHG Estimation Report is required if Compost Application Practice(s) are selected. One COMET-Planner Carbon Sequestration and GHG Estimation Report is required if any of the other eligible NRCS practice(s) are selected. If both NRCS practice(s) and Compost Application Practices are selected in the project, then one COMET-Planner Carbon Sequestration and GHG Estimation Report and one Compost-Planner Carbon Sequestration and GHG Estimation Report are required.

For practices that are under the **Research Category**, the Quantification Methodology (QM) and Calculator Tools are not available. Recipients are required to report to CDFA annual GHG emissions based on on-farm measurements associated with the implementation of each proposed practice annually through the grant duration.

GRANT APPLICATION PROCESS

HOW TO APPLY

The 2018 HSP Demonstration Projects will be a web based application process. The grant application is a series of questions regarding the proposed project. Questions are answered in one or more of the four following formats: a drop-down menu; a check box; a text box with predetermined character limitations; or as a document attachment. Responses to all questions must be submitted in the manner and format required by the application questionnaire electronically without exception. Preview of application questions is available in Appendix II, Document 2.

Applicants are encouraged to gather all required information using information provided in Appendix I to facilitate effective and timely submission of the grant application.

REVIEW AND EVALUATION PROCESS

REVIEW PROCESS

CDFA will conduct multiple levels of review during the grant application process. The first level review is an administrative review to determine whether application requirements were met and if applicable, assess an applicant's past CDFA grant performance. All required documentation must be submitted to avoid disqualification.

The second level is a technical review conducted by the HSP Technical Advisory Committee (TAC) to evaluate the merits of the application and overall expected success of the project, including sufficient data generated to demonstrate the expected benefits on GHG emission reductions, carbon sequestration, soil health improvement, and dissemination of the information to wide audience including but not limited to industry stakeholders and community members. The TAC is comprised of subject matter experts affiliated with state and federal agencies.

EVALUATION CRITERIA

Applications are evaluated based on the following criteria.

Criteria	Score
Project Merit: 1. Type A Projects: a. Demonstration Component b. Outreach Component 2. Type B Projects: a. Demonstration Component b. Outreach Component	 25 15 10 30
Project Timeline and Implementation Plan	15
Project Team Qualifications	10
Project Budget and Justification	15
GHG Emission Reduction Benefits	15
Projects Serving Severely Disadvantaged Communities (SDACs) [2]	5

[2] Per SB 5 (2018), at least 15 percent of the total funds available for 2018 HSP must be allocated for projects serving severely disadvantaged communities. For the purpose of 2018 HSP, 'severely disadvantaged community' means a community with

Total	100

ADDITIONAL CONSIDERATIONS

During the review process, the following additional considerations will be evaluated when selecting projects for an award of funds based on the number of additional criteria met:

- Projects that provide additional matching funds through the grant duration.
- The Soil management practices may vary with climatic regions, soil conditions, and crop production systems. Therefore, projects with greater regional and crop production representation may be given additional consideration in order to achieve widespread adoption of the management practices in the state.

ASSISTANCE AND QUESTIONS

CDFA cannot assist in the preparation of grant applications; however, general questions may be submitted to grants@cdfa.ca.gov. CDFA will conduct five rounds of Questions and Answers (Q&A) to address general questions about the application submission process and program requirements. Responses to all questions received during the workshops and webinars or by email will be posted to CDFA's HSP Demonstration Projects website [schedule will be provided].

NOTIFICATION and FEEDBACK

All applicants will be notified by email regarding the status of their grant application. Applicants not selected for funding will receive feedback on their grant application within 60 days after receiving notification.

DISQUALIFICATIONS

The following will result in the disqualification of a grant application:

- Incomplete grant applications: applications with one or more unanswered questions necessary to administrative or technical review.

median household income less than 60 percent of the statewide average.

- Incomplete grant applications: applications with missing, blank, unreadable, corrupt, or otherwise unusable attachments.
- Applications requesting funding for more than the maximum award amount.
- Applications with unallowable costs or activities not necessary to complete the project objectives.
- Applications that include activities outside the grant duration.

APPEAL RIGHTS: Any discretionary action taken by the Office of Grants Administration (OGA) may be appealed to CDFA's Office of Hearings and Appeals Office within ten (10) days of receiving a notice of disqualification from CDFA. The appeal must be in writing and signed by the responsible party named on the grant application or his/her authorized agent. It must state the grounds for the appeal and include any supporting documents and a copy of the OGA decision being challenged. The submissions must be sent to the California Department of Food and Agriculture Office of Hearings and Appeals, 1220 N Street, Sacramento, CA 95814 or emailed to CDFA.LegalOffice@cdfa.ca.gov. If submissions are not received within the time frame provided above, the appeal will be denied.

AWARD PROCESS

GRANT AGREEMENT

CDFA will initiate the Grant Agreement process with applicants selected to receive a 2018 HSP Demonstration Projects grant award. Applicants with projects selected for an award of funds will receive a Grant Agreement package with specific instructions regarding award requirements including information on project implementation, project reporting, verification, and payment process.

PROJECT IMPLEMENTATION

Once a Grant Agreement is executed, the grant recipient may begin implementation of the project. Recipients are responsible for the overall management of the awarded project to ensure all project activities are completed as identified in the grant agreement.

Implementation must begin on or after July 1, 2019, but no later than November 30, 2019. Failure to implement the project prior to November 30, 2019 may result in all or any portion of the grant funding

withheld or termination of the Grant Agreement.

PROJECT REPORTING REQUIREMENTS

Recipients are required to submit soil organic matter content data before implementing proposed practice(s) and semi-annual progress reports during the grant agreement term (July 1, 2019 – March 31, 2022). A Final Performance Report must be submitted no later than 30 calendar days following the expiration date of the grant agreement or after the project is complete, whichever comes first. The progress report is used to identify milestones, results achieved, success stories, potential concerns, and other pertinent information.

Information to be provided to CDFA may include:

- Annually soil organic matter content for each APN/ Field: once prior to project implementation, one year after, and two years following initial project implementation.
- Status of project implementation including all work completed and any reportable data.
- Plan for next six months.
- Management practice implementation activities and impacts (Type A and B Projects).
- Project data, including but not limited to soil organic matter data (Type A and B Projects), GHG fluxes/annual emissions, crop yield or economic analysis (Type A Projects only), co-benefits and ecosystem services (optional for both Type A and B Projects).
- Outreach activities and impacts (Type A and B Projects).
- Demonstration and outreach plan for next year (Type A and B Projects).
- Upon completion of project, barriers encountered and overcome, and recommendations for successful implementation (Type A and B Projects).

PAYMENT PROCESS

CDFA will provide the grant recipient with the necessary grant award and invoicing documents. Grant recipients will be required to submit at least a quarterly invoice for reimbursement of actual expenses

incurred to support the approved project activities. Invoice must include documentation to support reimbursement requested. Grant Recipients for projects located in SDACs may be eligible to receive an advance payment up to 25 percent of the total grant award to begin project implementation. The remaining funds will be allocated on a reimbursement basis through quarterly invoicing.

CDFA will withhold 10 percent from the total grant award until the verification requirement is complete to ensure grant recipients complete the project as approved by CDFA. Invoicing and closeout of all project expenditures must be completed no later than June 30, 2022.

PROJECT VERIFICATION

Recipients will be subjected to verification that the eligible agricultural management practices are implemented in a manner consistent with the USDA NRCS CPS guidelines. Verification will be conducted by CDFA or a third-party contracted entity who will conduct field evaluations by APN to verify program compliance during the grant agreement term. CDFA will be responsible for the expense of verification.

The purpose of project verification is to determine whether and when deliverables are being met and evaluate project progress to ensure the eligible agricultural management practice(s) are completed within the grant agreement term.

Recipients may be required to submit financial records and project related documentation (such as receipts for payment of services/goods) to ensure HSP Demonstration Projects funds are used in compliance with the Grant Agreement terms and conditions. The verification must be completed by March 31, 2022.

Consistent with SB 5 (2018), the State of California has the right to review project documents and conduct audits during project implementation and over the project life.

POST-PROJECT COMPLETION REQUIREMENTS

Execution of the Grant Agreement is conditional upon agreement to post-project completion requirements. Recipients are required to maintain implementation of practices incentivized through this program for a

minimum of three years. However, practices are expected to be maintained, and improved soil health and its associated environmental co-benefits and ecosystem services are expected to be achieved, for the long term. Recipients are encouraged to continue and/or expand these practices on their operations in order to achieve long-term benefits. Additionally, applicants are required to maintain documentation related to the HSP funded project, including records documenting maintenance of the agricultural management practice(s) and any soil testing reports for the project APNs, to report actual benefits achieved for three years after the grant term.

CDFA will contact a randomly selected subset of awarded projects to collect data including, but not limited to, eligible agricultural management practice implementation and GHG reduction estimates, for three years after project completion.

APPENDIX I: REQUIRED APPLICATION DOCUMENTS

All required application documents must be submitted by the deadline specified in this solicitation. In addition to the mandatory and optional attachments each applicant will provide, applicants must download, complete and upload the following templates.

