

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



MEETING AGENDA
October 18, 2018

EFA SAP MEMBERSHIP

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

Jocelyn Bridson, MSc, Rio Farms, Member and Chair
Don Cameron, Terranova Ranch, Member Jeff Dlott, PhD, SureHarvest, Member
Vicky Dawley, Tehama RCD, Member David Bunn, PhD, Resources Agency, DOC, Member
Emily Wimberger, CalEPA, ARB, Member Judith Redmond, Full Belly Farm, Member
Scott Couch, CalEPA, State Water Board, Member Julie Alvis, Resources Agency, Member
Tom Hedt, USDA NRCS, Subject Matter Expert Doug Parker, PhD, Subject Matter Expert

Public Meeting

10:00 to 5:00 PM

California Department of Food and Agriculture
Main Auditorium
1220 N Street, Sacramento CA 95814
916-654-0433

REMOTE ACCESS

Webinar information

Registration URL: <https://attendee.gotowebinar.com/register/4780234947776741890>

Webinar ID: 328-311-803

Please note the webinar is on listen-only mode.

For verbal questions and comments, please attend the meeting in person

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

https://www.cdfa.ca.gov/EnvironmentalStewardship/Meetings_Presentations.html

Meeting Agenda

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| 1. Introductions | Chair Bridson. EFA SAP |
| 2. Minutes | Chair Bridson. EFA SAP |
| 3. State Water Efficiency and Enhancement Program (SWEEP) <ul style="list-style-type: none">• Funding source for 2018-19• Timeline of activities• Public comments received and CDFA responses• SWEEP Technical Assistance | Carolyn Cook, MSc. CDFA |
| 4. Proposed WizeHive online application platform for SWEEP | Scott Weeks, CDFA |
| 5. Healthy Soils Program (HSP) <ul style="list-style-type: none">• Funding sources for 2018-19• Timeline of activities• Public comments received and CDFA responses• HSP Technical Assistance | Geetika Joshi, PhD. CDFA |
| 6. HSP Compost Application Ineligibility Tool | Benjamin Nicholson, MBA. CARB |
| 7. Proposed WizeHive online application platform for HSP | Guihua Chen, PhD. CDFA |
| 8. Comet-Planner update | Adam Chambers, PhD. USDA NRCS |
| 9. AB 2377 Technical Assistance requirements | Amrith Gunasekara, PhD. CDFA |
| 10. Public Comments | Chair Bridson. EFA SAP |
| 11. Next Meeting and location | Chair Bridson. EFA SAP |

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

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

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

U.S. Fish and Wildlife Office
10950 Tyler Road Red Bluff, CA

May 24, 2018
1:00 p.m. – 5:00 p.m.

MEETING MINUTES

Panel Members in Attendance

Jocelyn Bridson, MSc, Rio Farms, (Chair and Member)
Don Cameron, Terranova Ranch (Member)
Jeff Dlott, PhD. SureHarvest (Member)
Julie Alvis, Natural Resources Agency (Member)
Scott Couch, State Water Resources Control Board (Member)
Judith Redmond, Full Belly Farm (Member)
Vicky Dawley, Tehama RCD (Member)
Kathryn Lyddan, Department of Conservation (Member)
Doug Parker, PhD. UC ANR (Subject Matter Expert)
Tom Hedt, USDA NRCS (Subject Matter Expert)

State Agency Staff and Presenters

Jaydeep Bhatia, CDFA
Scott Weeks, CDFA
Geetika Joshi, PhD, CDFA
Amrith Gunasekara, PhD, CDFA

AGENDA ITEM 1 – Introductions

The meeting was called to order at 1:08 PM by the Chair, Jocelyn Bridson. Introductions were made. Present at the meeting were all the members noted above under “Panel Members in Attendance.”

AGENDA ITEM 2 –Administrative Housekeeping

Chair Bridson introduced the minutes from the March 15, 2018 meeting. A motion was presented by Member Redmond to accept the minutes as presented by CDFA staff and the motion was seconded by Member Cameron. The motion was moved by all members present and accepted without further changes.

The motion to fill co-chair vacancy was introduced by Member Cameron and proposed Jeff Dlott for the position. Member Dawley seconded the motion and Jeff Dlott accepted

the position. All panel members favored the motion. Jeff Dlott was elected as co-chair unanimously.

AGENDA ITEM 3 – Healthy Soils Program Update

Dr. Joshi of CDFA provided updates on two rounds of solicitation of Healthy Soils Program (HSP). She noted that 51 projects were awarded \$1.4 million in first round from incentive category of the program. This category was initially undersubscribed. These projects are located in 22 counties and are projected to reduce 9,000 MT CO₂e per year. Second solicitation was offered to encumber remaining funds and a total of 33 projects were awarded in 16 counties. The demonstration project category awarded 22 and 6 projects during two solicitations respectively. These projects are projected to reduce 1,642 and 447 tons of CO₂e per year respectively. Dr. Joshi provided program analysis results on average farm size and concluded that 79 percent of the awarded projects have farm size less than 250 acres. She further noted that compost application was the most popular practice proposed by the applicant. She also provided update on new management practices under consideration for HSP and overview of the submitted proposals. She noted that the proposals submitted fall into four practice categories, 1) Nitrogen Management, which includes reduced fertilizer application, slow release fertilizer and nitrification inhibitors. 2) Non-nitrogen practices such as strip cropping, biomass planting, conservation cover, range planting, grassed waterway, alley cropping, prescribed grazing, conservation cover crop rotation, windbreaker and shelterbelt renovation and tree shrub establishment. 3) Practices that are already included in the program or have significant overlap and 4) Practices which are not considered for funding either these are covered under other programs or don't have sufficient peer reviewed research to quantify GHG benefit. Chair Bridson asked if there is a list of crops which can be planted for biomass crops practice. Presenter noted that this information is being looked into. Another question asked was that why the second-round solicitation was first come first serve basis. Presenter responded that it was an attempt to increase the flow in order to meet the legislative encumbrance deadline for utilization of available funds; but applicant still had to meet certain minimum criteria to be eligible for award. Another question asked was that if there will be a proposal to review slow release fertilizers. Dr. Gunasekara responded that Secretary will review the proposal with the team and make recommendation.

AGENDA ITEM 4 – SWEEP Update

Scott Weeks of CDFA provided update on the SWEEP. He noted that program future funding allocations are coded in Proposition 68 and it would need voter approval in June 5, 2018 primary elections. He further updated the panel on 2017 fund reallocation and noted that some 2017 regular SWEEP projects and CDFA/DWR joint project got cancelled resulting in 1.8 million unencumbered funds. CDFA awarded 27 additional projects utilizing 1.8 million dollars. These projects will impact a total of 4927 acres and are projected to save 5041-acre feet of water and 1228 MT CO₂e per year. Mr. Weeks also updated panel on media outreach efforts carried out by CDFA.

AGENDA ITEM 5 – Strategic Planning Summary document

Chair Bridson introduced the summary document and provided overview of the document. She noted that the document is posted on CDFA website for public comments. The public comment period ends on June 21, 2018. She further noted that Strategic Planning document will provide timeline and work plan for the panel.

AGENDA ITEM 6 – CDFA Climate Smart Agriculture efforts

Jaydeep Bhatia of CDFA provided informational presentation on the CDFA's Climate Smart Agriculture (CSA) efforts. He noted that CSA is an integrated approach to achieve GHG reductions while ensuring food security in the face of climate change. He further noted that CDFA is providing a number of incentive programs and provided overview of OEFI's incentive programs, and CSA is building international collaborations and resources. He mentioned that CDFA is fostering international collaborations through CDFA delegation visits. Mr. Bhatia noted that CDFA hosted 10 climate-smart webinars, which were attended by 75 panelists and more than 1500 people worldwide. Member Lyddan asked if CSA also include agriculture land conservation in addition to the technologies. Member Cameron noted this topic came up during Israel visit as well. Dr. Gunkasekara noted that greenhouses are popular in Europe but that may change the land use from agriculture to commercial even though it is used for food production. Member Dlott suggested that CSA work should be tied to certain United Nations goals for example changing dietary patterns and food demands. Dr. Gunasekara responded that main mandate of CSA is focused on adoption technologies and practices, and climate change adaption. Member Cameron acknowledged California's leadership in global agriculture and the necessity to be aware of global agriculture situation.

AGENDA ITEM 6 – Public Comments

Several questions and comments from the public were accommodated by Chair Bridson and CDFA staff. They included feedback on HSP application process being complex and the lack of substantial assistance. Another public comment on HSP was to clarify if the panel would approve the list of practices in July and when stakeholders can submit their comments. Dr. Gunasekara responded that the panel may decide in July if the public comment period is required. It was decided that CDFA will post meeting materials for July 19th meeting online on July 9th to allow time for Panel Members, stakeholders and public to review ahead of the meeting. Member Redmond asked if public comments can be submitted and Dr. Gunasekara responded that comments can be submitted until June 19th. However, CDFA staff would not officially respond to comments at the next meeting due to insufficient time to review them by July 9th.

AGENDA ITEM 7 – Next Meeting and Location

Dr. Gunasekara stated that the next meeting will be on July 19, 2018, at CDFA headquarters in Sacramento, CA to cover HSP and SWEEP new funding updates, and the Strategic Plan. The meeting was adjourned at 3.52 PM by Chair Bridson.

Respectfully submitted by:

Amrith Gunasekara, Ph.D.

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

California Department of Food and
Agriculture Main Auditorium
1220 N Street, Sacramento, CA 95814
July 19, 2018

MEETING MINUTES

Panel Member in Attendance

Jocelyn Bridson, MSc, Rio Farms, (Chair and Member)
Don Cameron, Terranova Ranch (Member)
Julie Alvis, Natural Resources Agency (Member)
Emily Wimberger, CalEPA, ARB (Member)
Doug Parker, PhD. UC ANR (Subject Matter Expert)
Tom Hedt, USDA NRCS (Subject Matter Expert)
Brianna St. Pierre, State Water Resources Control Board *for*
Scott Couch, State Water Resources Control Board (Member)

State Agency Staff and Presenters

Scott Weeks, CDFA
Guihua Chen, PhD, CDFA
Ravneet Behla, PhD, CDFA
Carolyn Cook, MSc, CDFA
Geetika Joshi, PhD, CDFA
Amrith Gunasekara, PhD, CDFA
Karen Ross, Secretary, CDFA

AGENDA ITEM 1 – Introductions

The meeting was called to order at 10:05 AM by the Chair, Jocelyn Bridson. Introductions were made. Presented at the meeting were all the members noted above under “Panel Members in Attendance.” A quorum, according to the EFA SAP bylaws, is majority members plus one member for a total of six members. Four members were present at the last meeting and therefore a quorum was not established. Secretary Karen Ross also attended the meeting and was introduced by Chair Bridson.

