

**ENVIRONMENTAL FARMING ACT SCIENCE ADVISORY PANEL (EFA SAP)  
CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE**

**MEETING AGENDA**

**Covid-19 social distancing measures will be observed at this location**

**July 16, 2020**

**9 AM to 3 PM**

**California Department of Food and Agriculture**

**Main Auditorium**

**1220 N Street, Sacramento, CA 95814**

**REMOTE ACCESS**

**Meeting participants are encouraged to attend remotely to limit the spread of Covid-19**

Webinar information

Registration URL: <https://attendee.gotowebinar.com/register/8085116483917580>

Webinar ID: 501-912-323

Presentation materials will be posted at the following link prior to the meeting:

[https://www.cdfa.ca.gov/EnvironmentalStewardship/Meetings\\_Presentations.html](https://www.cdfa.ca.gov/EnvironmentalStewardship/Meetings_Presentations.html)

Topic	Presenter	Action Level
1. Meeting begins – Welcome remarks	Interim Chair Dlott	Informational Item
2. Introduction of New EFA SAP members	Interim Chair Dlott	Informational Item
3. Selection of Chair	Interim Chair Dlott	Action Item Requires EFA SAP Approval
4. Minutes from January 21, 2020 meeting	Interim Chair Dlott	Action Item Requires EFA SAP Approval
5. Stakeholder proposal to add an Organic Transition Plan to the Healthy Soils Program (HSP) • Presentation by the HSP team • Opportunities for public comment	HSP Team, CDFA	Action Item Requires EFA SAP Input
6. Stakeholder proposal to establish a SWEEP subcommittee	Amrith Gunasekara, PhD, CDFA	Action Item Requires EFA SAP Approval
7. State Water Efficiency and Enhancement • Program Updates	SWEEP Team, CDFA	Informational Item
8. Healthy Soils Program • Program updates New Practices solicitation update	HSP Team, CDFA	Informational Item
9. Technical Assistance Program • Program Updates	Carolyn Cook, MSc, CDFA	Informational Item

10. Public Comments	Interim Chair Dlott	Informational Item
11. Next Meeting and Location – Meeting ends	Interim Chair Dlott	Informational Item

## EFA SAP MEMBERSHIP

<https://www.cdfa.ca.gov/oefi/efasap/>

Jeff Dlott, PhD, SureHarvest, Member and Interim Chair

Don Cameron, Terranova Ranch, Member

Vicky Dawley, Tehama RCD, Member

Judith Redmond, Full Belly Farm, Member

Michelle Buffington, PhD, California Air  
Resources Board, CalEPA, Member

Keali'i Bright, PhD, Assistant Director, DOC,  
Natural Resources Agency, Member

Leonard Diggs, Pie Ranch, Member

Doug Parker, PhD, UCCE, Subject Matter Expert

Tom Hedt, USDA NRCS, Subject Matter Expert

Amanda Hansen, Deputy Secretary for Climate  
Change, Natural Resources Agency, Member

Scott Couch, Supervising Engineering Geologist,  
State Water Board, CalEPA, Member

CDFA Liaison to the Science Panel - Amrith (Ami) Gunasekara, PhD,

All meeting facilities are accessible to persons with disabilities. If you require reasonable accommodation as defined by the American with Disabilities Act, or if you have questions regarding this public meeting, please contact Amrith Gunasekara at (916) 654-0433.

More information at: <http://cdfa.ca.gov/Meetings.html> and

[http://www.cdfa.ca.gov/EnvironmentalStewardship/Meetings\\_Presentations.html](http://www.cdfa.ca.gov/EnvironmentalStewardship/Meetings_Presentations.html)

# Agenda Item 2

Introduction of New EFA SAP members

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[CDFA Home](#) | [OEFI](#) | [EFASAP](#) | [Leonard Diggs](#)

## Leonard Diggs – EFA SAP

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Leonard Diggs is Director of Operations and Farming Education at Pie Ranch in Pescadero, California. He has managed sustainable and organic farms in northern California for over 30 years, including a 365 acre college farm with annual and perennial crops, a winery, livestock and a mixed species forest. Leonard has also instructed a wide range of agricultural classes and served on numerous agricultural boards and committees in an effort to share his experiences with current and future generations of gardeners and farmers.



[California Ag Water Use Fact Sheet](#) 

[CDFA By the Numbers 2016](#) 

[CDFA Home](#) :: [OEFI](#) :: [EFASAP](#) :: [Amanda Hansen](#)

## Amanda Hansen — EFA SAP

Amanda Hansen serves as Deputy Secretary for Climate Change at the California Natural Resources Agency. From 2013 to 2017, she was a director of the Community Reconstruction Program in Governor Andrew Cuomo's Office of Storm Recovery. In 2012, Amanda served as deputy associate director for policy outreach at the White House Council on Environmental Quality. She was chief of staff to the chairman of the 2010-2011 round of United Nations climate change negotiations, and a foreign affairs officer at the U.S. Department of State's Bureau of Oceans and International Environmental and Scientific Affairs from 2005 to 2009. Amanda earned her Masters of Public Policy in environmental policy from the University of Maryland, and a Bachelor's degree in the interdisciplinary Science in Society program at Wesleyan University. She lives in El Dorado Hills, California with her husband, children, and dog where they enjoy all things outdoors.



**SB/DVBE Program**

# Agenda Item 3

Selection of Chair

Bylaws;

<https://www.cdfa.ca.gov/oefi/efasap/docs/BylawsEFA-SAP2017.pdf>

PROCEDURES FOR THE  
CANNELLA ENVIRONMENTAL FARMING ACT SCIENCE ADVISORY PANEL  
(Revised 3/16/2017)

The following will guide the activities of the Cannella Environmental Farming Act Scientific Advisory Panel (Science Panel), created under the Food and Agricultural Code, Division 1, Chapter 3, Article 8.5, Sections 560-568.

## PANEL STRUCTURE

### 1.1 Membership

As provided by Section 568, the Panel shall: 1) Consist of nine members. 2) Five members shall be appointed by the Secretary of Food and Agriculture, with at least two members having a minimum of five years of training and experience in the field of agriculture and shall represent production agriculture, at least one member shall have training and field experience in on-farm management practices that reduce greenhouse gas emissions, sequester carbon, or both; at least one member shall be certified as a producer pursuant to the federal Organic Foods Production Act of 1990 (7 U.S.C. Sec. 6501 et seq.); and at least one member shall have technical expertise in agricultural conservation planning and management. 3) Two members shall be appointed by the Secretary for Environmental Protection, with one member having a minimum of five years of training and experience in the field of human health or environmental science, and one shall have expertise in greenhouse gas emissions reductions practices related to agriculture. And 4) Two members who have a minimum of five years of training and experience in the field of resource management shall be appointed by the Secretary of the Natural Resources Agency, with one member additionally having expertise in climate change adaptation and climate change impacts in the agricultural sector.

In accordance with Section 568 the secretary may also appoint, in consultation with the panel, ex officio nonvoting members to the panel and the panel may establish ad hoc committees, which may include professionals, scientists, or representatives of nongovernmental entities, to assist it in performing its functions.

### 1.2 Terms

Of the members first appointed to the Panel, two shall serve for a term of two years and three shall serve for a term of three years, as determined by lot. Thereafter, members shall be appointed for a term of three years. Any variances which occur shall be filled for the remaining unexpired term.

### 1.3 Vacancies

Any vacancy that occurs during an unexpired term shall be filled by the appointing agency for the remainder of the unexpired term, in accordance with the requirements set for in section 1.1.

#### 1.4 Officers

The permanent officers of the Panel shall be: Chairperson and Vice Chairperson. The Panel may from time to time create additional officers with such titles and duties as it may assign.

#### 1.5 Chairperson

The Chairperson shall preside over meetings of the Panel, and shall serve as the principal spokesperson for the Panel.

#### 1.6 Vice Chairperson

The Vice Chairperson shall serve as Chairperson in the absence of the Chairperson.

#### 1.7 Election of Panel Officers

Panel officers shall be elected for a term of two or three years as specified in section 1.2, commencing with the October 2011 meeting. An office may be held for two consecutive terms, but not more than two consecutive terms.

#### 1.8 Ad Hoc Committees

As defined in Section 568 (c), the Panel may establish ad hoc committees, which may include professionals, scientists, or representatives of nongovernmental entities, to assist it in performing its functions.

### II. AD HOC COMMITTEES

#### 2.1 Membership

The Panel may establish ad hoc committees, which may include professionals or scientists, to assist it in performing its functions, and Panel members. The Chairperson and membership of these committees shall be determined by the Panel Chairperson or Panel.

#### 2.2 Quorums

A quorum for the conduct of ad hoc committee business shall be a majority of the members, plus one. A majority of the quorum shall be entitled to adopt recommendations constituting committee action.

Once a quorum has been established and a meeting has commenced, a committee may continue to meet and take action even if, as a result of early retirement of some members, less than a quorum of the subcommittee are in attendance.

#### 2.3 Minutes

Ad Hoc Committees shall keep meeting minutes and shall make approved minutes available to the public in a timely manner.

### III. PANEL MEETINGS

#### 3.1 Meetings

Meetings of the Panel shall be scheduled as needed and shall be noticed



according to the provisions of the Bagley-Keene Open Meeting Act (Government Code Sections 11120 et seq.). A copy of the Bagley-Keene Act shall be provided to each Panel member.

### 3.2 Notice of Meetings

Written notice of all meetings shall be sent to all interested persons entitled to notice under the provisions of the Bagley-Keene Open Meeting Act.

### 3.3 Public Meetings

All meetings of the Panel shall be open to the public and in other respects shall conform to requirements of the Bagley-Keene Open Meeting Act.

### 3.4 Panel Action

A quorum for the conduct of Panel business shall be a majority of Panel Members plus one [six of the nine-member Panel].

### 3.5 Place of Meetings

Meetings shall be held as specified in the official meeting notice.

### 3.6 Minutes

The Panel shall keep meeting minutes and shall make approved minutes available to the public in a timely manner.

## IV. PANEL COMMUNICATIONS

### 4.1 Public Communications

The Science Advisor to the Secretary of the Department of Food and Agriculture shall be the Department's liaison to the panel and official spokesperson for the Panel in the Department.

### 4.2 Communications with the Department

While any Panel member may communicate with the Department, official communications from the Panel shall be sent by the Science Advisor.

### 4.3 Communication to Panel Members

In recognition of the Panel's broad responsibilities, each member of the Panel shall have the responsibility to maintain lines of communication with his/her appointing agency.

### 4.4 Reports to Committee from Department

The Department will furnish the Panel with information and reports reasonably necessary to allow the Panel to perform its advisory role.

### 4.5 Conflict of Interest Notice

Panel members are required to complete Form 700 documentation. Panel members will recuse themselves from voting on certain actions if they feel there is a conflict of interest.

## V. FUNCTION OF THE PANEL

### 5.1 Enumeration of Functions

The Panel shall perform to the best of its ability the advisory functions on all matters pertaining to Chapter 3 of Division 1 including making recommendations regarding incentives for the private sector to undertake economic activities that benefit the environment.

## VI. REIMBURSEMENT OF EXPENSES

### 6.1 Compensation and Reimbursements

The members of the Panel shall serve without compensation, but shall be reimbursed for reasonable expenses incurred attending meetings approved by the department.

# Agenda Item 4

Minutes from January 21, 2020 meeting

**CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE (CDFA)  
ENVIRONMENTAL FARMING ACT SCIENCE ADVISORY PANEL**

California Department of Food and Agriculture  
Auditorium  
1220 N Street  
Sacramento, CA 95814

**January 21, 2020  
10 AM to 4 PM**

**MEETING MINUTES**

**Panel Member in Attendance**

Jocelyn Bridson, Rio Farms (Chair and Member)  
Don Cameron, Terranova Ranch (Member)  
Vicky Dawley, Tehama RCD (Member)  
Judith Redmond, Full Belly Farm (Member)  
Michelle Buffington, PhD. CalEPA, ARB (Member)  
Jeffery Onsted, PhD, Resources Agency, DOC (Member)  
Scott Couch, CalEPA, State Water Board, (Member)  
Doug Parker, PhD. UC ANR (Subject Matter Expert)  
Thomas Hedt, USDA NRCS (Subject Matter Expert)

**State Agency Staff and Presenters**

Carolyn Cook, MSc, CDFA  
Geetika Joshi, PhD, CDFA  
Steph Jamis, MSc, CDFA  
Michael Wolff, PhD, CDFA  
Benjamin Nicholson, MBA, CARB  
Guihua Chen, PhD, CDFA  
Dennis Grossman, PhD, Strategic Growth Council  
Amrith Gunasekara, PhD, CDFA  
Nicole Lederer, Chair and Co-Founder, Environmental Entrepreneurs  
Anthony Myint, Director of Partnerships, Restore California  
Jane Sooby, Senior Outreach & Policy Specialist, CCOF  
Scott Park, Farmer, Park Farming Organics  
Kate Scow, PhD, Professor, University of California, Davis

**AGENDA ITEM 1 – Introductions**

The meeting was called to order at 10:05 AM by Chair Bridson. Panel members introduced themselves. Present at the meeting were all the members noted above under “Panel Members in Attendance.” A quorum of at least six members was present at the meeting.