- Cover Sheet and Application Checklist (Appendix II, Document 1 in this draft)
- Application Template (Appendix II, Document 2 in this draft)

The mandatory and applicable attachments include:

- Screenshot of Web Soil Survey
- Design Schematic
- Landowner Agreement (if applicable)
- Applicant organization's Indirect Rate Policy (if applicable)
- Letters of Support
- Resumes/CVs
- Cooperator/Collaborator letters
- Compost-Planner Report (if applicable)
- COMET-Planner Report (if applicable)

APPENDIX II: REFERENCE DOCUMENTS TO ASSIST PREPARATION OF APPLICATION

Document 1: Cover Sheet and Application Check List

Applicant Organization Name: Click here to enter the legal name of the organization that will serve as lead for the project and will receive grant funds.
Applicant ID: Click here to enter the applicant ID generated by the electronic application system.
Address: Click here to enter the applicant organization address
Federal Tax ID: Click here to enter the applicant organization Federal Tax ID
Project Director: Click here to enter the name, telephone number and email address for the authorized representative for the project
Project Manager: Click here to enter the name, telephone number and email address for the authorized representative for the project (if different from the Project Director)
Project Title:
Click here to enter the project title as it appears on the Application Template.
Application Checklist:
Check the box below for each file included in the application to be submitted electronically:

☐ Coversheet and Application Checklist Click here to enter file name.
☐ Application Template Click here to enter file name.
☐ Budget Worksheet Click here to enter file name.
☐ Screenshot of Web Soil Survey* Click here to enter file name.
☐ Project Design Checklist Click here to enter file name.
☐ Landowner Agreement* Click here to enter file name.
☐ Letters of Support Click here to enter file name.
☐ Resumes/CVs Click here to enter file name.
☐ Cooperator/Collaborator Letters* Click here to enter document name.
☐ Compost Planner Report* Click here to enter document name.
☐ COMET Planner Report* Click here to enter document name.
(Documents that are applicable.)*

Submitted by:
Name: Click here to enter submitter name. **Title:** Click here to enter title.
Signature: _____ **Date:** Click here to enter date.

Once complete, print, sign and submit this document as a PDF along with the other applicable documents selected above.

Document 2: Preview of Application Questions

Applicants must respond to the following questions under the General Information, Project Budget, Cooperating Entities, and Application Questionnaire tabs. Failure to answer one or more application questions may result in disqualification.

Applicant Organization:

Click here to enter the legal name of the organization that will serve as lead for the project and will receive grant funds.

Organization Type: Select the organization type that best describes the applicant.

Submitting Organization:

If applicable, click here to enter the legal name of the organization submitting on behalf of the applicant.

Cooperating Entities:

Click here to list the cooperating entities and identify the role or contribution each will make to the project.

Project Type:

Choose an item.

Project Title:

Click here to provide a concise description of the project in 15 words or less.

Project Description (Abstract):

Click here to Summarize the need for the project, describe the goals and outcomes, and present a plan for evaluating and measuring the success of the project. *

*The Project Description should minimize the use of technical terms and be appropriate for dissemination to the public as it may be included with information shared publicly for projects funded through California Climate Investments.

Project Budget:

Funds Requested: Click here to enter the total amount of grant funds requested.

Cost Share: Click here to enter the total amount of cost share committed to the project.*

Total Budget: Click or here to enter the sum of funds requested and cost share.**

* Cost share is not a requirement, but is encouraged and may serve as evidence to demonstrate commitment to, or support for, the project.

**The total budget will not calculate automatically.

Did you receive a CDFA HSP Incentives Program or Demonstration Projects grant in the past?

Yes/No

If Yes, provide grant agreement number:

Are you planning to submit an application for the CDFA HSP Incentives Program in 2018 or in the future?

Yes/No

Did you receive another State or Federal Grant for this project?

Yes/No

If yes, provide name, year and amount of grant award:

Agricultural Operation Data:

Total size of the applicant's farm/agricultural organization: Click here to enter the total farm/agricultural organization size (in acres).

Assessor's Parcel Number (APN) that will be impacted by the proposed Healthy Soils project: Click here to enter APN(s).

Be sure to use the APN format that is used by your county Assessor's Office. Visit your county's Assessor's Office in person or the Assessor's Office webpage to look up or verify the APN(s).

Address or Nearest Cross Streets: Click here to enter address.

City, Zip Code: Click here to enter city and zip code.

County: Click here to enter the county.

Does the Applicant own the land to be impacted by the Healthy Soils Project?: Yes or No
If leasing land, applicants must include a letter of agreement from the land owner stating their consent to the project implementation for the duration of the project term.

Are there multiple fields on which agricultural management practices will be implemented within a single APN?: Yes or No

Provide a list of APNs, the eligible agricultural management practices to be implemented, and acreage involved for each practice:
Click here to enter APNs, eligible agricultural management practices, and acreage for each practice.

Baseline Data:
Provide the cropping history for the past three years (October 2015 - October 2018) for all APNs included in the project.
Click here to enter the cropping history.

Provide the management practice history for the past three years (October 2015 - October 2018) for all APNs included in the project.
Click here to enter the management practice history.

Does the project include Compost Application Practices?: Yes or No
If yes, applicant must enter the major soil type (i.e., soil series name) and soil organic matter content data sourced from the UCD Web Soil Survey for the specific APNs where project implementation will occur. Instructions for using the Web Soil Survey are provided in Appendix II, Document 4. Include the

screenshot(s) of Web Soil Survey results as an attachment (single file) and name it "Demonstration_[ApplicantName]_[taxIDlast4digits]_WebSoilSurvey".

Project Justification

All of the following must be addressed within the text boxes provided.

Describe the mechanism of the proposed agricultural management practices in reducing GHG emissions, increasing carbon sequestration, improving soil health, and/or providing other environmental benefits.

Describe the geographic location and/or provide a regional representation of the project.
Provide a rationale for the crop(s) selected for the project.

Describe the agronomic, environmental, or other impacts the project anticipates having on a local, regional, and statewide basis.

Describe the possibility for and scale (state or local) at which the project anticipates influencing farmers and ranchers to adopt the demonstrated agricultural management practices.

Experimental and/or Project Design

All projects must include a Design Schematic that consists of a detailed map of the agricultural operation showing the following:

The specific APNs where eligible management practices will be implemented.

A layout of where all eligible management practices will be implemented.

The total acreage for each eligible management practice to be implemented.

Names of plant species to be planted, if applicable

Type A Projects:

All of the following must be addressed within the text boxes provided:

Provide an experimental design that is statistically sound (randomized and replicated) that includes a schematic representation of the agricultural management practice implementation and how it fits into the production system.

Outline the methods and scheme for monitoring soil health indicators and GHG emission measurements along with crop yield data collection or economic analysis.

Type B Projects:

All of the following must be addressed within the text boxes provided:

Provide a project design that includes a schematic representation of the agricultural management practice implementation and how it fits into the production system.

Describe the proposed approach, procedure, or methodology for project. The approach should be realistic, suitable and feasible for the project.

Outreach Design

All of the following must be addressed within the text boxes provided:

Describe the proposed outreach activities. These must include farmer or rancher Field Day activities. Other activities such as workshops, farmer or rancher meetings, social media communication, and publications are encouraged.

Describe the proposed approach, procedure, or methodology for the outreach activities. Include and clearly describe the methods for notification, recording attendance, distributing and collecting surveys and how they are suitable and feasible for the project.

Work Plan

Table I. Management Practice Implementation Collection Plan

Fill the table provided below for each eligible management practice (identified as T1- treatment 1, T2 – treatment 2, etc.) to be implemented on all fields within an APN that are part of the project. Table must be filled for both Type A and Type B projects. Each sub-table must be specific for each practice (treatment). Add additional sub-tables as needed.

T1	Practice Name			APN/Field No.			Acres /Feet			Performed by		
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2019												
2020												
2021												
T2	Practice Name			APN/Field No.			Acres /Feet			Performed by		
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2019												
2020												
2021												
T3	Practice Name			APN/Field No.			Acres /Feet			Performed by		
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2019												
2020												
2021												

Table II. Data Collection Plan

For data collection activities: Fill the table provided below describing the activities that will take place to

ensure data collection for the project. Type A projects must describe detailed plan to accomplish GHG and other data collection from the project site (both T and C fields as applicable) in chronological order for all three project years. Soil organic matter data collection activities should be listed. Other data such as crop yield and any other additional data collection activities are optional. Add additional rows as necessary.

Activities	Data to be Collected/Analyzed	Timeline (mm/yyyy – mm/yyyy)	Performed by

Table III. Outreach Plan

Fill the table provided below describing the activities that will take place to complete outreach requirements. Add additional rows as necessary.

Activity Name	Location	Timeline (mm/yyyy-mm/yyyy)	Practice(s) to be showcased	Estimated Number of Participants	Performed by

Evaluation and Project Success

Describe the methods that will be used to assess the progress and success of the practice implementation.

Provide a cost/benefit analysis for adoption of the agricultural management practices and anticipate any barriers to adoption, if applicable.

Team Qualifications

Project Oversight: For project management, describe roles of all personnel in the project. Note specific time commitments and how they will impact the proposed project.

For each project director or principal investigators (PIs), attach a current resume, a description of current outreach activities, and information on current/recent planned or pending research and/or outreach projects.

For cooperators and collaborators, include a letter with detailed contact information, a description of the role in the project, the estimated time commitment, and a statement of agreement to participate in the project.

Project Budget and Justification

Budget Narrative

Complete the required Budget Narrative template, in your application template. When completing the Budget Narrative attachment, do not alter the template in any way, except to add or remove rows in the tables as needed. Instructions on required information for each budget section are provided in in the Budget Narrative template.

Cost Share

CERTIFY:

☐ By checking the box to the left, the applicant certifies that the total amount of cost share committed to the project has been secured for the project duration.

Add additional rows as necessary, not to exceed a total of two pages.