AGENDA ITEM 2 – SWEEP Update

Carolyn Cook of CDFA provided an update on the State Water Efficiency and Enhancement Project (SWEEP). She updated the members of the EFA SAP on previous awards, noting that \$ 62.7 million were awarded to 614 projects. These

projects were supported by \$40.8 million in matching funds. The program impacted 113,994 acres.

Ms. Cook informed the EFA SAP that future SWEEP funding allocations have been approved through Proposition 68 on June 5, 2018, for \$20 million. CDFA SWEEP staff are recommending dispersing these funds in two solicitations of \$10 million each. No major changes to the program from the 2017 solicitation are expected. Proposition 68 allows for 5% as administrative costs and 10% for technical assistance and post project tracking. A draft of the Request for Grant Application (RFA) document is being prepared and would be published for a 30-day public comment period following the EFA SAP meeting. CDFA staff will hold three workshops in Northern, Central and Southern California to solicit public feedback on the draft RFA. Proposition 68 requires 20% of the funds must be allocated to projects in severely disadvantaged communities. Ms. Cook informed EFA SAP members that stormwater capturing and recycled water use will be added to the program under additional considerations. She further noted that CDFA is working on new application platform. She also briefed the panel on tentative timeline for next RFA solicitation.

EFA SAP members posed several comments and questions. Member Cameron applauded CDFA for the success of the program and appreciated the changes proposed by the staff. Chair Bridson inquired if stormwater capture has been included in the water savings calculator. Ms. Cook responded that CDFA staff is still evaluating different ways to include such changes. Member Dawley asked if there is a way to identify if an applicant themselves applies, compared to an applicant who was assisted by a contractor if those applications can be weighed or ranked higher. Ms. Cook responded that was not a function of the program and the new application platform will likely capture it better than previously used platform and could enhance CDFA-awardee communication. Dr. Parker enquired whether CDFA will target severely disadvantaged communities. Ms. Cook replied that CDFA will target severely disadvantaged communities and would hold workshops in these areas. Member Alvis clarified that 20% funds allocation requirement of the bond funds is a cumulative total for all programs identified in the same chapter of SB 5 (Proposition 68).

Chair Bridson accommodated questions/comments from the public on the SWEEP program. One question involved the possibility of shortening the SWEEP program timeline. Chair Bridson responded that SWEEP receives a significant higher number of applications and technical reviews and CDFA staff need sufficient time to select best application and projects. A comment was made that the panel must be careful in investing in agriculture lands which will not be viable due to regulation and climate impacts on water supply. Member Cameron responded that it is true a portion of land will be fallowed due to lack of irrigation water, therefore it important to install these water conserving technologies to stay viable. Another question inquired if the EFA SAP is considering a joint project that leveraged improvements from both the water district and growers. Secretary Ross responded that CDFA is considering conducting workshops to evaluate the interest of various water districts. Public attendees also suggested to provide SWEEP outreach material in multiple languages and to revive RCD contracts

for future verifications.

AGENDA ITEM 3 – HSP Update

Dr. Geetika Joshi of CDFA provided updates on the Healthy Soils Program (HSP). Dr. Joshi informed the panel that HSP has received \$10 million through Proposition 68 and \$5 million through the Greenhouse Gas Reduction Fund administered by the California Climate Investments Program. A tentative timeline of activities was shared with EFA SAP members.

Dr. Joshi discussed new practices recommendations proposed to be included into the HSP. She listed the practices which CDFA is recommending for incentive projects and the ones which need further research data and would be included in Type A and B demonstration projects. She also discussed the list of practices which are not recommended for inclusion and provided the reasons. Dr. Joshi informed the EFA SAP members panel about the status of each practice and verification methodology recommended for Type A and B projects and plan for technical assistance. Member Dawley suggested that technical assistance providers should be compensated both for one-on-one as well as for outreach and workshop efforts.

Questions were provided by EFA SAP members. Member Wimberger inquired if the two-funding sources can be combined in one solicitation. Member Dawley inquired whether HSP is designed to exclude research from demonstration projects. Dr. Gunasekara responded that bond does not specify if there is need for demonstration projects and neither does it require that research to be excluded. Chair Bridson suggested that there is a value in demonstration projects, especially on outreach and collaboration. Subject matter expert, Mr. Hedt, suggested that research is important factor to bridge the knowledge gaps. Member Dawley enquired whether on-farm composing is eligible for demonstration project. Dr. Joshi responded that it is eligible as long as the awardee abides by the practice requirements. Chair Bridson asked if the NRCS eVeg manual can be used in either of the project types. Dr. Joshi replied that it can be used for both project types. Member Dawley noted that one-on-one payment rates are low and recommended panel to reconsider increasing these.

Chair Bridson accommodated questions/comments from the public on the HSP program. Public members suggested panel to reconsider excluding the research component in demonstration projects. Another comment made was that technical assistance reimbursement rates are low as suggested and panel should consider involving RCD verifications to improve the collaboration and answer questions that growers might have for these practices. A member of the public suggested that the panel should consider pre-proposal process for awards.

AGENDA ITEM 4 – Public Comments

Several questions and comments from the public were accommodated by Chair Bridson and CDFA staff. These comments are noted in agenda item 2 and 3. A member of the public, Brian Kolodji, of California Engineering Services, gave a brief

presentation to the panel on technology that distributes water pump or commercial exhaust gas into orchards for the purpose of atmospheric carbon dioxide crop fertilization. A comment was made that distribution of flyers and other programmatic materials in Spanish would be helpful. An inquiry was made on why cannabis growers were not eligible for the programs and should be.

AGENDA ITEM 7 – Next Meeting and Location

Dr. Gunasekara stated that the next meeting will be on October 18, 2018, at CDFA headquarters in Sacramento and will cover HSP and SWEEP public comments and potential changes to the draft RFAs. The meeting was adjourned at 1:48 PM by Chair Bridson

Respectfully submitted by:

Amrith Gunasekara, Ph.D.
Liaison to Science Advisory Panel

STATE WATER EFFICIENCY AND ENHANCEMENT PROGRAM

Environmental Farming Act – Science Advisory Panel Meeting

Carolyn Cook, MSc.

Senior Environmental Scientist Supervisor - SWEEP

October 18, 2018

Sacramento, CA



CALIFORNIA DEPARTMENT OF
FOOD AND AGRICULTURE

Outline

Funding Source and
Timeline of Activities

Public Comments and
Proposed Integration

Proposal on Technical
Review Scoring Criteria

Technical Assistance Grant

Funding Sources and Next Steps

- Funding source:
 - Budget Act of 2018 - \$20 million through Proposition 68 (California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access for All Act of 2018).
- Two rounds of funding for \$10 million each.



Timeline

| Activity | Estimated Timeframe |
|---------------------------------------------------|------------------------------|
| Public Comment on Draft Request for Applications | August – September 2018 |
| Finalize Request for Applications | October 2018 |
| Accept Applications | November 2018 – January 2019 |
| Administrative Review and Technical Review | January to April 2019 |
| Announce Awards | April/May 2019 |
| Prepare and Announce 2 nd Solicitation | Late Summer 2019 |

Update on Public Comments

Public Comments

- 11 letters received between July 25 and September 12, 2018 at the CDFA OEFI email address.
- Submitted comment letters are available online at:
<https://www.cdfa.ca.gov/oefi/sweep>
- CDFA has provided responses to comments in a summarized format, which is available online at:
<https://www.cdfa.ca.gov/oefi/sweep>

Examples of public comments and OEFI responses on the next slides.

Public Comments

Category: Eligibility

- *Comment:* Tribal communities that would benefit highly from basic water efficiency and management improvements, increasing water savings in their areas. Confirm that Native American Tribes or Tribal agricultural enterprises/entities are eligible for SWEEP funding.
 - *Response:* The final SWEEP Request for Grant Applications (RGA) will specify that Native American Tribes and Tribal agricultural entities are eligible for funding.
- *Comment:* Reduce the cumulative program funding cap to \$300K per operation.
 - *Response:* During the technical review process additional consideration is given to previously unawarded applicants. CDFA is unable to implement a reduced cap at this time because previous notice of a reduced cap was not provided. OEFI recommends discussion at the Environmental Farming Act (EFA) Science Advisory Panel (SAP) meeting.

Public Comments

Category: Application Process

- *Comment:* Real-time responses to questions submitted during application period.
 - *Response:* In past funding cycles questions received during workshops and webinars have received real-time responses. Answering questions outside of the competitive FAQ process (such as email questions) is not feasible because accurate responses may require coordination between OEFI and the Office of Grants Administration. CDFA OEFI will provide work-hour availability to contracted technical assistance providers for SWEEP questions during the application period. CDFA is also evaluating the ability to increase FAQ postings.
- *Comment:* Lengthen the application period to 12 weeks.
 - *Response:* CDFA is extending the application period to 8 weeks. A further extension to 12 weeks would delay awards and impact project implementation timelines. CDFA must consider funding source deadlines when setting program timelines.

Public Comments

Category: Project Types

- *Comment:* Propose that open air carbon enrichment be a project type eligible for SWEEP funding.
 - *Response:* SWEEP may fund practices that reduce greenhouse gas emissions and save water in crop irrigation settings. CDFA's Office of Environmental Farming and Innovation (OEFI) does not believe that the water and GHG benefits of this practice can be captured in the required calculator. EFA SAP may consider a new practice proposal process in the future.

Public Comments

Category: Funding Requirements

- *Comment:* Recognize the need for flooding and micro-irrigation use in combination for the purpose of leaching salts.
 - *Response:* The SWEEP RFA indicates that awardees may keep existing flood irrigation infrastructure.
- *Comment:* In the situation where portable pumps are used on farms, allow the farm to estimate energy use by the number of irrigation events on the field.
 - *Response:* Irrigation logs in tandem with fuel receipts for portable pumps are allowable supporting documentation for the GHG calculations.

Public Comments

Category: Funding Combinations

- *Comment:* Clarify whether EQIP funds can be used on complementary or supporting practices on the same APN, provided the applicant is not “double-dipping” and receiving funds for the same practice from two sources. For example, if funds are requested from SWEEP for an irrigation system and NRCS is funding cover crops or irrigation water management on the same property, is that considered the same “project”?
 - *Response:* CDFA will further define this requirement in the RFA after discussion with USDA NRCS.

