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

# MEETING AGENDA
**March 15, 2018**

## EFA SAP MEMBERSHIP
https://www.cdfa.ca.gov/oefi/efasap/

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

**Public Meeting**
**1:00 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/4450844349152604930
Webinar ID: 359-801-499
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 Cameron |
| 2. | Minutes from previous meeting | Chair Cameron |
| 3. | SWEEP Update<br>• Post-project quantification of GHGs reductions and water savings | Carolyn Cook, MSc, CDFA<br>Virginia Lew and Anish Gautam, CEC<br>Olivier Jerphagnon, MSc, and Kevin Langham, MSc, PowWow Energy |
| 4. | Healthy Soils Program Update<br>• Update for adding new practices to Quantification Methodologies | Guihua Chen, PhD, CDFA and Geetika Joshi, PhD, CDFA |
| 5. | Strategic Planning on future topics | Miriam Volat, UC Davis Facilitation Services |
| 6. | Public Comments | Chair Cameron |
| 7. | Next Meeting and location | Chair Cameron |

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**

California Farm Bureau Federation
2300 River Plaza Drive, Harvest Room
Sacramento, CA 95833

January 18, 2018
1 PM – 5 PM

**MEETING MINUTES**

## Panel Members in Attendance

Don Cameron, Terranova Ranch (Chair and Member)
Jocelyn Bridson, MSc, Rio Farms, (Co-Chair and Member)
Julie Alvis, Resources Agency (Member)
Kathryn Lyddan, Department of Conservation (Member)
Emily Wimberger, CalEPA, ARB (Member)
Judith Redmond, Full Belly Farm (Member)
Vicky Dawley, Tehama RCD (Member)
Scott Couch, CalEPA, State Water Board (Member)
Doug Parker, PhD. (Subject Matter Expert)
Hudson Minshew (filling in for Tom Hedt, USDA NRCS, Subject Matter Expert)

## State Agency Staff and Presenters

Secretary Karen Ross, CDFA
Cynthia Corey, California Farm Bureau Federation
Miriam Volat, UC Davis Facilitation Services
Steven Springhorn, DWR
Wyatt Arnold, DWR
Katie Riley, Environmental Incentives
Guihua Chen, PhD, CDFA
Geetika Joshi, PhD, CDFA
Ravneet Behla, PhD, CDFA
Amrith Gunasekara, PhD, CDFA

AGENDA ITEM 1 – Introductions

The meeting was called to order at 1:06 PM by the chair, Mr. Don Cameron. Introductions were made. Present at the meeting were all the members noted above under “Panel Members in Attendance.” Secretary Ross introduced and thanked retiree Cynthia Corey for her years of service at the California Farm Bureau Federation. Ms. Corey acknowledged the Panel for their successes and thanked them for their work in promoting environmental farming.

AGENDA ITEM 2 – Minutes from Previous Meeting

Chair Cameron introduced the minutes from the July 20 and October 26, 2017 meetings. A motion was made by Ms. Alvis to accept the minutes as presented by CDFA staff and the motion was seconded by Mr. Couch. The motion was moved by all members present and accepted without further changes.

AGENDA ITEM 3 – Strategic Planning on Future Topics

Mr. Cameron introduced Ms. Volat to discuss strategic planning for the future topics that were discussed at the Science Advisory Panel meeting on October 26, 2017.

Ms. Volat explained the overarching focuses for 2018. Science Panel members concluded that they should focus on the following topics for 2018, in order of priority: ecosystem services, native plants and species, agriculture press tour/leverage demonstrations and funded/existing projects, mapping and inventory of groundwater recharge on working lands, new technology, bio products and bio-based industry. Questions from the public were entertained by Science Panel members and CDFA staff.

The Panel confirmed the topics and Ms. Volat stated she would compile all comments on a final written report. Chair Cameron thanked Ms. Volat for facilitating the discussion.

AGENDA ITEM 5 – Regional Conservation Investment Strategy (RCIS)

Agenda item 4 was moved after Agenda items 5, 6, and 7, at the request of Dr. Gunasekara, to facilitate adequate time for the participants to travel to the meeting and allow for accommodating the presenter's schedules.

Chair Cameron introduced Ms. Riley to discuss the Regional Conservation Investment Strategy (RCIS). She explained that the purpose of RCIS is to improve conservation planning and delivery, streamline mitigation for public infrastructure projects, provide a means to assign credits to new types of actions, and unlock advanced mitigation for the first time. She discussed the elements of the program and showed maps of current and past RCIS projects in California.

Questions from the public and Science Panel members were entertained by Ms. Riley. She noted that current RCIS projects are listed at cvhe.org; the Central Valley Habitat Exchange.

AGENDA ITEM 6 – Healthy Soils Program (HSP) Update

Chair Cameron introduced Dr. Chen who provided an update to the Science Panel on the Healthy Soils Program. She discussed the projects selected for funding and distribution of awardees for the HSP Incentives Program and HSP Demonstration Projects. She explained the proposed management practices to be considered for

inclusion under the HSP. The proposed practices included those for croplands, grasslands/rangelands, cropland to herbaceous cover, and establishment of woody cover. Dr. Chen stated that CDFA will analyze the data and relay information at the next Science Advisory Panel meeting.

Several questions from the Panel were facilitated by CDFA staff. Topics included remaining fund allocation, the purpose of pre-project consultations, preventing incomplete applications, incorporating disadvantaged communities and the future of the HSP.

AGENDA ITEM 7 – SWEEP Update

Chair Cameron introduced Dr. Behla who provided an update on data analysis trends from 2014-2017 on SWEEP funding. He listed the SWEEP project categories, which include irrigation systems, irrigation monitoring, variable frequency drives, pump improvements and renewable energy. He presented several graphs that showed an increase in activities since the program's start, as well as figures showing GHG reductions and water savings compared to requested funds. He noted there are positive correlations in the two comparisons, which implies CDFA funds are reducing GHGs and saving water. Questions and comments from the Science Panel members were entertained by CDFA staff.

AGENDA ITEM 4 – DWR Land Use Viewer

Dr. Gunasekara introduced Mr. Springhorn and Mr. Arnold who discussed DWR's Sustainable Groundwater Management (SGM) Program. Mr. Springhorn stated that the four steps of SGM are forming agencies, developing plans, implementing plans, and achieving sustainability. He explained stakeholders' roles, groundwater sustainability methods, and DWR's technical resources.

Mr. Arnold explained county land use surveys and showed an interactive map demonstration. He showed that one can view groundwater and soil changes over time in individual counties and statewide. He also demonstrated that a specific area can be viewed and filtered to show only one type of crop. Questions from the Science Panel members were entertained by Mr. Springhorn and Mr. Arnold.

AGENDA ITEM 8 – Public Comments

Several questions and comments from the public were accommodated by Chair Cameron and CDFA staff. They included clarifying criteria for HSP project evaluation, addressing public and SAP feedback on the HSP, inquiring about HSP future funding, and ensuring that the HSP focuses on improving soil health, in addition to GHG reductions.

AGENDA ITEM 9 – Next Meeting and Location

Dr. Gunasekara stated that the next meeting will be March 15, 2018. A location was not confirmed. The meeting was adjourned at 3:58 PM by Chair Cameron.

Respectfully submitted by:

_____ _____

Amrith Gunasekara, Ph.D. Date

# POST PROJECT QUANTIFICATION OF GHG AND WATER BENEFITS

Remote Monitoring Approach

# CALIFORNIA DROUGHT, WATER, PARKS, CLIMATE, COASTAL PROTECTION, AND OUTDOOR ACCESS FOR ALL ACT OF 2018.

- Enrolled September 19, 2017
- Authorizes the issuance of $4 billion in bonds
- Must be approved by the voters on **June 5th 2018**

SB 5 (Chapter 11.6. 80147 (b)) Regional Sustainability for Drought and Groundwater, and Water Recycling:

*"...funds made available pursuant to this section, up to twenty million dollars ($20,000,000) shall be available for the State Water Efficiency and Enhancement Program administered by the Department of Food and Agriculture."*


- October 2017 - CDFA and DWR made a joint award to North San Joaquin Water Conservation District and 19 affiliated farms
- February 27, 2018 - CDFA and DWR were informed by the district that an assessment ballot measure for  failed by a 1% margin.
- The success of the assessment was necessary for the water district's pipeline project to move forward.
- CDFA's deadline to encumber the $1.7 million dedicated to the project is June 30, 2018.
- This does not leave enough time for a resolution on the joint project.
- CDFA is moving forward with reallocating these funds to unfunded SWEEP applications from the 2017 solicitation. Due to the smaller appropriation, many excellent projects remain that can now be funded.

# POST PROJECT QUANTIFICATION OF GHG AND WATER BENEFITS

Remote Monitoring Approach

# 3 YEAR AUDITING REQUIREMENT

- Required to audit 10% of the projects (Completed 18%)
- Obtain **energy** and **water** records from agricultural operations
- Compute, compare, and report GHG emission reductions to ARB

# TWO APPROACHES TO MONITORING

- The three year auditing requirement came into SWEEP during the third round, which we call SWEEP 2015 (or Round 3).

- For SWEEP 2015, CDFA is collecting records on water and energy use from a subset of the projects. 1st year results have been presented at the previous SAP meetings.

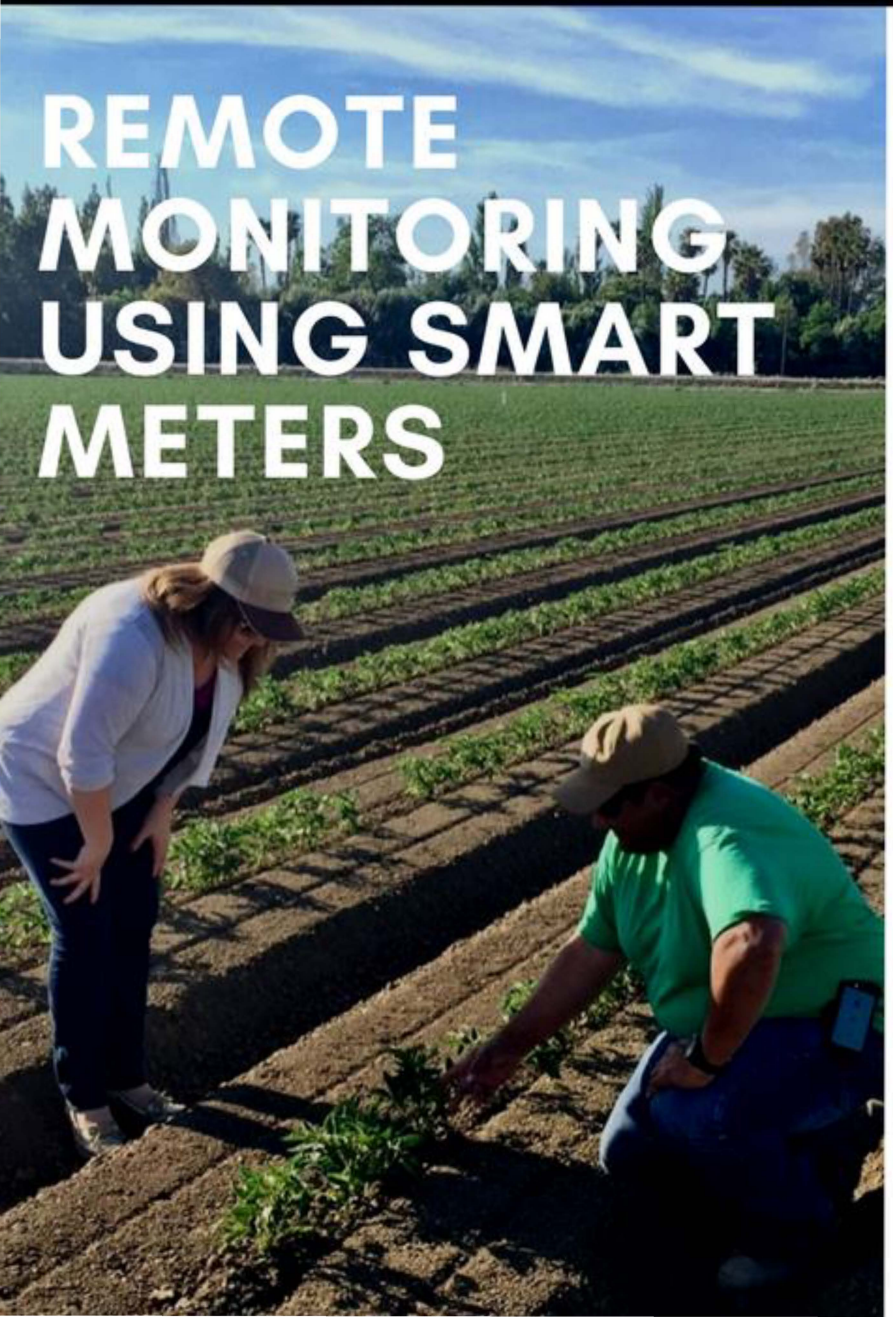
- For the 2016 Round 1 SWEEP projects, we are taking a different approach by utilizing a third party to perform the energy and water audit.

