

Healthy Soils Program

**California Bioresources
Alliance**

November 1, 2017

Sacramento, CA

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OFFICE OF ENVIRONMENTAL FARMING &
INNOVATION



CALIFORNIA FARM FACTS

400

agricultural commodities in California, including unique specialty crops.

1

state in cash farm receipts in 2015, with \$47 billion in revenue (#1 for more than 50 years).

77,600

farms across the state

HEALTHY SOILS INITIATIVE



2015
International
Year of Soils

- 2015: United Nations declared International Year of Soils.
- Meeting with Governor's Office and administration on initiative; interagency meetings with several agencies and departments.



Image Source: USDA Cropscape - Cropland Data Layer

ACTIONS FOR THE HEALTHY SOILS INITIATIVE: INTERAGENCY AND STATE-FEDERAL PARTNERSHIPS

- Protect and restore soil organic matter in California's soils.
- Identify sustainable and integrated financing opportunities to facilitate healthy soils.
- Provide for research, education and technical support to facilitate healthy soils.
- Increase governmental efficiencies to enhance soil health on public and private lands.
- Promote interagency coordination and collaboration to support soils and related state goals

PARTNERSHIPS



HEALTHY SOILS PROGRAM: OBJECTIVE AND FUNDING

Objective: To build soil carbon and reduce agricultural GHG emissions through incentives.

\$7.5 m

were received by CDFA to develop and administer a new incentive and demonstration program on the CA Healthy Soils Initiative from the Greenhouse Gas Reduction Fund

Funds allocation



TIMELINE - INCENTIVES AND DEMONSTRATION



Applications Received

69 HSP Incentives Program

27 HSP Demonstration Projects

MANAGEMENT PRACTICES ELIGIBLE FOR FUNDING

Cropland Management Practices

- Mulching (484)
- Residue and Tillage Management - No-Till (329)
- Residue and Tillage Management - Reduced Till (345)
- Cover crops (340)

Compost application Practices

- Compost Application to Annual Crops (CDFA)
- Compost Application to Perennials, Orchards and Vineyards (CDFA)
- Compost Application to Grassland (CDFA)

Cropland to Herbaceous Cover Practices*

- Herbaceous Wind Barriers (603)
- Vegetative Barriers (601)
- Riparian Herbaceous Cover (390)
- Contour Buffer Strips (332)
- Field Border (386)
- Filter Strip (393)

Establishment of Woody Cover Practices*:

- Windbreak/ shelterbelt establishment/renovation (380)
 - Riparian Forest Buffer (391)
 - Hedgerow Planting (422)
 - Silvopasture (381)
- *must be implemented in combination with at least one soil management practice(s)

INCENTIVES PROGRAM

- **Eligibility: California farmers, ranchers, Native American Indian Tribes.**
- **Award amount: Maximum \$50,000 per project**



PROGRAM REQUIREMENTS

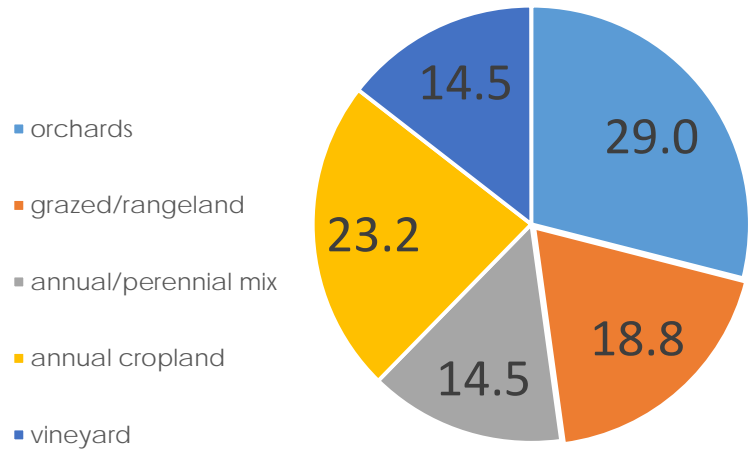
- Applications include information such as:
 - Cropping and management history and soil organic matter content.
 - Project design and plan including maps and schematics.
 - Estimation of GHG emissions reductions.
- Post-project implementation data collection and reporting for three years.
- A standard cost per acre (payment rate) is provided for all eligible practices