Amount	Type of Cost Share* (Matching Funds or In-Kind Contribution)	Source (Include Contact Information)	Summary of Activities or Costs Covered with Matching Funds or In-kind Contributions

* Matching funds refers to a dollar amount committed to your project from a source other than the Healthy Soils Program. An in-kind contribution is the estimated dollar value of any time, property, or supplies donated to your project.

GHG Reduction Estimation:

Indicate the estimated greenhouse gas emission reductions from the project (Tonnes of CO_2 equivalent/acre) located in the CARB Calculator Tool(s). For each practice, please calculate total acreage to be implemented in order to calculate GHG reduction estimation.

Before proceeding with this application, applicant must follow guidance of CARB Greenhouse Gas (GHG) Quantification Methodology for CDFA Healthy Soils Program and use CARB Greenhouse Gas (GHG) calculator Tools: COMET-Planner and/or Compost-Planner to estimate project GHG benefits.

When using the model tools, please ensure:

(1) Selection of correct county where your project site is located,

(2) Selection of practice that is the treatment (T) in project demonstration field(s), and

(3) Entry of correct acreage for each designated treatment (T).

Indicate the estimated greenhouse gas emission reductions from the project (Tonnes of CO_2 equivalent/acre) located in the CARB Calculator Tool(s).

Enter the total CO_2 equivalent obtained from the Compost-Planner Carbon Sequestration and GHG Estimation Report.:

And/or:

Enter the total CO_2 equivalent obtained from the COMET-Planner Carbon Sequestration and GHG Estimation Report.:

Enter the total CO_2 equivalent obtained from both the Compost-Planner and COMET-Planner Carbon Sequestration and GHG Estimation Report (i.e., provide the total sum of CO_2 from both reports).

Additional Considerations

Severely Disadvantaged Communities

To qualify as serving severely disadvantaged communities, projects must be:

(i) Located in a severely disadvantaged community as identified using the Community FactFinder (2018) Tool available at: http://www.parksforcalifornia.org/communities

(ii) Must provide opportunities such as:

a. Education and outreach of healthy soils practices and their benefits to a wider audience including community members, local residents and local schools.

b. Targeting outreach to farmers located in SDACs and/or providing translation services for languages other than English.

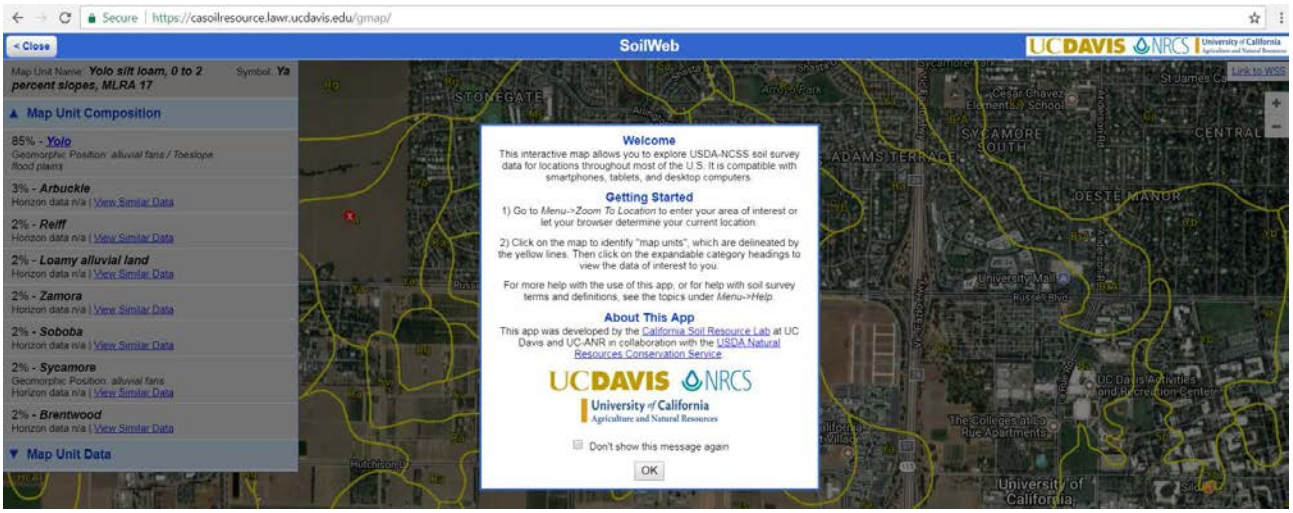
Document 3: Feet-to-Acre Conversion for Implemented Practices

An excel file to help applicants perform this calculation is available at:

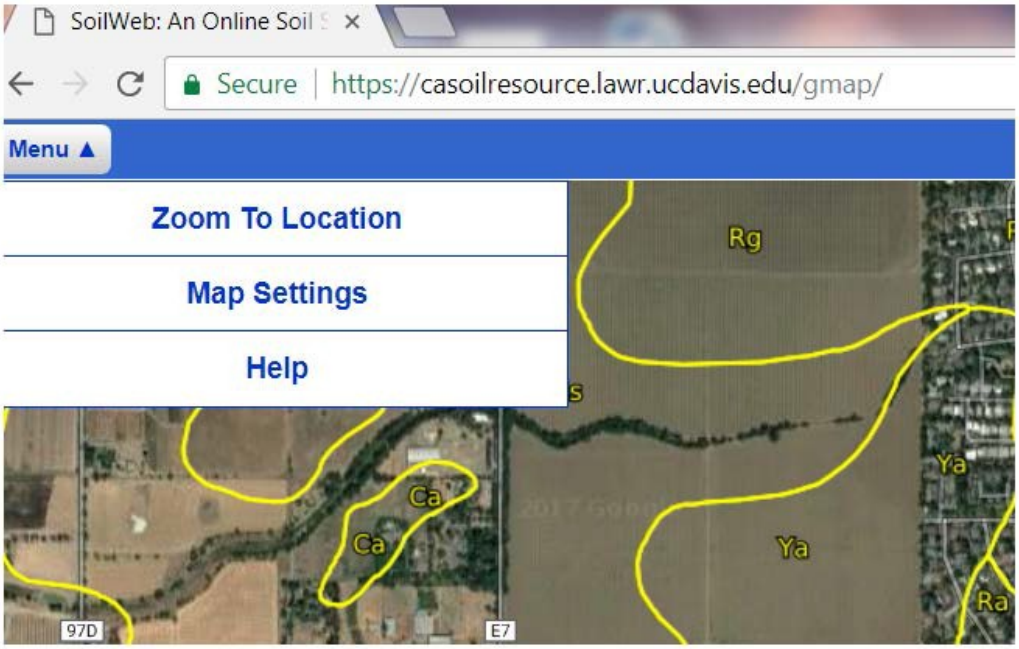
https://www.cdfa.ca.gov/oefi/healthysoils/DemonstrationProjects.html

Document 4: Step-by-Step Instructions to Determine Soil Organic Matter Content Using Web Soil Survey

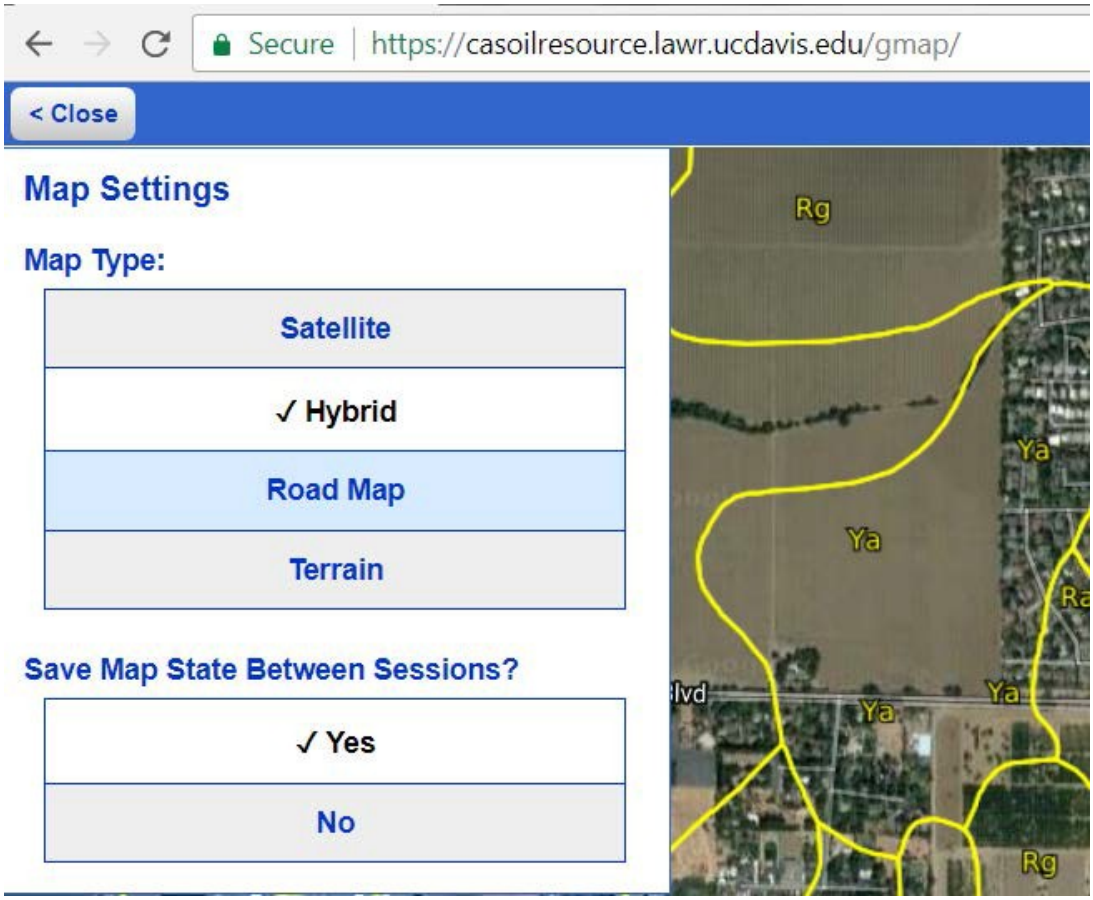
Step 1: Go to the UCD web soil survey site at https://casoilresource.lawr.ucdavis.edu/gmap/ as shown below. Click "OK" at the bottom of box.