**AGENDA ITEM 2 – Minutes**

Chair Bridson introduced the October 17, 2019 meeting minutes. Member Cameron made a motion to approve the minutes. Member Dawley seconded the motion. The motion to approve the minutes was passed by all members present.

**AGENDA ITEM 3 – Whole Orchard Recycling (WOR)**

A staff presentation on the WOR practice was given by Dr. Wolff. The presentation reviewed a proposal to add the WOR to the Healthy Soils Incentive Program, revisited the modeling work, shared practice costs, covered public comments received for the WOR practice and discussed

the updated staff recommendations for practice requirements.

Mr. Hedt from the USDA NRCS informed the EFA SAP that an interim practice standard for WOR is being adopted. NRCS EQIP is using the work done by CDFA to inform the interim practice and the agency is working on a payment schedule.

CDFA staff fielded several questions from EFA SAP members;

- Subject matter expert Hedt inquired if orchards were being removed due to the Sustainable Groundwater Management Act (SGMA) and not being replanted, what the best management of land should be as observed from the modelling work. Dr. Wolff responded that it could be ecosystem restoration type of work but that these systems would not be compatible with the modelling nor has that scenario been modelled at this time.
- Member Onsted inquired about the initial studies considering burning and WOR and if there was any data on the tree biomass being removed or orchards left abandoned. Dr. Wolff indicated that such data currently does not exist to his knowledge.
- Member Couch inquired why the cost estimates do not include the “pulling” or physical remove of the trees from the soil. Mr. Wolff responded that the since the life of the orchard trees have been reached, the farmer would be initiating the practice of removing the trees regardless of the disposal method. Therefore, the proposed payment rate primarily covers shredding of the woody material.
- Member Cameron asked if there was more carbon in almond trees compared to softer woody trees. Dr. Wolff responded that in the modelling work and subsequent analysis, age of the tree was as a driving factor in the modeling rather than the characteristics of the woody material, which are difficult to model.
- Member Redmond suggested that other options not modelled, such as permanent fallow or annual cropping, could be included as research type projects in the Healthy Soils Program. Member Dawley agreed that with the implementation of SGMA, farmers will need the other options such as permanent fallow or annual crops and more research is needed.
- Chair Bridson noted that co-benefits of the practice might prevent the leaching of nutrients and it would be beneficial to do more research work around this topic. Chair Bridson also inquired if a more accurate estimate would be the higher biomass value rather than the staff recommended 14 tons since almond trees might have higher biomass than other trees. Dr. Wolff noted that the practice was designed to include all orchard crops. Dr. Gunasekara also noted that the 14 tons value provides a conservative estimate for greenhouse gas reduction calculations and ensures the practice is available to other tree crops.
- Member Cameron questioned if the size of wood chips were smaller or larger than 2 inches, if the carbon sequestration and greenhouse gas values change. Dr. Wolff noted that smaller chips can result in dust creation and loss of the product to erosion where in some of the field experiments larger chunks did not seem to have an adverse effect on soil organic carbon sequestration and they decomposed in a few years.
- Member Onsted inquired if farmers can apply to both the CDFA Healthy Soils Program and USDA NRCS EQIP. Dr. Gunasekara responded that they are able to apply to both programs, however farmers are discouraged from receiving funding from the two entities for the same field.

Comments from the Public to the EFA SAP members were facilitated by Chair Bridson;

- Mr. Brian Shobe from CalCAN thanked the CDFA team for the work completed. Mr. Shobe agreed with the new staff recommendations and clarification to the requirements. He thanked the EFA SAP for discussions on permanent fallow.

Following public comment, a motion was made to approve the staff recommendations as

presented and accept the WOR practice for inclusion as an incentivized practice in the Healthy Soils Program. Member Onsted seconded the motion. The motion was passed by all members present. A final report on the WOR analysis will be posted on the EFA SAP website.

#### AGENDA ITEM 9 – Technical Assistance Program Updates

This agenda item was moved up in the EFA SAP meeting schedule to accommodate several speaker schedules for Agenda Item 4.

An update of the AB 2377 Climate Smart Agriculture Technical Assistance Grants was provided by Ms. Cook of CDFA. The presentation included revisiting the 2019 Technical Assistance Grant Solicitation timeline, sharing of the news release that awarded 33 technical assistance grants for climate smart agriculture work totaling \$2.1 million, summary of the awardees, next steps for the program and the grant awardees and outreach completed using Twitter.

Questions from EFA SAP members were fielded by Ms. Cook;

- Chair Bridson inquired if the program awards resulted in good statewide coverage of technical assistance. Ms. Cook responded that there is good coverage of technical assistance in the agricultural regions and that several awardees will be providing statewide technical assistance as well.
- Member Couch inquired as to how long the grant agreement execution process takes. Dr. Gunasekara provided background on the grant agreement process and Ms. Cook discussed the budget and scope of work development process following the award announcement.

#### AGENDA ITEM 4 - Carbon Removal and Soil Sequestration Partnership

#### AGENDA ITEM 5 - Partnering with the CDFA Healthy Soils Director of Partnerships Informational Item Program

Both agenda item 4 and 5 were held under the format of a panel format with speakers taking turns presenting their information to the EFA SAP members. Ms. Lederer provided an overview of Written Testimony in Support of Sec. 2307(c)(7): Soil Health Demonstration Trial that her organization, Environmental Entrepreneurs, had worked on. Several other organizations presented with her in a panel discussion format including representatives from Locus Agricultural Solutions, Nori Marketplace and Restore California. The primary message of each of the presentations was to inquire how private entities can work with CDFA on the Healthy Soils Program. Several proposals were made to CDFA ranging from establishing partnerships to providing a verification element to those farms that conduct carbon sequestration management practices from private funding.

Ms. Lederer from Environmental Entrepreneurs provided background on their efforts for carbon removal from the atmosphere. She noted that USDA estimates that U.S farmers could store 12-14% of annual greenhouse gas emissions. She proposed establishing a new program that monetizes carbon storage by farmers and technology companies can help measure the benefits. She also supported soil health demonstration trials funded through federal organizations.

Representatives from Locus discussed the benefits of crop “probiotics” as soil amendments that can increase soil carbon sequestration while Mr. Neil Curlers from Civic Ethanol discussed the Low Carbon Fuel Standard incentive for reducing emissions through the use of ethanol to displace gasoline. Mr. Christopher Jospe from Nori informed the EFA SAP that one can establish baselines using Comet-Farm and then monitor for reductions. Mr. Anthony Myint highlighted that the restaurant industry is a \$97 million sector and there are private funds to incentivizing soil health practices on farms. However, what is missing is the verification component and that CDFA can play a role.

The panel fielded several questions from EFA SAP members.

Dr. Gunasekara requested from Environmental Entrepreneurs a written proposal. He stated to the EFA SAP, following the panel presentations, that there are many stakeholder entities seeking collaborations with CDFA. He also suggested that CDFA put together a comprehensive discussion with a large group of private entities, including those who presented, on organizing several listening sessions on how CDFA can better partner with private organizations and stakeholders interested in the Healthy Soils Program and the topic in general. Dr. Gunasekara noted that such a meeting can be organized, and the results and recommendations brought back to the EFA SAP for further discussion. Although no motion was passed, the EFA SAP in general, agreed to that pathway proposed by CDFA.

#### AGENDA ITEM 6 - Addition of an Organic Transition Option to the Healthy Soils Program

This agenda item included a panel format with speakers making presentations on the topic of adding an organic transition option and plan to the Healthy Soils Program. Ms. Sooby from CCOF led the discussions which was supported by a recently submitted letter to CDFA Healthy Soils Program. The letter describes a proposal to add a one-time payment as a Healthy Soils Program practice for an organic transition plan for those farmers who would like to transition to an organic farming system. As part of the practice, recipients would agree to use organic compliant practices during the three-year term and develop a plan for organic production. Ms. Sooby advocated that the proposal fits for Healthy Soils Program because once the farmer is an organic producer, they will be committing to practices that continue to build soil health.

Dr. Scow supported the proposal and provided a presentation on the importance of microbial soil communities. She noted that microbial communities transform carbon inputs into their own bodies and metabolites. This process in turn builds stable soil carbon pools. When microbes die, the carbon associated with their bodies bond with the soil mineral fraction. Carbon inputs need to be continually fed to maintain the soil carbon reservoir and have many co-benefits including water retention, soil stability, buffering from extreme heat and providing adaptation and resiliency. She highlighted the Century Experiment and Study being conducted at Russell Ranch at the University of California, Davis. After 19 years, the study shows that more carbon is sequestered in organic systems. In conventional, tilled systems there is some carbon lost whereas in organic, tilled system substantial increase in top 1 foot and down to 6 feet, there was a 13% increase in soil organic carbon.

Mr. Park, an organic farmer since 1995, who farms 1700 acres presented on his experiences. He began farming in the 1970's. Decision-making on his farm now relates to soil health since 1986. He advocated that adding this option to the Healthy Soils Program will help young farmers the opportunity to work with a professional to develop an organic transition plan.

Questions by EFA SAP members were fielded by the panel;

- Member Couch inquired if the Russell Ranch study used dairy manure. Dr. Scow stated that they used poultry compost every year in addition to cover crops.
- Member Cameron informed the group that he has been farming organically for 27 years. He has worked to integrate organic practices into the production of conventional agricultural crops. Member Cameron emphasized that one goal of the EFA SAP has been to be move these practices into conventional agriculture but has concerns that the proposal may not be compatible with greenhouse gas funding. Ms. Sooby noted that two thirds of Healthy Soil Program funds in 2018 and 2019 came from Prop 68.
- Chair Bridson noted it would be hard to identify the greenhouse gas benefits of the consultant fee that is required with the organic transition plan. Ms. Sooby responded by noting the California Air Resources Board (CARB) has funded technical assistance and that there are other programs funded by greenhouse reduction funds (California Climate Investments) that don't have quantifiable greenhouse reductions. The cost of an organic transition plan is \$4300.
- Member Redmond referenced the CARB investment plan which stresses long term

transformational goals. She noted that the vision gives space for the proposal. She also noted that this can be considered a form of technical assistance. Member Redmond stated that organic farmers have been some of the best supporters and would also help to promote the program further.

Public comments were facilitated by Chair Bridson;

- Mr. Brian Shobe from CalCAN spoke in support of the proposal.
- Mr. Bill Aileo from Environmental Working Group also spoke in support of the proposal. His comments were in line with those made by Mr. Shobe on the point that quantification of this practice may not be needed for inclusion in the Healthy Soils Program.
- Mr. Ben King from Colusa County supported the comments by Mr. Scott Park
- Online verbal comments included ensuring performance-based approaches be considered in the proposed new organic transition plan proposal, there were existing questions about the parameters for the proposal and any limits set on when the full transition to organic needs to take place.

Following public comments, the EFA SAP had further discussion;

- Chair Bridson commented again that many conventional farmers use these practices and the tools indicate a greenhouse gas reduction measure in the quantification tools. She suggested that further digestion and discussion could occur of the proposal.
- Member Redmond inquired when this would be implemented. CDFA staff informed her that anything new would be included in the next solicitation in 2021.
- Member Couch noted that the proposal may best fit within the Technical Assistance Program
- Member Onsted informed the group that there are planning grants. These grants are different than technical assistance grants.
- Chair Bridson moved that CDFA OEFI staff review the proposal and bring their findings including recommendations to the next meeting for further discussion. Mr. Cameron seconded that motion. All members passed the motion.

#### AGENDA ITEM 7 – Healthy Soils Program Update

Dr. Chen and Dr. Joshi from CDFA and Dr. Grossman from the Strategic Growth Council (SGC) provided updates on the Healthy Soils Program. Public comments received for a public review of the upcoming solicitation and how the comments were addressed was presented. A new mapping tool to assist grower applications was presented and the partnership between CDFA and SGC was noted in developing this new tool to make the Healthy Soil Program (HSP) application process more user friendly. There were several updates to the Comet-Planner tool as well including inclusion of payment rates into it. These new developments were presented to the EFA SAP and members of the public. Information surrounding the next solicitation was discussed by Dr. Joshi.

Member Redmond stated it would be beneficial to receive an update on older projects and the outcomes. Dr. Gunasekara responded that this could be one of the agenda items in a future EFA SAP meeting.

#### AGENDA ITEM 8 – State Water Efficiency and Enhancement Program Updates

Program updates on the SWEEP was presented to the EFA SAP by Ms. Jamis. Program updates included metrics on the last solicitation.

Dr. Gunasekara announced that the next meeting of the Panel would be on April 16, 2020. The location of the meeting is yet to be determined.