Public Comments

Category: Additional Considerations

- *Comment:* The Farmer Equity Act of 2017 should be applied. Add Socially Disadvantaged Farmers and Ranchers to the Additional Criteria options.
 - *Response:* CDFA hired a Farm Equity Advisor on September 20, 2018. SWEEP will work in close consultation with the Farm Equity Advisor to incorporate requirements related to the Farmer Equity Act of 2017.
- *Comment:* Add a geographical component to SWEEP so that farmers in California regions are competing against other farmers in the same region where systems are similar to each other.
 - *Response:* SWEEP is a statewide competitive program. OEFI will suggest this topic for discussion at a meeting of the EFA SAP.

Public Comments

Category: Technical Review

- *Comment:* Provide clear scoring criteria including guiding questions or scoring rubrics to help applicants assess the strengths/weaknesses of proposals and improve the quality of applications.
 - *Response:* CDFA OEFI will recommend new scoring matrix to the EFA SAP. If adopted by the EFA SAP, this guidance will be included in the RFA.

| Criteria | Maximum Points |
|----------------------------------------------|----------------|
| Merit and Feasibility | 10 |
| Water Savings | 10 |
| GHG Reductions | 10 |
| Budget | 8 |
| Additional Considerations | 6 |
| Benefits to Severely Disadvantaged Community | 6 |

Proposed Scoring Criteria

- Previous scoring directions:
 - *Score of 1 to 5*
 - *Score was determined by the technical reviewer based upon overall expected success of the project, including the potential for the project to reduce GHG emissions and save water.*
 - *Additional considerations were tallied up and applied to project ranking after the score.*

Technical Assistance Request for Applications Response

Climate Smart Agriculture Technical Assistance Request for Applications

- Request for Applications was released on August 15
- Deadline to apply was September 14, 2018
- Rates for Technical Assistance for SWEEP
 - Up to \$5,000 per solicitation may be reimbursed for outreach and indirect costs
 - \$200 per individual assisted
 - OR**
 - \$400 per application submitted

Applications Received

- 28 Applications received
- OEFI evaluated eligibility and submissions
- \$480,000 estimated to be awarded
- CDFA may expend up to 10% of \$20 million appropriation for technical assistance in disadvantaged or severely disadvantaged communities (shown in yellow and orange)
- Technical assistance provided outside of DACs and SDACs will be funded through dollars associated with planning and monitoring





THANK YOU!

Carolyn Cook, M.Sc.

Senior Environmental Scientist, Supervisor

Scott Weeks

Environmental Scientist

Ravneet Behla, Ph.D.

Senior Environmental Scientist, Specialist

Amrith Gunasekara, Ph.D.

Science Advisor to CDFA Secretary

Manager of OEFI

Comments Received on the CDFA SWEEP Program
Comment Period : July 25, 2018 - September 12, 2018

| Category | Comment Received | CDFA Response |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Eligibility | Confirm that Native American Tribes or Tribal agricultural enterprises/entities are eligible for SWEEP funding. | The final SWEEP Request for Grant Applications (RGA) will specify that Native American Tribes and Tribal agricultural entities are eligible for funding. |
| | Reduce the cumulative program funding cap to \$300K per operation. | During the technical review process additional consideration is given to previously unawarded applicants. CDFA is unable to implement a reduced cap at this time because previous notice of a reduced cap was not provided. This topic will be discussed at a future Environmental Farming Act (EFA) Science Advisory Panel (SAP) meeting. |
| 2. Project Types | Propose that open air carbon enrichment be a project type eligible for SWEEP funding. | SWEEP may fund practices that reduce greenhouse gas emissions and save water in crop irrigation settings. CDFA's Office of Environmental Farming and Innovation (OEFI) does not believe that the water and GHG benefits of this practice can be captured in the required calculator. EFA SAP should consider a new practice proposal process in the future. |
| | Propose that sensor-controlled livestock soaker products should be considered for this program and include dairies to apply to further meet CDFA SWEEP program's goals. | The scope of the SWEEP program is limited to agricultural crop irrigation systems. |
| 3. Outreach | As required by the Farmer Equity Act of 2017, prioritize outreach to and track participation of Socially Disadvantaged Farmers and ranchers. | CDFA hired a Farm Equity Advisor on September 20, 2018. OEFI will work in close consultation with the Farm Equity Advisor to incorporate requirements related to the Farmer Equity Act of 2017. |
| | Make educational materials about existing weather, evapotranspiration, and soil moisture monitoring systems and their alternatives available as part of the program materials. | CDFA OEFI does not make recommendations on technologies or irrigation equipment. |
| | Provide multilingual materials (flyer, FAQs, sample application). | CDFA will evaluate resources needed to provide multilingual materials and is working on a Spanish version of the flyer. Technical assistance providers are encouraged to provide multilingual materials. |
| 4. Funding Requirements | Provide GHG reduction requirement waivers to farms in regions where gravity fed systems are primarily used or allow consideration of the water energy intensity. | SWEEP has dual requirements for water savings and GHG reductions. |
| | Recognize the need for flooding and micro-irrigation use in combination for the purpose of leaching salts | The SWEEP RFA indicates that awardees may keep existing flood irrigation infrastructure. |
| | In the situation where portable pumps are used on farms, allow the farm to estimate energy use by the number of irrigation events on the field. | Irrigation logs in tandem with fuel receipts for portable pumps are allowable supporting documentation for the GHG calculations. |
| | Add a geographical component to SWEEP so that farmers in California regions are competing against other farmers in the same region where systems are similar to each other. | SWEEP is a statewide competitive program. OEFI will suggest this topic for discussion at a meeting of the EFA SAP. |

| Category | Comment Received | CDFA Response |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Develop and require irrigation management training for SWEEP recipients. | Course development is a function of University and State University systems. A list of available developed courses are provided on the SWEEP webpage for applicants to choose from when electing to qualify for additional consideration. Requiring irrigation training may create an additional burden for applicants, particularly those that already have training adequate to develop or implement an irrigation practice. CDFA recommends this remain an optional additional consideration. |
| 5. Funding Source Combinations | Clarify whether United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Environmental Quality Incentive Program (EQIP) funds can be used on complementary or supporting practices on the same APN, provided the applicant is not receiving funds for the same practice from both sources. For example, if funds are requested from SWEEP for an irrigation system and NRCS is funding cover crops or irrigation water management on the same property, is that considered the same "project"? | CDFA OEFI will further define this requirement in the RFA following consultation with USDA NRCS. |
| | Allow SWEEP and EQIP funds to be combined to meet the needs of farms practicing crop rotation. In crop rotation situations, the irrigation system components do not have a 10 year life making SWEEP funding not compatible. If SWEEP funds could be combined with EQIP, SWEEP funds could be used on the energy components while EQIP funds could be used on the irrigation system components (drip tape, etc.). | SWEEP funded projects must result in both water savings and GHG reductions and awardees are expected to maintain the project for 10 years. |
| | Coordinate with NRCS and water districts to maximize SWEEP impacts | CDFA OEFI consults with NRCS and solicits stakeholder (including water districts) input on SWEEP program improvements. OEFI will evaluate strategies to enhance outreach regarding water district incentive programs, NRCS incentives or other programs that could benefit California farms. |
| 6. Technical Review | Improve the reviewers' experience and impact on the program. | CDFA OEFI attempts to improve the reviewer experience through training on the evaluation process prior to the application period and requesting reviewer feedback following each solicitation. |
| | Match reviewers with expertise in the region to the project applications from that region. | All SWEEP reviewers are technical irrigation experts affiliated with the University of California or California State University systems with broad expertise. Additionally, CDFA must consider workload for each reviewer. |
| | For expensive monitoring equipment such as weather stations and telemetry, ask applicants to justify why existing monitoring tools such as CIMIS are not sufficient. | CDFA has a robust technical review process in which technologies and project designs are evaluated on merit, feasibility and the proposed budget. |
| | Provide clear scoring criteria including guiding questions or scoring rubrics to help applicants assess the strengths/weaknesses of proposals and improve the quality of applications. | CDFA OEFI will recommend new scoring matrix to the EFA SAP. If adopted by the EFA SAP, this guidance will be included in the RFA. |

| Category | Comment Received | CDFA Response |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7. Scoring - Additional Considerations | Include Conservation Practice Standard (CPS) 327, Conservation Cover, in the list of soil management practices that increase soil water holding capacity. This is the practice used in California in permanent crops rather than CPS 340. | CDFA OEFI will consult with the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) regarding the inclusion of CPS 327 in the soil management practice additional consideration. |
| | Consider approving conservation practice standard 449, Irrigation Water Management (IWM), as an irrigation training option for growers. If they are implementing a 449 practice as part of an NRCS funded conservation plan, they will receive technical assistance for irrigation efficiency specific to their site and irrigation system. | CDFA OEFI will accept CPS 449 irrigation plans certified by USDA NRCS for the purpose of meeting the irrigation training additional consideration. The awardee must provide the IWM plan to CDFA as verification of the training. |
| | The Farmer Equity Act of 2017 (Section 510 of the Food and Agricultural Code) should be applied. Add Socially Disadvantaged Farmers and Ranchers to the Additional Criteria options. | CDFA hired a Farm Equity Advisor on September 20, 2018. OEFI will work in close consultation with the Farm Equity Advisor to incorporate requirements related to the Farmer Equity Act of 2017. |
| | Allow the business location (as opposed to strictly the project location) to count towards the Severely Disadvantaged Community (SDAC) additional consideration. | Per the requirements of Proposition 68 regarding funding to Severely Disadvantaged Communities, CDFA must determine the location of the project based upon the location where the benefits of the project (e.g., water savings, GHG reductions) will be realized. |
| | Further define what types of activities and infrastructure will qualify for the additional consideration for storm water capture and reuse and water recycling. Recommend that a water re-use system must conform to governmental agency regulations. | After consulting with partner state agencies, CDFA OEFI will further define this additional consideration and require that applicants be in compliance with regulations. |
| 8. Technical Assistance | Allow more flexible payments for technical assistance providers to pay for outreach and support for implementation. More financial and technical support is needed from CDFA for conducting workshop day to work with applicants. | CDFA has increased the grant award amount for technical assistance from \$5,000 in 2017 to \$20,000 in 2018. Of the \$20,000, up to \$5,000 per solicitation may be utilized to cover base expenses incurred by the providers, including staff time and outreach costs. Remainder funds are performance based, \$200 per individual assisted and \$400 for each submitted application. |
| | Technical assistance providers should be trained to better serve Socially Disadvantaged Farmers and Ranchers. | CDFA will evaluate requirements regarding the Farmer Equity Act of 2017 in consultation with the Farm Equity Advisor to be considered in future technical assistance efforts. |
| | Coordinate with stakeholders to improve SWEEP outreach, technical assistance, and irrigation management training. | CDFA OEFI will evaluate the effectiveness of the new technical assistance strategy and requirements. |
| | Increase funding for technical assistance and improve the application experience for farmers | CDFA has increased technical assistance funding and changed the assistance strategy to emphasize one-on-one assistance. |
| | Ensure the new platform allows applicants to share applications with technical assistance providers. | A technical assistance provider may create an application for an applicant using the technical assistance provider's account. More than one application can be submitted from an account. |