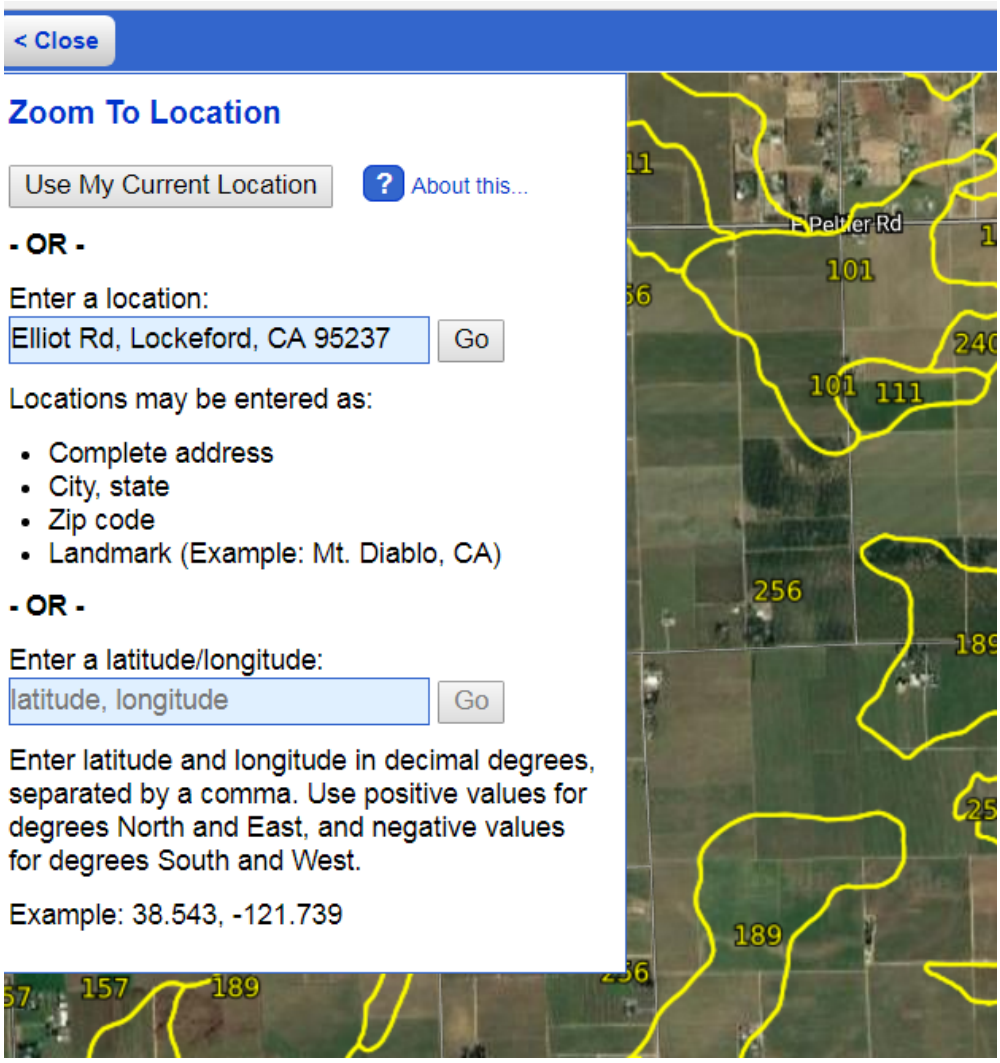
Step 2: Locate “Menu” on the up left side corner of the screen. A menu of three contents will pop up when clicked.



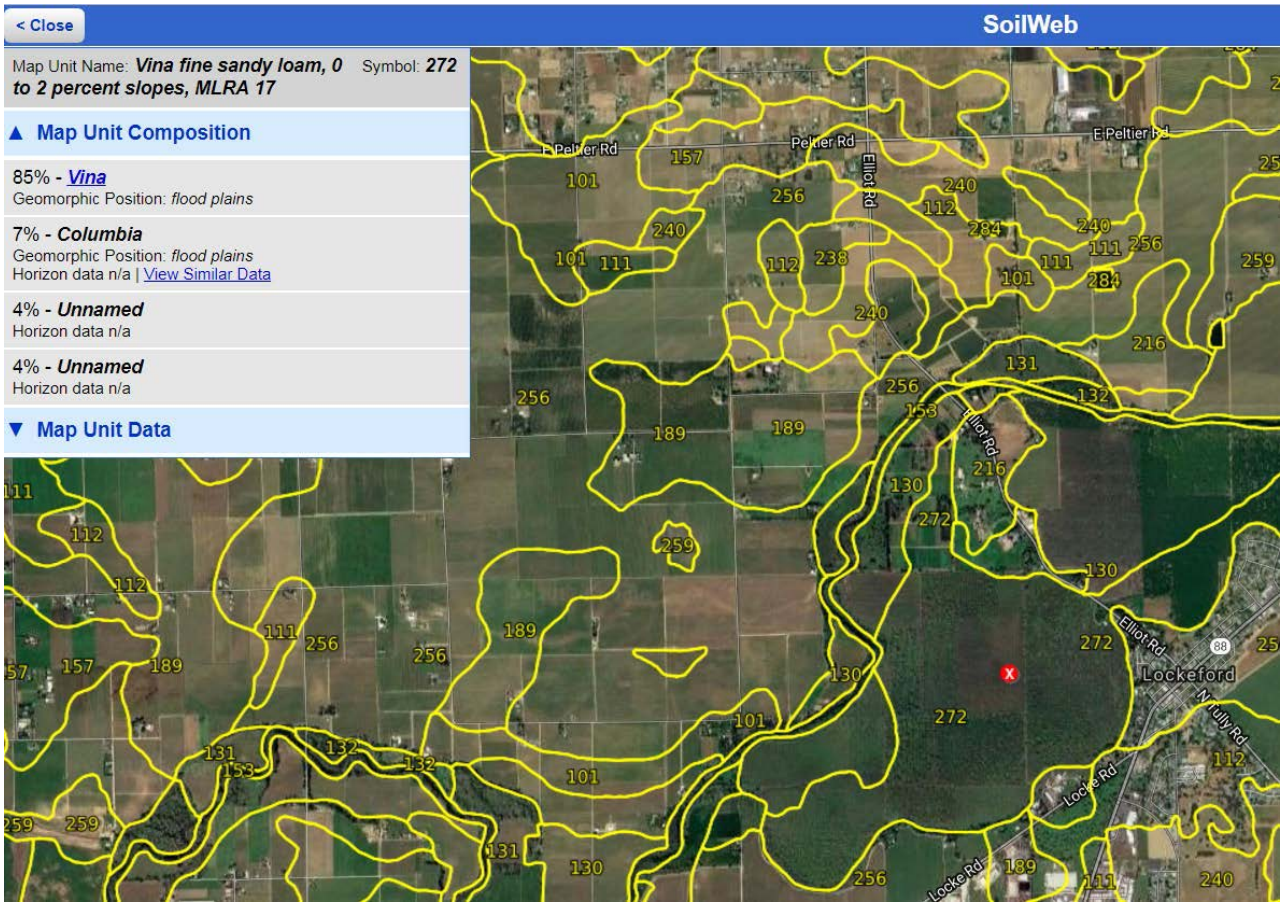
Step 3: Click “Map Settings”. Under “Map Type”, select “Hybrid”. This selection is recommended as it allows one to easily identify the location of their fields. Once map type is selected, click “Close”. This will bring you back to the “Menu”.