## SUMMARY OF THE 2016 ROUND I PROJECTS

**126** projects

**$16m** distributed

- Project implementation from mid 2016 to mid 2017
- Annual GHG reductions are estimated at **5,586 MT CO2e**
- Annual water savings are estimated at **20,573 acre-feet**
- CDFA will begin reporting on the actual project benefits in the 2018 annual report to ARB




- CDFA held a competitive bid process for a third party to remoting monitor SWEEP projects.
- PowWow Energy was selected for the contract
- Background with California Energy Commission – EPIC (Electric Program Investment Charge)

# THANK YOU

Carolyn Cook, M.Sc.
Senior Environmental Scientist, CDFA
Carolyn.Cook@cdfa.ca.gov

# Introduction to advanced data analytics platform for food and agriculture

Olivier Jerphagnon, Founder and CEO

# Water/energy data across the food chain

**Compliance**

Implementing water and energy policy

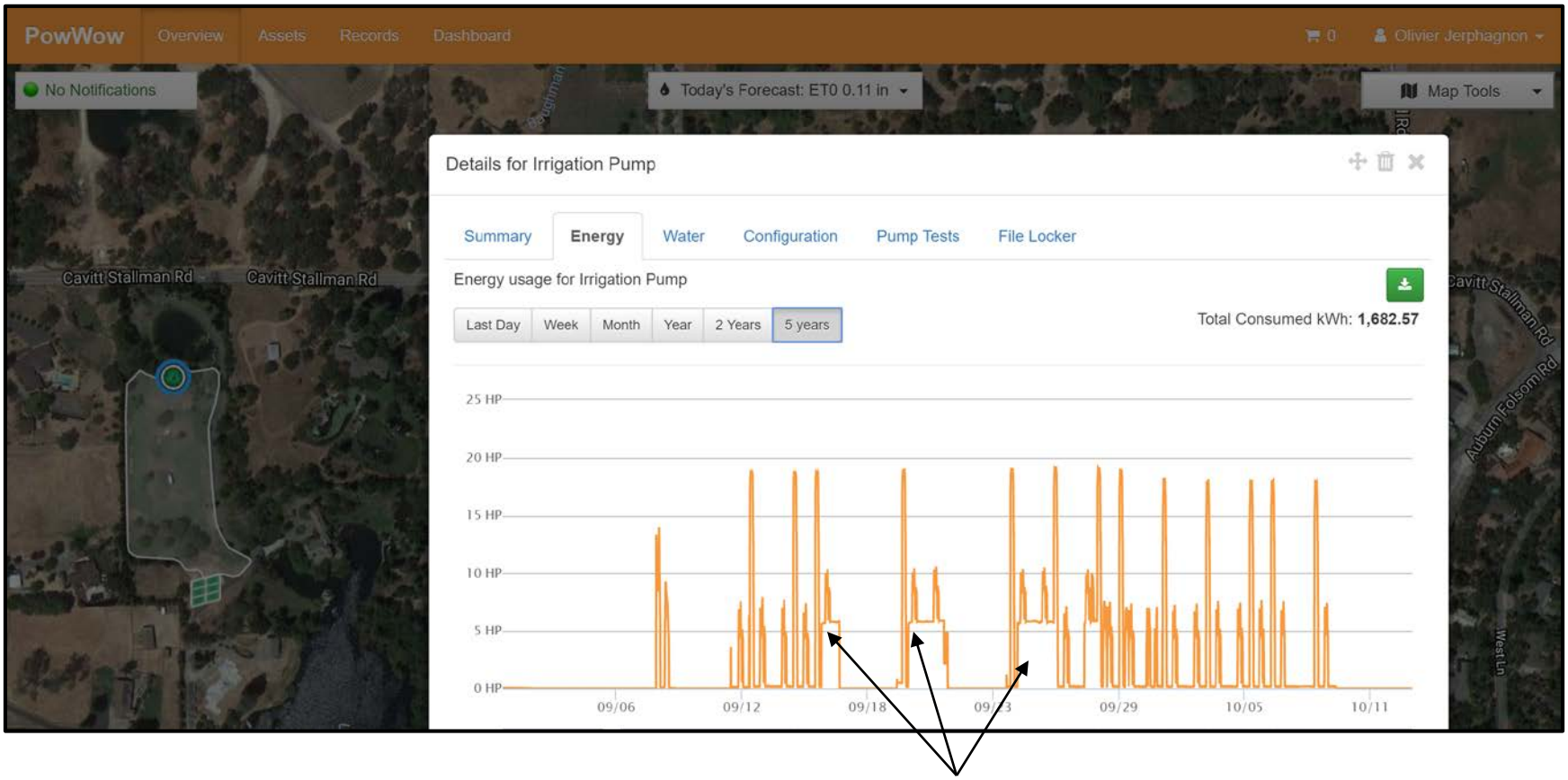
**Production**

Increasing yield per unit of water at the farm

**Supply chain**

Educating all of us about impact of our diet

# The platform started with a leak



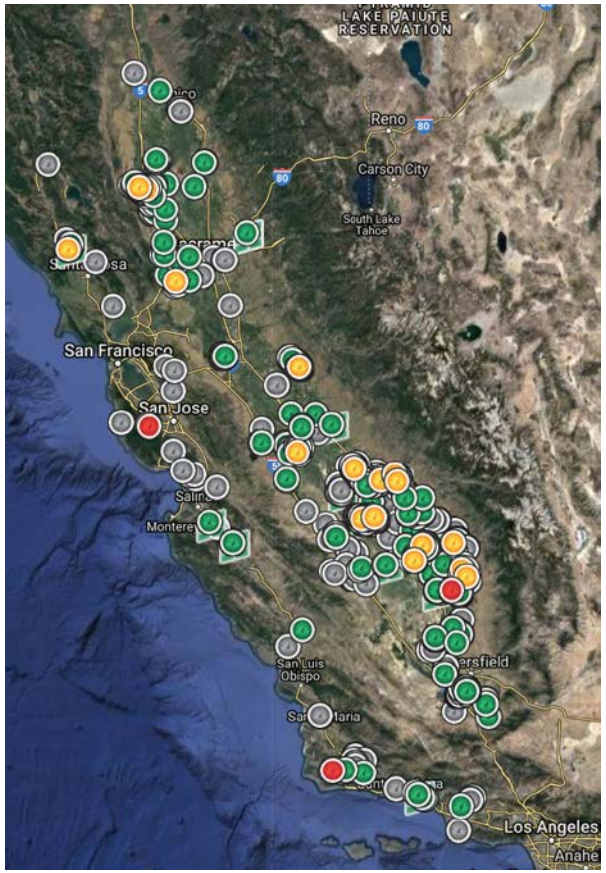

Leak



Presentation to CDFA on 3/15/2108

PowWow

# Company funded in California in 2013




Presentation to CDFA on 3/15/2108

PowWow

# Collaboration with UCSB and UC Davis

## Energy savings on UCSB campus


FLEXALERT.ORG

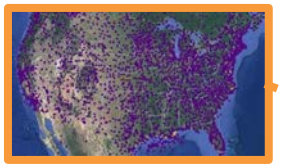
CAMPUS CONSERVATION NATIONALS 2014

## Water measurement at UCD

(Russell Ranch)

# Company has grown since: full platform

Energy data
(Green Button)



Weather data
(NWS, etc.)

Pow
Wow

**2 patents granted**

Aerial images and
irrigation schedules

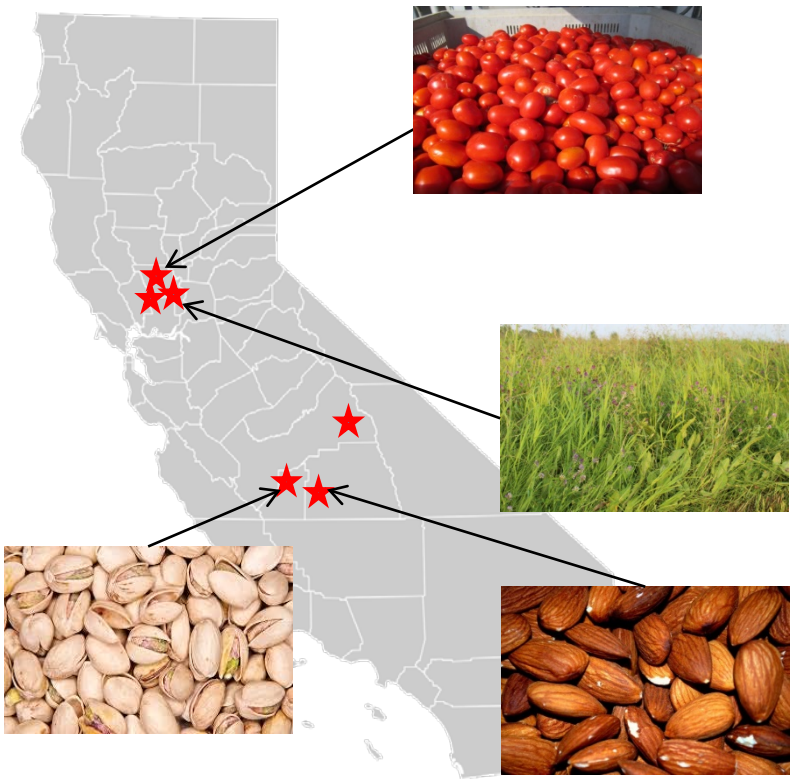



Presentation to CDFA on 3/15/2108

PowWow

# Deficit irrigation: water savings per yield

3 years, 4 crops; 5 farm sites



| Site | Change in water use efficiency in 2016 (%) |
|---|---|
| #1 – Pistachio | X |
| #2 – Almond | -8% (-15% was goal) |
| #3 – Tomato | -9% (-14% at UCD) |
| #4 – Tomato | X |
| # 5 - Alfalfa | -9% |

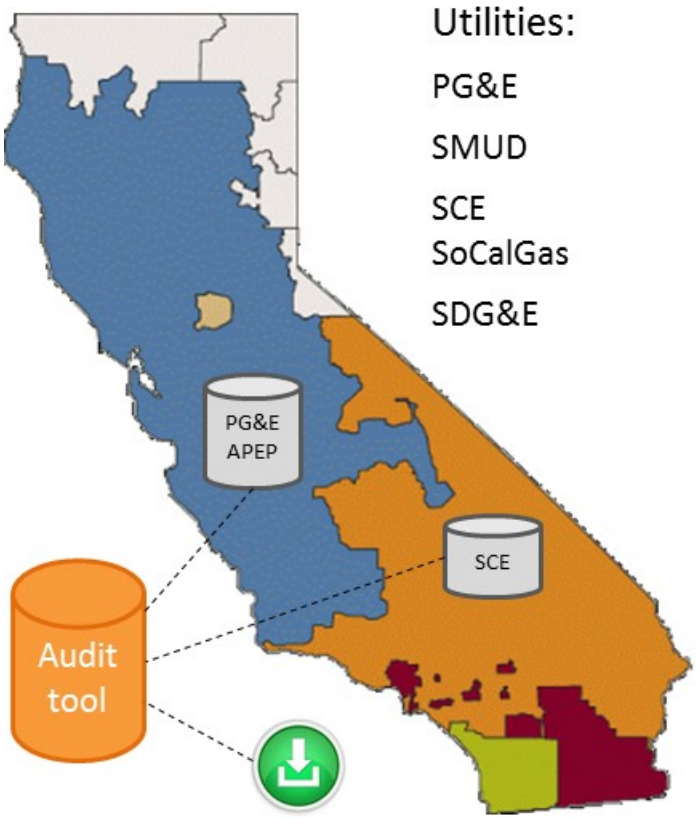
Consistent **improvement of 8% in water use per yield** across crops. No adverse effects following years.

Why the same number? Limitation is labor schedule (lack of automation)

*3-year trial funded by CEC (2015-17)*

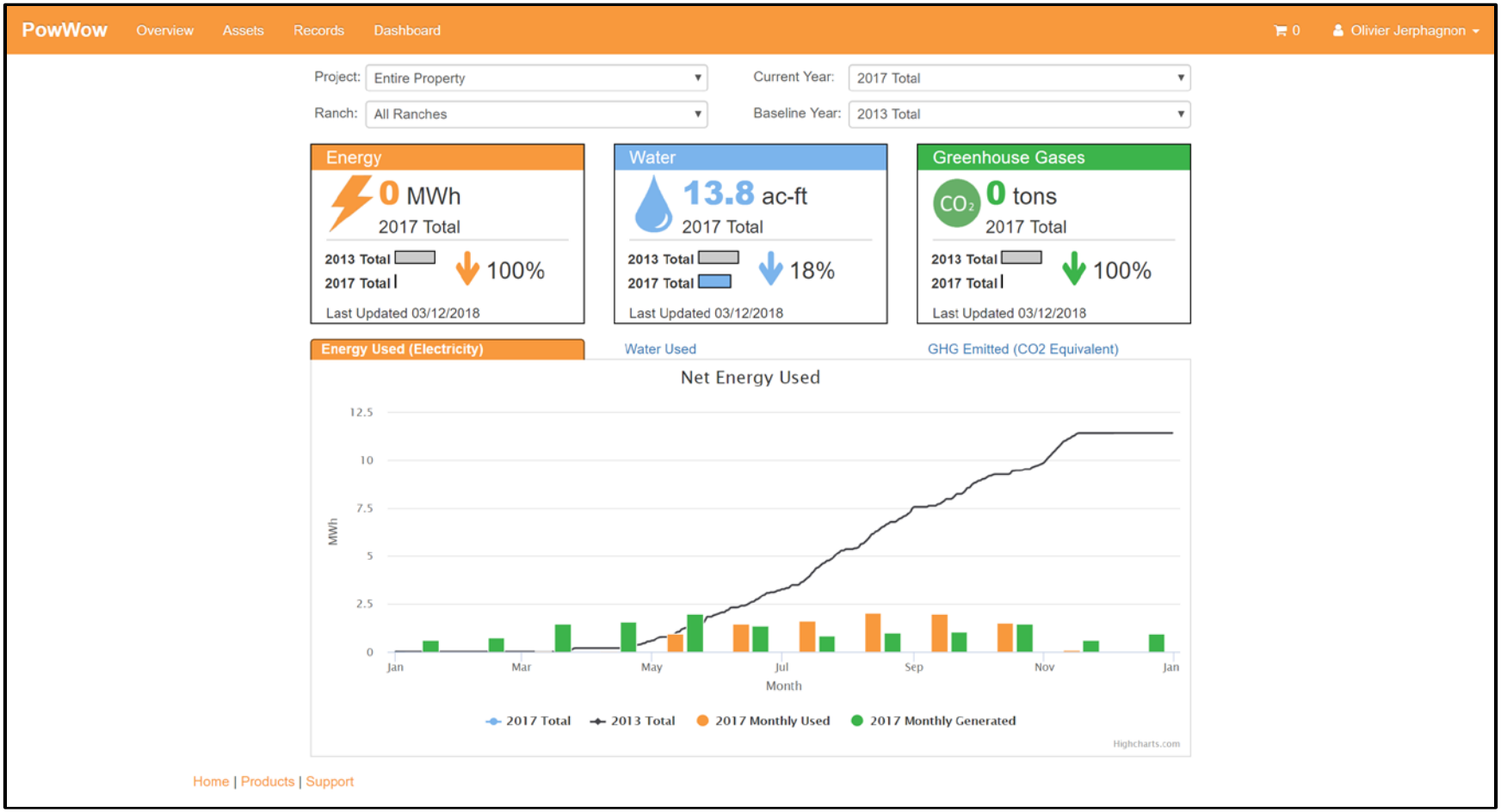
# Pump monitoring: energy and water audit

- Automated quantification tool for energy & water could facilitate other programs (SWEEP, SGMA, etc.) by tracking actual energy, GHG and water savings
- Analogy with problem that Prop 39 created for schools. Green Button was of great help to accelerate projects




*Slide presented at EPIC Symposium in Dec. 2015*

# Collaboration with CDFA: dashboard

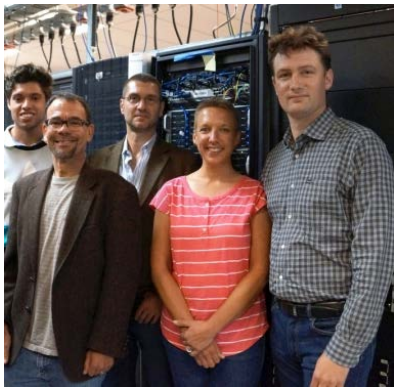





Presentation to CDFA on 3/15/2108

PowWow

# Answers, not more data



UCSB
UNIVERSITY OF CALIFORNIA
SANTA BARBARA

FRESNO STATE
Discovery. Diversity. Distinction.