| Category | Comment Received | CDFA Response |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Enhanced training for technical assistance providers to ensure the producers receive the best help possible. | Training is provided to technical assistance providers and on-demand assistance is provided to them from CDFA to address their queries. |
| 9. Grant Process | To improve feasibility of the invoicing and reimbursement process allow recipients to move funds between supplies, equipment and labor without a line item shift if the amounts being moved are less than some percentage of the total award (such as 5% or 10%). | The CDFA Office of Grants Administration is examining the feasibility of this suggestion. If feasible, this change will be integrated into the terms and conditions of the program at the time awards are announced. |
| | Merge supplies and equipment into one category for materials. | Equipment and supplies have clear and unique definitions as described in the California grant regulations therefore merging the two into one category is not possible. |
| | Provide guidance up front on the required format for invoices to pump and irrigation companies, with an example invoice or a list of guidelines. | CDFA is developing an example invoice that will be included in the awardee package for reference. |
| | Restore advance payment eligibility to all grant recipients. | Options for advance payments are limited under Prop 68 funding. CDFA is currently determining the feasibility of broad implementation of an advance payment feature for this program. If feasible, this change will be integrated into the terms and conditions of the program at the time awards are announced. |
| | Allow real-time responses to questions submitted during the application period | In past funding cycles questions received during workshops and webinars have received real-time responses. Answering questions outside of the competitive FAQ process (such as email questions) is not feasible because accurate responses may require coordination between OEFI and the Office of Grants Administration. CDFA OEFI will provide work-hour availability to contracted technical assistance providers for SWEEP questions during the application period. CDFA is also evaluating the ability to increase FAQ postings. |
| | Lengthen the application period to 12 weeks. | CDFA is extending the application period to 8 weeks. A further extension to 12 weeks would delay awards and impact project implementation timelines. CDFA must consider funding source deadlines when setting program timelines. |
| | Streamline the application with autofill, checkboxes, etc. | The current SWEEP application is being developed and will take into consideration both the ease of applying for the program as well as effectively capturing the data that CDFA requires in order to make a funding decision and meeting funding source requirements. |
| | Convene irrigation experts, TA providers, and representatives from GSAs, water districts, and NRCS to help CDFA align SWEEP with long-term groundwater sustainability objectives and explore the barriers and opportunities for greater participation in southern California. | This is the role of the Environmental Farming Act (EFA) Science Advisory Panel (SAP). |

| Category | Comment Received | CDFA Response |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10. Consultation | Suggest that CDFA convene a meeting of SWEEP grant reviewers, technical assistance providers, NRCS, Department of Water Resources staff and some of the Groundwater Sustainability Agencies to discuss ways to support efficient irrigation management through SWEEP in ways that meet the goals of the program and positively contribute to sustainable groundwater management. | This is the role of the Environmental Farming Act Science Advisory Panel. |
| | Convene a committee of irrigation experts, technical reviewers, and TA providers to review and improve the program's water savings and GHG emissions calculators. | SWEEP calculators have been developed in coordination with subject matter experts. The GHG calculator was developed by the California Air Resources Board in coordination with CDFA and technical experts. CDFA coordinated the development of water calculator with NRCS |
| | Convene water and irrigation experts to help CDFA align SWEEP with long-term sustainability objectives | This is the role of the Environmental Farming Act Science Advisory Panel. CDFA OEFI can highlight this topic at future SAP meetings. |
| | Further explore the barriers and opportunities for participation in southern California | CDFA OEFI conducted a listening session in Imperial region on August 31 and solicited feedback. OEFI is also increasing funding to technical assistance providers in the region. |
| 10. General | The SWEEP 2018 Request for Applications includes key changes from the 2017 SWEEP Program that will encourage greater participation from landowners. | Comment of support - thank you. |

Note - Green color indicates comments and suggestions CDFA is able to consider for inclusion in the Program.

CDFA HEALTHY SOILS PROGRAM

Geetika Joshi, Ph.D.

Senior Environmental Scientist Supervisor, HSP

Environmental Farming Act – Science Advisory Panel Meeting

October 18, 2018

Sacramento, CA



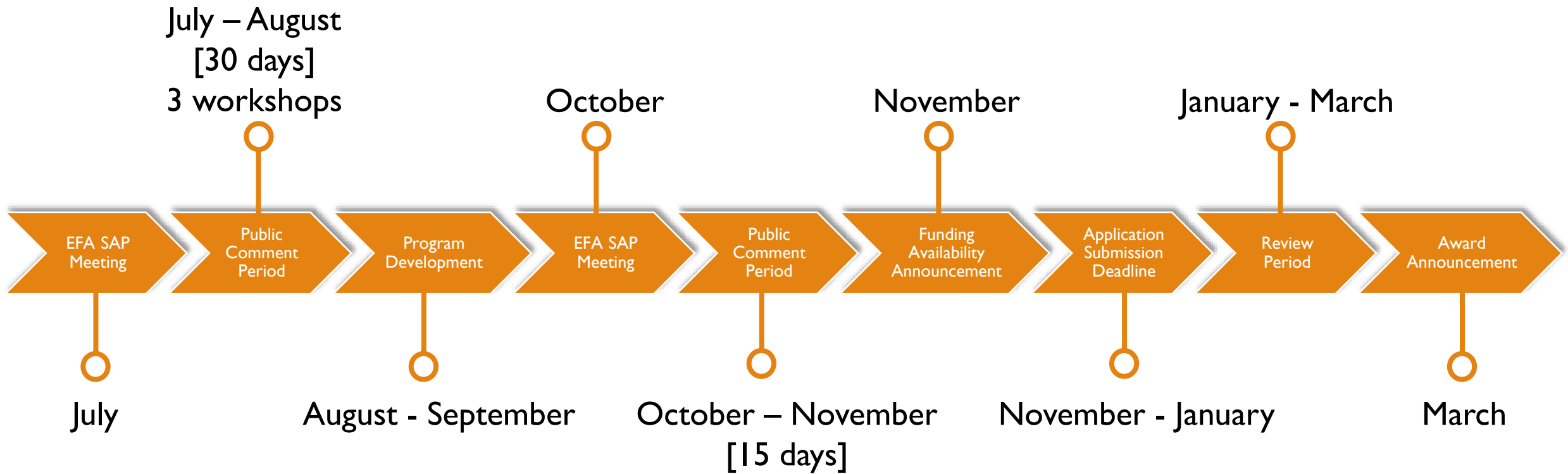
Outline

- Funding Source and Timeline of Activities
- New Management Practices Under Consideration for Inclusion in the CDFA HSP
- Update: Public Comments
- Update: Technical Assistance Grant

Funding Sources and Next Steps

- Funding sources:
 - Budget Act of 2018 - \$10 Million through Proposition 68 (California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access for All Act of 2018).
 - Budget Act of 2018 (SB 856) - \$5 Million through the Greenhouse Gas Reduction Fund (GGRF)
- One round of funding for \$15 Million.

Program Timeline 2018-19



QM Development in Collaboration with CARB and USDA-NRCS

New Management
Practices Under
Consideration for
Inclusion in
the CDFA HSP

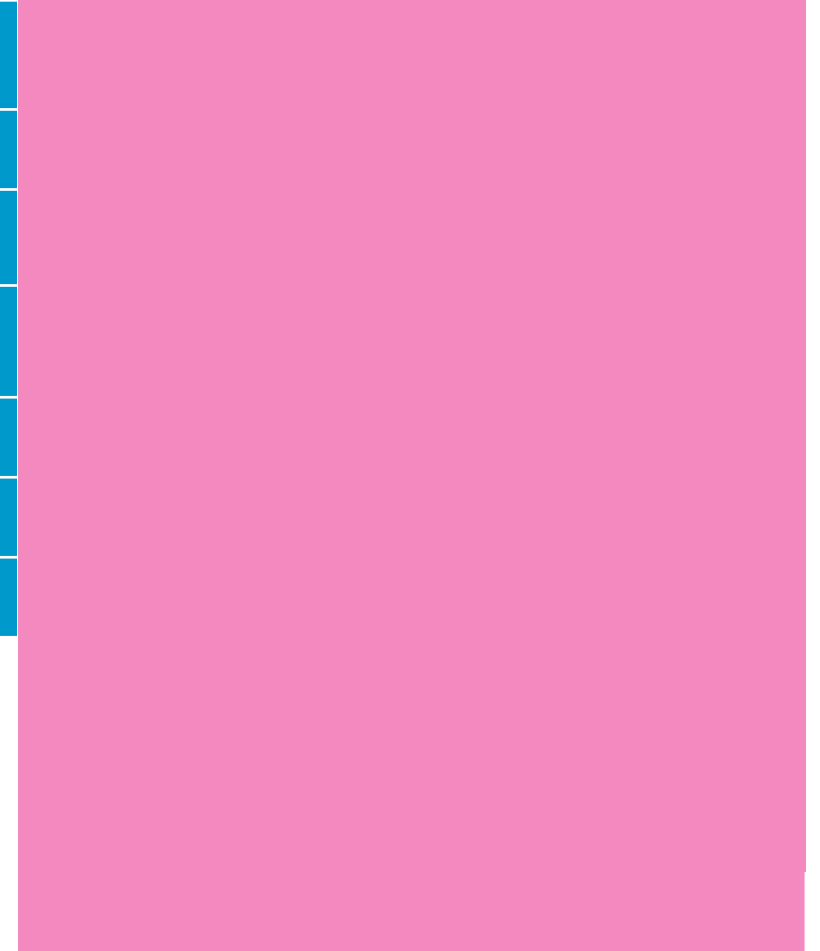
I. Recommended for Inclusion in 2018 HSP Incentives Program and 2018 HSP Demonstration Projects

2. Recommended for Inclusion in 2018 HSP Demonstration Projects with Research (Type A)

3. Practices Not Recommended for Inclusion

| |
|-------------------------------------------------------------------------|
| Nutrient Management (15% reduction in fertilizer application) (CPS 590) |
| Strip-cropping (CPS 585) |
| Forage and Biomass Planting (CPS 512) |
| Conservation Cover (CPS 327) |
| Range Planting (CPS 550) |
| Grassed Waterway (CPS 412) |
| Alley Cropping (CPS 311) |
| Multistory Cropping (CPS 379) |
| Prescribed Grazing (CPS 528) |
| Conservation Crop Rotation (CPS 328) |
| Tree/Shrub Establishment (CPS 612) |
| Application of On-farm Produced Compost |
| Nutrient Management (Nitrification Inhibitors) (CPS 590) |
| Nutrient Management (Slow-release Fertilizers) (CPS 590) |

| |
|---------------------------------------------------------------------------------------|
| Nutrient Management (Replacing Synthetic N Fertilizer with Soil Amendments) (CPS 590) |
| Whole Almond Orchard Recycling |
| One-time Compost Application with Higher Rates for Grazed Grasslands |
| Anaerobic Digestate Application |
| Vermicompost Application |
| Mycorrhizal Application |
| Microbial Inoculation with Compost Tea |



- Proposals were submitted between November 6, 2017 – December 18, 2017
 - 32 unique practices evaluated

Update: Public Comments

Public Comments

- 21 letters/emails received between July 25 and September 12, 2018
- Submitted comment letters are available online at: <https://www.cdfa.ca.gov/oefi/healthypoils/>
- CDFA has provided responses to comments in a summarized format, which is available online at: <https://www.cdfa.ca.gov/oefi/healthypoils/>
- Examples of comments and responses (next slide).