The meeting was adjourned at 4 PM.

Respectfully submitted by:



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Amrith Gunasekara, Ph.D.  
Liaison to the Environmental Farming Act Science Advisory Panel

# Agenda Item 5

Stakeholder proposal to add an Organic Transition Plan to the Healthy Soils Program (HSP)

Presentation by the HSP team

Opportunities for public comment



# CCOF

Advancing organic agriculture through certification, education, advocacy, and promotion.

## The Value of Adding an Organic Transition Option to the Healthy Soils Program

**Adding an Organic Transition Option in the Healthy Soils Program will meet the goals of CDFA and the Greenhouse Gas Reduction Fund while also providing social and economic co-benefits.**

The Organic Transition Option to CDFA's Healthy Soils Program (HSP) would offer a one-time payment of \$4,300<sup>1</sup> for a producer to hire an organic crop consultant to help them complete an Organic System Plan. An Organic System Plan is a detailed description of the practices and procedures used to produce organic crops and livestock. With an Organic System Plan in place, a producer is ready to be certified after the ground has undergone three years of transition during which no prohibited materials are applied.

### **An Organic Transition Option Facilitates GHG Emission Reductions**

Organic farming should be included as a climate change mitigation practice in HSP because it is an investment that meets the goals of CDFA and the Greenhouse Gas Reduction Fund (GGRF) to "achieve feasible and cost-effective GHG emission reductions."<sup>2</sup> Scientific studies, including those conducted by UC Davis researchers, consistently find that organic farming builds soil organic matter which stores carbon in the soil<sup>3</sup> and has lower net GHG emissions.<sup>4</sup> Certified organic producers are required by federal law to maintain or improve their soil organic matter and must use crop rotation, so assisting producers transition to organic certification will ensure they continue to use (and earn an organic premium to help offset the cost of) healthy soils practices.

### **An Organic Transition Option Benefits Disadvantaged Communities**

An Organic Transition Option would help the HSP meet GGRF requirements to benefit disadvantaged communities by reducing exposure to synthetic herbicides, insecticides, and fungicides in communities already disproportionately burdened by multiple sources of pollution. The Organic Transition Option would also make organic certification more accessible to limited resource, beginning, and socially disadvantaged farmers and ranchers by removing financial and technical barriers to transition.

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<sup>1</sup> This is the amount that NRCS offers through its Environmental Quality Incentives Program (EQIP) Organic Initiative, which provides funding for producers to hire a consultant to develop a conservation plan and an Organic System Plan for the farm.

<sup>2</sup> California Air Resources Board. (2019). Cap-and-Trade Auction Proceeds Third Investment Plan: Fiscal Years 2019-20 through 2021-22. Retrieved from

[https://ww3.arb.ca.gov/cc/capandtrade/auctionproceeds/2019\\_thirdinvestmentplan\\_final\\_021519.pdf?\\_ga=2.44130916.1147759135.1574730304-744090955.1563814456](https://ww3.arb.ca.gov/cc/capandtrade/auctionproceeds/2019_thirdinvestmentplan_final_021519.pdf?_ga=2.44130916.1147759135.1574730304-744090955.1563814456)

<sup>3</sup> Greater carbon storage in organically managed plots has been found in numerous published studies including reports on UC Davis trials, USDA Agricultural Research Service studies in Salinas, a national soil survey, and an international meta-analysis of soil quality data. See Wolf, K., Herrera, I., Tomich, T.P., & Scow, K. (2017). Long-term agricultural experiments inform the development of climate-smart agricultural practices. *California Agriculture*, 71, 120-124; Brennan, E.B., & Acosta Martinez, V. (2017); Cover cropping frequency is the main driver of soil microbial changes during six years of organic vegetable production. *Soil Biology and Biochemistry*, 109, 188-204; Ghabbour, E.A., Davies, G., Misiewicz, T., Alami, R.A., Askounis, E.M., Cuozzo, N.P., . . . Shade, J. (2017). Chapter one - national comparison of the total and sequestered organic matter contents of conventional and organic farm soil. *Advances in Agronomy*, 146, 1-35; Sanders, J. & Hess, J. (Eds), 2019. *Leistungen des ökologischen Landbaus für Umwelt und Gesellschaft*. Braunschweig: Johann Heinrich von Thünen-Institut, 364 p, Thünen Report 65. Accessed May 2, 2019 at: [https://www.thuenen.de/media/publikationen/thuenen-report/Thuenen\\_Report\\_65.pdf](https://www.thuenen.de/media/publikationen/thuenen-report/Thuenen_Report_65.pdf).

<sup>4</sup> De Gryze, S., Wolf, A., Kaffka, S. R., Mitchell, J., Rolston, D. E., Temple, . . . Six, J. (2010). Simulating greenhouse gas budgets of four California cropping systems under conventional and alternative management. *Ecological Applications*, 20(7), 1805-1819.

### **An Organic Transition Option Maximizes Economic, Environmental, and Public Health Co-Benefits**

An Organic Transition Option would meet the goal of CDFA and the GGRF to provide co-benefits because organic agriculture benefits the economy, environment, and public health. Organic agriculture sequesters carbon, creates jobs, improves soil water holding capacity, improves soil structure, reduces pollution from soil erosion and nutrient leaching, and improves environmental health. (Refer to CCOF's *Roadmap to an Organic California: Benefits Report* for detailed citations.)

Increasingly, organic farming is receiving recognition as an important strategy in preparing agriculture for climate change. The National Sustainable Agriculture Coalition (NSAC) recently published a report calling for the U.S. Department of Agriculture to *"Promote organic agriculture to make agriculture more resilient in the face of climate change while reducing GHG emissions from the agriculture production sector."*<sup>5</sup>

### **An Organic Transition Option Ensures the Continued Use of Healthy Soils Practices**

Supporting farmers and ranchers with an Organic Transition Option will make the organic transition economically feasible, provide them with experience in using healthy soils practices, and position them to become certified organic, which will incentivize the ongoing use of healthy soils practices beyond the three years of the HSP grant.

High consumer demand for organic products makes organic farming attractive to many producers, but the three-year transition is the most challenging part of the certification process. Transitional growers incur higher production costs when substituting organic management for chemical inputs but are not able to access the organic premium to offset these costs until the land has been managed organically for three years. Including an Organic Transition Option will support producers who choose to transition to organic.

### **An Organic Transition Option Supports CDFA in Expending Additional Funding**

As the HSP budget almost doubles in the coming year, CDFA will need to find ways to increase grower participation in the program. Offering an organic option will be popular with farmers and ranchers and attract more applicants to the HSP.

### **An Organic Transition Option is Needed Beyond the NRCS Program**

The federal Natural Resources Conservation Service (NRCS) offers conservation payments and funding to hire a consultant to develop an Organic System Plan through its Environmental Quality Incentives Program (EQIP). Some drawbacks of the EQIP Organic Initiative include a contract cap of \$140,000, which is much lower than the cap on general EQIP contracts of \$450,000. Also, payments for specific practices offered by NRCS are significantly lower than payments offered by HSP. Finally, EQIP Organic Initiative funding levels in California are insufficient to meet demand: in FY 2018, California NRCS bolstered the initial \$100,000 that was allocated for the Organic Initiative by an additional \$90,673, and in FY 2019 they allocated \$200,000 due to high grower demand.<sup>6</sup>

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<sup>5</sup> National Sustainable Agriculture Coalition. 2019. Agriculture and Climate Change: Policy Imperatives and Opportunities to Help Producers Meet the Challenge. Washington D.C.

<sup>6</sup> NRCS California Farm Bill Programs Summary for FY 2018 EQIP, prepared for the State Technical Advisory Committee; and personal communication with RaeAnn Dubay, NRCS Assistant State Conservationist—Programs, personal communication Nov. 19, 2019.

LETTER TO CDFA BY CCOF:  
ADDITION OF AN ORGANIC TRANSITION  
OPTION TO THE HEALTHY SOILS PROGRAM

ANALYSIS AND RECOMMENDATIONS BY  
CDFA HSP TEAM

JULY 16, 2020  
EFA SCIENCE ADVISORY PANEL MEETING  
SACRAMENTO, CA

## BACKGROUND INFORMATION

- January 16, 2020 - CCOF presents proposal to the EFA SAP at its public meeting held in Sacramento, CA
  - Panel style presentation
  - Information included a proposal for an Organic Transition Option in the CDFA Healthy Soils Program (HSP)
- January 16, 2020 - EFA SAP members make and move motion to have CDFA HSP evaluate proposal prior to next EFA SAP meeting in April, 2020
- April, 2020 - CDFA HSP team completed analysis
- April, 2020 – EFA SAP public meeting postponed indefinitely due to Covid-19 impacts
- July 16, 2020 – This meeting! Presenting analysis and recommendations



# ASK

- Add an “Organic Transition Option to CDFA’s Healthy Soils Program”
- One time payment of \$4,300 for:
  - Hiring Organic Crop Consultant
  - Develop an Organic System Plan
  - Proposal letter is part of EFA SAP binder posted here;  
[https://www.cdfa.ca.gov/oefi/efasap/meetings\\_presentations.html](https://www.cdfa.ca.gov/oefi/efasap/meetings_presentations.html)

## STEPS TAKEN BY CDFA HSP TEAM

### 1. CDFA team evaluated the request for the following:

- Does the ask fall within the requirements of the program in terms of costs (i.e, standard payment rates)? **No**
- Does the ask fall within the requirements of the program in terms of quantifiable GHG reductions? **No**
- What are the concerns (if any) with adding it to the HSP?
- Is there a way to accommodate this request (and similar future requests) in the HSP without compromising GHGs and available funds to farmers and ranchers? **YES...3 options**
- What reporting metrics would be needed to ensure government accountability for the use of these funds?

### 2. Drafted recommendation for EFA SAP consideration



## STEPS TAKEN BY CDFA HSP TEAM

1. CDFA team evaluated the request for the following:

- Does the ask fall within the requirements of the program in terms of costs (i.e, standard payment rates)? No
- Does the ask fall within the requirements of the program in terms of quantifiable GHG reductions?
- What are the concerns (if any) with adding it to the HSP?
- Is there a way to accommodate this request (and similar future requests) in the HSP without compromising GHGs and available funds to farmers and ranchers?
- What reporting metrics would be needed to ensure government accountability for the use of these funds?

2. Drafted recommendation for EFA SAP consideration

## Does the ask fall within the requirements of the program in terms of costs?

- All costs covered by HSP are Program Requirements. These include:
  - Standard payment rate (as opposed to itemized budget) for a management practice standards consistent with 20202 USDA NRCS EQIP payment rates
  - Payment for soil testing
  - An Organic System Plan is not a requirement for funding
  - Paying for consultants is not allowed under the HSP Incentives Program.
    - Standard Payments Rates are designed to cover material and labor costs for each practice implementation and to achieve GHG reduction benefits.
  - The HSP Incentives Program does not cover the cost of development of “plans” to date
  - Difficult for accountability purposes if grower decides not to pursue organic – cost paid out for plan and consultant can not be recovered.

## STEPS TAKEN BY CDFA HSP TEAM

### 1. CDFA team evaluated the request for the following:

- Does the ask fall within the requirements of the program in terms of costs (i.e, standard payment rates)?
- Does the ask fall within the requirements of the program in terms of quantifiable GHG reductions? No
- What are the concerns (if any) with adding it to the HSP?
- Is there a way to accommodate this request (and similar future requests) in the HSP without compromising GHGs and available funds to farmers and ranchers?
- What reporting metrics would be needed to ensure government accountability for the use of these funds?

### 2. Drafted recommendation for EFA SAP consideration

Does the ask fall within the requirements of the program in terms of quantifiable GHG reductions?

- HSP Incentives Program practices must achieve quantifiable GHG reductions:
  - All incentivized practices must have an GHG emission factor in the quantification methodology (COMET-Planner)
  - No quantification of GHG in Comet-planner for a organic transition plan
  - Scientific data to support developing an emission factor for an Organic System Plan to include in COMET-Planner is not available
  - CDFA HSP verifies implementation of practices that reduce GHGs. CDFA HSP does not verify any plans were completed to date
  - Practices typically implemented through organic transition plans are covered under the HSP with standard payment rates

## STEPS TAKEN BY CDFA HSP TEAM

### 1. CDFA team evaluated the request for the following:

- Does the ask fall within the requirements of the program in terms of costs (i.e, standard payment rates)?
- Does the ask fall within the requirements of the program in terms of quantifiable GHG reductions?
- What are the concerns (if any) with adding it to the HSP?
- Is there a way to accommodate this request (and similar future requests) in the HSP without compromising GHGs and available funds to farmers and ranchers?
- What reporting metrics would be needed to ensure government accountability for the use of these funds?