UCDAVIS
UNIVERSITY OF CALIFORNIA

WEST HILLS COLLEGE
COALINGA

Thank you!

# SWEEP Quantification Tool

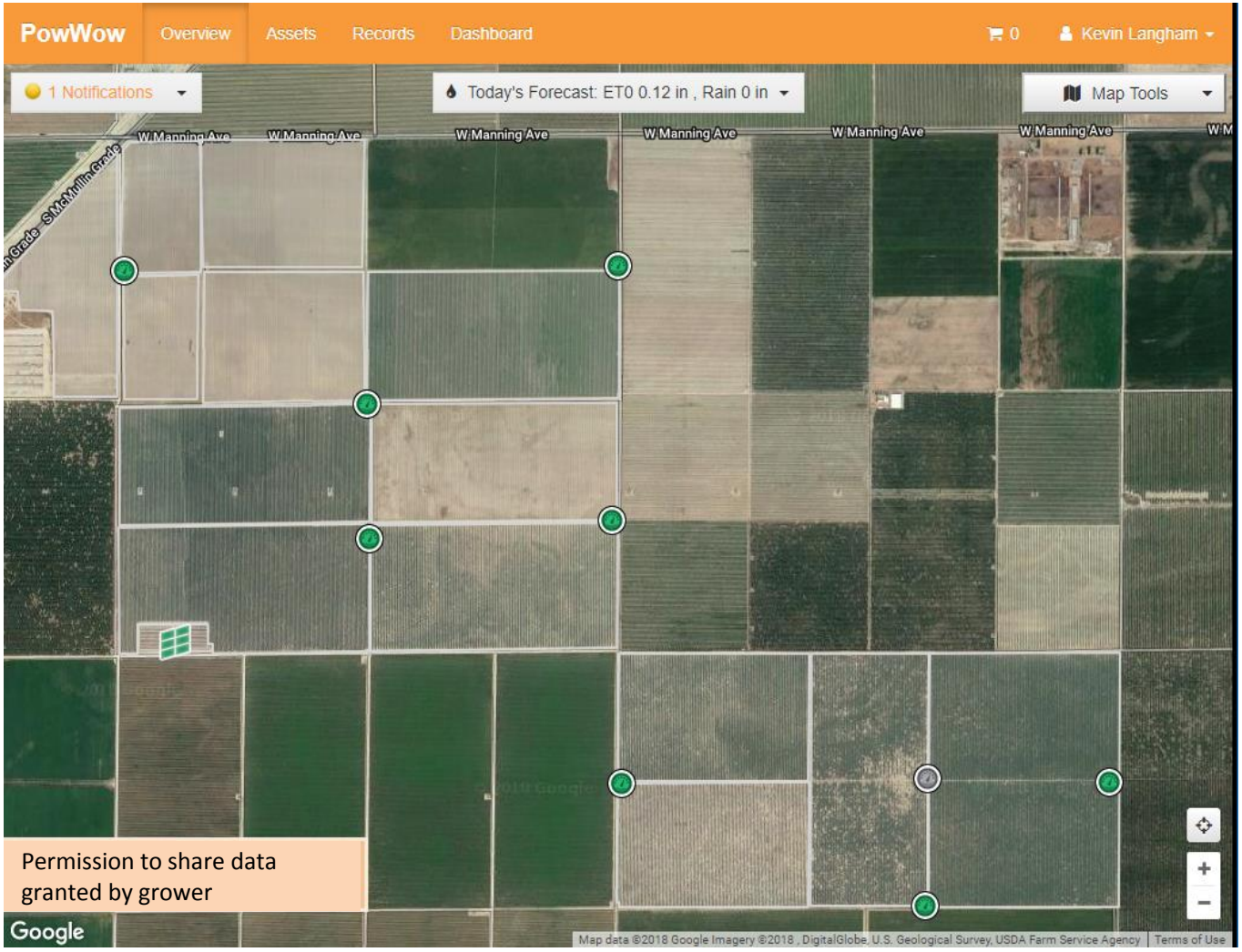
Kevin Langham, Sr. Project Manager

# Quantification of SWEEP impact

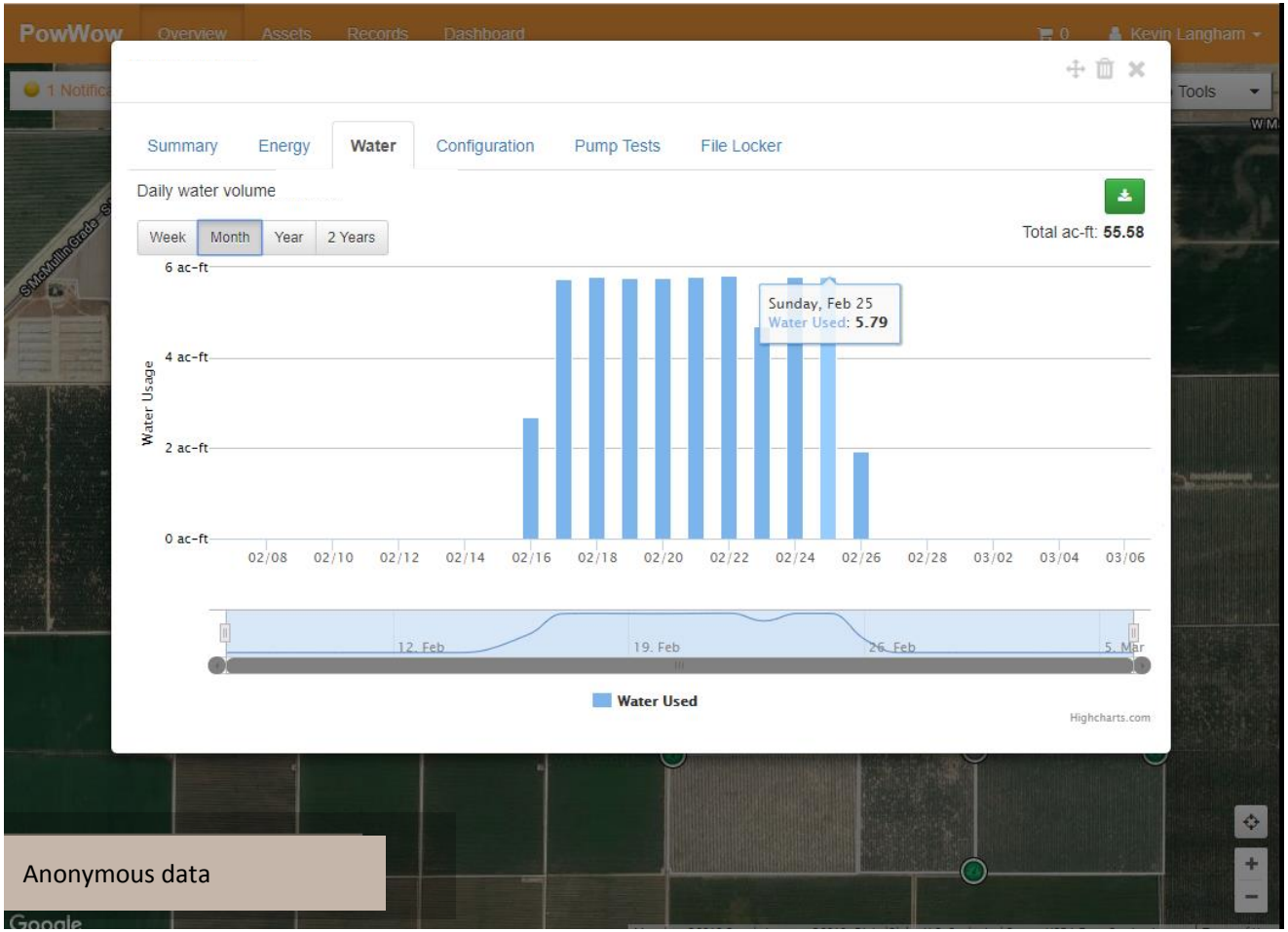
- Provide financial incentives to CA ag operations to reduce GHG emissions and save water
- PowWow contracted to help quantify the impact of the grants through monitoring of real data

| Goal | Project Type |
|---|---|
| Water conservation | Weather, soil or plant based sensors for irrigation scheduling; Micro-Irrigation or drip systems |
| GHG reduction | Fuel conversion; Improved energy efficiency; Low pressure systems; Variable frequency drives; Reduced pumping |
| Other | Other innovative ideas that do not fit above |

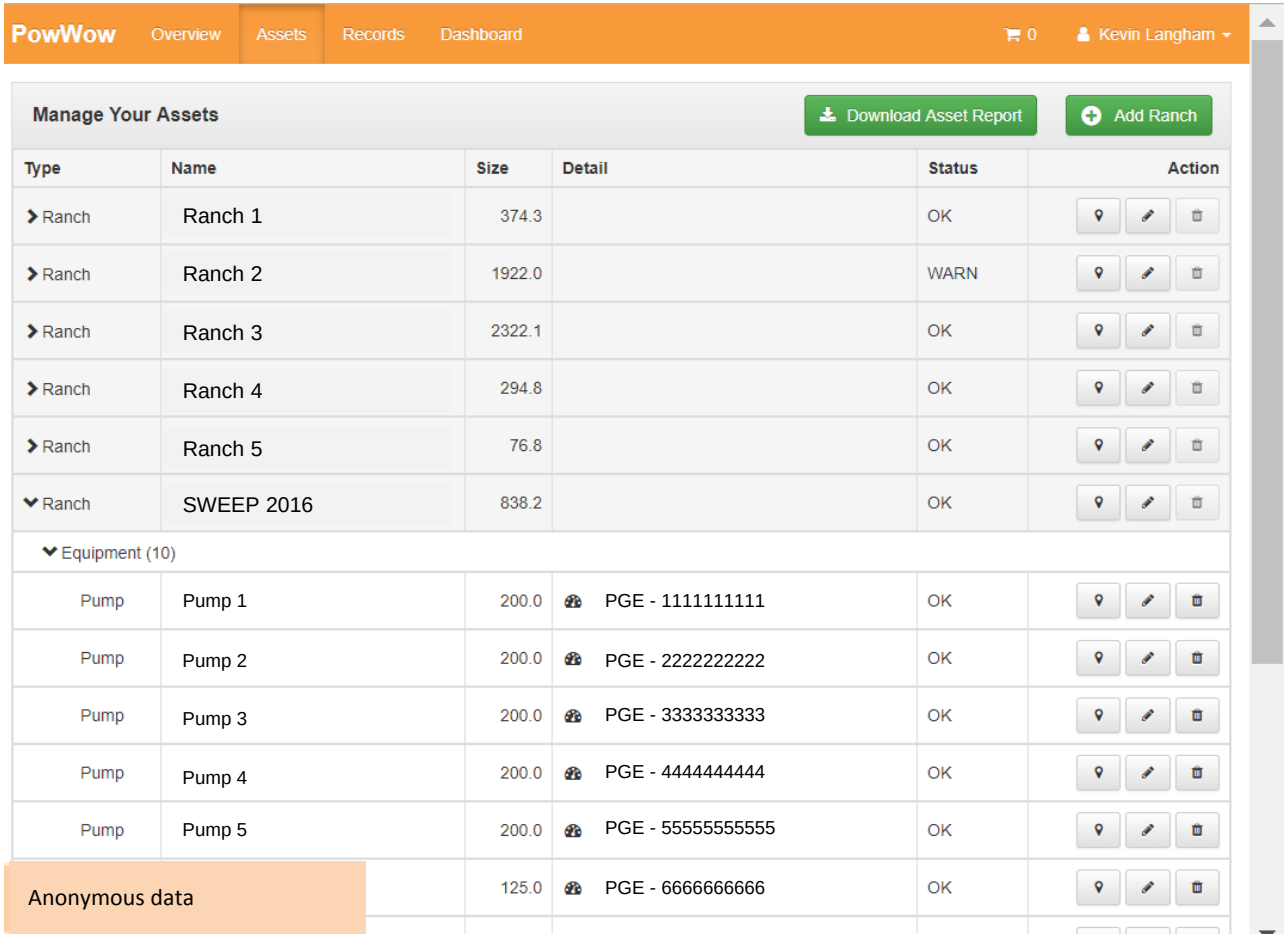
# What do SWEEP recipients have access to?