Public Comments

Category: Demonstration Projects

- *Comment:* Create a separate funded program for research. Remove Type A projects from HSP Demonstration Program.

Response: Research specific funding is not available. GHG emission reduction data for existing HSP practices are needed to further advance the modeled GHG reduction estimates for California.

- *Comment:* Do not support inclusion of Type A Research projects under HSP Demonstration Program.

Response: Type A projects allow for future consideration of new practices in HSP for which existing published peer-reviewed scientific data are insufficient.

Public Comments

Category: Cost of Practices – HSP Incentives Program

- *Comment:* Not being able to use own compost is cost prohibitive; maximum grant amount is too small to be effective compared to the work of application submission and reporting.

Response: CDFA has proposed inclusion of on-farm produced compost in future rounds of HSP.

- *Comment:* Include Farmer Equity Act of 2017 , assign 10 points to Socially Disadvantaged Farmers and Ranchers, distinct from DACs or SDACs. Add an SDFR checkbox to the application to ensure Farmer Equity Act compliance.

Response: Under consideration. CDFA hired Farm Equity Advisor on September 20, 2018. HSP will work in close consultation with the Farm Equity Advisor to incorporate requirements related to the Farmer Equity Act of 2017.

Public Comments

Category: Application design

- *Comment:* Do not track awarded projects by APN as one APN can have multiple fields, not all included in the same grant application, or a new practice might be added to a field where a different practice was funded in the past.

Suggest that CDFA track project by tracking parcel number AND field ID as most producers have field IDs registered with the County Agriculture Departments. This could be verified by the producer submitting a map, with parcel number information, ALL field ID information, and crop information in the beginning of the project as to ensure there is no "double funded" projects with in the same field ID perimeter.

Response: Tracking by APNs provides a simplified application and verification process. Not all counties may have registered field IDs. Field IDs add several layers of complexity to the application, reporting and verification processes for CDFA as well as for awarded farmers and ranchers. Due to lack of time to fully implement this significant change, CDFA will consider this suggestion for future rounds of HSP.

Public Comments

Category: Outreach

- *Comment:* Provide multilingual materials (flyer, FAQs, sample application).

Response: Technical Assistance Providers are encouraged to provide multilingual materials. CDFA will evaluate resources needed to provide multilingual materials and is working on a Spanish version of the flyer.

Category: Incentives Program - New Practices Proposed in November-December 2017

- *Comment:* Support inclusion of nitrification inhibitors and slow release fertilizers under HSP Incentives Program.

Response: CDFA proposes these practices to be included under HSP Incentives Program and HSP Demonstration Projects. Practices are already included in Comet Planner under CPS 590, Nutrient Management.

Public Comments

Category: Grant Process

- *Comment:* Allow 25% advance payments, make them easy.

Response: CDFA is supportive of implementing this comment and the suggestion is being evaluated by CDFA Office of Grants Administration.

Category: Technical Assistance

- *Comment:* Allow more flexible payments for Technical Assistance Providers to pay for their outreach and support for implementation. More financial and technical support is needed from CDFA for conducting workshop day to work with applicants.

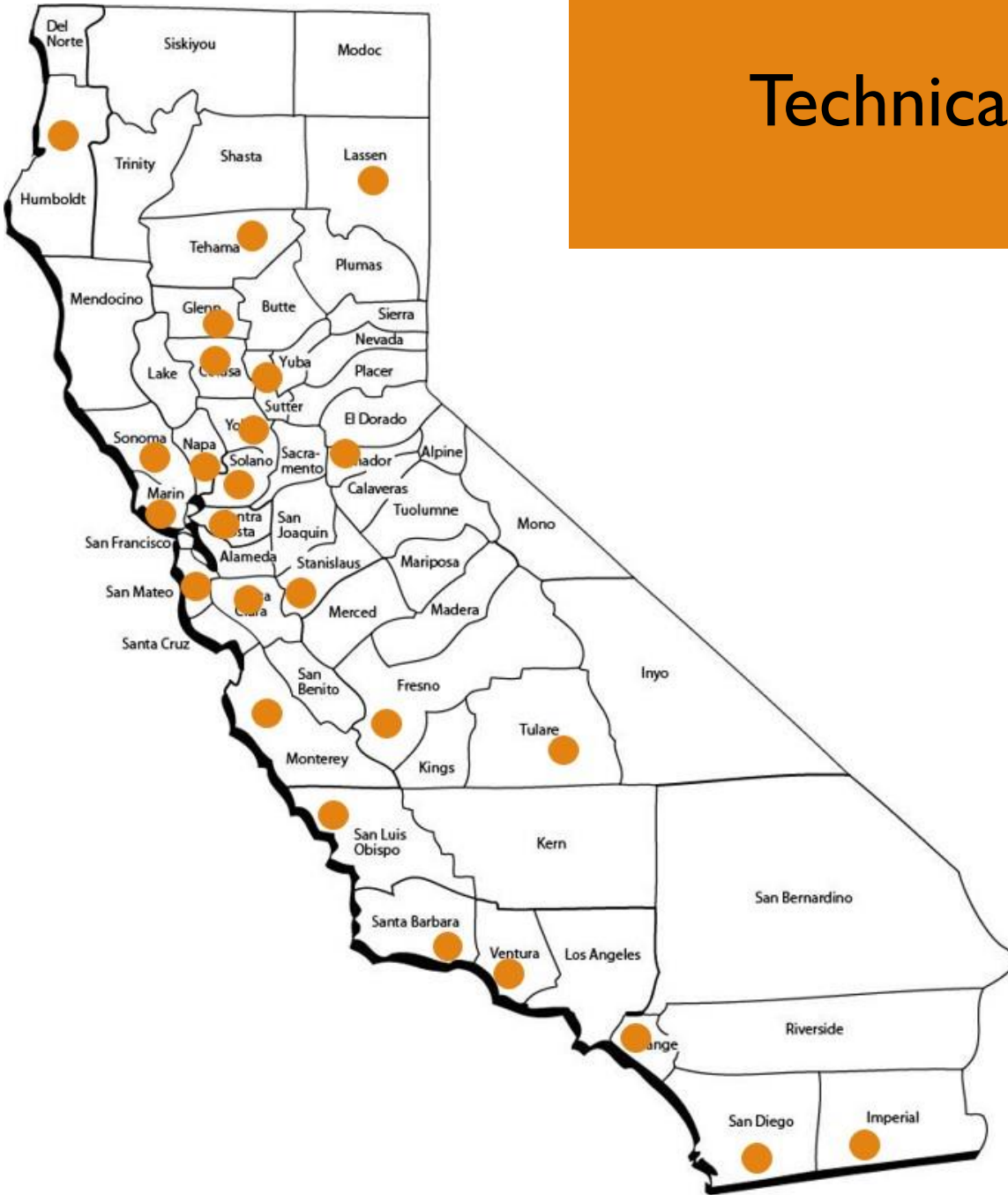
Response: CDFA has increased the grant award amount for technical assistance from \$5,000 in 2017 to \$20,000 in 2018. Detailed breakdown of cost in following section.

- *Comment:* Enhanced training for technical assistance providers to ensure the producers receive the best help possible.

Response: Training is provided to technical assistance providers and on-demand assistance is provided to them from CDFA to address their queries.

Update: Technical Assistance

Technical Assistance



- Award amount: up to \$20,000 per program:
 - \$5,000 for base expenses incurred.
 - \$200 per individual assisted.
 - \$400 per application submitted.
- Applications accepted between August 15, 2018 and September 14, 2018.
- 36 applications received, based in 25 counties.

Program Contacts

Guihua Chen, Ph.D.

Senior Environmental Scientist |
Guihua.Chen@cdfa.ca.gov

Geetika Joshi, Ph.D.

Senior Environmental Scientist |
Geetika.Joshi@cdfa.ca.gov

Amrith Gunasekara, Ph.D.