### 2. Drafted recommendation for EFA SAP consideration

## What are the concerns (if any) with adding it to the HSP?

- Addition of payments to incentives program will likely take away from funds provided directly to farmers and ranchers for practice implementation
  - Program aims to maximize projects on farms and ranches that directly reduce GHG and sequester carbon
- Other concerns:
  - Sets a precedent for paying for “planning” costs, and future requests may be made to cover costs for other planning activities
  - Planning costs can become expensive and utilize funds that would otherwise go to farmers and ranchers to implement practices

## STEPS TAKEN BY CDFA HSP TEAM

### 1. CDFA team evaluated the request for the following:

- Does the ask fall within the requirements of the program in terms of costs (i.e, standard payment rates)?
- Does the ask fall within the requirements of the program in terms of quantifiable GHG reductions?
- What are the concerns (if any) with adding it to the HSP?
- Is there a way to accommodate this request (and similar future requests) in the HSP without compromising GHGs and available funds to farmers and ranchers? Yes...3 options
- What reporting metrics would be needed to ensure government accountability for the use of these funds?

### 2. Drafted recommendation for EFA SAP consideration

## OPTIONS TO ACCOMMODATE – OPTION I

Option 1. Encourage organic transition applicants additional points in scoring criteria: Include Organic Transition Plans as allowable plan under the Conservation Plan category which gets 10 points out of 60 total

- **Pros**

- Farmers achieving environmental benefits through organic farming practices may be more competitive in the grants process
- Funds continue to be dedicated for direct payments to farmers implementing practices
- Funded practices achieve quantifiable GHG reductions

- **Cons**

- Applicants would need to use cost-share/own funds to prepare an Organic Transition Plan prior to submitting their application (currently business-as-usual case)
- Challenge for CDFA to track or monitor who is certified to create the organic plan



## OPTIONS TO ACCOMMODATE – OPTION 2

Option 2. Encourage organic transition applicants dedicated additional points in scoring criteria: Include Organic Transition Plans as dedicated plan which will be eligible for 10 points out of 70 total.

- **Pros**

- Farmers achieving environmental benefits through organic farming practices may be more competitive in the grants process
- Funds continue to be dedicated for direct payments to farmers implementing practices
- Funded practices achieve quantifiable GHG reductions
- Organic Transition Plans and Conservation Plans have different outcomes and not the same thing therefore dedicated points are supported

- **Cons**

- Applicants would need to use cost-share/own funds to prepare an Organic Transition Plan prior to submitting their application (currently business-as-usual case)
- Challenge for CDFA to track or monitor who is certified to create the organic plan

## OPTIONS TO ACCOMMODATE – OPTION 3

### Option 3. Add planning costs to the Technical Assistance (TA) Grants

- **Pros**

- Will allow for grantees to subcontract these costs further to appropriate professionals
- Itemized Budget worksheets for TA grants can accommodate these costs
- TAP budgets would reflect how many “plans” are going to be undertaken and cost, providing accountability for CDFA and verification options
- TA providers, with their engagement and interface with farmers and ranchers, would serve as a resource for CDFA to learn about existing interest in organic transition plans

- **Cons**

- May need to consider increasing TA grants to accommodate additional work.
  - Currently at \$20,000 per climate smart agriculture program
- Funds diverted from direct grants to farmers and ranchers to implement GHG practices
  - At the suggested cost of \$4,300, as few as 5 Organic Transition Plans exceed the total TA grant amount.
  - CDFA able to track the plan but not its<sup>34</sup> implementation given grant timeframes

## STEPS TAKEN BY CDFA HSP TEAM

1. CDFA team evaluated the request for the following:

- Does the ask fall within the requirements of the program in terms of costs (i.e, standard payment rates)?
- Does the ask fall within the requirements of the program in terms of quantifiable GHG reductions?
- What are the concerns (if any) with adding it to the HSP?
- Is there a way to accommodate this request (and similar future requests) in the HSP without compromising GHGs and available funds to farmers and ranchers?
- What reporting metrics would be needed to ensure government accountability for the use of these funds? TBD based on option selected

2. Drafted recommendation for EFA SAP consideration

## STEPS TAKEN BY CDFA HSP TEAM

### 1. CDFA team evaluated the request for the following:

- Does the ask fall within the requirements of the program in terms of costs (i.e, standard payment rates)?
- Does the ask fall within the requirements of the program in terms of quantifiable GHG reductions?
- What are the concerns (if any) with adding it to the HSP?
- Is there a way to accommodate this request (and similar future requests) in the HSP without compromising GHGs and available funds to farmers and ranchers?
- What reporting metrics would be needed to ensure government accountability for the use of these funds?

### 2. Drafted recommendation for EFA SAP consideration

## RECOMMENDATIONS FOR EFA-SAP

HSP Team recommends Options 1 or 2:

Option 1. Include Organic Transition Plans as allowable plan under the Conservation Plan category which gets up to 10 points out of 60 total

Option 2. Include Organic Transition Plans as dedicated plan which will be eligible for up to 10 points out of 70 total

Reasons:

1. No conflict with existing programmatic structure
2. Program continues to be driven by implementation of eligible practices in terms of GHG reductions and payments
3. Recipients can utilize existing 25% eligible advance toward the plan

## NEXT STEPS FOR EFA SAP

1. CDFA HSP team will facilitate questions from any of the EFA SAP members
2. EFA SAP members must hear public comment today before making motions or moving on a recommendation to the Secretary of CDFA
3. EFA SAP should allow written public comment following this remote July meeting to accommodate Covid-19 challenges
  - Suggested public comment period from July 20 to August 17, 2020
  - Will be posted here;  
[https://www.cdfa.ca.gov/oefi/efasap/meetings\\_presentations.html](https://www.cdfa.ca.gov/oefi/efasap/meetings_presentations.html)
4. EFA SAP should make final motions and recommendations after consideration written public comments at next meeting on October 15, 2020

# Agenda Item 6

Stakeholder proposal to establish a SWEEP  
subcommittee



May 26, 2020

TO: Secretary Karen Ross and the Environmental Farming Act Science Advisory Panel

**Re: Request for the EFA SAP to Convene a SWEEP Stakeholder Advisory Group**

Dear Secretary Ross and the Science Advisory Panel Members:

Thank you for the important role you have played in guiding the development of the State Water Efficiency and Enhancement Program (SWEEP) over the past six years. Your expert input to the program has contributed greatly to its success. Many farmers in our respective networks have benefitted from the program and are eager to see the program continue and expanded.

In light of new regulatory, technological, and policy developments, as well as stakeholder feedback, we, the undersigned, are requesting the Science Advisory Panel (SAP) convene a stakeholder advisory group to review and, if necessary, make recommendations for updates to the program. We are making this request now to give stakeholders and the SAP adequate time outside of SWEEP's typical quick-turnaround funding cycles to consider these developments and address the next phase of the program.

Farmers are facing a complex new regulatory environment, from implementation of the Sustainable Groundwater Management Act (SGMA) and the Irrigated Lands Regulatory Program (ILRP) to new requirements from the Bay-Delta Plan and the Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) Plan. These changes have made resource management more challenging and complicated, and require the need for both efficient and flexible on-farm water management systems. Concurrently, irrigation technologies are evolving rapidly, creating both exciting new opportunities and the need for more resources for some growers.<sup>1</sup>

For the first few years, SWEEP predominately received funding from the Greenhouse Gas Reduction Fund (GGRF), which required every project to demonstrate quantifiable on-farm greenhouse gas (GHG) reductions. This requirement led to the incentivization of micro and drip irrigation systems, and also had the consequence of complicating the implementation of on-farm water efficiency projects that use surface water, portable irrigation pumps, and pressurized water. The current funding source for the program (Proposition 68) and potential future funding sources for the program (e.g. potential bond funds or the General Fund) may not have the same GHG

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<sup>1</sup> Management of Agricultural Energy and Water Use with Access to Improved Data. Fresno State Center for Irrigation Technology and Ag H2O. 2017.



requirements as GGRF. As such, this may allow for a greater diversity of projects to help farmers address on-farm water management challenges.

In light of these changes and new opportunities for SWEEP, we are requesting the SAP use its authority under Section 568(c) of the Food and Agriculture Code<sup>2</sup> to convene stakeholders to make recommendations to address the following:

1. The program's ability to help farmers improve water use efficiency – what's working well and what might the program seek to improve? How might the program evolve to help farmers address new resource management challenges?
2. How might the program improve participation by operations that have historically faced barriers in accessing or utilizing the program?
3. How might promotion and coordination of SWEEP be improved with irrigation districts, groundwater sustainability agencies, and USDA-NRCS?

The state's record-breaking drought that spurred the creation of SWEEP in 2014 has thankfully subsided, but as temperatures continue to rise, the risk of severe droughts is predicted to increase in California by 50 percent by 2100.<sup>3</sup> Climate scientists also predict the state will increasingly experience precipitation whiplash, going from severe droughts to greater flooding.<sup>4</sup> We have a wealth of expertise in the state that can be tapped to participate in discussions on SWEEP, including farmers, technical assistance providers, irrigation experts, and irrigation industry representatives familiar with the grant program. We believe a diverse stakeholder advisory group can provide valuable expertise and time to assist the SAP in updating SWEEP to better serve our state's farmers in these challenging times, and we believe the best time to convene such a group is now.

Thank you for considering our request.

Sincerely,



Brian Shobe  
Associate Policy Director  
CalCAN



Taylor Roschen  
Policy Advocate  
California Farm Bureau Federation

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<sup>2</sup> FAC 568(c) states: "The panel may establish ad hoc committees, which may include professionals, scientists, or representatives of nongovernmental entities, to assist it in performing its functions."

<sup>3</sup> Pathak, T., et. al. 2018. Climate change trends and impacts on California agriculture: A detailed review. *Agronomy*, (3)25.

<sup>4</sup> Defined as "two consecutive years when wet season precipitation falls under the 20<sup>th</sup> percentile the first year and above the 80<sup>th</sup> percentile the second year." Source: Swain, D., Langenbrunner, B., Neelin, J., and Hall, A. 2018. Increasing precipitation volatility in twenty-first century California. *Nature Climate Change*, 427-433.



Kris Beal  
Executive Director  
Vineyard Team



Nathan Harkleroad  
Program Director  
Agriculture & Land Based Training  
Association



Laurel Marcus  
Executive Director  
California Land Stewardship Institute



Rex Dufour  
Western Regional Office Director  
National Center for Appropriate  
Technology (NCAT)



Andy Fisher  
Executive Director  
Ecological Farming Association

June 22, 2020

Dear Mr. Shobe, Ms. Roschen, Ms. Beal, Mr. Harkleroad, Ms. Marcus, Mr. Dufour, and Mr. Fisher:

Thank you for your letter regarding the State Water Efficiency and Enhancement Program (SWEET) and your ongoing partnership in our efforts to advance climate smart agriculture. We are proud of the accomplishments of the SWEET program.

As you know, California was in the depths of a severe drought when SWEET was developed and the program offered financial assistance to help farmers cope and adapt. Since 2014 SWEET has provided 848 awards, and over \$80 million, to California farmers seeking to save water and reduce greenhouse gas emissions. The program has been effective at improving understanding of the relationship between irrigation and greenhouse gas emissions while providing a flexible set of options for participation in climate mitigation that also benefit farmers measurably. We could not have executed SWEET, the first Climate Smart Agriculture incentive program offered at CDFA, without the valuable partnerships and contributions from stakeholders, irrigation experts, and technical assistance providers.

Whether in the midst of a severe drought or not, water availability will indefinitely be at the top of the list of farmers' worries. Your letter makes important points about the increasing complexity of water management in California. The impacts of climate change and regulations such as SGMA continue to challenge the agricultural community in decisions of water management. At CDFA we want SWEET to be a tool to help meet and surmount these challenges.

At the upcoming meeting of the Environmental Farming Act Science Advisory Panel (Science Panel) on July 16, 2020, the panel will be evaluating your letter under a public forum and recommending to me on the establishment of a sub-committee of the panel to discuss the three topics identified in your letter.

I look forward to the recommendations of the Science Panel and any sub-committee that is established. I am hopeful that practical and achievable recommendations will



Mr. Shobe, Ms. Roschen, Ms. Beal, Mr. Harkleroad, Ms. Marcus, Mr. Dufour, and Mr. Fisher  
June 22, 2020  
Page 2

take SWEEP into the future as a program that can be utilized by farmers statewide to meet regional concerns and adapt to a changing climate.

Thank you again for your partnership and advocacy in helping advance our Climate Smart Agriculture Programs for farmers and ranchers in California.

Yours truly,

A handwritten signature in blue ink that reads "Karen Ross". The signature is written in a cursive, flowing style.