# Pump water records

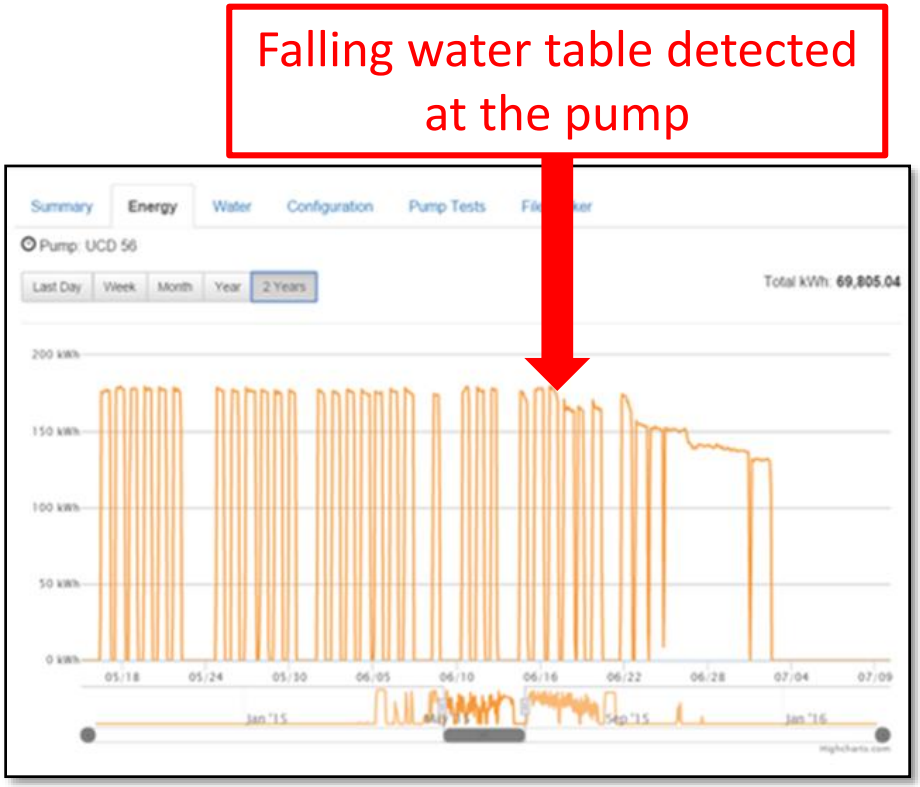


# Asset management



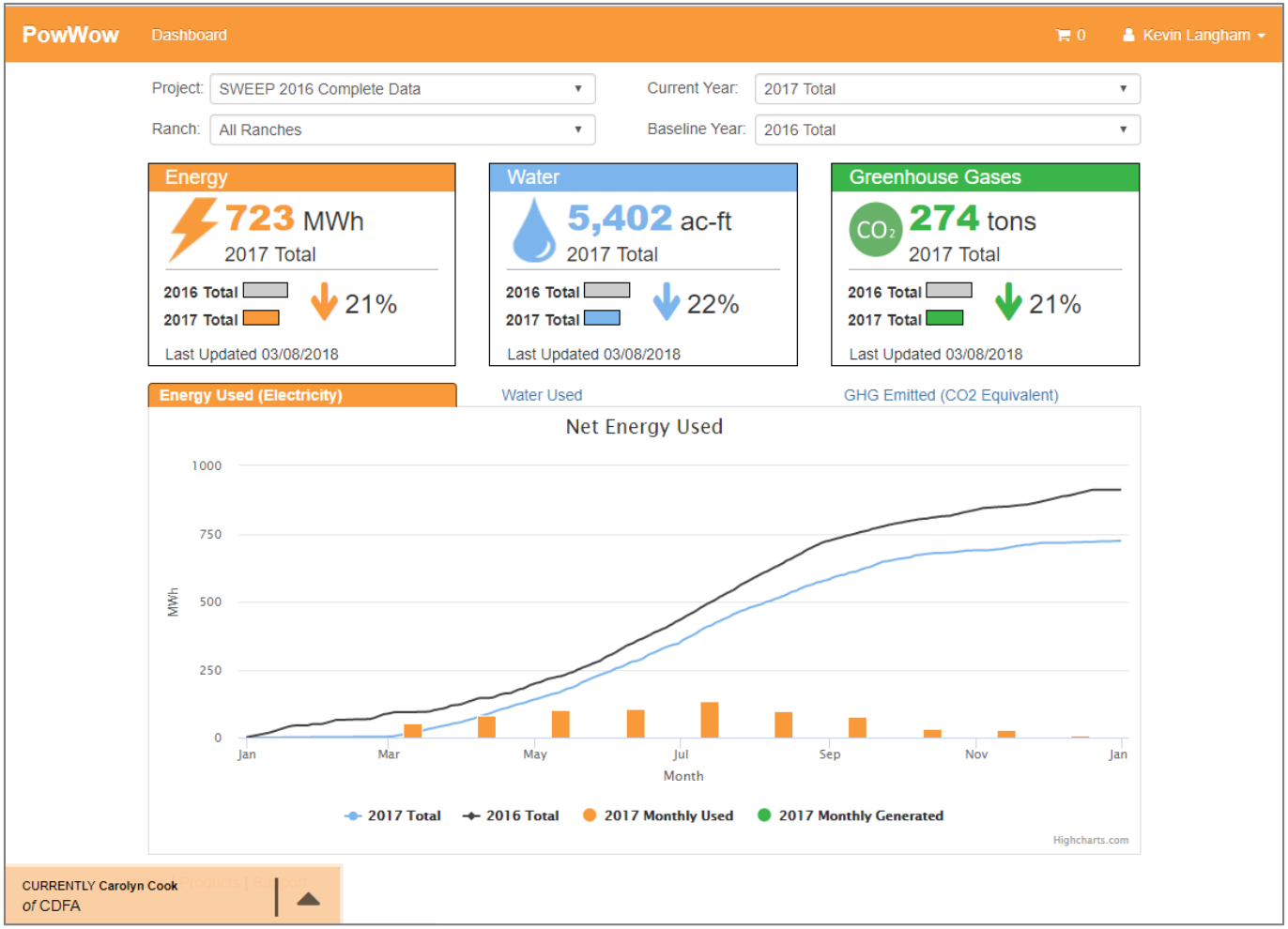
# Pump alerts

- **24/7 monitoring of pump energy usage for:**
  - Falling water table
  - Pump leaks
  - Cavitation
  - Motor issues
- **Alerts are emailed or texted to the grower**

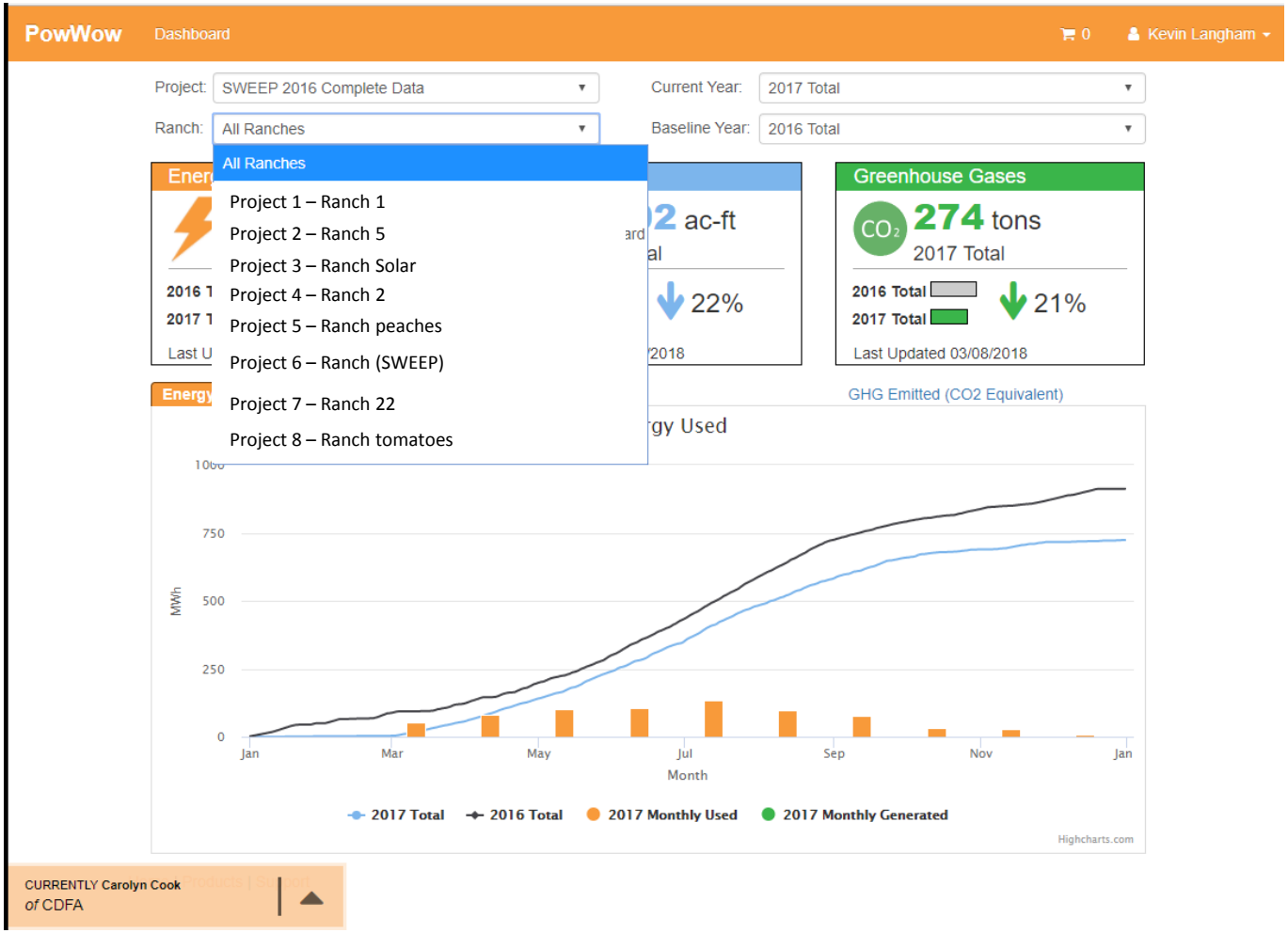



| | | | |
|---|---|---|---|
| 10/12/2017 11:34 AM | Text | [PowWow] Reminder warning:The water table at 31 S appears to be declining, detected on Oct 09 at 7:45 AM. | Main Ranch (east of McMullin) |