Science Advisor to CDFA Secretary

Manager, Office of Environmental Farming and
Innovation

Amrith.Gunasekara@cdfa.ca.gov



**Comments Received on the CDFA Healthy Soils Program
Comment Period : July 25, 2018 - September 12, 2018**

| Category | Comment Received (between July 25, 2018 and September 12, 2018) | CDFA Response |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. New Practices | Consider low inputs in farming so that extraction of fossil fuels is reduced. | Practices that reduce fossil fuel use in farming are outside the scope of the HSP. HSP focuses on practices that build soil health, rather than fuel-based GHG reductions. Technologies that achieve GHG reductions through use of renewable fuels are incentivized through other programs, such as CDFA's SWEEP and CARB's FARMER program. |
| | Incentivize the use of gypsum in soils. | Practice was not proposed during the new practices solicitation period in November - December 2017. |
| | Incentivize Class A biosolids application in soils. | Practice was not proposed during the new practices solicitation period in November - December 2017. Composted biosolids are eligible for funding under the compost application practices. |
| | Incentivize Integrated Pest Management (IPM) (CPS 595). | Practice was not proposed during the new practices solicitation period in November - December 2017. IPM has not been demonstrated to directly result in increase in soil carbon and reduce GHG emissions. |
| | Incentivize carbon dioxide crop enrichment. | Practice was not proposed during the new practices solicitation period in November - December 2017. |
| | Incentivize Hemp Sense soil enricher. | Practice was not proposed during the new practices solicitation period in November - December 2017. Proprietary products are not supported for incentives by CDFA. |
| 2. Demonstration Projects | Create a separate funded program for research. Remove Type A projects from HSP Demonstration Program. | Research specific funding is not available. GHG emission reduction data for existing HSP practices are needed to further advance the modeled GHG reduction estimates for California. |
| | Do not support inclusion of Type A Research projects under HSP Demonstration Program. | Type A projects allow for future consideration of new practices in HSP for which existing published peer-reviewed scientific data are insufficient. |
| | Remove requirement for treatment and control fields in demonstration projects. | Control fields are necessary to show the differences and benefits achieved by implementation HSP practices on the farm. |
| | Increase the grant award amount for Type B projects. | CDFA is open to suggestions on other award amounts. Comment letter did not include a proposed grant award amount for evaluation and any supporting information. |
| | Allow project owners to decide how to do outreach in demonstration projects: reduce the requirement for 120 attendees for field days to 30 and allow for more one on one outreach. Replace 120 attendee requirement with SMART goals. | Number of attendees is critical to increase the level of deliverables by demonstration projects. SMART goals are currently allowed and encouraged, however minimum number of attendee requirement must be met. Number of required attendees was reduced from 300 to 120 in response to previous public comments collected through public meetings of the Environmental Farming Act Science Advisory Panel. |
| 3. Cost of Practices - HSP Incentives Program | Not being able to use own compost is cost prohibitive; maximum grant amount is too small to be effective compared to the work of application submission and reporting. | CDFA has proposed inclusion of on-farm produced compost in future rounds of HSP. |
| | Improve compost reimbursement rate by allowing purchase of all 3 years of compost at once and apply in one year. | The practice of one-time application of higher rates of compost has been proposed as a Type A Demonstration Project practice for data collection and research, to facilitate publication of additional scientific data on this topic and to address nutrient management concerns associated with the application of larger quantities of compost. |
| | Take the real costs of the project into account. Provide grant recipients access to vendor information in their area of where to source project needs per your calculations. Cover labor costs as a separate line budget. | CDFA cannot endorse specific vendors or businesses. Labor cost is already considered in the Standard Payment Rates for practices. An itemized budget was replaced by Standard Payment Rates to minimize the burden of maintaining receipts, documents to support expenses, and reporting for the awarded farmers and ranchers. |

| | | |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4. Application Design | Include Farmer Equity Act of 2017 , assign 10 points to Socially Disadvantaged Farmers and Ranchers, distinct from DACs or SDACs. Add an SDFR checkbox to the application to ensure Farmer Equity Act compliance. | Under consideration. CDFA hired Farm Equity Advisor on September 20, 2018. HSP will work in close consultation with the Farm Equity Advisor to incorporate requirements related to the Farmer Equity Act of 2017. |
| | Provide easy application with pre-drafted menu instead of essay questions, reduce attachments. | New application platform under development includes some pre-drafted menu based questions. Some essay questions are necessary for competitive evaluation of submitted applications. |
| | Remove requirement for annual soil organic matter tests and instead ask for a reporting template with several narrative questions. | Soil organic matter tests are needed to determine if organic matter increases over time through implementation of HSP practices, and if not, helps understand reasons why. Soil organic matter tests are inexpensive and the cost of tests is covered by the HSP grant. |
| | Prioritize projects with multiple practices. | Prioritizing based on number of practices may discourage smaller operations proposing to implement fewer practices. |
| | Increase importance of environmental co-benefits including reduced pesticide use. | Environmental benefits are allocated up to 10 points in the scoring criteria. CDFA does not collect data on pesticide use and collecting such data would increase the implementation, data collection and reporting burden on the farmers and ranchers receiving grant awards. |
| | Provide a scoring rubric for the evaluation criteria. | Under consideration to provide in the Request for Grant Applications (RGA) for the next round. |
| | Support for improved budget sheet to be introduced. | Comment of support - thank you. |
| | Do not track awarded projects by APN as one APN can have multiple fields, not all included in the same grant application, or a new practice might be added to a field where a different practice was funded in the past. Suggest that CDFA track project by tracking parcel number AND field ID as most producers have field IDs registered with the County Agriculture Departments. This could be verified by the producer submitting a map, with parcel number information, ALL field ID information, and crop information in the beginning of the project as to ensure there is no "double funded" projects with in the same field ID perimeter. | Tracking by APNs provides a simplified application and verification process. Not all counties may have registered field IDs. Field IDs add several layers of complexity to the application, reporting and verification processes for CDFA as well as for awarded farmers and ranchers. Due to lack of time to fully implement this significant change, CDFA will not be able to evaluate this suggestion for inclusion in 2018 HSP. CDFA will consider this suggestion for future rounds of HSP. |
| | Support for upgrading application software to make it more user friendly for the producer and technical assistance partners. | Comment of support - thank you. |
| | New application platform should allow application sharing with Technical Assistance Providers. | Sharing application with Technical Assistance Providers is already allowed; applicant may share their log-in information for the application platform with Technical Assistance Providers. |
| | Allow real-time responses to questions submitted during the application period. | CDFA does not have resources for full-time staff for this service. Number of Q and A rounds have been increased from 3 in 2017 to 5 in upcoming 2018 round. |
| | Provide simpler application and faster way to inform applicant if CDFA did not receive application. | CDFA provides acknowledgement of receipt of application. If an acknowledgement is not received within 24 hours, then applicant should contact CDFA. |

| | | |
|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5. Outreach | Provide adequate outreach to Socially Disadvantaged Farmers and ranchers. | CDFA increased funds for technical assistance and outreach in 2018. CDFA will evaluate requirements regarding the Farmer Equity Act of 2017 in consultation with the Farm Equity Advisor to be considered in future technical assistance efforts. |
| | Provide multilingual materials (flyer, FAQs, sample application). | Technical Assistance Providers are encouraged to provide multilingual materials. CDFA will evaluate resources needed to provide multilingual materials and is working on a spanish version of the flyer. |
| 6. Incentives Program - New Practices Proposed in November-December 2017 | Support inclusion of nitrification inhibitors and slow release fertilizers under HSP Incentives Program. | CDFA proposes these practices to be included under HSP Incentives Program and HSP Demonstration Projects. Practices are already included in Comet Planner under CPS 590, Nutrient Management. |
| | Include compost tea application under HSP Incentives Program. | Practice is proposed as a Type A Demonstration Project practice for data collection and research, as characterization and user application rates need to be established for major crops to allow for quantification of GHG reductions, which is required for inclusion in the HSP Incentives Program. |
| | Include mycorrhizae application under HSP Incentives Program. | Practice is proposed as a Type A Demonstration Project practice for data collection and research, as published peer-reviewed scientific data establishing GHG reduction benefits with mycorrhizae are not available. |
| | Allow one time compost application to rangeland under HSP Incentives Program. | The practice of one-time application of higher rates of compost has been proposed as a Type A Demonstration Project practice for data collection and research, to facilitate publication of scientific data on this topic and to address nutrient management concerns associated with the application of larger quantities of compost. This practice is not currently in Comet Planner and more GHG reduction values need to be established for California for this practice. |
| | Refine QM to reflect refinement of integrated cropland ruminant grazing. | Integrated Cropland Ruminant Grazing is accommodated within the Prescribed Grazing practice, which is proposed by CDFA for inclusion under HSP Incentives Program and Demonstration Projects. Prescribed Grazing practice is already included in Comet Planner. |
| | Support for inclusion of conservation crop rotation and on-farm produced compost application practices in the HSP. | Comment of support - thank you. |
| | Support inclusion of vermicompost and Whole Orchard Recycling under HSP Incentives Program. | These practices are proposed as Type A Demonstration Project practices for data collection and research, as user application rates, demonstrated CA-wide GHG reduction benefits need to be established for inclusion under HSP Incentives Program. |
| | Do not support mycorrhizae application since no-till promotes mycorrhizae and provides their benefit. | Practice is proposed as a Type A Demonstration Project practice for data collection and research, as published peer-reviewed scientific data establishing GHG reduction benefits with mycorrhizae are not available. |
| | Do not support nitrification inhibitors and slow release fertilizers. | Reasons for lack of support not provided in letter. |
| | Support for new practices proposed for addition to HSP Incentives Program by CDFA. | Comment of support - thank you. |
| | Allow 3rd party verifications with RCDs. | Project verification has been included as a function for CDFA to minimize conflict of interest, since majority of RCDs are also Technical Assistance Providers for submission of applications. |
| | Allow 25% advance payments, make them easy. | CDFA is supportive of implementing this comment and the suggestion is being evaluated by CDFA Office of Grants Administration. |
| | If soil test requirements are included in the program, then CDFA should conduct tests OR allow for consultant costs and provide a standard protocol. | Cost of soil organic matter tests is covered by the HSP grant. CDFA provided a standard soil sampling protocol for collecting soil samples for testing in 2017. CDFA is revising the protocol for ease of use. |

| | | |
|--------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7. Grant Process | Support for allowing combination of HSP funds with EQIP funds and other cost-share sources, post-project requirements. | Comment of support - thank you. |
| | Support for removing the 3rd year cost-sharing requirement. | Comment of support - thank you. |
| | Support for extending the application period from 6 to 8 weeks. | Comment of support - thank you. |
| | Support for planning for a November through January application period to accommodate producer farming schedules. | Comment of support - thank you. |
| | Change the date implementation must start by in order to allow spring practices. If practices must be started by November 30, how does that accommodate spring practices, or the potential for late rains that might delay fall planting? | CDFA cannot reimburse costs for spring practices implemented prior to execution of grant agreements. CDFA will consider change of November 30 date to December 31, to allow for delays in fall plantings. |
| | Institute a 2-step application process with a short pre-proposal for HSP Demonstration Projects. | A two-stage review process is too long to be accommodated within 12 months, which include program development, public comment period, application submission, review and execution of grant agreements. This would limit CDFA's ability to fund all 3 years of the project term. |
| 8. Technical Assistance | Allow more flexible payments for Technical Assistance Providers to pay for their outreach and support for implementation. More financial and technical support is needed from CDFA for conducting workshop day to work with applicants. | CDFA has increased the grant award amount for technical assistance from \$5,000 in 2017 to \$20,000 in 2018. Of the \$20,000, up to \$5,000 may be utilized to cover base expenses incurred by the providers, including staff time and outreach costs. Remainder funds are performance based, \$200 per individual assisted and \$400 for each submitted application. |
| | Technical Assistance Providers should be trained to better serve Socially Disadvantaged Farmers and Ranchers. | CDFA will evaluate requirements regarding the Farmer Equity Act of 2017 in consultation with the Farm Equity Advisor to be considered in future technical assistance efforts. |
| | Enhanced training for technical assistance providers to ensure the producers receive the best help possible. | Training is provided to technical assistance providers and on-demand assistance is provided to them from CDFA to address their queries. |
| 9. General | CDFA made several improvements based on previous comments. | Comment of support - thank you. |
| | Need a public soil testing lab. | CDFA does not have resources for a public soil testing lab. Cost of soil organic matter tests required as part of the HSP are covered by the HSP grant. |
| | Are Cannabis growers eligible for funding through the HSP? | Projects must be located on a California agricultural operation. For the purpose of this program, an agricultural operation is defined as row, vineyard, field and tree crops, commercial nurseries, nursery stock production, and livestock and livestock product operations. This definition currently does not include cannabis. |
| Note - Green color indicates comments and suggestions CDFA is able to consider for inclusion in the Program. | | |

Updated Method to Determine Compost Practice Eligibility for the Healthy Soils Program

Benjamin Nicholson

California Air Resources Board



2017 Determination of Compost Eligibility

Project Site soil organic matter content \leq 20%

- Submission of soil organic matter test data from last 5 years

OR

- Querying the UC Davis Web Soil Survey
 - 8 Step Process
 - 11 clicks



Using the UC Davis Web Soil Survey 2017 Request for Grant Application Linked Presentation

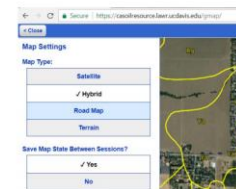
Step 1: Go to the UCD web soil survey site at <https://casoilresource.lawr.ucdavis.edu/gmap/> as shown below. Click "OK" at the bottom of box.