Karen Ross  
Secretary



# **SWEEP SUB-ADVISORY GROUP OF THE EFA SAP**

## **SUGGESTED PROCESS FOR CONSIDERATION**

**EFA SAP MEETING  
JULY 16, 2020  
SACRAMENTO, CA**



# PURPOSE

To provide recommendations to the EFA SAP on the SWEEP program, specifically the topics enumerated below:

- THE PROGRAM'S ABILITY TO HELP FARMERS IMPROVE WATER USE EFFICIENCY – WHAT'S WORKING WELL AND WHAT MIGHT THE PROGRAM SEEK TO IMPROVE? HOW MIGHT THE PROGRAM EVOLVE TO HELP FARMERS ADDRESS NEW RESOURCE MANAGEMENT CHALLENGES?
- HOW MIGHT THE PROGRAM IMPROVE PARTICIPATION BY OPERATIONS THAT HAVE HISTORICALLY FACED BARRIERS IN ACCESSING OR UTILIZING THE PROGRAM?
- HOW MIGHT PROMOTION AND COORDINATION OF SWEEP BE IMPROVED WITH IRRIGATION DISTRICTS, GROUNDWATER SUSTAINABILITY AGENCIES, AND USDA-NRCS?

July 16, 2020 EFA SAP Meeting

CDFA presents letter to EFA SAP, response letter and proposes process for establishing sub-advisory group

August 2020

CDFA releases News Release to solicit applications for sub advisory group members

September 2020

Member applications are provided to EFA SAP for consideration. EFA SAP can determine number of members

Fall EFA SAP meeting

EFA SAP nominates member of sub-advisory group

Winter 2020

Sub-Advisory Group meets 3 times

Winter/Spring EFA SAP meeting 2021

Sub-advisory group presents to EFA SAP on recommendations. Opportunities for public comment initiated

Late Spring EFA SAP Meeting 2021

Consideration of public comments<sub>4/7</sub> EFA SAP considers recommendations

# Agenda Item 7

State Water Efficiency and Enhancement

Program Updates





# State Water Efficiency and Enhancement Program Update

ENVIRONMENTAL FARMING ACT SCIENCE ADVISORY PANEL  
July 16, 2020

# Proposition 68

- CDFA's SWEEP program received \$20 million.
- CDFA held two solicitations to award the funding
- Prop 68 requires that CDFA expend 20% (\$4M) of the funds to benefit Severely Disadvantaged Communities (SDACS)



## SWEEP Projects

Projects require both Water and GHG reductions from irrigation systems

# 2019 SWEEP Application Period

## 366 applications were submitted

- \$28.7 million requested
- \$14.9 million in matching funds
- \$6 million requested from 80 Socially Disadvantaged Farmers and Ranchers (SDFRs)
- \$6.5 million requested from 80 projects benefitting Severely Disadvantaged Communities (SDACs)
  - Reviewed and found 49



### 2019 SWEEP Solicitation

October 21<sup>st</sup> 2019 –  
December 16<sup>th</sup> 2019

### Review Process

Winter 2019-2020

### Awards Announced

March 17<sup>th</sup> 2020

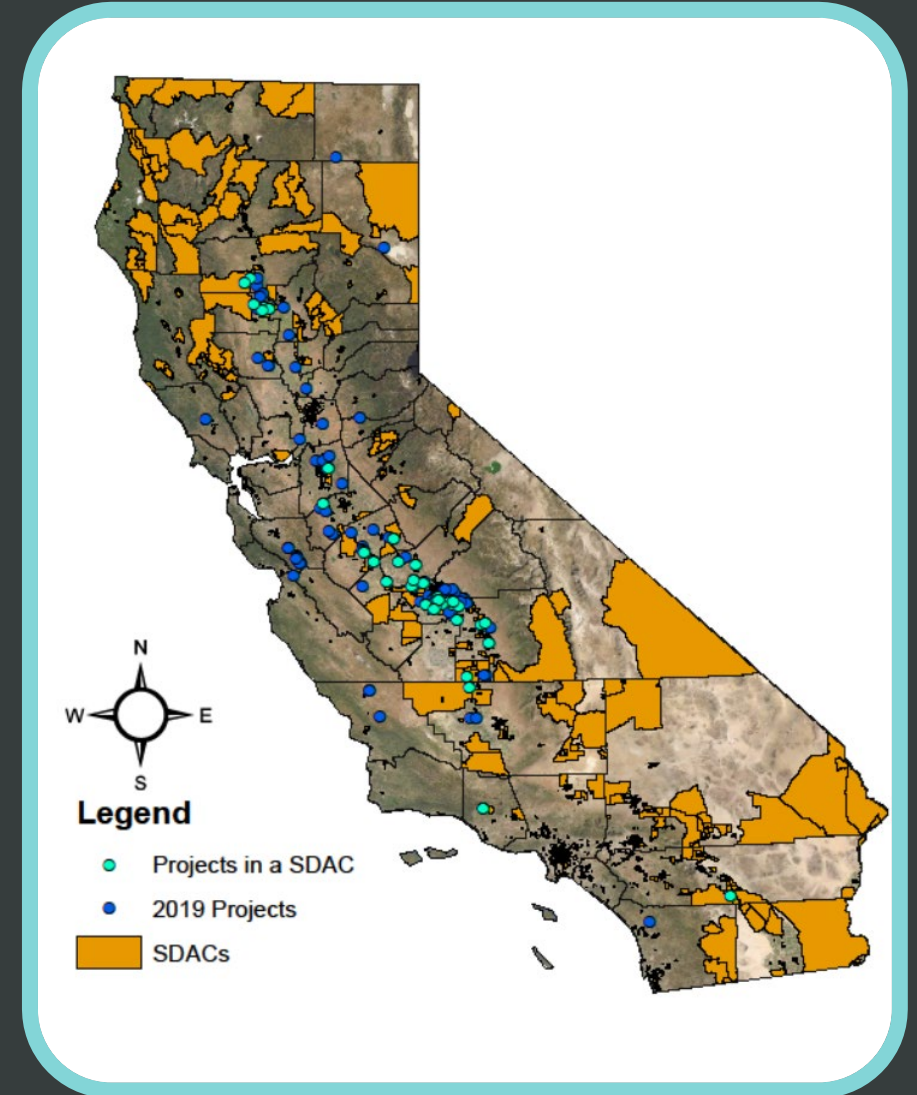
### Implementation Timeframe

June 15<sup>th</sup> 2020 –  
December 31<sup>st</sup> 2021

# 2019 SWEEP Awarded Projects

## 123 New Agreements

- \$9.57 million awarded
- \$4.78 million in matching funds
- 42 SDAC projects awarded
- \$3.43 million for SDAC
- 69 SDFR projects awarded
- \$5.1 million for SDFR
- 7 projects are both SDFR and SDAC
- 10,325 acres impacted
- Projected water savings of 7,182 acre-feet per year
- Projected GHG reductions of 3,271 MTCO2e per year



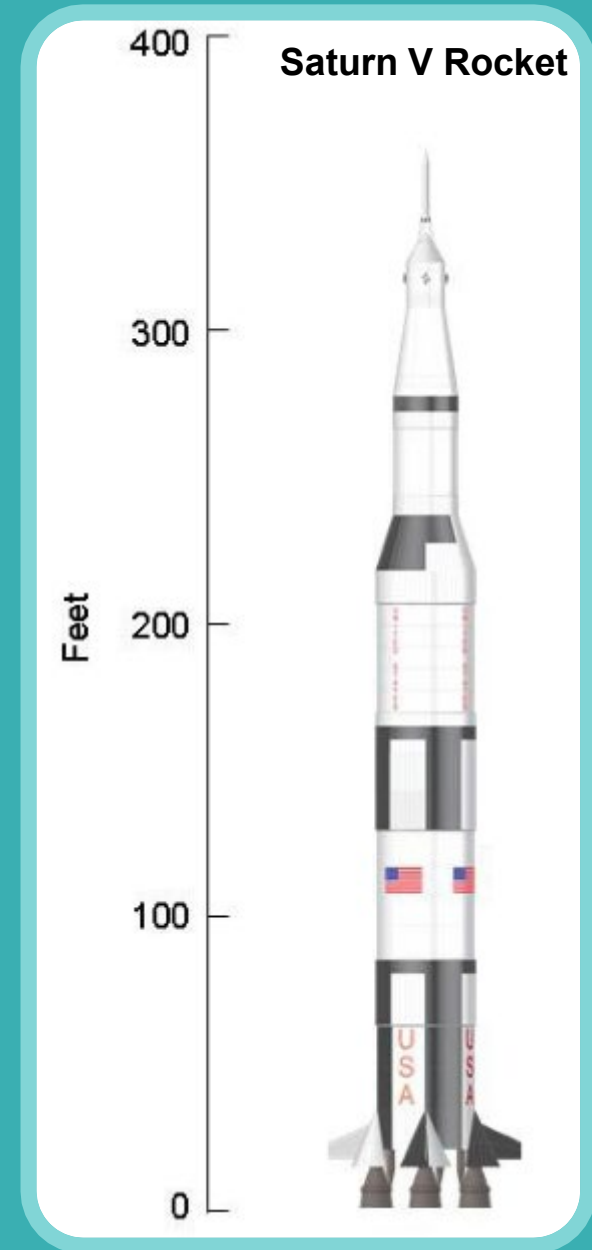
# 2018 and 2019 Totals

Awarded 231 projects over two rounds

- \$18.85 million awarded
- \$11.41 million on matching funds

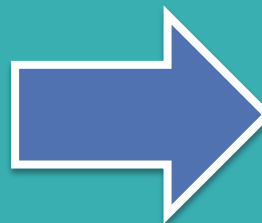
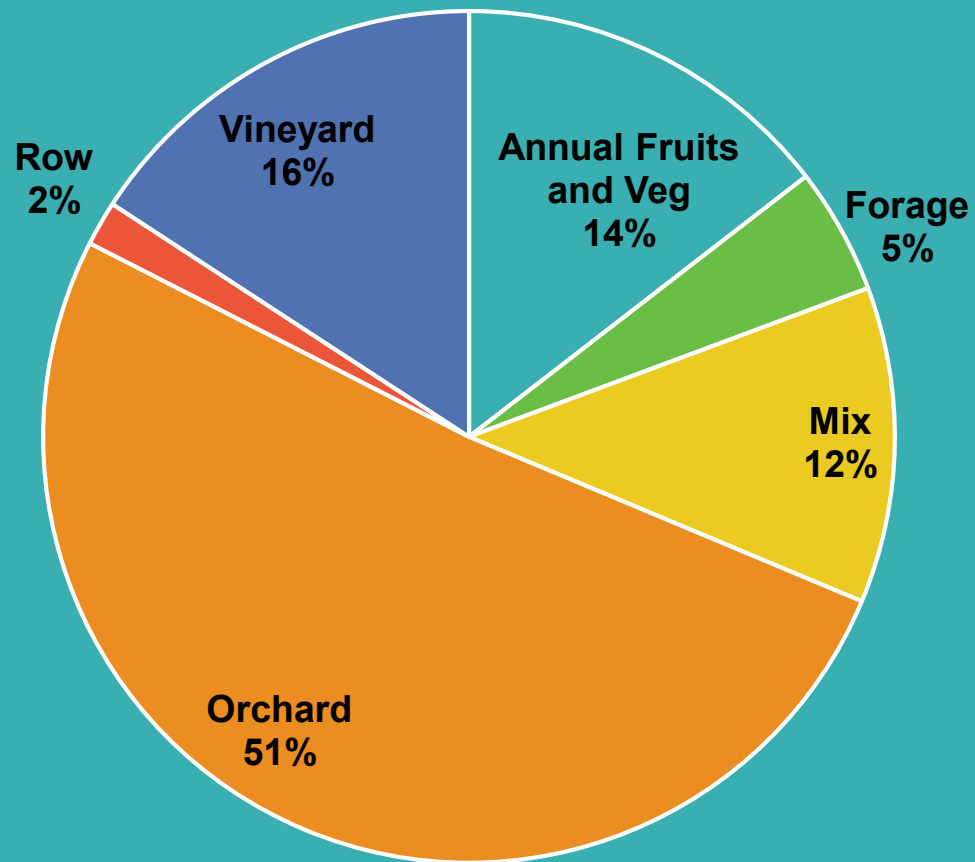
## SWEEP Project Impacts

- Impacting 23,200 acres
- Projected water savings 5.2 billion gallons of water per year
- Projected savings of 6,710 MTCO<sub>2</sub>e/year
- 96.5% agree to undergo irrigation training
- 65% indicate they will implement soil management practices