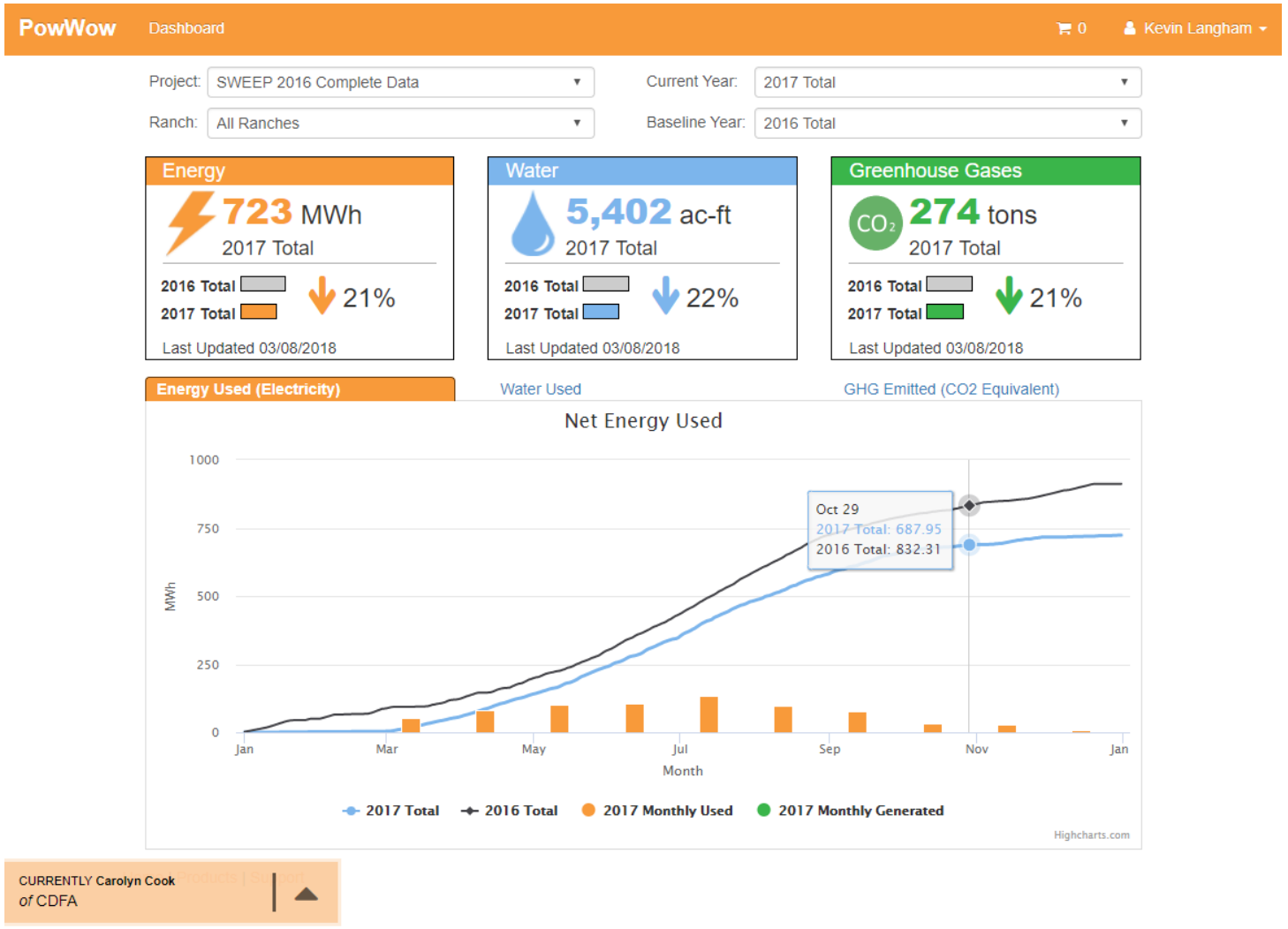
# Dashboard developed for CDFA



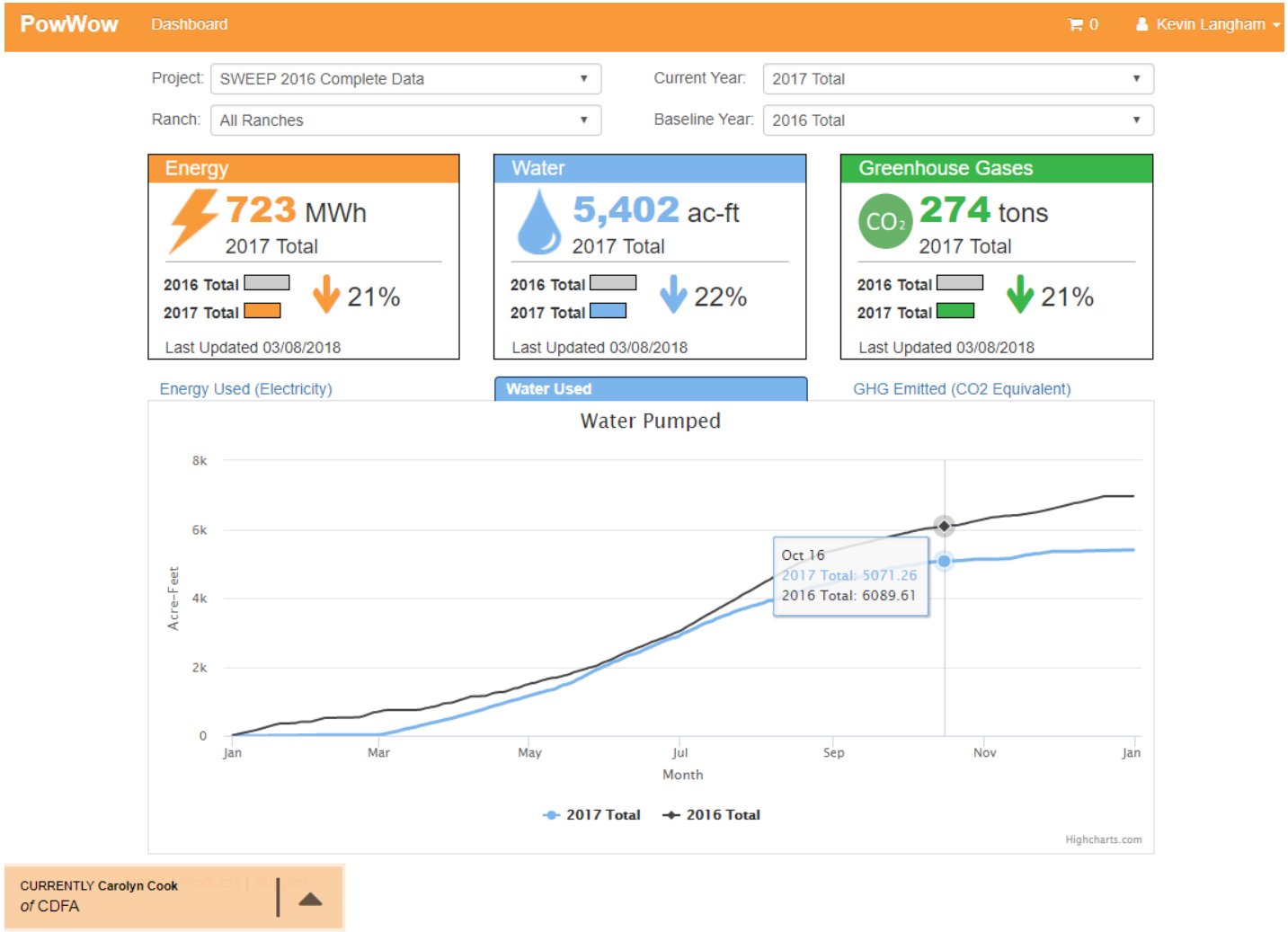
# Dashboard – ranch list



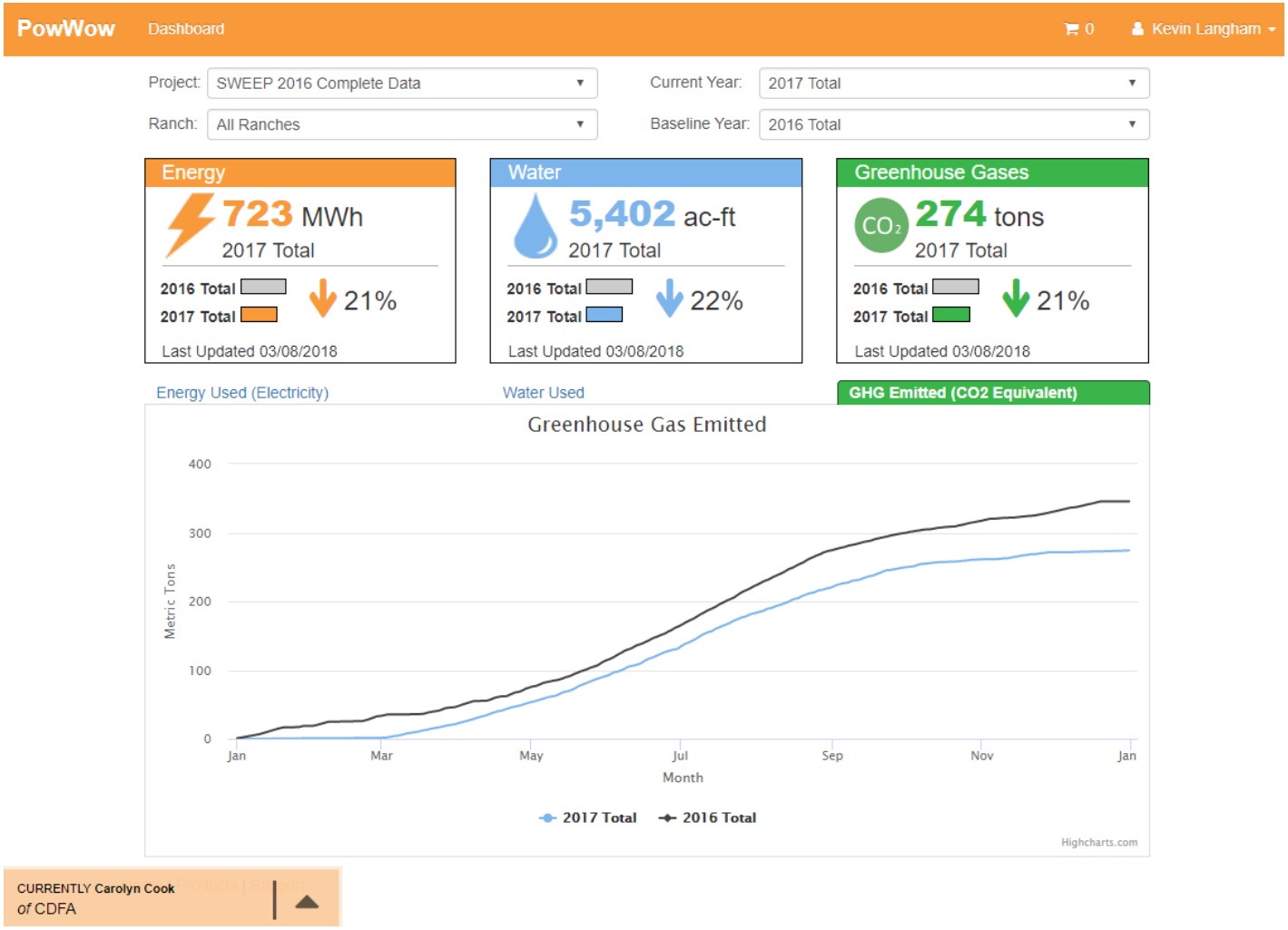
# Dashboard – energy graph



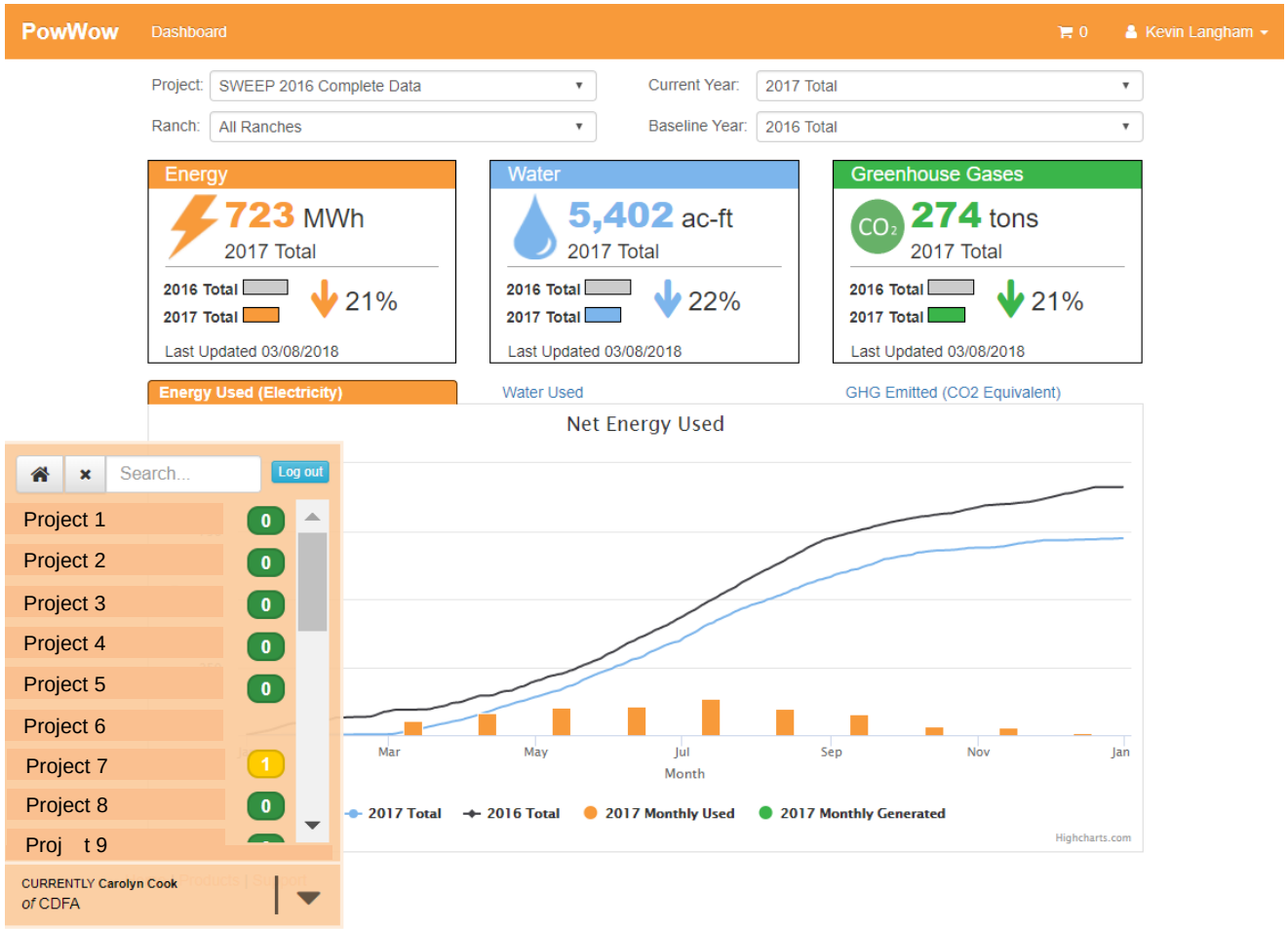
# Dashboard – water graph



# Dashboard – GHG graph



# Dashboard – site navigation



# SWEEP preliminary results

- Baseline energy records provided by CDFA from 2015 were compared with 2017 treatment energy records from PWE.
  - 14 projects
  - ~75% of total savings from 3 ranches with solar
  - Most projects verified to be complete mid 2017

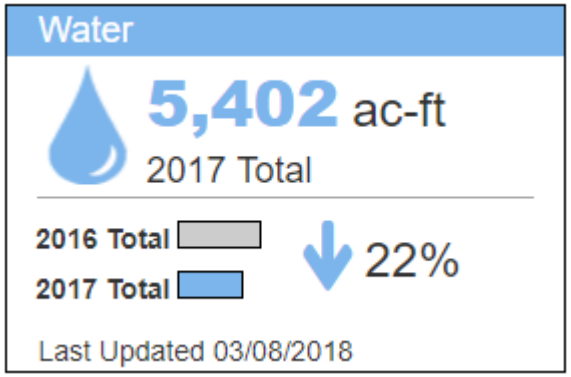
| Total Energy Saved (MWh) | Total GHG Saved (MT $CO_2$ eq.) | Average Energy per ranch (MWh) | Average GHG per ranch (MT $CO_2$ eq.) |
|---|---|---|---|
| 849.9 | 201.6 | 56.6 | 14.4 |

*Some data omitted*

# SWEEP preliminary results (water)

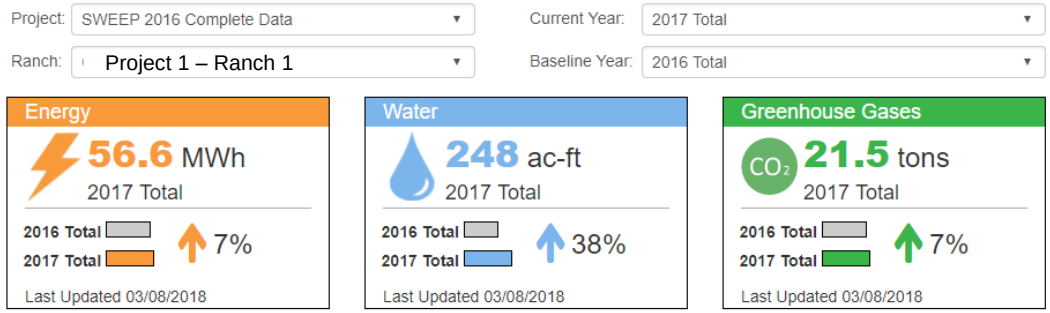
- Water records from PWE were compared between 2016 and 2017.
  - 8 projects
  - 65% of total savings from 1 project (big operation)

| Total Water Saved (ac-ft) | Average water savings pre ranch (ac-ft) |
|---|---|
| 1559 | 194 |