2017 HSP INCENTIVES PROGRAM APPLICATION SUMMARY

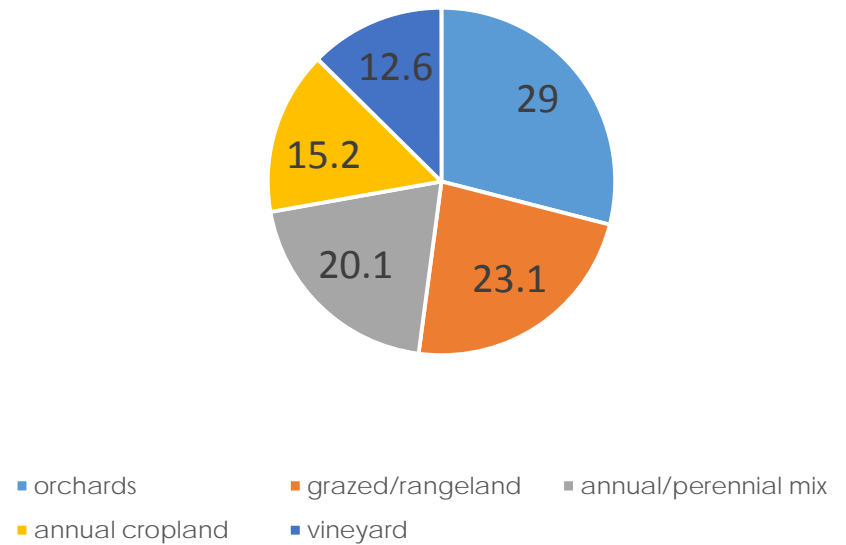
Category	#	Funds Requested (Million)	Matching Funds (Million)
Received Applications	190	\$ 2.84	\$ 2.64
Incomplete Applications	121	\$ 0.93	\$ 0.77
Complete Applications	69	\$ 1.92	\$ 1.99