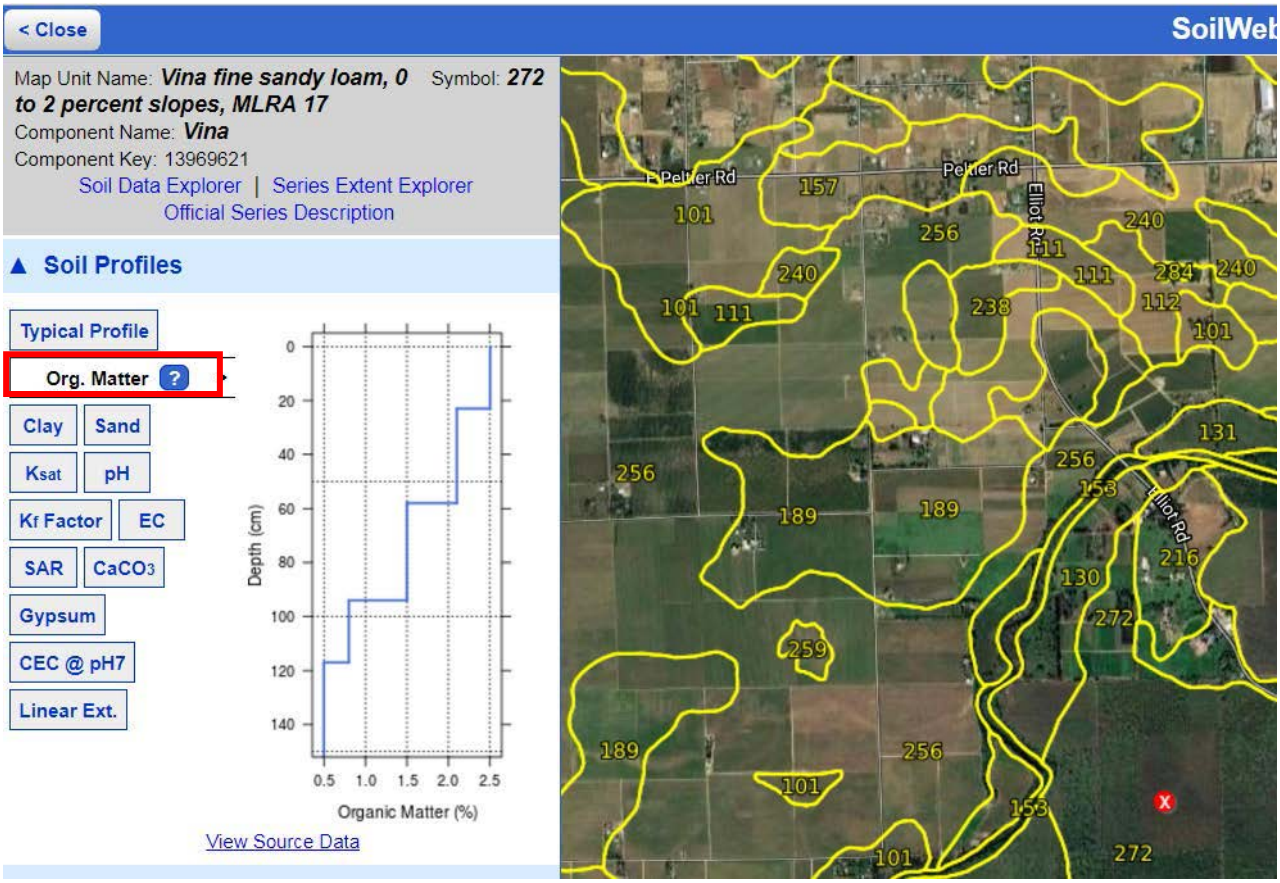
Step 4: Click “Menu” again. Click “Zoom to Location”. This allows you enter your field address. Type your field address and click “Go”.



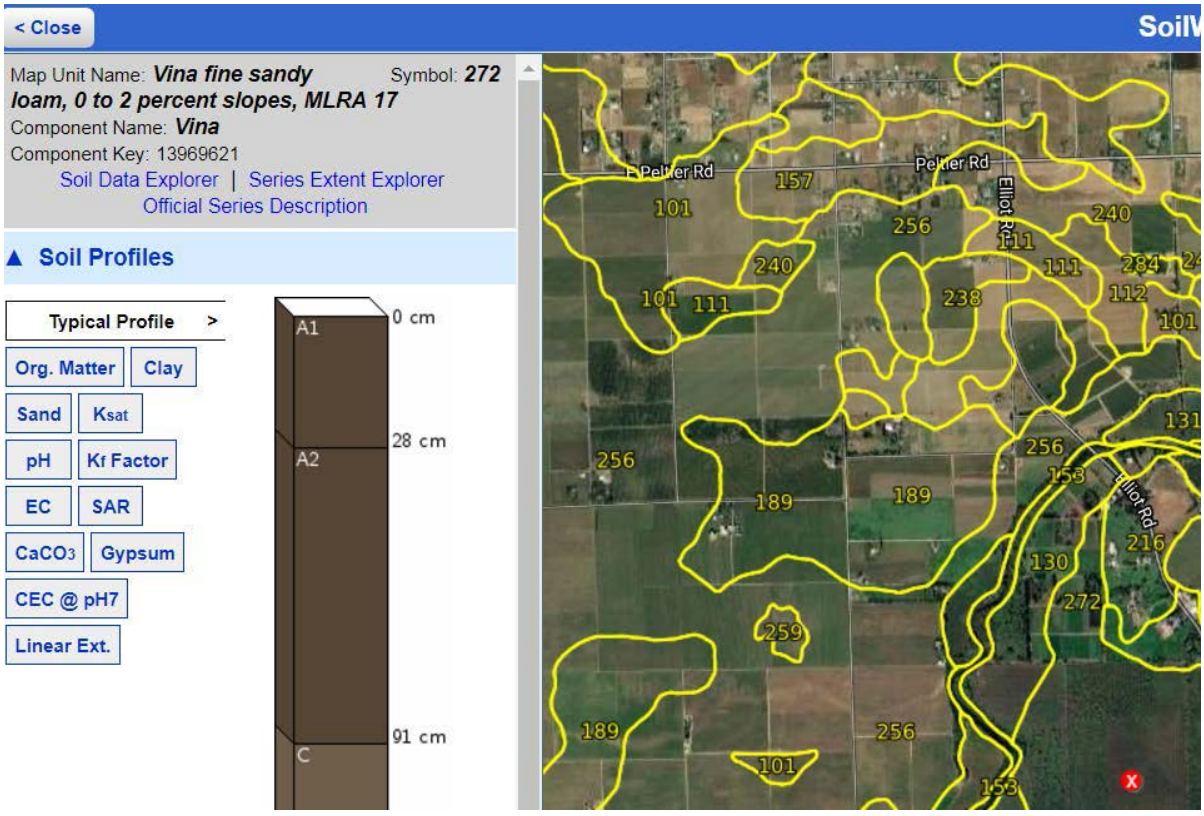
Step 5: Identify the field location as best possible. Move your mouse pointer to the location and click. Soil type of the field appears on the left side corner, with your selected location marked as red check box. For example, the major soil type on this field is “Vina”. Record the name of the major soil type for your location. Click the soil type name (“Vina” in this example).



Step 6: Detailed information for a typical “Vina” soil series appears. Click “Org. Matter” as highlighted in the red box.



Step 7: The diagram shows percent organic matter content (SOM) in the soil profile. Read % soil organic matter (the bottom of the diagram) for surface soil layer (0-20 cm or 0-8 inch in this diagram). In this example, it is approximately 2.5%for Vina soil series.



Step 8: Write down the organic matter content and name of soil series for each field/APN as it is needed for your electronic application. Save a screenshot of your Web Soil Survey result to include as an attachment with your application.

Note: If an APN's soil organic matter is greater than 20 percent, all Compost Application practices are not eligible.

Document 5: Soil Sampling Protocol for Soil Organic Matter Analysis

WHAT DO I NEED?

Please ensure bringing all materials to the field for soil sampling.

As shown in Figure 1, these materials include:

- Two buckets (one for sample and one for supplies)
- Soil sample bags: one-gallon freezer storage bags (or soil sample bags); one bag per sample
- One clipboard and papers for recording
- Permanent marker and/or pen
- A soil probe or straight shovel (sharpshooter or drain spade style).
- Ice pack(s) (optional, needed for hot days when samples for nitrogen content or biological properties.)

Figure 1. Materials needed for soil sampling

WHERE TO SAMPLE?

A. Determine the number of samples to be taken from each field (or APN).

Decide whether one sample will adequately represent the field (or APN), or whether an APN should be split to into multiple sampling units. A field is not the same and may vary in soil type, fertility, or cropping and management histories. Divide the field into different sampling units and make sure conditions inside

the same sampling unit are as uniform as possible. If a uniform field is very large, you may need to divide it into several sampling units so as each sampling unit is no larger than 20 acres. One soil sample is needed from each unit.

B. Inside a sampling unit, a composite soil sample is taken.

1. Identify locations within the unit where soil samples are representative.
2. Borders and irregular areas should be avoided, unless a sample is specifically being collected from those areas to identify constraints.
3. As shown in Figure 2, one soil core from each location. Total 14 cores will be taken mixed in the bucket to make a composite soil sample to represent the sampling unit.
4. For a sampling unit, about 10 -20 locations should be selected to make a composite sample.

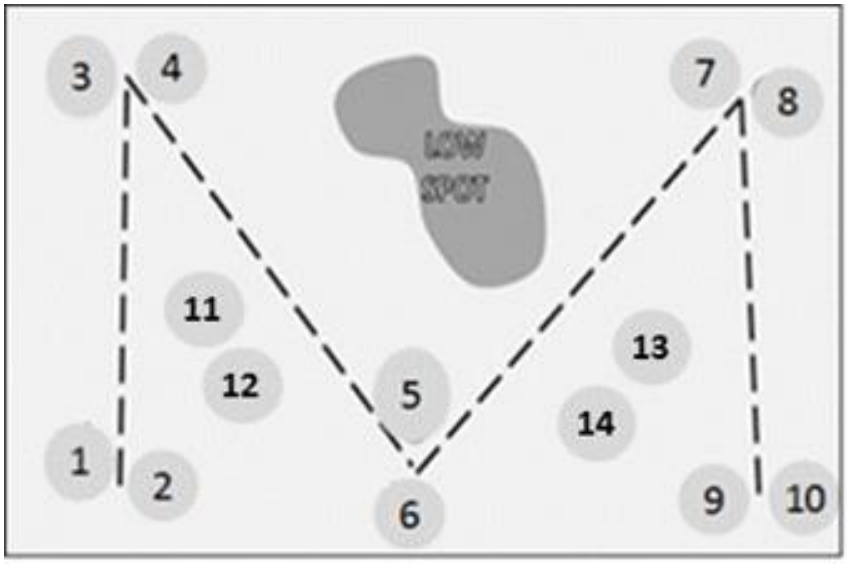


Figure 2. Locations where samples should be taken within a sampling unit

HOW TO TAKE A COMPOSITE SOIL SAMPLE?