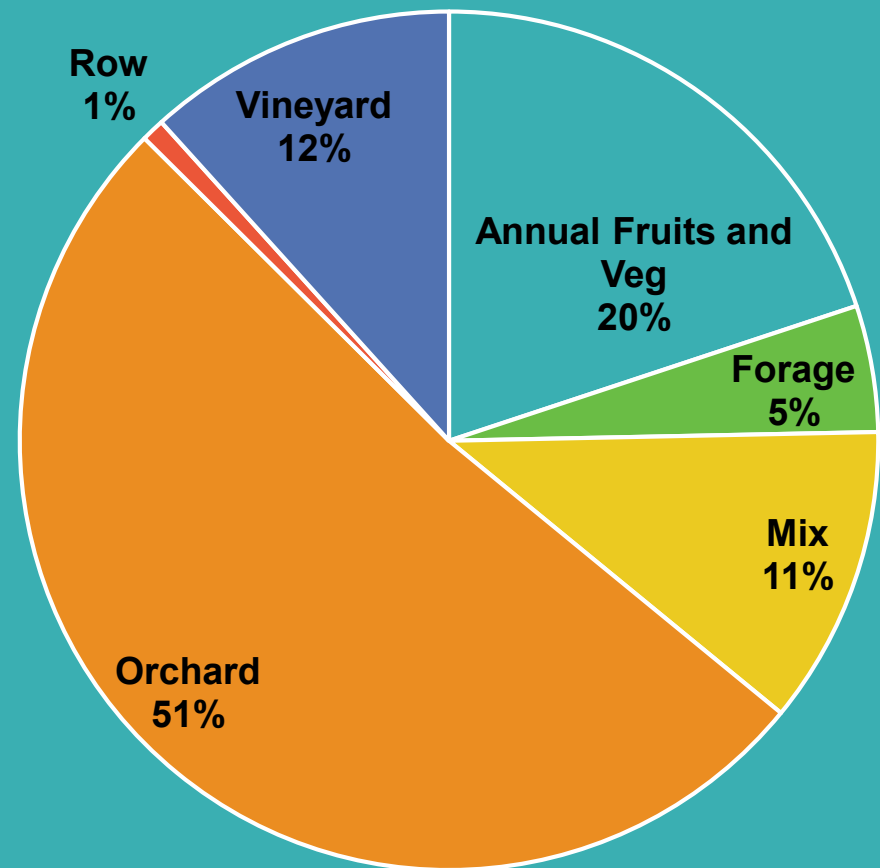


# 2018 & 2019 Crop Type

Total Applied

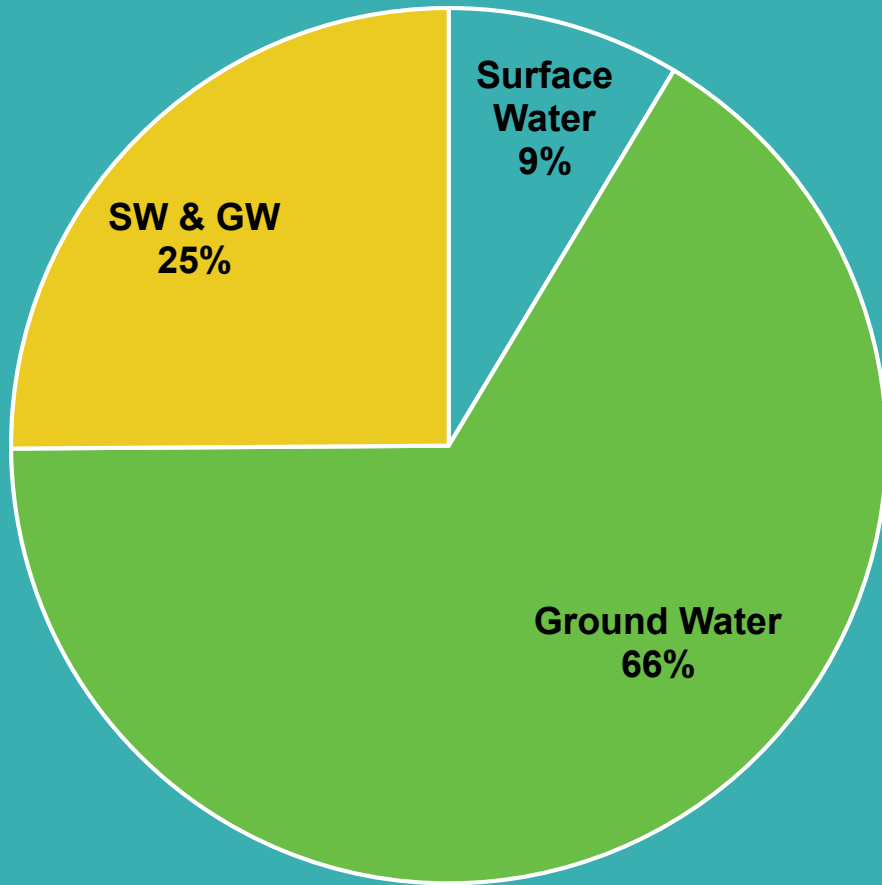


Total Awarded

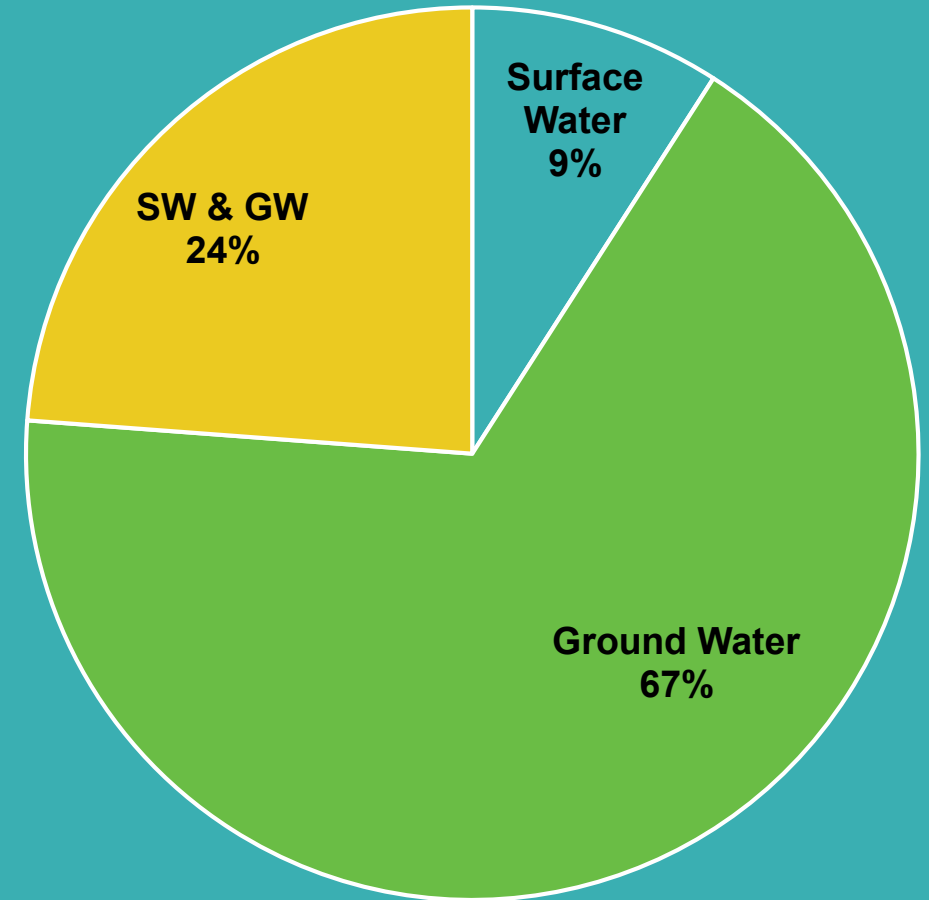


# 2018 & 2019 Water Source

Total Applications



Total Awarded



## 2018 & 2019 Adopted Project Practices

<b>SWEEP Practice</b>	<b>Number of Projects by Project Component (Total 231)</b>	<b>%</b>
<b>Irrigation Water Management</b>	225	97%
<b>Conversion to Drip/Micro Irrigation</b>	109	47%
<b>Pump Fuel Conversion</b>	106	46%
<b>Improved Energy Efficiency</b>	139	65%
<b>Convert to Low Pressure Irrigation</b>	37	15%
<b>Install a Variable Frequency Drive</b>	134	58%
<b>Reduce Pumping</b>	231	100%



# 2018-2019 Project Selection Process

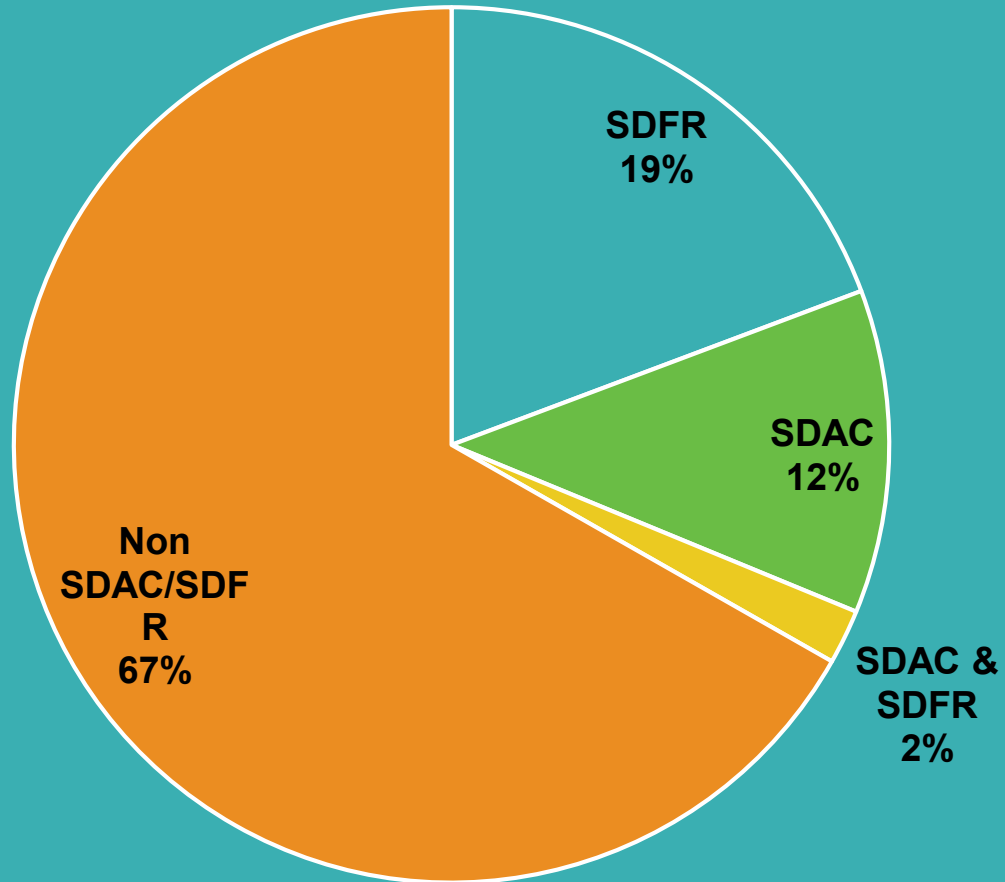
- Maximum Project Score: 50 points
- Average project Score: 40 points
- Request for Grant Applications (RGA) states that SDAC and SDFR “projects will receive priority funding if they meet a minimum score of 30 points during the technical review”
- Prop 68 required 20% of funds to go to SDAC projects



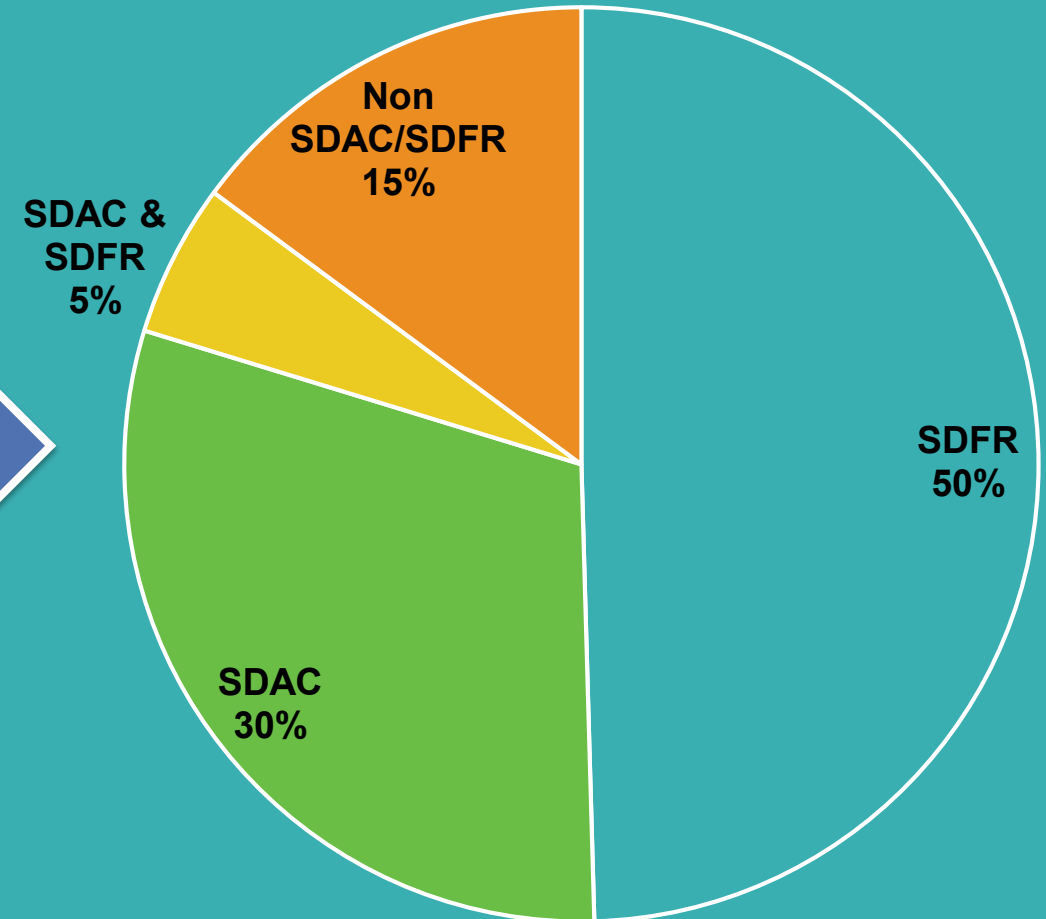
Identified Population	Amount Awarded	% (Out of \$20 million)
Severely Disadvantaged Community (SDAC)	\$5,530,000	28%
Socially Disadvantaged Farmers and Ranchers (SDFR)	\$8,390,000	42%
Both SDAC/SDFR	\$960,000	5%
Non SDAC/SDFR	\$3,960,000	20%