2017 HSP INCENTIVES PROGRAM APPLICATIONS DISTRIBUTION

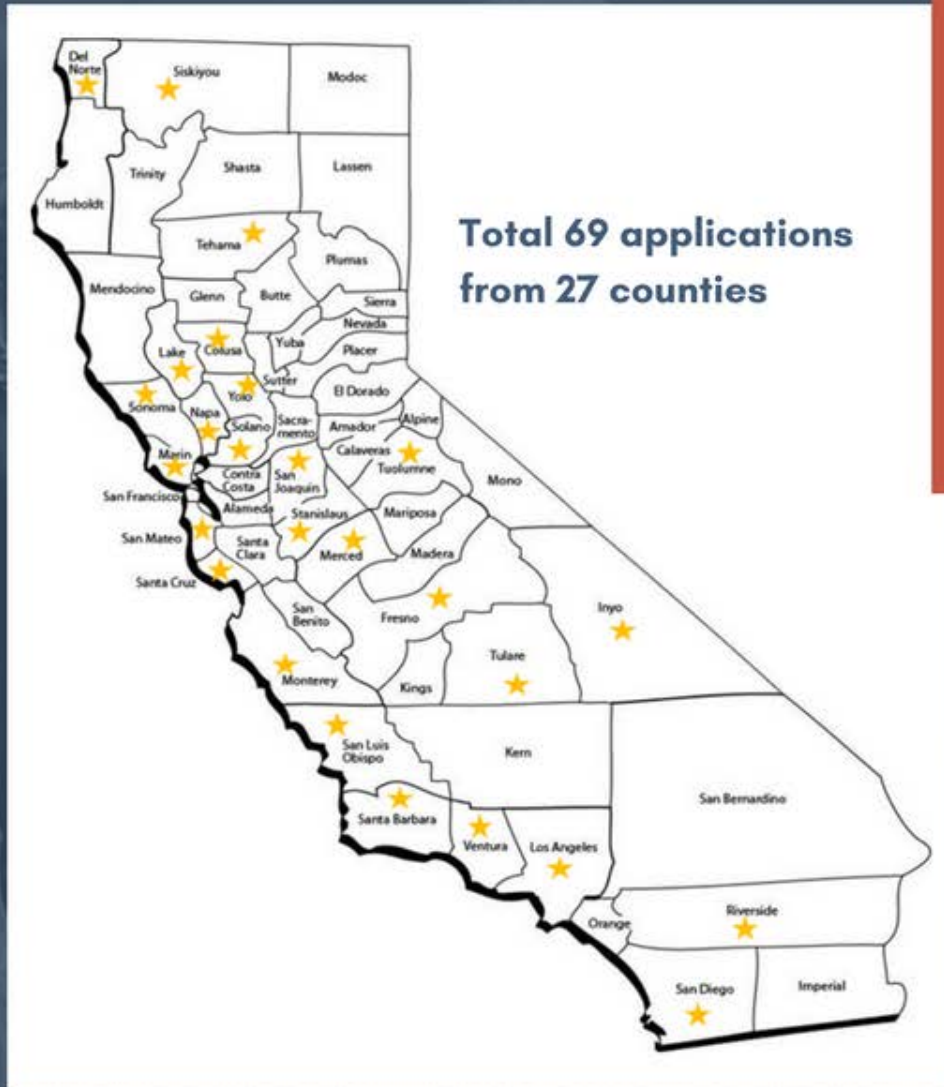
Distribution of Projects by Farm Type



Distribution of Projects by Dollars Requested



2017 HSP INCENTIVES PROGRAM APPLICATIONS DISTRIBUTION BY COUNTY



County	#	County	#
Merced	10	Lake	2
Sonoma	6	Napa	2
San Luis Obispo	5	San Diego	2
Marin	5	Yolo	2
Riverside	4	Los Angeles	1
Santa Barbara	4	Del Norte	1
Colusa	3	Inyo	1
Ventura	3	Monterey	1
Fresno	2	Sacramento	1
Stanislaus	2	San Joaquin	1
Tulare	2	San Mateo	1
Santa Cruz	2	Siskiyou	1
Solano	2	Tuolumne	1
Tehama	2		

FEEDBACK FROM WORKSHOP PROVIDERS



Time constraints

- Insufficient time to submit applications.
- Timing did not work for applicants due to scheduling conflicts.



Payment rates not sufficient

- Especially for Compost Application, Cover Crop, Herbaceous Vegetative Barriers and Windbreak Establishment



Difficulty to ensure Cost Sharing in Year 3



Application required a large amount of information



Practice implementation and management need more flexibility



Technical assistance: one-on-one assistance is more efficient than workshops

DEMONSTRATION PROJECTS

Objective: Fund projects that achieve net GHG benefits from soil carbon sequestration in the field and provide a learning and demonstration opportunity to farmers.

Eligibility: Not-for-profit entities, University Cooperative Extension Services, Federal and University Experiment Stations, Native American Tribes, Resource Conservation Districts and farmers in partnership with one of these entities.

Outreach and education component.



PROGRAM REQUIREMENTS

- **Two project types:**

- Type A: Implement practice, collect GHG data and conduct outreach; \$250,000 max. award.
- Type B: Implement practice and conduct outreach; \$100,000 max. award.

Outreach: Awarded projects to invite 40 other farmers per year to site to showcase and share information on practices.