A. Two important requirements must be met when taking soil samples:

1. A uniform slice of soil from the soil surface to a desired depth must be taken.
2. The same volume of soil must be collected from each sample location.

B. Depth to sample:

Depth to take soil samples is usually determined by the crop, what you are interested to know, and your

knowledge about the soil profile. For soil organic matter content for the purpose of the CDFA Healthy Soils Program, sampling depth should be from surface to 8” deep.

C. How to take sample with a soil probe (Figure 3)

1. Remove surface debris (A).
2. Push probe steady and straight to the desired depth (e.g., 8” in a tomato field) (B).
3. Remove the core and place it in the clean bucket.
4. Go to the next location and repeat steps 1-3.
5. Finish sampling from all (ten or more) locations.
6. Gently mix soils in the bucket and collect them in the sample bag labeled with the APN, sampling date, and farm name (C).

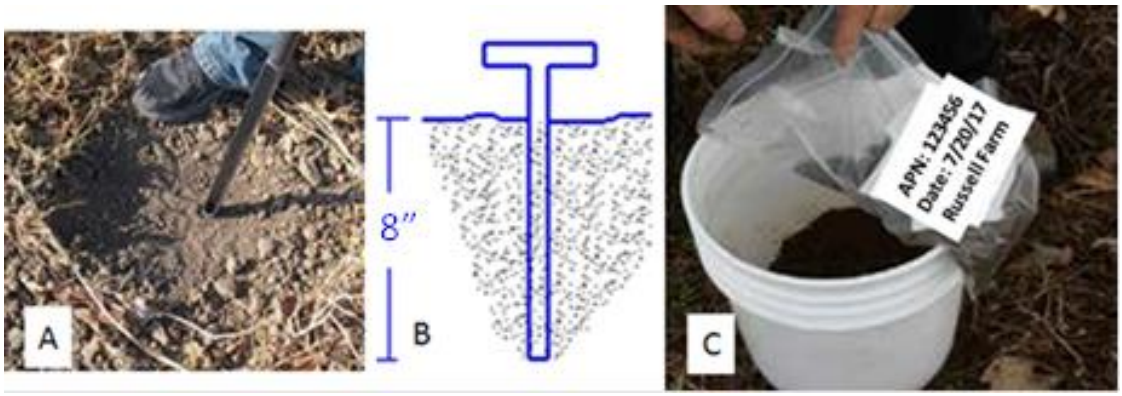


Figure 3. Taking samples with a soil probe.

D. How to take samples with a shovel or spade (Figure 4)

1. Remove surface debris (A).
2. Use the spade to dig a small hole about 8’’ deep. From the side of the hole, take a vertical, rectangular slice of soil 8” deep and about 2” thick (B).
3. Remove any extra soil to ensure that the sample is the same width at the top and bottom of the slice. It is important to collect the same amount of soil through the 6” sample profile so that it is not biased with more soil from the surface compared to the subsurface (C).
4. Place sample into a clean bucket.
5. Go to the next location and repeat the steps 1-4 for all locations.

6. Gently mix soils in the bucket and collect 6 cups of well-mixed soils (or no less than 1 lb.) into the sample bag labeled with the APN, sampling date, and farm name (D).

Figure 4. Taking samples with a shovel.

SAMPLE STORAGE AND SHIPPING TO A SOIL TESTING LABORATORY

Before you send your soil samples for analysis, ensure that the laboratory uses University of California testing methods, which are proven on California farms by the University. Contact the soil testing laboratory where you plan to send your samples.

CDFA recommends the laboratories listed at the following websites for tests conducted for the Healthy Soils Program:

- Selected Plant and Soil Laboratories in Northern and Central California: http://cesonoma.ucanr.edu/files/27431.pdf.
- UC Cooperative Extension el Dorado County List of Laboratories for Tissue/Soil/Water – Agricultural Analysis: http://cecentralsierra.ucanr.org/files/115331.pdf.
- UC ANR Soils Testing Laboratories for Home Gardeners: http://ccmg.ucanr.edu/files/51308.pdf.
- Selected Plant and Soil Testing Laboratories in Central and Southern California:

http://ceventura.ucanr.edu/Com_Ag/Subtropical/Avocado_Handbook/Resources/Plant_Disease_Diagnostics_and_Soil_Testing_Labs_in_California-1999_/

Please check with the laboratory where you intend to send samples to ensure if there are specific requirements regarding sample storage, packing and shipping. Requirements may be different depending on what soil properties are to be tested.

Provided below are general guidelines regarding handling of soil samples:

- Ship your soil samples to a soil test laboratory as soon as possible.
- Ensure all sample bags are correctly labeled and sealed.
- Provide a soil sampling form together with samples in the shipping box.
- For tests on soil texture, organic matter content, pH, cation exchange capacity or mineral contents other than nitrogen, samples can be handled at room temperature.
- For tests on nitrogen content and/or biological properties (e.g. microorganisms), keep samples out of direct sunlight and store as cool as possible (ice packs recommended) during sampling and storage. Store samples in a refrigerator or cold room after returning from the field. Pack soil samples with ice packs when shipping.
- Contact the soil testing laboratory a few days after samples are shipped to confirm they were received and are being handled properly.

Important: If you know your soils are calcareous soils (i.e., soils with a significant amount of calcium carbonate), please ensure that your chosen laboratory is aware of your soil type and able to conduct the analysis specific for calcareous soils.

SOIL HEALTH DATA

1. Required by CDFA

   The cost of the following test are covered by the 2018 CDFA HSP Incentives Program:

   - Soil organic matter content.

2. Optional data, encouraged but not required by CDFA

   The costs of the following tests are to be covered by cost sharing provided by recipients:

   - Physical properties:

    - Bulk density
    - Surface hardness
    - Subsurface hardness)
    - Water infiltration
    - Water holding capacity
    - Aggregate stability
    - Saturated hydraulic conductivity
- Chemical Properties
    - pH
    - Soil chemical composition
- Biological Properties
    - Active or labile carbon
    - Soil protein
    - Soil respiration
    - Earthworms

REFERENCES

- Moebois-Clune B.N., D.J. Moebois-Clune, B.K. Gugino, O.J. Idowu, R.R. Schindelbeck, A.J. Ristow, H.M. van Es, J.E. Thies, H.A. Shayler, M.B. McBride, D.W. Wolfe, and G.S. Abawi. 2016. Soil sampling protocol. In Comprehensive Assessment of Soil Health. Soil and Crop Science Section, Cornell University. Ithaca, NY. P. 27-30.
- USDA NRCS. 2007. Soil sampling for nutrient management. https://www.nrcs.usda.gov/wps/PA_NRCSConsumption/download?cid=nrcs144p2_051273&ext=pdf
- UCCE UC Small Farm Program, 2017. Soil sampling. http://sfp.ucdavis.edu/pubs/Family_Farm_Series/Veg/Fertilizing/soil/

Document 6: Non-Overlapping Practices

The practices listed below cannot be implemented on the exact same land area or field, i.e., cannot overlap:

- Cover Crop (USDA NRCS CPS 340)
- Conservation Crop Rotation (USDA NRCS CPS 328)
- Residue and Tillage Management – No-Till (USDA NRCS CPS 329)
- Residue and Tillage Management − Reduced Till (USDA NRCS CPS 345)
- Strip Cropping (USDA NRCS CPS 585)
- Compost Application: Compost is either
    - Purchased from a Certified Facility

      or
    - On-farm Produced Compost
- Alley Cropping (USDA NRCS CPS 311)
- Multi-story Cropping (USDA NRCS CPS 379)

Document 7: Additional Practice Implementation Guidelines

(next page)

Current HSP Practices

HSP Agricultural Management Practice Name	Practice Implementation Name* (COMET –Planner)	Scenario Name*	Implementation Guidelines
Residue and Tillage Management, No-Till (USDA NRCS CPS 329)	Intensive Till to No Till or Strip Till on Irrigated Cropland	No-Till or Strip-Till	(1) No tillage; (2) Planting method is no-till drilling or hand planting.
	Intensive Till to No Till or Strip Till on Non-Irrigated Cropland		
Cover Crop (USDA NRCS CPS 340)	Add Non-Legume Seasonal Cover Crop to Irrigated Cropland	Cover Crop	Cover crop should be allowed to grow to produce as much biomass as possible without delaying planting of the following crop.
	Add Legume Seasonal Cover Crop to Irrigated Cropland		
	Add Legume Seasonal Cover Crop to Non-Irrigated Cropland		
	Add Non-Legume Seasonal Cover Crop to Non-Irrigated Cropland		
Residue and Tillage Management, Reduced Till (USDA NRCS CPS 345)	Intensive Till to Reduced-Till on Irrigated Cropland	Residue and Tillage Management, Reduced Till	(1) Tillage methods may be mulch tillage, vertical tillage, chiseling or disking that limit soil disturbance; and/or (2) Tillage/planting systems with few tillage operations.
	Intensive Till to Reduced-Till on Non-Irrigated Cropland		
Mulching (USDA NRCS CPS 484)	Add High Carbon Mulch to Croplands	Natural Materials	Straw or other natural material that provides 60-70% soil coverage (1-2 tons/Ac or 1-3" thickness)
		Wood Chips	(1) 60-70% soil coverage is required; and (2) 2-3 inches thickness of wood chips or similar materials that are hardy enough to last for several years.
Contour Buffer Strips (USDA NRCS CPS 332)	Convert Strips of Irrigated Cropland to Permanent Unfertilized Grass Cover **Or** Convert Strips of Irrigated Cropland to Permanent Unfertilized Grass/Legume Cover	Introduced Species, Forgone Income	(1) Introduced cool season perennial grass; (2) Area of strips is taken put out of production.
		Native Species, Foregone Income	(1) Native warm season perennial grass; (2) Area of strips is taken put out of production.
		Wildlife/Pollinator, Foregone Income	(1) Three or more native warm season perennial grasses that are pollinator friendly species; (2) Area of strips is taken put out of production.