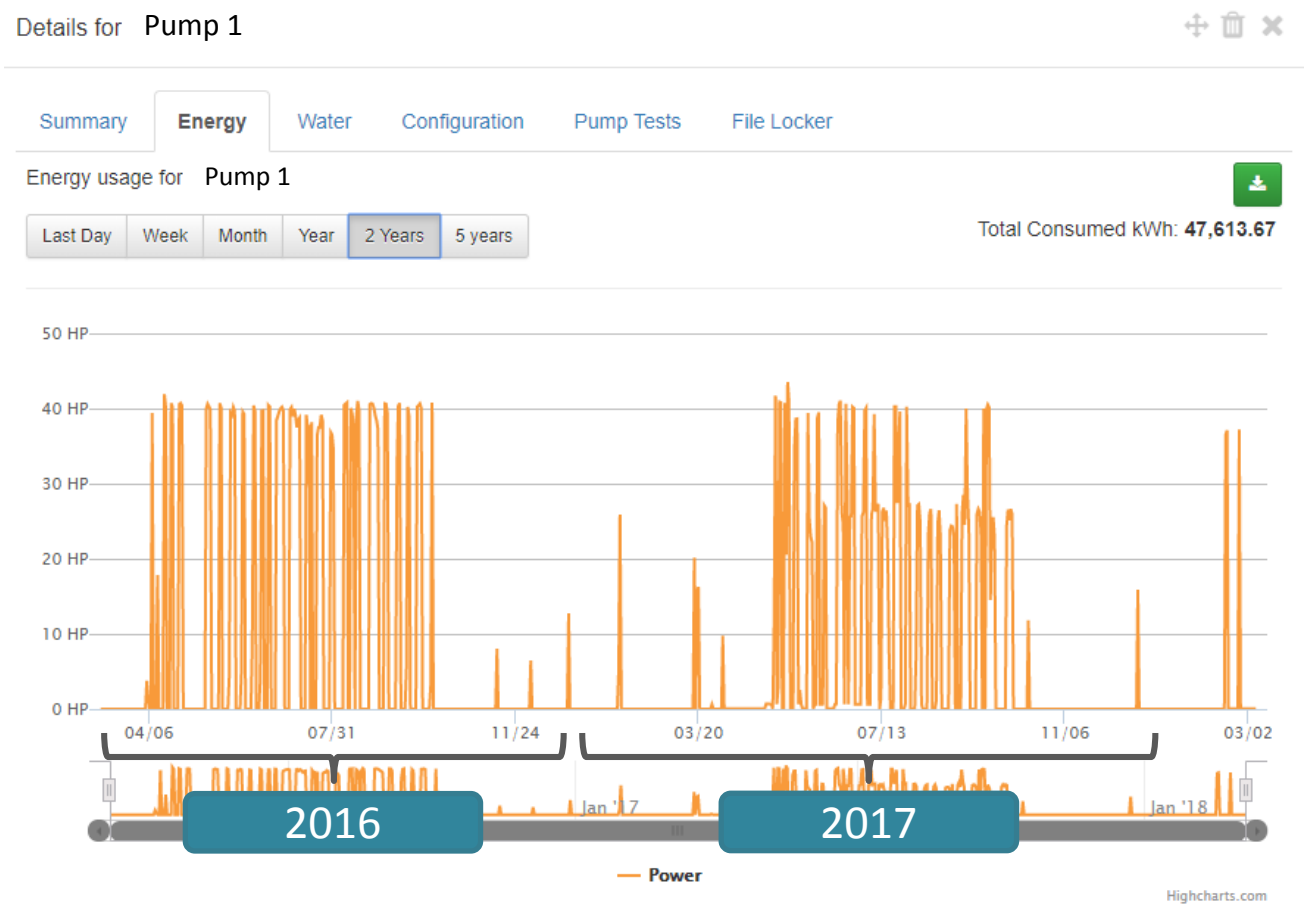
# Case Study – Project 1

- Project: Added VFD to pump and installed soil moisture sensors.
  - Verified completion in August, 2017

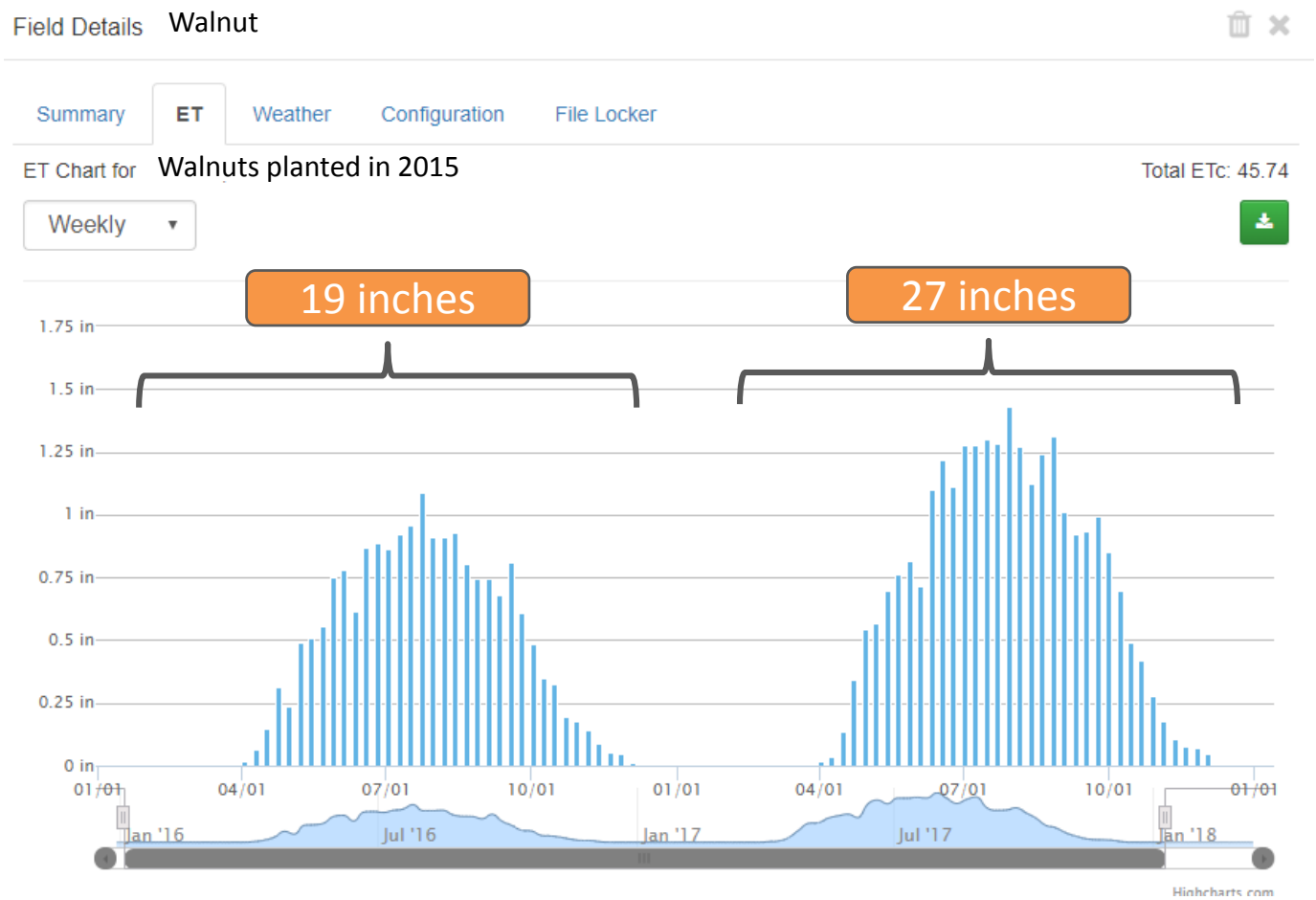



- Why was there an increase in water and energy?

# What can we learn from pump records?



# What can we learn from crop ETc?



# Influence from external factors

- CEC project – must consider external factors
- Possible influence on annual energy use
  - More water needed
    - Change crop, crop age, climate… etc.
  - More energy expensive water
    - Surface water, water table level, extra equipment… etc.
- Annual comparisons without context have limited significance

# Project summary

- Calculated annual savings of **849 MWh**, **56.6 MT $CO_2$ eq.** so far on 14 projects.
- Successful tech transfer from work funded by the California Energy Commission to CDFA
- Measuring all data is difficult!
  - Big step towards monitoring empirical data, and not making guesses
- Access to data provides new program insights

# HEALTHY SOILS PROGRAM UPDATE

## ENVIRONMENTAL FARMING ACT – SCIENCE ADVISORY PANEL
## MARCH 15, 2018 SACRAMENTO, CA

Guihua Chen, Ph.D.
Geetika Joshi, Ph.D.
Office of Environmental Farming and Innovation

# OUTLINE

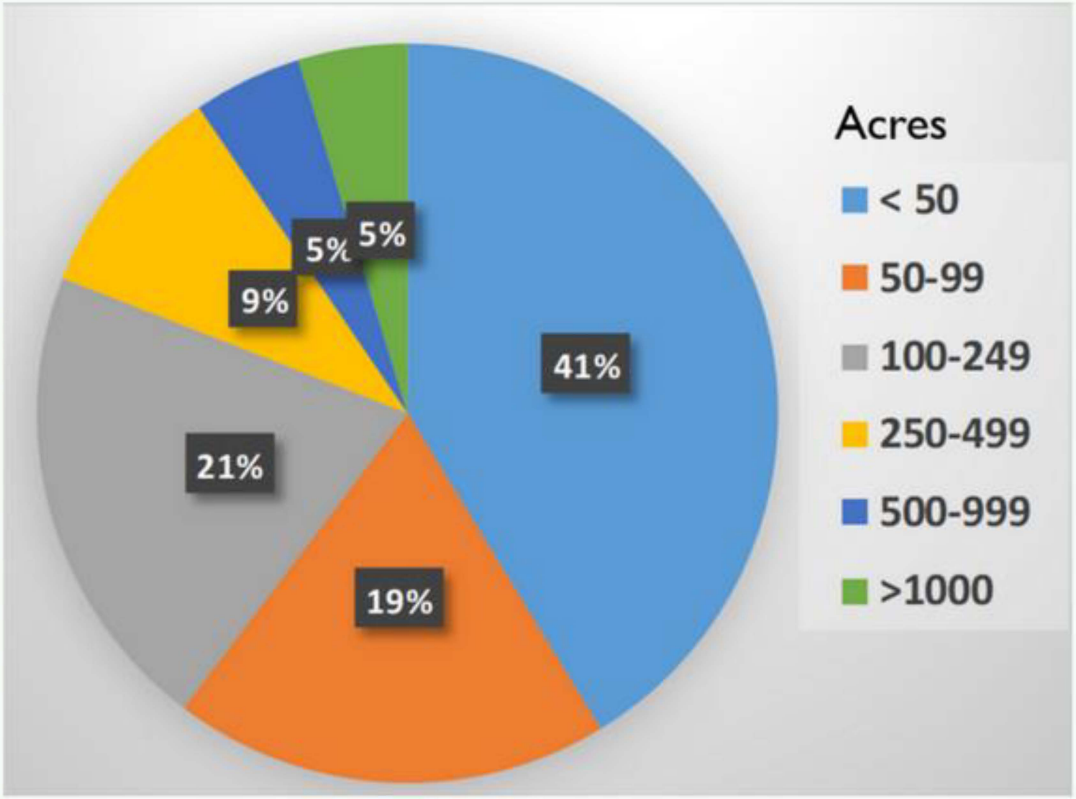
**Updates on 2017 HSP Incentives Program – First Round**
Awarded Projects: Farm Size and Practices Acreage
Survey Reports from Incomplete Submissions

**Update: Initial Selection of Proposed New Practices**
(To Be Considered for Inclusion under the HSP)

**2017 HSP Second Solicitation**
Differences from the First Round Timeline

# 2017 HSP INCENTIVES PROGRAM AWARDED PROJECTS -1

**Farm Size by Acerage**




**63 projects**

**3780 acres**

**26 counties**

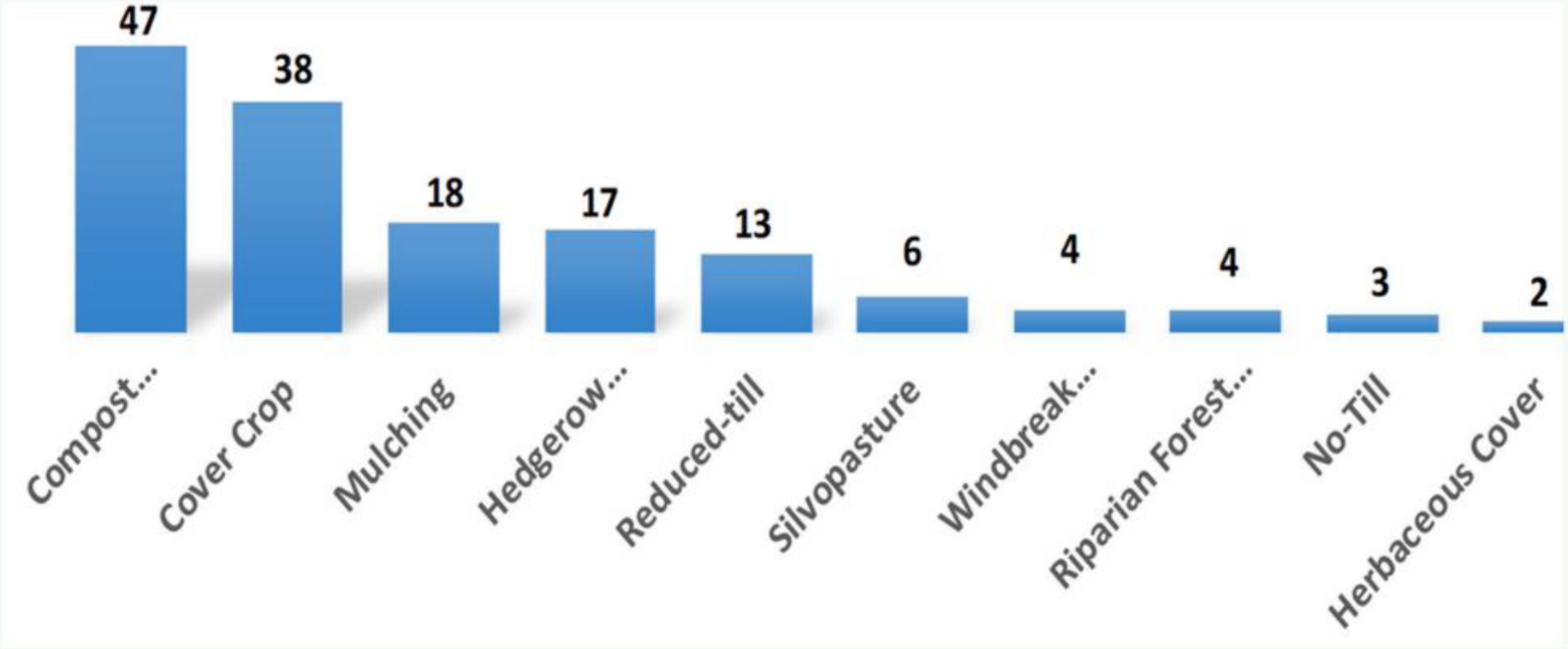
**81% projects (51) locate on farms with acreage less than 250.**