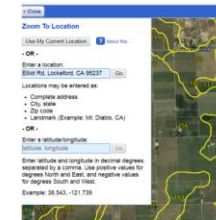
Step 2: Locate "Menu" on the up left side corner of the screen. A menu of three contents will pop up when clicked.



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".



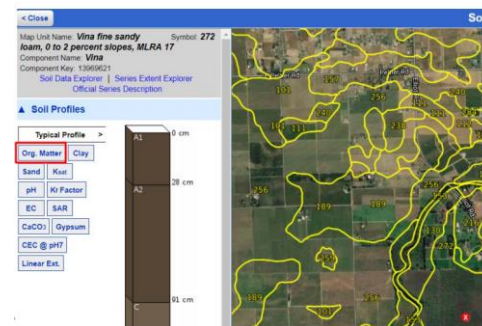
Step 4: Click "Menu" again. Click "Zoom to Location". This allows you enter your field address. Type your field address and click "Go".



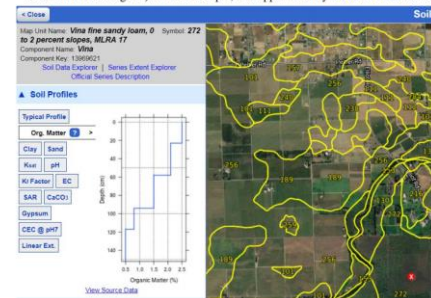
Step 5: Identify the field location as best possible. Move your mouse pointer to the location and click. Soil type of the field appears on the left side corner, with your selected location marked as red check box. For example, the major soil type on this field is "Vina". Record the name of the major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

Please remember that if an APN's soil organic matter is greater than 20%, all Compost Application practices are not eligible.

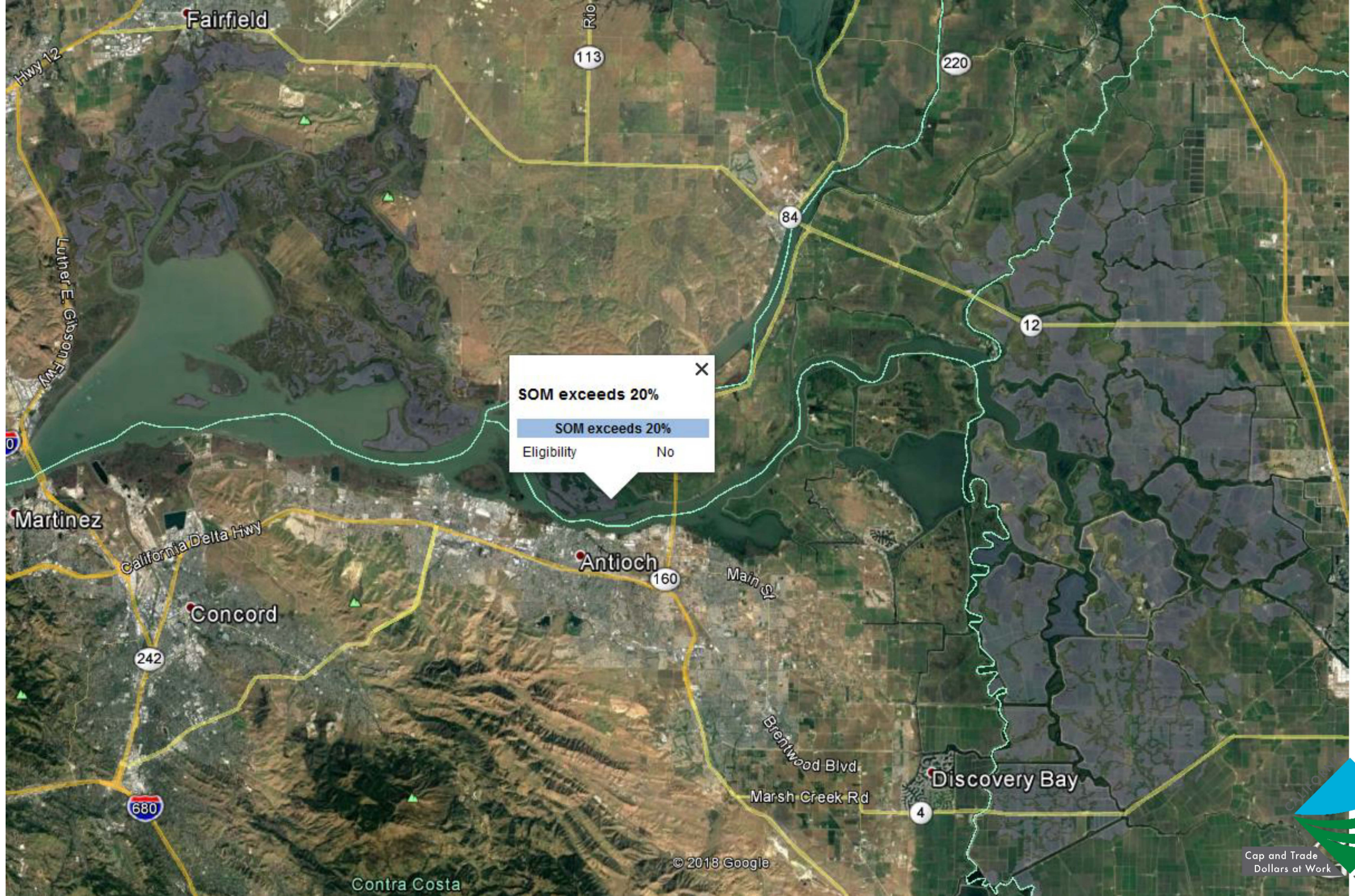


Healthy Soils Program

Compost Application Ineligibility Map

- Farmland Regions containing high soil organic matter were identified using the UC Davis California Soil Resource Lab's Soil Properties App.
- The NRCS Soil Survey SSURGO databases for those regions were evaluated using the same process used in the 2017 Healthy Soils Program Request for Grant Applications.
- Areas where the dominant soil type had a soil organic matter content greater or equal to 20% are identified.
- These areas are built into a file that can be downloaded viewed by the applicant.