HSP Agricultural Management Practice Name	Practice Implementation Name* (COMET –Planner)	Scenario Name*	Implementation Guidelines
Field Border (USDA NRCS CPS 386)	Convert Strips of Irrigated Cropland to Permanent Unfertilized Grass Cover **Or** Convert Strips of Irrigated Cropland to Permanent Unfertilized Grass/Legume Cover	Field Border, Introduced Species	(1) Introduced, cool season perennial grass; (2) at the edge of or around the perimeter of an agricultural land.
		Field Border, Native Species	(1) Untreated, warm season, native perennial grass; (2) at the edge of or around the perimeter of an agricultural land.
		Field Border, Pollinator	(1) Mixed species, native Forb; (2) at the edge of or around the perimeter of an agricultural land.
Riparian Herbaceous Cover (USDA NRCS CPS 390)	Convert Irrigated Cropland to Permanent Unfertilized Grass Cover Near Aquatic Habitats; **Or** Convert Irrigated Cropland to Permanent Unfertilized Grass/Legume Cover Near Aquatic Habitats	Broadcast Seeding with Foregone Income	(1) Area is removed from crop production; (2) Six species mix, native Forb; (3) existing plant community is disturbed /destroyed.
		Plug Planting with Foregone income	(1) Area is removed from crop production; (2) Native aquatic plants, emergent or submerged; (3) A narrow strip with total area less than 0.5 Acre.
		Combination Broadcast Seeding and Plug Planting with Foregone Income	(1) Area is removed from crop production; (2) One species native forb and native aquatic plants, emergent or submerged; (3) A narrow strip with total area less than 0.5 Acre.
		Pollinator Cover with Foregone Income	(1) Area is removed from crop production; (2) 2-12 species (native forb) that bloom sequentially during the growing season and at least 2 species in bloom at any given time during the growing season; (3) A narrow strip with total area less than 0.5 Acre.
Filter Strip (USDA NRCS CPS 393)	Convert Strips of Irrigated Cropland to Permanent Unfertilized Grass Cover **Or** Convert Strips of Irrigated Cropland to Permanent Unfertilized Grass/Legume Cover	Filter Strip, Native species	Native, warm season perennial grass
		Filter Strip, Introduced species	Introduced, cool season perennial grass and/or legume mix

HSP Agricultural Management Practice Name	Practice Implementation Name* (COMET –Planner)	Scenario Name*	Implementation Guidelines
Vegetative Barrier (USDA NRCS CPS 601)	Convert Strips of Irrigated Cropland to Permanent Unfertilized Grass Cover **Or** Convert Strips of Irrigated Cropland to Permanent Unfertilized Grass/Legume Cover	Seeded Barrier	A strip or strips of stiff, dense vegetation is established by seeding with width being 3 feet or more.
		Vegetative Planting	Permanent strips of stiff, dense vegetation established along the general contour of slopes with width being 3 feet or more.
Herbaceous Wind Barriers (USDA NRCS CPS 603)	Convert Strips of Irrigated Cropland to Permanent Unfertilized Grass Cover	Cool Season Annual/Perennial Species	Width of the Herbaceous Wind Barrier must be at least 2 feet.
	Convert Strips of Irrigated Cropland to Permanent Unfertilized Grass/Legume Cover		
Windbreak/ Shelterbelt Establishment (USDA NRCS CPS 380)	Replace a Strip of Cropland with 1 Row of Woody Plants **Or** Replace a Strip of Grassland with 1 Row of Woody Plants	1-row, trees, containers, hand planted, protected	(1) Tree row must have a minimum of 8 feet width; (2) Plant protection is required; (3) Plant density of 200 plantings or more per Acre is required.
		1-row, Tree and/or Shrub, with Wind-protection Fence	(1) The minimum width is 8 feet for a row of trees and 4 feet for a row of shrubs; (2) Plant protection is required; (3) Plant density of 200 plantings or more per Acre is required.
Silvopasture Establishment (USDA NRCS CPS 381)	Tree/Shrub Planting on Grazed Grasslands	Establish Trees, Existing Grasses	At least 20 plantings per Acre.
Hedgerow Planting (USDA NRCS CPS 422)	Replace a Strip of Cropland with 1 Row of Woody Plants	Single Row	(1) ≥ 200 tree and shrub plantings per acre (2) Width of each Hedgerow must be at least 8 feet. (3) Average height of hedgerow will be at least 3 feet and extend 15 feet wide at maturity. (4) Combination of cool and warm season perennial species will be used. (5) Planting protection is needed.
	Replace a Strip of Grassland with 1 Row of Woody Plants		

HSP Agricultural Management Practice Name	Practice Implementation Name* (COMET –Planner)	Scenario Name*	Implementation Guidelines
Riparian Forest Buffer (USDA NRCS CPS 391)	Replace a Strip of Cropland Near Watercourses or Water Bodies with Woody Plants **Or** Replace a Strip of Grassland Near Watercourses or Water Bodies with Woody Plants	Bare-root, hand planted	**General:** (1) The planting will consist of hand planted bare-root shrubs and trees; (2) 35 or more tree/shrub plantings per acre; and (3) Tree protection is required. **Materials:** (1) Bare root hardwood trees: 18-36" tall; (2) Bare root conifer trees: 1-1(2 years old).
		Bare-root, machine planted	**General:** (1) The plantings will consist of machine planted bare-root shrubs and trees; (2) 35 or more tree/shrub plantings per acre; and (3) Tree protection is required. **Materials:** (1) Bare root hardwood trees: 18-36" tall; (2) Bare root conifer trees: 1-1(2 years old).
		Cuttings, Small to Medium	**General:**(1) hand planting in a mosaic pattern; and (2) 35 or more tree/shrub plantings per acre. **Materials:** Woody cuttings and live stakes or whips typically 1/4" to 1" diameter and 24-48"long.
		Cuttings, Medium to Large	**General**: (1) The planting consists of tree, shrub and live stakes (whips) planted by hand; (2) 35 or more tree/shrub plantings per acre; and (3) Planting protection is required. **Materials**: (1) Woody cuttings - medium size: 1/4" to 1" diameter and 24" to 48" long; (2) woody cuttings - large size: 2" to 6" in diameter and 6' long.
		Small container, hand planted	**General**: (1) The planting will consist of hand planted shrubs and trees; (2) 35 or more tree/shrub plantings per acre; and (3) Planting protection is required **Materials**: Potted shrub or tree size is 1 quart.
		Small container, machine planted	**General**: (1) The planting will consist of machine planted shrubs and trees; (2) 35 or more tree/shrub plantings per acre; and (3) Tree shelters will be provided. Materials: Potted shrub or hardwood/conifer tree: 1 quart.
		Large container, hand planted	**General**: (1) The planting will consist of hand planted l shrubs and trees; (2) 35 or more tree/shrub plantings per acre; and (3) Tree shelters will be provided. **Materials**: Potted or balled shrub or tree size: 2-3 gal.

HSP Agricultural Management Practice Name	Practice Implementation Name* (Compost–Planner)	Scenario Name*	Implementation Guidelines
Compost Application to Annual Crop (CDFA)	Compost (C:N ≤ 11) application to annual crops	Compost from Certified Composting Facility	Application rate must be between 2.2-3.6 Dry tons/Acres
	Compost (C:N > 11) application to annual crops		Application rate must be between 4.0-5.3 Dry tons/Acres
Compost Application to Perennials, Orchards and Vineyards (CDFA)	Compost (C:N ≤ 11) application to annual crops	Compost from Certified Composting Facility	Application rate must be between 1.5-2.9 Dry tons/Acres
	Compost (C:N > 11) application to annual crops		Application rate must be between 4.0-5.3 Dry tons/Acres
Compost Application to Grassland (CDFA)	Compost (C:N > 11) application to grazed, irrigated pasture	Compost from Certified Composting Facility	Application rate must be between 4.0-5.3 Dry tons/Acres
	Compost (C:N > 11) application to grazed rangeland		Application rate must be between 4.0-5.3 Dry tons/Acres

Proposed New Practices

HSP Agricultural Management Practice Name	Practice Implementation Name* (COMET –Planner)	Scenario Name*	Implementation Guidelines
Nutrient Management (USDA NRCS CPS 590)	Improved N Fertilizer Management on Irrigated Cropland – Reduce Fertilizer Application Rate by 15%	Basic NM	A nutrient management budget will be developed for each field(s) based on soil test analysis and land grant university recommendations or crop removal rates.
	Improved N Fertilizer Management on Non-Irrigated Cropland – Reduce Fertilizer Application Rate by 15%		
Conservation Crop Rotation (USDA NRCS CPS 328)	Decrease Fallow Frequency or Add Perennial Crop to Rotations	Basic rotation	Effective implementation of a conservation crop rotation to provide high residue and/or perennial crops.
		Specialty crops	Effective implementation of a rotation of organic or non-organic specialty crops (fruits and vegetables).
Alley Cropping (USDA NRCS CPS 311)		Tree-planting, single row	(1) Potted or balled and burlapped hardwood tree size: 2-3 gal; and (2) Plant density is 200 or more trees/acre.
Multistory Cropping (USDA NRCS CPS 379)		Free trees or shrubs	For enhancement of multi-story agroforests or improvement of overstory conditions on existing cropland.
		Native shrub planting	(1) Plant Density is 200 or more plantings/acre; and (2) Shrub seedling size is no less than 1 qt.
		Native tree planting	(1) Plant Density is 200 or more plantings/acre; and (2) Tree seedling size is no less than 1 qt.
		Non-native shrubs	(1) Plant density is 200 or more plantings/acre; (2) Bare root tree size is 6-18" tall, band pots of common species trees or shrubs, and/or (3) tree or shrub seedling containerized size is no less than 10 cu. in..
		Non-native tree planting	(1) Plant density is 200 or more plantings/acre; (2) Bare root tree size is 6-18" tall, band pots of common species trees or shrubs, and/or (3) Tree or shrub seedling containerized size is no less than 10 cu. in..