*Average CA farm size: 329 acres

# 2017 HSP INCENTIVES PROGRAM AWARDED PROJECTS - 2

**Practice Popularity**

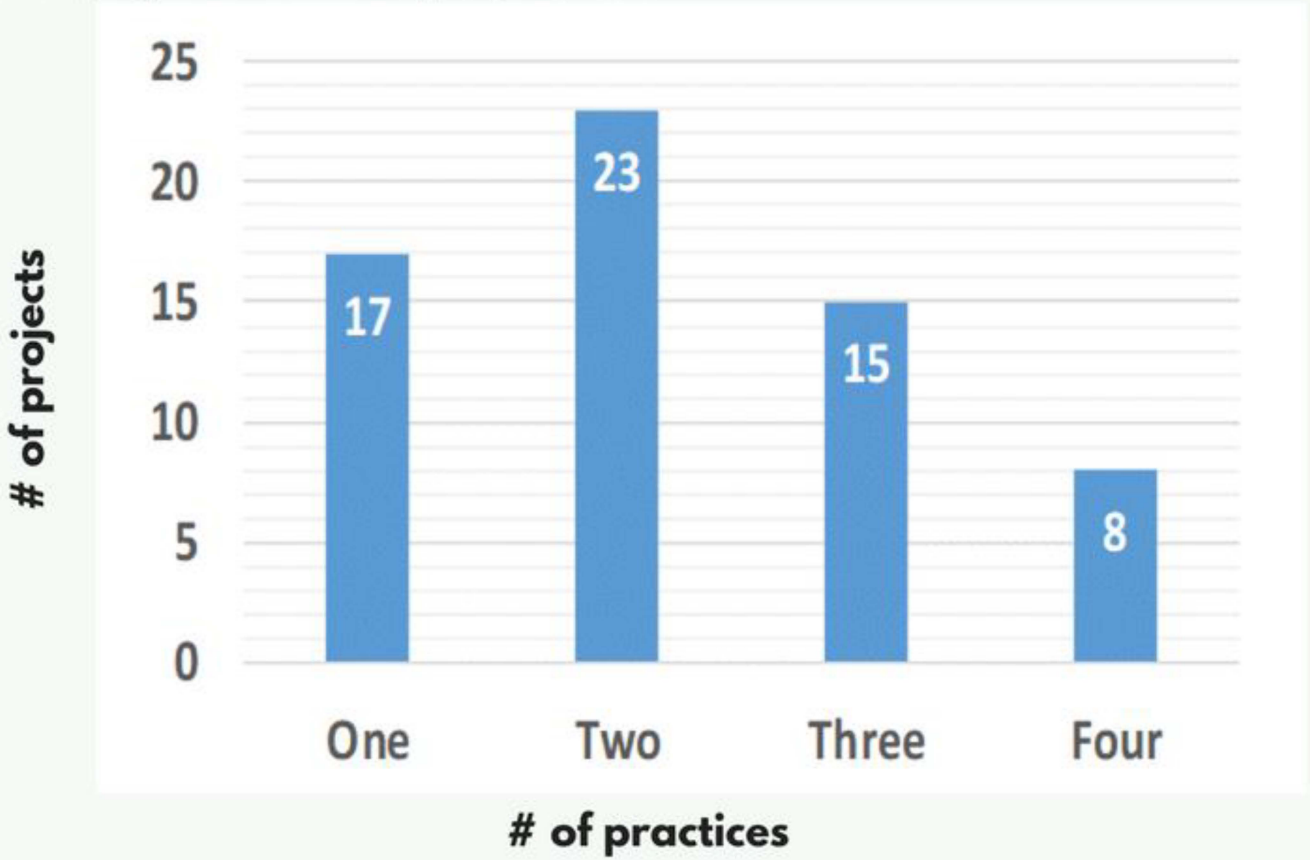
1. Number of projects to implement each practice



# 2017 HSP INCENTIVES PROGRAM AWARDED PROJECTS - 3

**Practice Popularity**

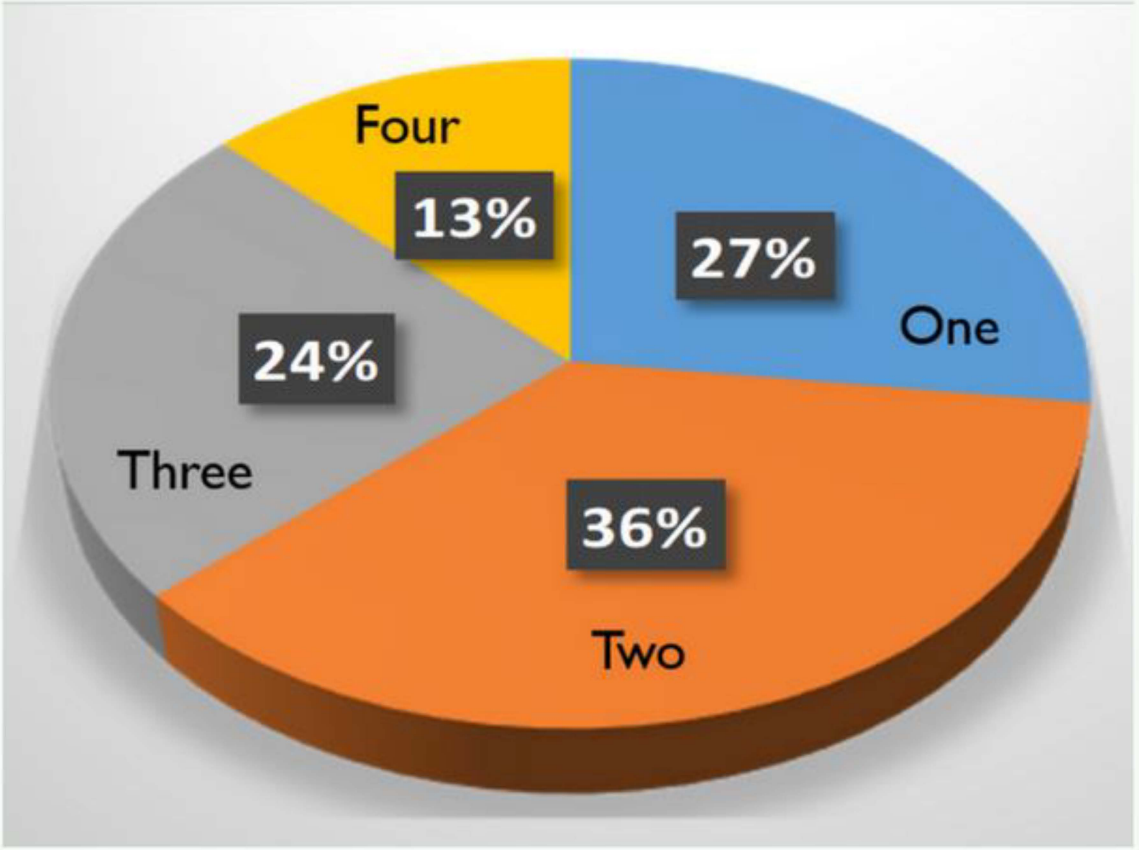
Number of projects with multiple practices



# 2017 HSP INCENTIVES PROGRAM AWARDED PROJECTS - 4

**Practice Popularity**

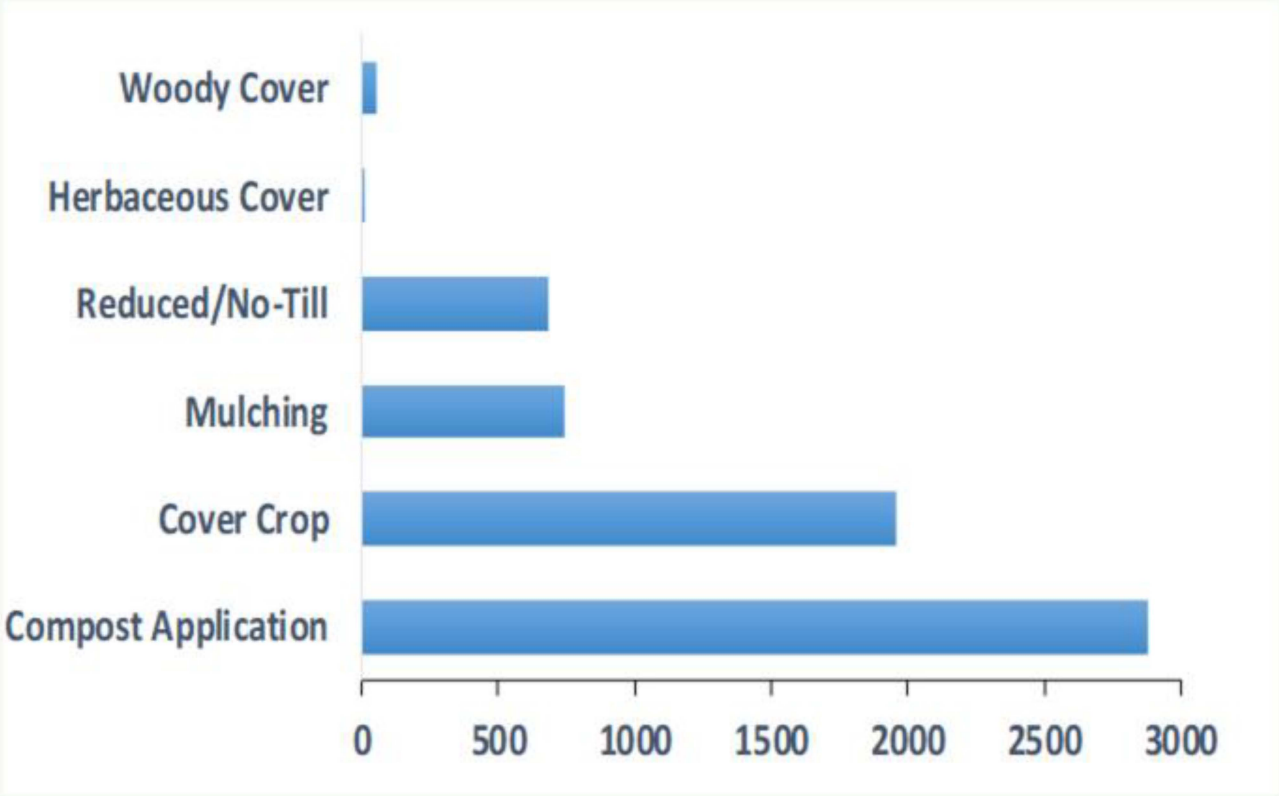
Number of projects with multiple practices



# 2017 HSP INCENTIVES PROGRAM AWARDED PROJECTS - 5

## Practice Popularity

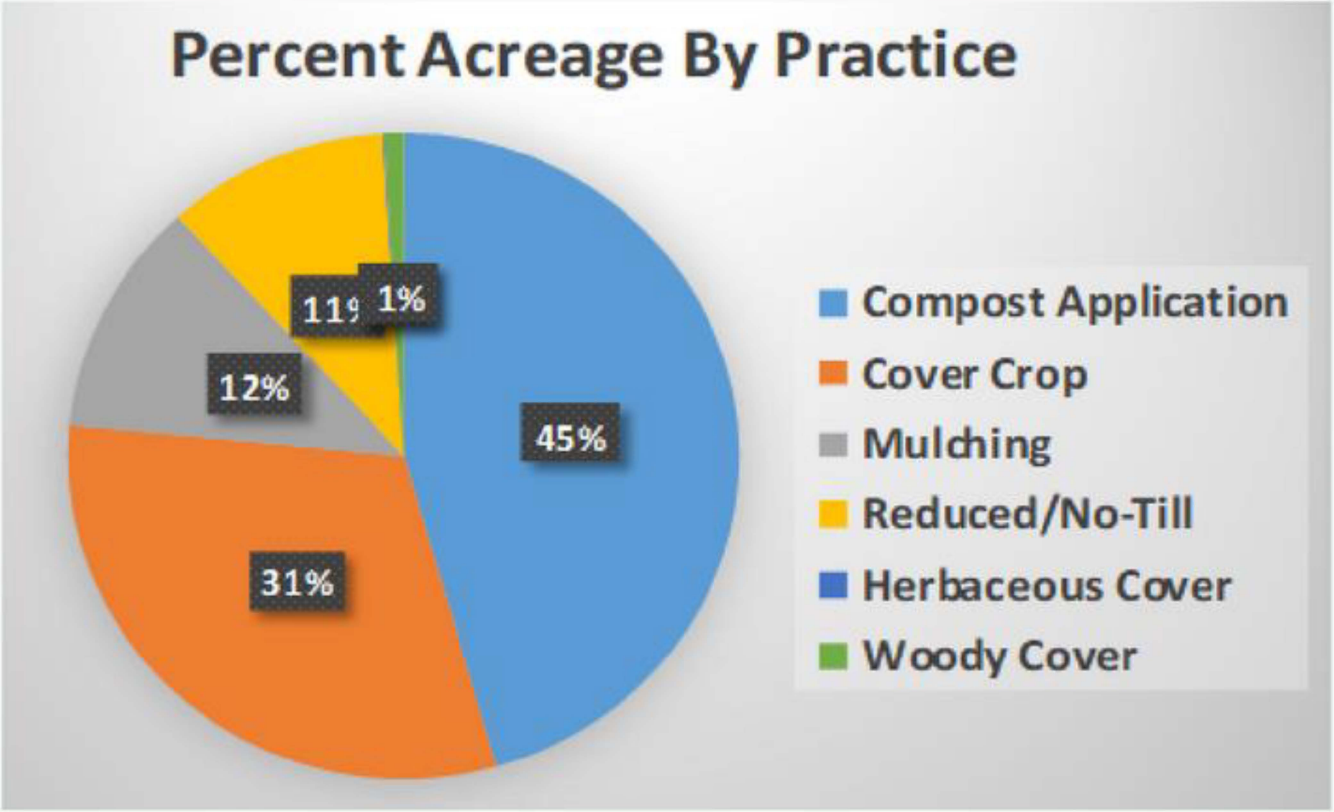
Acreage of each practice to be implemented