# 2018-2019 Project Selection Results

Applications Submitted



Projects Selected



# SWEEP Project Highlight



*Located next to French Creek, these farmers have been focused on protecting and enhancing habitat.*

*"Ranching and wildlife protection go together hand in hand"*



**Michael and Betsy Stapleton**

French Creek Ranch (2018 SWEEP)

- Etna, California - Siskiyou County
- Located in SDAC
- 12 acre hay grass production

SWEEP Project Overview

- Switched from big gun sprinkler to center pivot
- Installed new electric pump with VFD
- New solar system



# Thank you!



## SWEEP TEAM

CAROLYN COOK

Senior Environmental Scientist, Supervisor

SCOTT WEEKS

Environmental Scientist

STEPH JAMIS

Environmental Scientist

# Agenda Item 8

## Healthy Soils Program

Program updates  
New Practices solicitation update



CALIFORNIA DEPARTMENT OF  
FOOD & AGRICULTURE

# HEALTHY SOILS PROGRAM

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**Environmental Farming Act - Science Advisory Panel  
Meeting**

*July 16, 2020*

*Sacramento, CA*



# Outline

- 2020 HSP Updates
  - Funding
  - Incentives Program
    - Solicitation process
    - Projects Selected for Award
  - Demonstration Projects
- Proposing New Practices for the HSP

# 2020 HEALTHY SOILS PROGRAM (HSP) - FUNDING

## 2020 HSP Funding

- Budget Act of 2019 - \$28 million through the Greenhouse Gas Reduction Fund (GGRF)
- Technical Assistance Grants - \$1.92 million
- \$25 million available for awards
  - Incentives Program – up to \$22 million
  - Demonstration Projects awards – up to \$3 million

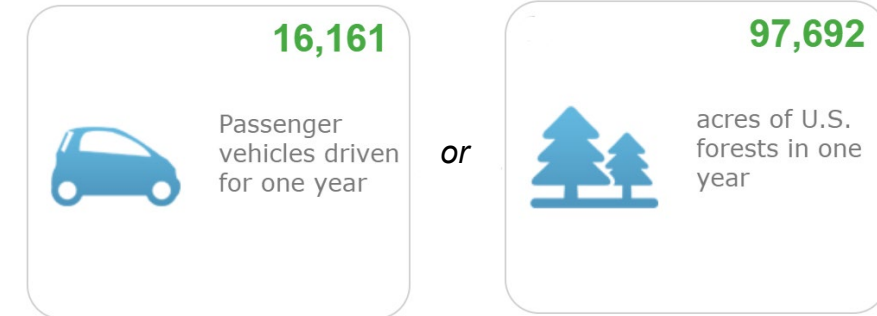


# 2020 HSP INCENTIVES PROGRAM – SOLICITATION PROCESS

- Application submission began February 27, 2020.
- Rolling, first-come-first-serve process until June 26, 2020 or until available funds exhausted.
- Early May: CDFA expected to have sufficient projects submitted and reviewed to utilize available funds.
  - May 11, 2020 – applicants and stakeholders sent 1 week notice alerting close of application period.
  - May 15, 2020 – application period closed.
  - May 21, 2020 – award announcement released.
- CDFA received 578 applications requesting \$37.88 million in grants.
- 319 projects totaling \$22.29 million selected<sup>65</sup> for awards.

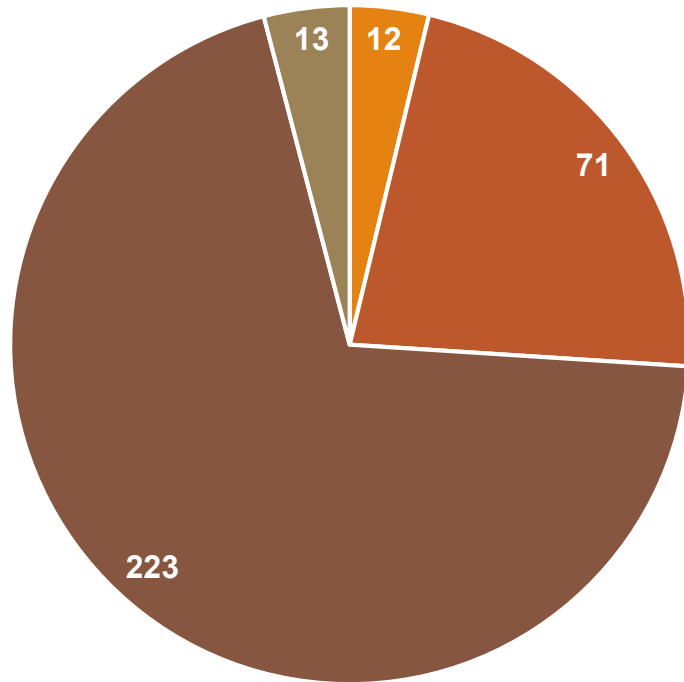
# 2020 HSP INCENTIVES PROGRAM – PROJECTS SELECTED FOR AWARDS

- 319 projects totaling \$22.29 million selected for awards.
- Total acres of practices: 31,543.
- Total GHG Reductions: 74,805 metric tons of CO<sub>2</sub>e.
- 19 different practices proposed for implementation.
- 85 projects, totaling \$5.63 million in grants belong to Socially Disadvantaged Farmers and Ranchers.
  - 26.6 % of awarded projects, 25.3% of awarded dollars.
- 19 projects, totaling \$1.52 million in grants provide benefits to AB 1550 Priority Populations (based on CalEnviroscreen 3.0 locations and environmental and/or economic benefits).
  - 6% of awarded projects, 6.8% of awarded dollars.



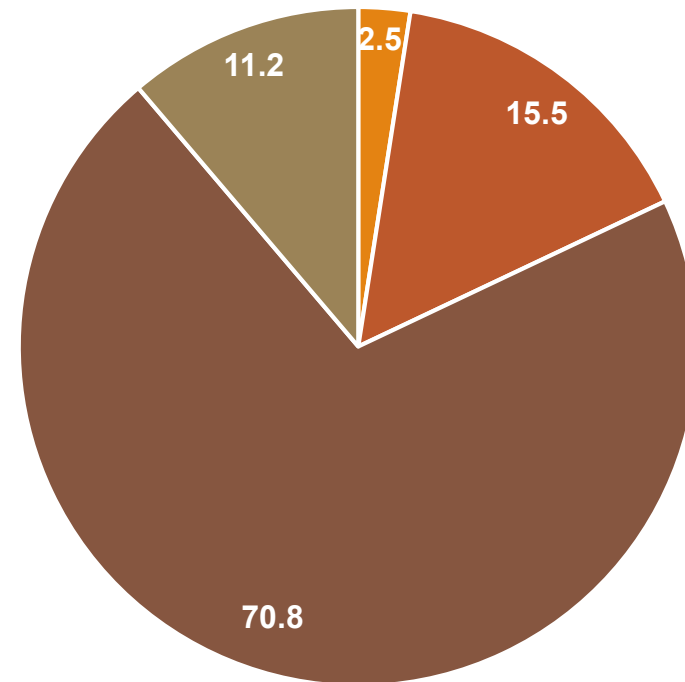
# 2020 HSP INCENTIVES PROGRAM – PROJECTS SELECTED FOR AWARDS

Project Distribution by Agricultural System Type



■ Mixed ■ Cropland ■ Orchard or Vineyard ■ Grazing Lands

Acreage % Distribution by Agricultural System Type

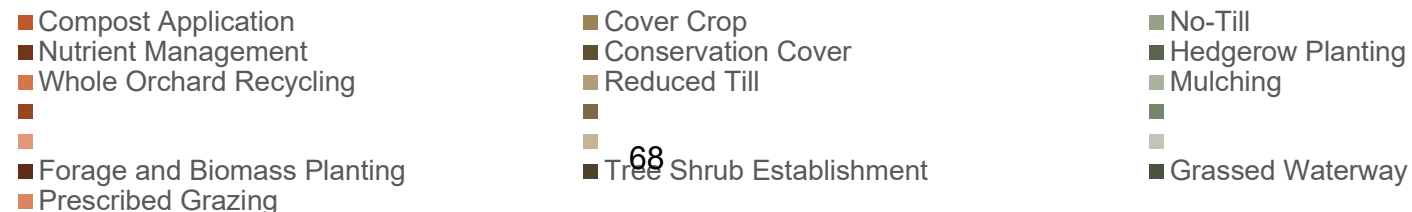


■ Mixed ■ Cropland ■ Orchard or Vineyard ■ Grazing Lands

# 2020 HSP INCENTIVES PROGRAM – PROJECTS SELECTED FOR AWARDS

## Most Frequently Requested Practices by Number of Projects (Total 319 projects)

*Note: Majority of projects proposed  
multiple practices.*



# 2020 HSP DEMONSTRATION PROJECTS

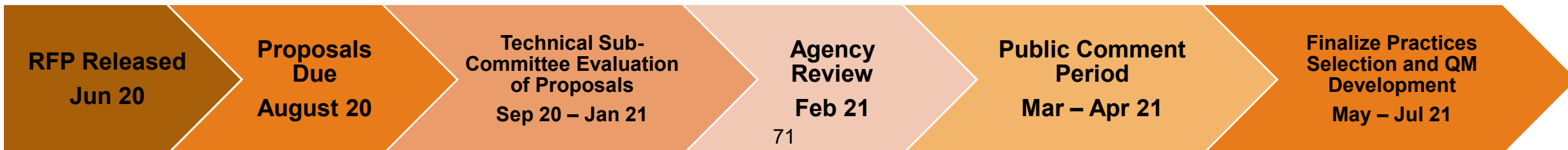
- Applications accepted between February 27, 2020 and April 24, 2020.
- 39 applications received requesting \$5,978,869 in grants.
  - 24 Type A applications proposing to demonstrate implementation of conservation management practices, measure field GHGs emissions, and conduct analysis on cost/benefits for adoption of the proposed practice(s) and anticipated barriers.
  - 15 Type B applications proposing to demonstrate implementation of HSP conservation management practices and/or conduct analysis on cost/benefits for adoption of the proposed practice(s) and anticipated barriers.
- Up to \$3 Million available for awards.
- Applications under review.

# PROPOSING NEW PRACTICES FOR THE HSP

- Request for Proposals (RFP) released on June 29, 2020
- Proposals due on August 28, 2020
- Proposals to be submitted by email to [cdfa.HSP\\_tech@cdfa.ca.gov](mailto:cdfa.HSP_tech@cdfa.ca.gov)
- Submission must include:
  - Practices must not be proprietary or involve the usage of exclusive, proprietary products, materials or equipment.
  - Proposals must include peer-reviewed and publicly available research literature demonstrating that implementing these practices will:
    - Improve soil health; and,
    - Provide GHG benefits, including carbon sequestration, carbon dioxide emission reductions or nitrous oxide emission reductions.
  - Field study design and research findings submitted in support of the practice must be statistically sound and significant.
  - Additional data encouraged to demonstrate environmental co-benefits of proposed practices, if available.
  - In case of proposed practices involving addition of soil additives and/or amendments, proposals must include an analysis of environmental impacts and materials' safety, waste management and disposal procedures.
- Details available at: <https://www.cdfa.ca.gov/oefi/healthysoils/docs/2020-HSPNewPracticesRFP.pdf>

# PROCESS FOR PROPOSING NEW PRACTICES FOR THE HSP

- Multi-step evaluation process.
  - A technical sub-committee of academic experts, state and federal agency subject matter experts will evaluate the proposals.
  - Recommendations made by the sub-committee will be evaluated by CDFA and CARB staff and presented to the Environmental Farming Act – Science Advisory Panel (EFA-SAP) and publicly available on the EFA SAP website.
  - Upon consideration and approval of recommendations by the EFA-SAP, additional opportunity for public comments will be provided.
- Practices for inclusion under the HSP and QM development will be finalized after evaluation of public comments by CDFA.
- QM development will take place in coordination with CARB and USDA-NRCS.