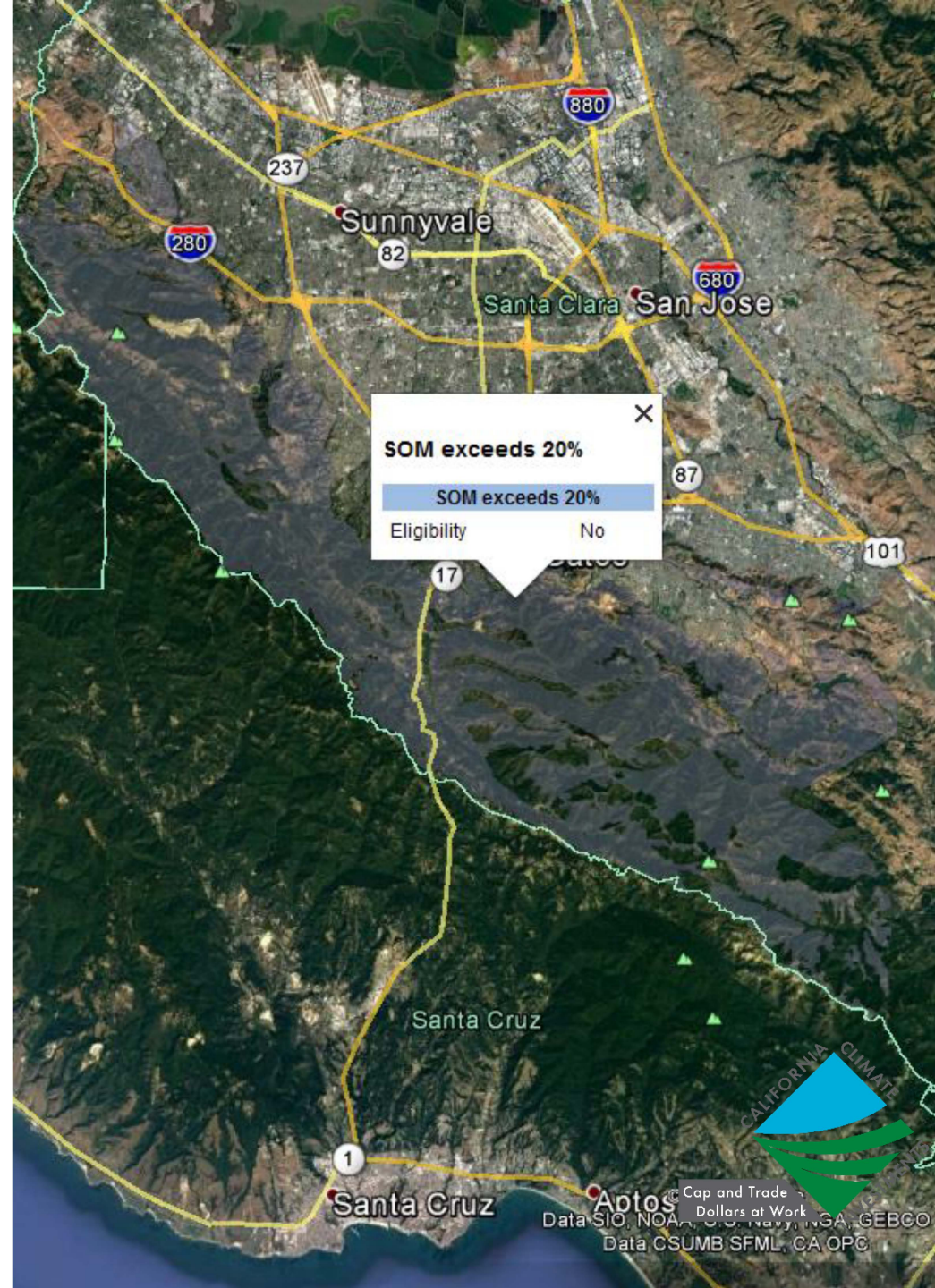
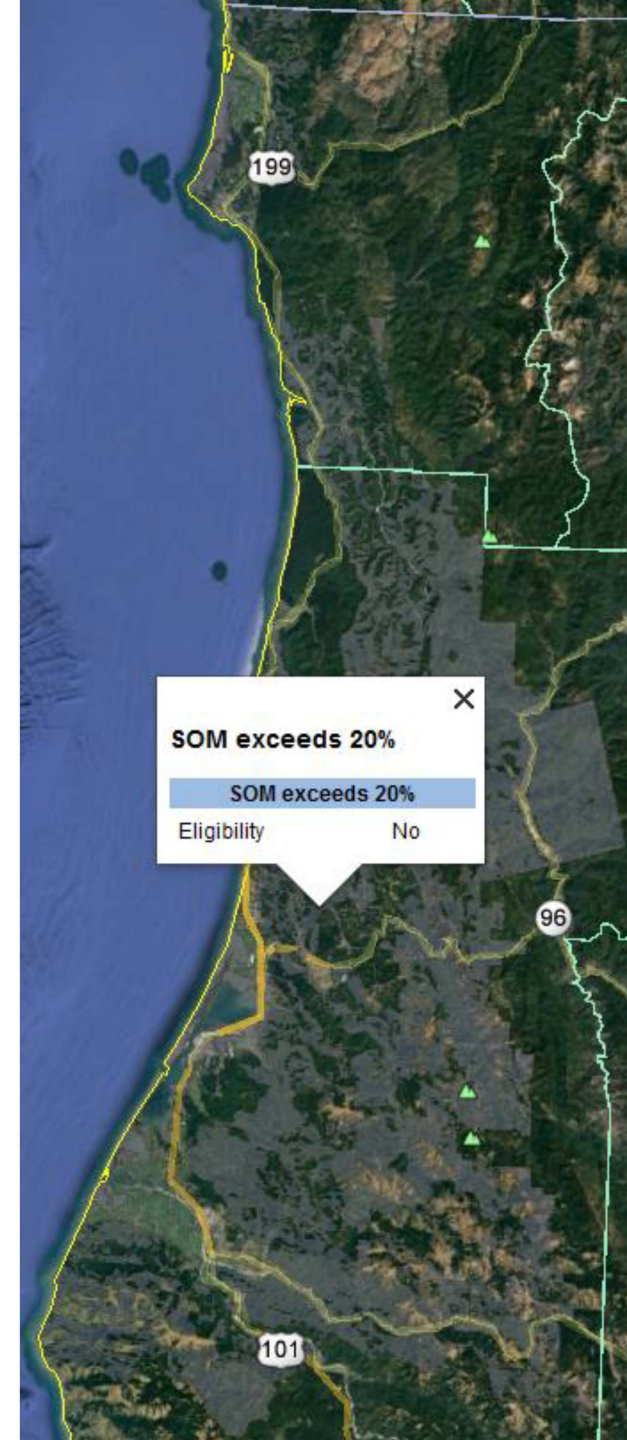
X
SOM exceeds 20%
SOM exceeds 20%
Eligibility No



Cap and Trade Dollars at Work

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Contra Costa



AB 2377 TECHNICAL ASSISTANCE REQUIREMENTS

Amrith Gunasekara, Ph.D.

Manager, Office of Environmental Farming & Innovation

Environmental Farming Act – Science Advisory Panel Meeting

October 18, 2018

Sacramento, CA



Outline

- AB 2377 Requirements
- Next Steps
- Update: CDFA's current Technical Assistance Grant

AB 2377
Requirements

AB 2377 Requirements

- Establish a technical assistance (TA) grant program to provide funds to technical assistance providers to Healthy Soils Program (HSP), Alternative Manure Management Program (AMMP) and State Water Efficiency and Enhancement Program (SWEEP).
- Total funding: Minimum 5% of the funds appropriated to the programs will be made available for technical assistance, up to a maximum of \$5 million.
- Grant award amount: minimum \$10,000 and up to \$100,000 annually for no more than 3 years, for a total grant of no more than \$300,000 per TA provider.
- TA to be prioritized for farms and ranches 500 acres or less.

AB 2377 Requirements

- TA activities to include outreach, education, project planning, project design, grant application assistance, project implementation or project reporting assistance.
- TA providers to include resource conservation districts (RCDs), UC Cooperative Extension and non-profit organizations with demonstrated technical expertise in designing and implementing agricultural management practices.
- Annual information sharing between CDFA, TA providers and other stakeholders.

AB 2377 Requirements

- CDFA to:
 - Establish criteria and guidelines for TA providers to qualify to receive grants. Applications to include a work plan identifying activities undertaken, estimated number of farmers and ranchers to be served and statement of qualifications of staff/project partners.
 - Ensure at least 25% of the funds are used to provide TA to socially disadvantaged farmers or ranchers.
 - Review applications and recommend grant awardees to Secretary.
 - Allow direct project costs and a percentage of overhead expenses as part of the grant.
 - Consult with Environmental Farming Act – Science Advisory Panel (EFA-SAP) on program design, guidelines and outreach.
 - Provide update to the EFA-SAP on the grant program on or before January 31, 2021.

Next Steps

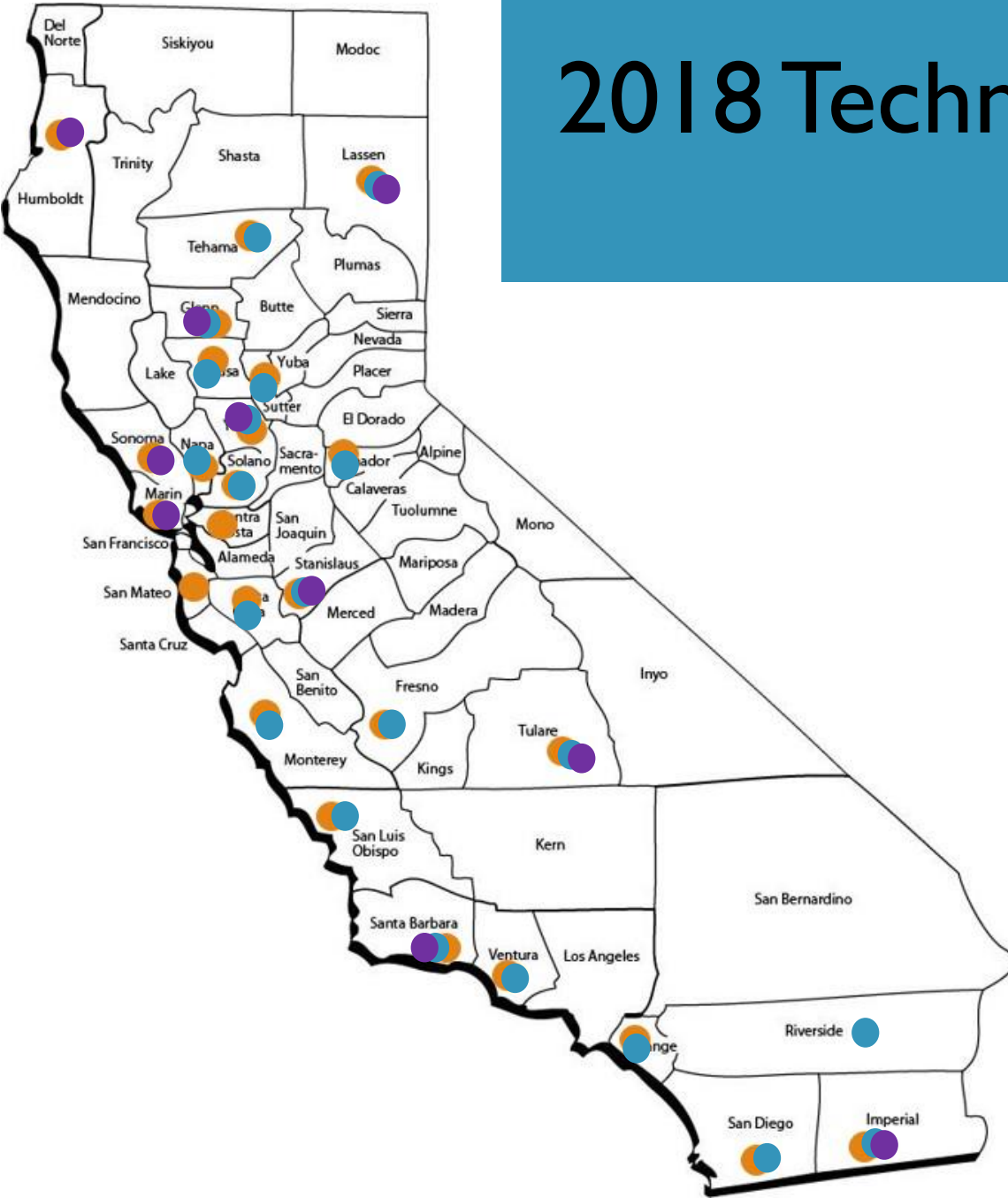
Next Steps

- CDFA will present a proposed program timeline and framework to the EFA-SAP at public meetings beginning January 2019.



**Update: CDFA's
current Technical
Assistance Grant**

2018 Technical Assistance Grant



- CDFA accepted applications from TA providers between August 15 and September 14, 2018.
- 44 applications received:
 - SWEEP: 28 applications, requesting a total of \$501,000 from 21 counties
 - AMMP: 12 applications, requesting a total of \$176,000 from 10 counties
 - HSP: 36 applications, requesting a total of \$629,000 from 25 counties

Thank you...

Amrith Gunasekara, Ph.D.

Science Advisor to CDFA Secretary

Manager, Office of Environmental Farming and
Innovation

Amrith.Gunasekara@cdfa.ca.gov

SWEEP: Carolyn Cook

Carolyn.Cook@cdfa.ca.gov

AMMP and HSP: Geetika Joshi

Geetika.Joshi@cdfa.ca.gov