# 2017 HSP INCENTIVES PROGRAM AWARDED PROJECTS - 6

**Practice Popularity**

Acreage of each practice to be implemented

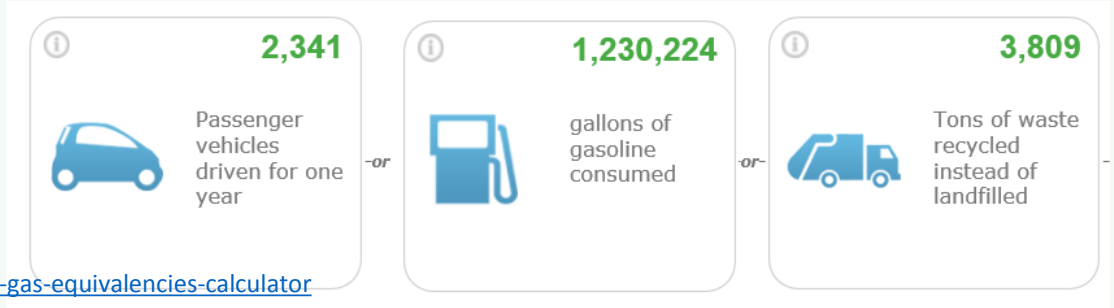


# 2017 HSP INCENTIVES PROGRAM AWARDED PROJECTS - 7

## Greenhouse Gases Reduction Benefits Per Year

| Project Acres | Practice Acres | Compost-Planner Estimation (tons of $CO_2$ equivalent) | COMET-Planner Estimation (tons of $CO_2$ equivalent) | Total GHG Benefits (tons of $CO_2$ equivalent) |
|---|---|---|---|---|
| 3780 | 6320 | 10,066 | 876 | 10,933 |

10,933 tons of $CO_2e$ =




Source: https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator

## OTHER MAJOR BENEFITS

- Healthier soils – more sustainable agricultural lands
- Co-Benefits – clean water and air
- Eco-system services – less agrichemical input and high yield potentials

## CURRENT STATUS

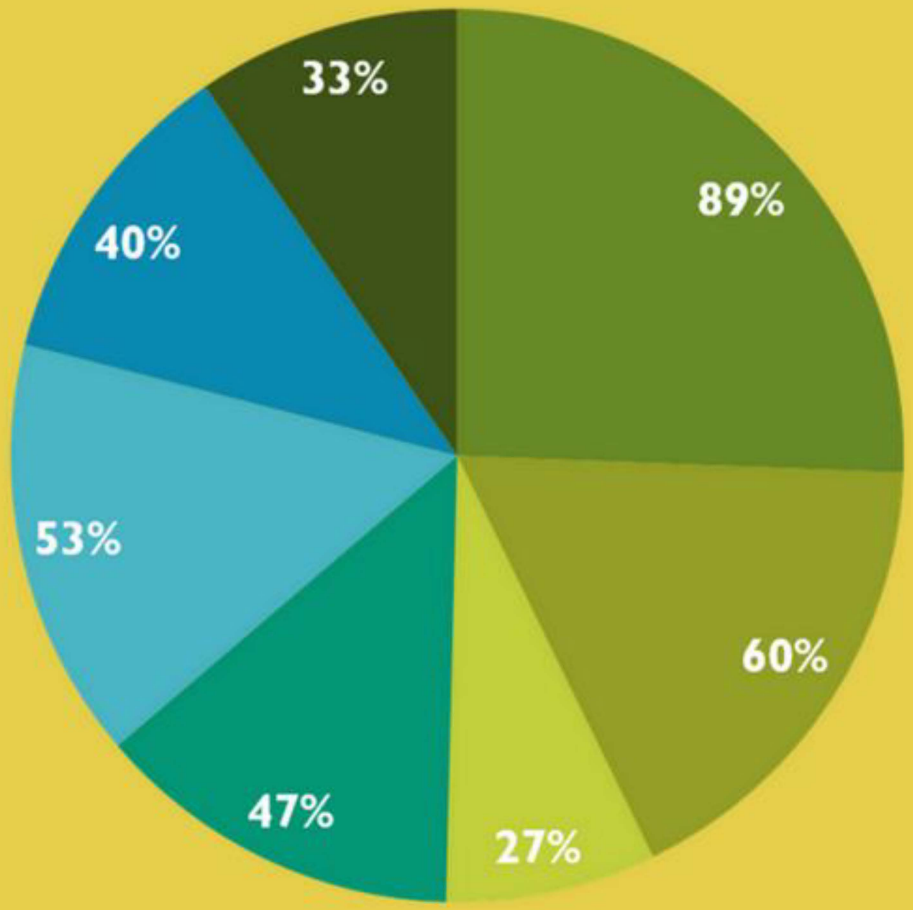
- Practice implementation is going on …
- Grant agreement contracts have been in process …
- Project Verification has been in process …

# 2017 HSP Incentives program – Incomplete submission

## 121 PINS CLASSIFIED AS INCOMPLETE SUBMISSIONS

- 79 were real incomplete submissions
- 26 were repeated (same applicants in the 79 counts)
- 4 were awarded on different PINs
- 2 were CDFA/RCD tested submissions

# Incomplete submission Survey




Number of survey recipients: 79
Number of respondents: 15-19
Response %: 19-24%

- Insufficient time to apply.
- Timing of other farm activities did not allow.
- No Technical Assistance available.
- Application/QM too complicated.
- Too much information needed to apply.
- Insufficient payment rates.
- Not able to provide Year 3 cost-share.

# OUTLINE

Updates on 2017 HSP Incentives Program – First Round
Awarded Projects: Farm Size and Practices Acreage
Survey Reports from Incomplete Submissions

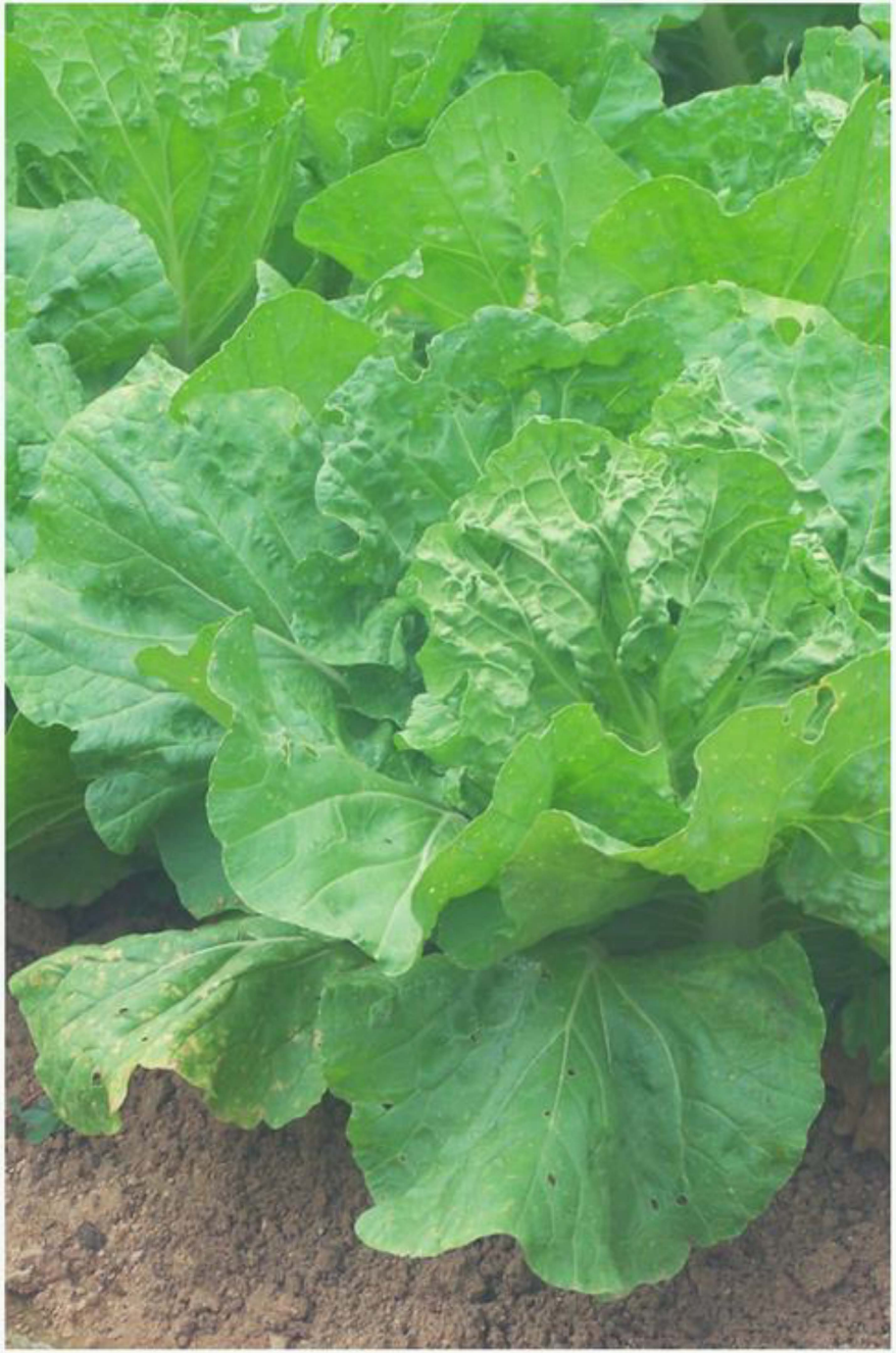
**Update: Initial Selection of Proposed New Practices (To Be Considered for Inclusion under the HSP)**

2017 HSP Second Solicitation
Differences from the First Round
Timeline

# PROPOSED MANAGEMENT PRACTICES 1. NITROGEN MANAGEMENT

- Nutrient Management (CPS 590)
- 15% Reduction in N application rate
- Replacing synthetic N fertilizer with soil amendments
- Nitrification inhibitors*

*Not in COMET-Planner



# PROPOSED MANAGEMENT PRACTICES
# II. PRACTICES ALREADY IN COMET-PLANNER

- Strip Cropping (CPS 585)
- Prescribed Grazing (CPS 528)
- Conservation Crop Rotation (CPS 328)
- Conservation Cover (CPS 327)
- Forage and Biomass Planting (CPS 512)
- Grassed Waterway (CPS 412)
- Alley Cropping (CPS 311)
- Multistory Cropping (CP 379)
- Windbreak/Shelterbelt Renovation (CPS 650)
- Tree/Shrub Establishment (CPS 612)

# PROPOSED MANAGEMENT PRACTICES
# III. VARIABLE NAMES/ALREADY INCLUDED

- Green manure (Cover Crop)
- Whole Almond Orchard Recycling (Mulching)
- Semi-Permanent Coverage (Reduced Till)
- Alternative Inter-Row Tillage (reduced Till)
- Cover-Cropping and Bio-diverse Planting (Cover Crop)

The following practices that have been proposed are similar to some of the practices already in the program and we are evaluating them to ensure if there is overlap and to what extent is the overlap.

# PROPOSED MANAGEMENT PRACTICES
# IV. ONGOING CONSIDERATIONS

Soil Erosion Control by Swale Building and Mulching
Integrated Cropland Ruminant Grazing
Composting and Mulching
Livestock Management & Rotational Grazing - need time to build in QM Tool
One-Time Compost Application with Higher Rate for Grazed Grasslands
Range Planting
On-Farm Composting Facility (CPS 317)
Anaerobic Digestate Application
Vermicompost Application
Mycorrhizal Application
Microbial Inoculation and Compost Tea
Sub-Surface Drip Irrigation – Covered by SWEEP

# OUTLINE

Updates on 2017 HSP Incentives Program – First Round
Awarded Projects: Farm Size and Practices Acreage
Survey Reports from Incomplete Submissions

Update: Initial Selection of Proposed New Practices
(To Be Considered for Inclusion under the HSP)

**2017 HSP Second Solicitation Differences from the First Round Timeline**

# 2017 HSP SECOND SOLICITATION

## FUND AMOUNT: $1.6 MILLION

Up to $500,000 for Demonstration Type B Projects.
$1.0 million for Incentives Program

Objectives: To build soil carbon and reduce Greenhouse Gas emissions.

**Applicants may select any of HSP Agricultural Management Practices**

Funds must be expended/liquidated by June 30, 2020.

Program duration and cost sharing:

- Program duration: May 1, 2018 – Dec. 31, 2020.
- HSP funds cover Project Years 1 and 2: May 1, 2018 – Dec 31, 2019.
- Cost sharing covers Project Year 3: Jan1, 2020 – Dec 31, 2020.

# REVIEW PROCESS

- Step1:  Administrative Review: Internal - Conducted by CDFA.
- Step 2:  Technical Review: External - Conducted by Technical Reviewers (University experts).
- An application must score at least 60 points to qualify for award.
- Additional consideration to fire-affected counties:
- Butte, Lake, Los Angeles, Mariposa Mendocino, Napa, Nevada, Orange, Santa Barbara, Sonoma, Ventura, Yuba
- Applications will be reviewed and awarded funding in the order received.
- CDFA will award proposals until all available funds have been allocated, or the application deadline has passed, whichever comes first.

# SOLICITATION TIMELINE

| Item | Dates |
| --- | --- |
| Release Request for Grant Applications | March 6, 2018 |
| CDFA Application Workshops & Webinar | March 13-21, 2018 |
| Additional Technical Assistance | March 13 – April 13, 2018 |
| Grant Applications Due | April 13, 2018, 5:00 pm PDT |
| Review Period | April – May, 2018 |
| Award Announcement(s) | May, 2018 |
| Project Implementation Begins | May, 2018 |

HSP

# PROGRAM CONTACTS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