# Thank you!

Questions?

Contact us:  
[CDFA.HSP\\_Tech@cdfa.ca.gov](mailto:CDFA.HSP_Tech@cdfa.ca.gov)





# Agenda Item 9

Technical Assistance Program

Program Updates

# AB 2377 Climate Smart Agriculture Technical Assistance Grants

Update to the Environmental Farming Act Science Advisory Panel  
July 16, 2020

Carolyn Cook, MSc  
Senior Environmental Scientist, Supervisor  
Office of Environmental Farming and Innovation  
[Carolyn.cook@cdfa.ca.gov](mailto:Carolyn.cook@cdfa.ca.gov)



## Background on AB 2377

- AB 2377 (Irwin, 2018) required the California Department of Food and Agriculture (CDFA) to establish a technical assistance grant program to provide funds to technical assistance providers to assist the applicants of the Healthy Soils Program (HSP), the Alternative Manure Management Program (AMMP) and the State Water Efficiency and Enhancement Program (SWEEP).
- At least 25% of these grant funds used to provide technical assistance to Socially Disadvantaged Farmers and Ranchers
- Technical assistance must be in the form of (i) outreach activities, CSA project design, education, project planning and individualized application assistance to farmers, ranchers and agricultural operations, and (ii) project implementation and reporting of funded projects.

# Summary of Awardees

## Thirty-three Organizations

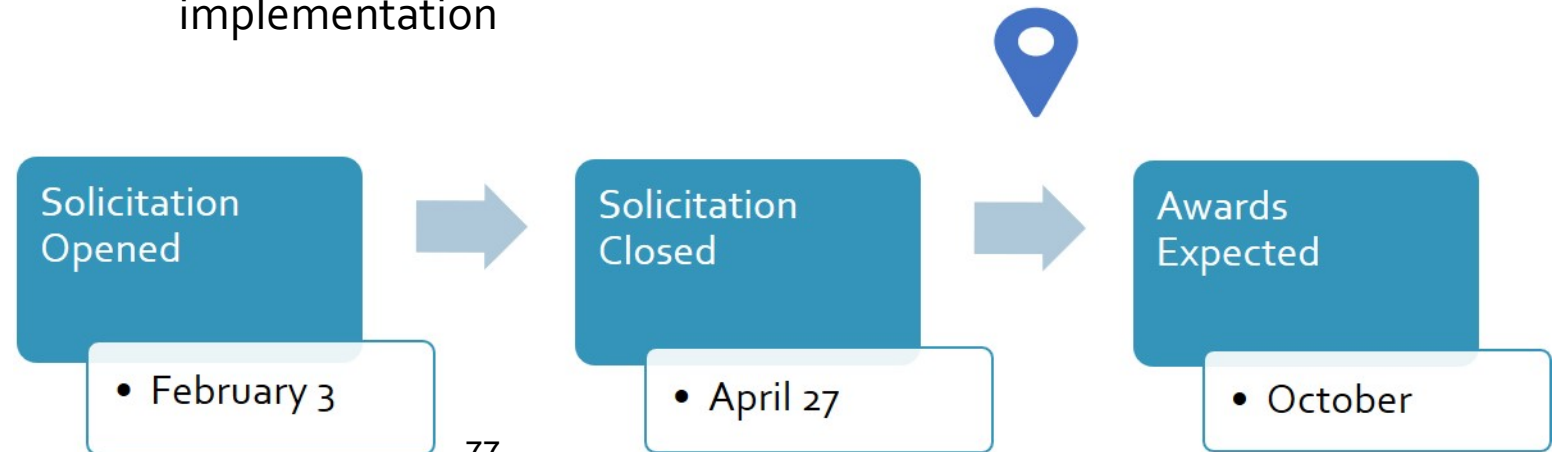
- CSA Program
  - 1 will provide assistance for AMMP only
  - 25 will provide assistance for HSP only
  - 7 will provide assistance for both programs
- Organization Type
  - 4 University of California awardees
  - 14 non-profits
  - 15 Resource Conservation Districts
- Funding Breakdown – California Climate Investments
  - AMMP - \$394,000
  - HSP - \$1,746,000
  - **Total of \$2.1 million**
- Statewide coverage

[List of awardees](#)



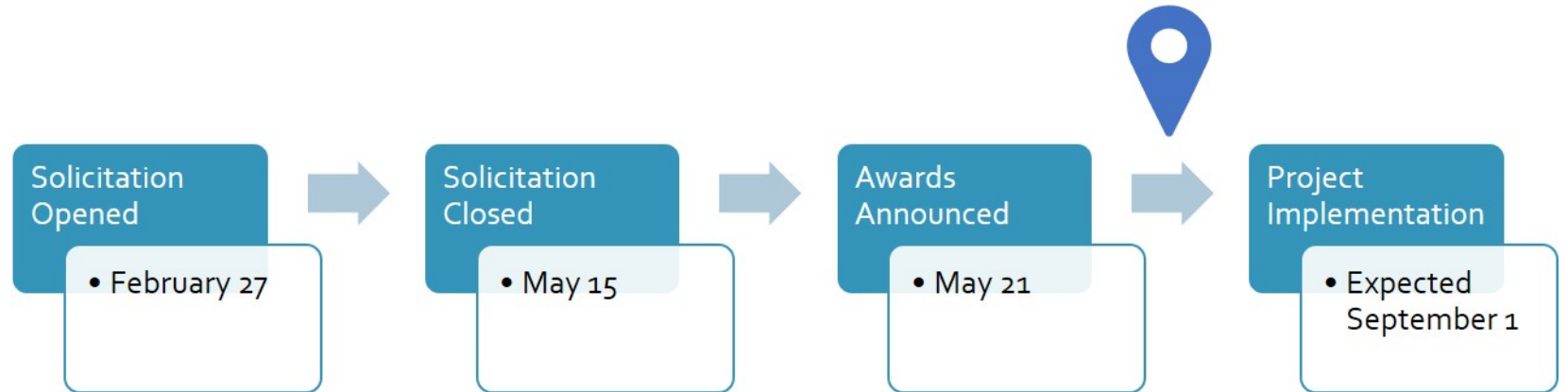
# Alternative Manure Management Program

- CDFA was appropriated \$34 million for dairy methane reduction programs through the Budget Act of 2019
- \$5.23 - \$9.15 million available for AMMP
- Funded practices: pasture-based management, conversion from flush-to-scrape and solid separation with drying/composting of manure solids, compost-bedded pack barns, slatted door pit storage
- 79 applications received for a total request of \$50.8M
- TAPS assisted with project and application development
  - May assist with grant agreement facilitation and then project implementation



# Healthy Soils Incentive Program

- CDFA was appropriated \$28 million for the Healthy Soils Program through the Budget Act of 2019
- Incentive program made 319 awards
- TAPS assisted with project and application development
  - May assist with grant agreement facilitation and then project implementation



# Outreach Campaign

- Social media
- Conferences booths (World Ag Expo, EcoFarm, CA Small Farm Conference, USDA NRCS Black Farmers Conference)
- Farmers' markets
- Technical assistance providers' webpages
- Mailings and newsletters
- Local workshops hosted by TAPS
  - 40 for HSP
  - 3 for AMMP



# Outcomes from 1<sup>st</sup> Quarter

Individuals Assisted	HSP	AMMP
Total Assisted	654	29
Assisted and Submitted Applications	174	22
Identify as SDFR	123	11
Located within an AB 1550 priority population	172	7
Farm 500 or Fewer Acres	451	14
Non-English Speakers*	62	0
Provided Computer Access	40	5

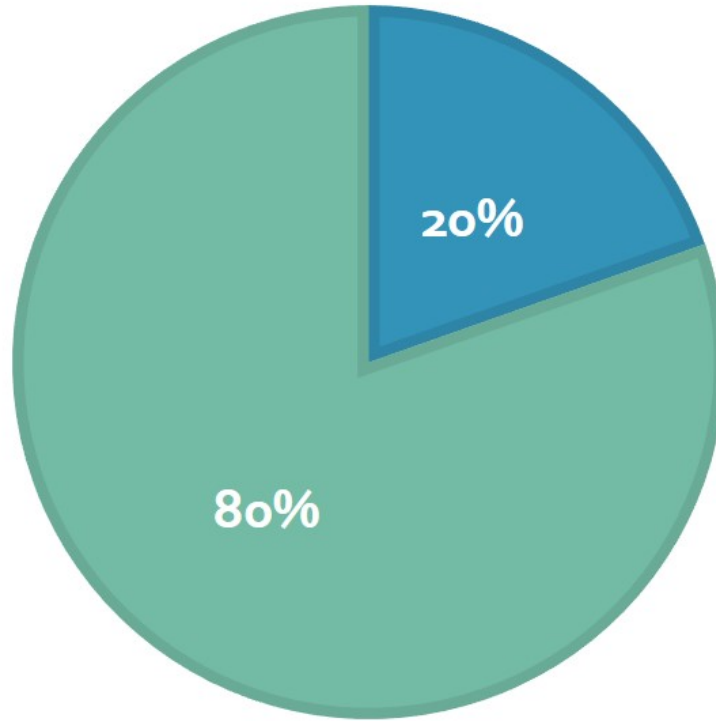
\*Assistance provided in Spanish, Chinese, Hmong, Portuguese

- Report data provided before the end of the HSP and AMMP application periods
- 1<sup>st</sup> quarter invoices total \$234,440



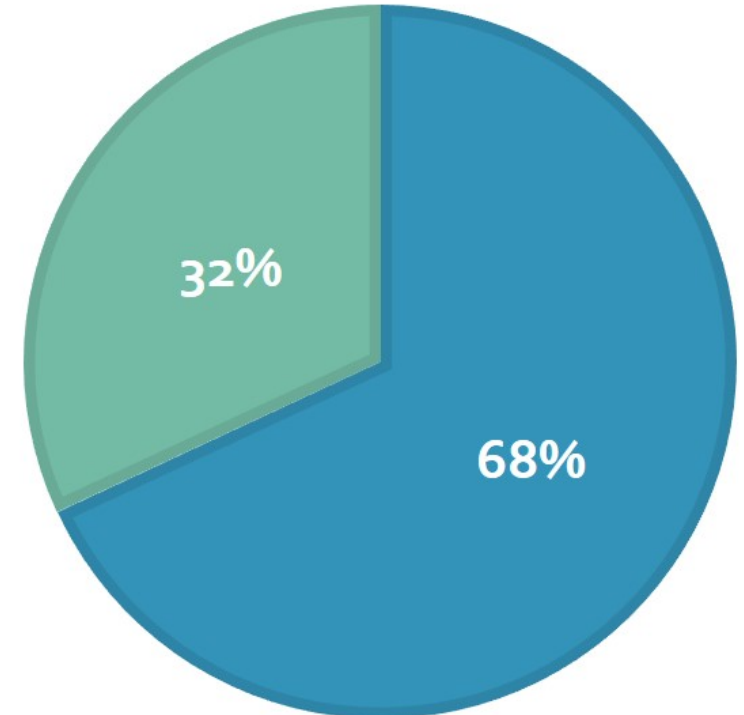
# AB 2377 Priorities

SOCIALLY DISADVANTAGED  
FARMERS AND RANCHERS



■ Total SDFR ■ Non-SDFR

FARM SIZE



■ 500 Acres or Fewer ■ Greater than 500 Acres

# Impact of Covid-19

- Shelter-in-place order prevented farm visits
- TAP offices were closed
  - Several organizations report inability to provide assistance during this time
  - Many TAPS worked from home during this time
- Workshops were cancelled or held as webinars
- Technical assistance providers reported that growers were hesitant to proceed due to uncertainty

# Execution of Agreements

There are several steps in the grant execution process that can be accelerated with assistance from TAPs and UC Community Education Specialists.

- Submission of a correctly completed STD 204 (Payee Data Record)
- Prompt response to questions from CDFA staff regarding project details.
- Thorough review, prompt signature and return of agreement documents.

# Transition to Post-Award Assistance

- Follow up with awardees and offer implementation assistance
  - Requires coordination among TAPS
- Providing Climate Smart Agriculture-relevant technical training to agricultural operation staff
- Preparing compelling case studies noting outcomes and benefits of CSA grants to farmers and ranchers
- Consulting with farmers and ranchers who did not receive funding in previous solicitations and advising them to improve competitiveness of their applications

Thank you!



<https://www.cdfa.ca.gov/85efi/technical/index.html>

# Agenda Item 10

## Public Comments

# Agenda Item 11

## Next Meeting and Location

Date: October 15, 2020

Locations: CDFA and Remote Attendance