Cover Crops



Soil Gas Flux Chamber



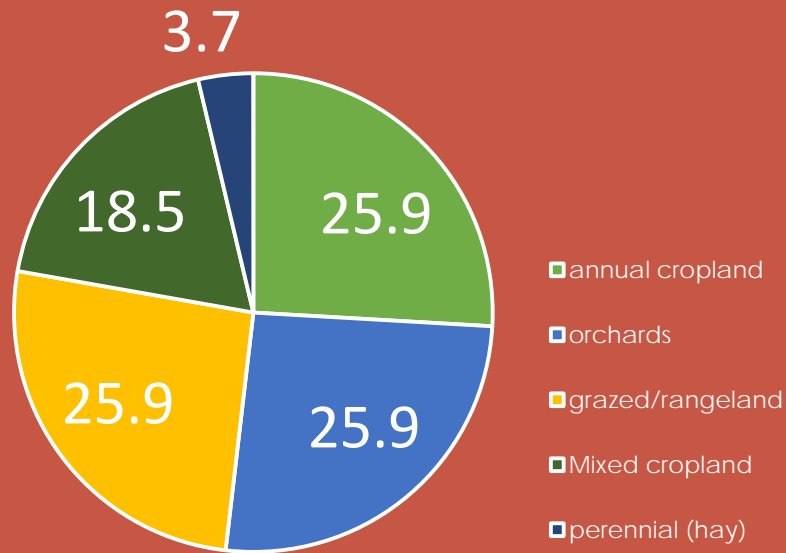
A Farmer Field Day at UC Davis

2017 HSP DEMONSTRATION PROJECTS APPLICATION SUMMARY

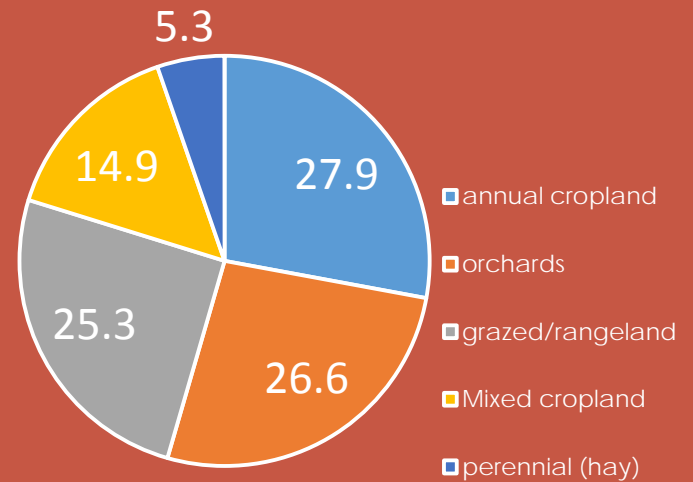
Category	#	Funds Requested (Million)	Matching Funds (Million)
Received Applications	82	\$ 5.97	\$ 3.87
Incomplete Applications	55	\$ 1.27	\$ 0.40
Complete Applications	27	\$ 4.70	\$ 3.47

2017 HSP DEMONSTRATION PROJECTS APPLICATION DISTRIBUTION

Distribution of Projects by Farm Type



Distribution of Projects by Dollars Requested



2017 HSP DEMONSTRATION PROJECTS APPLICATIONS DISTRIBUTION BY COUNTY



County	Type A	County	Type B
Fresno	2	Sonoma	3
Yolo	2	Yolo	2
San Diego	2	Los Angeles	1
Madera	1	Contra Costa	1
Merced	1	Monterey	1
Tehama	1	Nevada	1
Merced	1	Placer	1
San Joaquin	1	San Mateo	1
Sutter	1	Santa Clara	1
Riverside	1	Santa Cruz	1
San Luis Obispo	1	Shasta	1
Santa Barbara	1	Siskiyou	1
Yuba	1		

FUTURE FUNDING SOURCE

- **SB-5 California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018**
- Chapter 10. Climate Preparedness, Habitat Resiliency, Resource Enhancement, And Innovation
- 80134. (b) Of the amount subject to this section, the sum of ten million dollars (\$10,000,000) shall be available to the Department of Food and Agriculture for grants to promote practices on farms and ranches that improve agricultural and open-space soil health, carbon soil sequestration, erosion control, water quality, and water retention.

CDFA HEALTHY SOILS PROGRAM TEAM

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