HSP Agricultural Management Practice Name	Practice Implementation Name* (COMET –Planner)	Scenario Name*	Implementation Guidelines
Strip Cropping (USDA NRCS CPS 585)	Add Perennial Cover Grown in Strips with Irrigated Annual Crops	Wind and water erosion	(1) Two or more strips are required; (2) 50% or more vegetation cover must be perennial and erosion resistant crops.
	Add Perennial Cover Grown in Strips with Non-Irrigated Annual Crops		
Forage and Biomass Planting (USDA NRCS CPS 512)	Conversion of Annual Cropland to Irrigated Grass/Legume Forage/Biomass Crops **Or** Conversion of Annual Cropland to Non-Irrigated Grass/Legume Forage/Biomass Crops	Nonnative high seeding rate, no lime	(1) Seeding rate is no less than 30 lb/acre PLS (pure live seed); and (2) No-Till/grass drill is used to seed.
		Nonnative standard seeding rate, no fertilizer	(1) Seeding rate is no less than 9 lb/acre PLS (pure live seed); and (2) No-Till/grass drill is used to seed.
		Nonnative standard seeding rate with fertilizer	(1) Seeding rate is no less than 9 lb/acre PLS (pure live seed); and (2) No-Till/grass drill is used to seed.
		Non-native high seeding rate with lime or similar amendment	(1) Fields where moisture is not limited; (2) Seeding rate is no less than 30 lb/acre PLS (pure live seed); (3) No-Till/grass drill is used to seed.
Conservation Cover ((USDA NRCS CPS 327)	Convert Irrigated Cropland to Permanent Unfertilized Grass Cover Or Convert Irrigated Cropland to Permanent Unfertilized Grass/Legume Cover Or Convert Non-Irrigated Cropland to Permanent Unfertilized Grass Cover Or Convert Non-Irrigated Cropland to Permanent Unfertilized Grass/Legume Cover	Introduced species	Introduced cool season perennial grass to reduce soil erosion, water/sediment runoff and dust emissions.
		Introduced species with foregone income	Introduced, cool season perennial grass for organically managed lands.
		Monarch species - mix	A mix of native grass and forbs for specialized purposes (wildlife, pollinators or ecosystem restoration); Species not readily available and/or difficult to produce and harvest.
		Monarch species - mix with foregone income	A mix of native grass and forbs for specialized purposes; Species not readily available and/or difficult to produce and harvest.

HSP Agricultural Management Practice Name	Practice Implementation Name* (COMET –Planner)	Scenario Name*	Implementation Guidelines
Conservation Cover (USDA NRCS CPS 327) *(Continued)*	Convert Irrigated Cropland to Permanent Unfertilized Grass Cover Or Convert Irrigated Cropland to Permanent Unfertilized Grass/Legume Cover Or Convert Non-Irrigated Cropland to Permanent Unfertilized Grass Cover Or Convert Non-Irrigated Cropland to Permanent Unfertilized Grass/Legume Cover	Native species	Mixture of native and warm season perennial grass to reduce soil erosion, water/sediment runoff and dust emissions.
		Native species with foregone income	Mixture of native and warm season perennial grass. Forgone income is for dryland wheat or oats.
		Pollinator species	Permanent vegetation, including a mix of native grasses, legumes, and forbs to provide habitat for pollinators.
		Pollinator species with foregone income	Permanent vegetation, including a mix of native grasses, legumes, and forbs to provide habitat for pollinators.
Range Planting (USDA NRCS CPS 550)	Seeding forages to improve rangeland condition	Native species broadcast	(1) Predominately native adapted perennial species (native forb, cool season and native perennial grass); (2) Preparing the seedbed may be required prior to broadcast seeding; (3) Seeding rate is 18 lb/acre PLS.
		Native species high forb drilled	(1) Predominately native adapted perennial species (native forb, cool season and native perennial grass); and (2) No-till drill or range drill is used to seed.
		Native species low forb drilled	(1) Predominately native adapted perennial species (native forb, cool season and native perennial grass); and (2) no-till drill or range drill is used to seed.
		Nonnative species broadcast	(1) Three Species Mix - cool season and introduced perennial grass; (2) Preparing the seedbed may be required prior to broadcast seeding; and (3) Seeding rate is 18 lb/acre PLS.
		Nonnative species drilled	(1) Three Species Mix - cool season and introduced perennial grass; and (2) No-till drill or range drill is used to seed.
		Shrub plugs	(1) Shrub seedling or transplant, bare root shrubs 3 to 5 feet tall; (2) Typical planting density ay 1000 plants/acre.

HSP Agricultural Management Practice Name	Practice Implementation Name* (COMET –Planner)	Scenario Name*	Implementation Guidelines
Grassed Waterway (USDA NRCS CPS 412)	Convert Strips of Irrigated Cropland to Permanent Unfertilized Grass/Legume Cover **Or** Convert Strips of Non-Irrigated Cropland to Permanent Unfertilized Grass /Legume Cover	Base Waterway	Waterways area measured from top of bank to top of bank. Typical practice is 1200' long, 12' bottom, 8:1 side slopes, and 1.5' depth.
		Base waterway with checks	Waterways area measured from top of bank to top of bank. Typical practice is 1200' long, 12' bottom, 8:1 side slopes, 1.5' depth. Fabric or stone checks are installed every 100 feet along the length of the waterway perpendicular to waterflow and are 2/3 the waterway top width to reduce maintenance and provide temporary protection until vegetation is established. Fabric Checks are installed 18" deep with 12" laid over on the surface.
Prescribed Grazing (USDA NRCS CPS 528)	Grazing Management to Improve Irrigated Pasture Condition **Or** Grazing Management to Improve Rangeland or Non-Irrigated Pasture Condition	Pasture, basic	Design and implement a grazing system to enhance pasture condition and ecosystem function and optimize efficiency and economic return through monitoring & record keeping.
		Range, basic	Design and implementation of a grazing system that will enhance rangeland health and ecosystem function and optimize efficiency and economic return through monitoring & record keeping.
Tree/Shrub Establishment (USDA NRCS CPS 612)	Conversion of Annual Cropland to a Farm Woodlot	Conservation, hand planting, browse protection	To improving a forestry or agroforestry setting, planting density is 150 trees/acre. Bare root hardwood seedling or transplant: shrubs 6-18" tall and trees 18-36" tall. Seedlings are protected from deer browsing.
	Conversion of Grassland to a Farm Woodlot		
Compost Application to Annual Crop (CDFA)	Compost (C:N ≤ 11) application to annual crops	On-farm produced compost	Application rate must be between 2.2-3.6 Dry tons/Acres
	Compost (C:N > 11) application to annual crops		Application rate must be between 4.0-5.3 Dry tons/Acres
Compost Application to Perennials, Orchards and Vineyards (CDFA)	Compost (C:N ≤ 11) application to annual crops	On-farm produced compost	Application rate must be between 1.5-2.9 Dry tons/Acres
	Compost (C:N > 11) application to annual crops		Application rate must be between 4.0-5.3 Dry tons/Acres
Compost Application to Grassland (CDFA)	Compost (C:N > 11) application to grazed, irrigated pasture	On-farm produced compost	Application rate must be between 4.0-5.3 Dry tons/Acres
	Compost (C:N > 11) application to grazed rangeland		Application rate must be between 4.0-5.3 Dry tons/Acres

*Legend:

Practice Implementation Name: These agricultural management practices are available for selection in the COMET-Planner and Compost-Planner quantification tools, as specified. Access the quantification tools at: https://www.arb.ca.gov/cc/capandtrade/auctionproceeds/quantification.htm .

Implementation Guidelines: Some agricultural management practices have additional requirements that may not be listed by the USDA-NRCS as a requirement in the Conservation Practice Standard (e.g., compost application rates, minimum widths for establishing some herbaceous and woody practices, or minimum tree densities for woody practices). These requirements ensure alignment with the GHG estimation methods. For more detail, see: https://www.arb.ca.gov/cc/capandtrade/auctionproceeds/quantification.htm and https://efotg.sc.egov.usda.gov/treemenuFS.aspx .

Scenario Name: This is the corresponding agricultural management practice scenario under which a particular practice may be funded, as determined by CDFA in collaboration with USDA-NRCS.