

UC Cooperative Extension

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Contra Costa RCD and USDA-NRCS
Concord, CA
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UC Division of Agriculture and Natural Resources

The Division of the University of California that
administers UC Cooperative Extension

UC Cooperative Extension is the bridge between
local communities and UC research

Brings practical, science-based answers
to Californians

UC Division of Agriculture and Natural Resources

Represented by:

- 178 Cooperative Extension advisors based in 57 counties
- 111 Cooperative Extension specialists based at 3 UC campuses and 9 Research and Extension Centers
- The Division also administers 11 Statewide Programs and Institutes (e.g. I.P.M, 4-H, Master Gardeners)

“Boots on the Ground”

“Since the first UC Cooperative Extension office opened in Humboldt County in 1913, UC scientists have been fanning out to communities across California, serving as problem-solvers, catalysts, collaborators, stewards and educators.”

“These advisors live and work in the communities they serve. To many Californians they are the face of UC—providing expertise, visibility and a keen understanding of local issues.”

Strategic Vision 2025

- Guiding vision for research, education, and service

“ANR envisions a thriving California in 2025 where healthy people and communities, healthy food systems, and healthy environments are strengthened by a close partnership between the University of California and its research and extension programs and the people of the state. The University remains connected and committed to the people of California, who enjoy a high quality of life, a healthy environment, and economic success in a global economy.”

Strategic Initiatives

Our five Strategic initiatives bring the power of science to deliver practical solutions to help California.


1. Healthy Families and Communities
2. Sustainable Food Systems
3. Sustainable Natural Ecosystems
4. Endemic and Invasive Pests and Diseases
5. Water Quality, Quantity and Security

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About UC Cooperative Extension

UC Cooperative Extension is best described as a vast network of UC researchers and educators who work together to develop and provide science-based information to solve locally-relevant economic, agricultural, natural resource, youth development and nutrition issues.


Nestled within the Division of Agriculture and Natural Resources, our CE advisors live and work in every California county, applying research from the University of California to help local businesses and entire communities thrive. In turn, our experts partner with local innovators to develop and disseminate best practices through UC's expansive local and global networks. Some of our programs include 4-H Youth Development, Master Gardeners, Expanded Food and Nutrition Education, and the Statewide Integrated Pest Management Program.

Select a County

Select a County

Alameda

Go!



See http://ucanr.edu/County_Offices/

What Can UCCE Do For You?

- Problem solving
 - Information delivery
 - Meetings, field days
 - Newsletters, websites, blogs
 - Research collaboration
 - Program participation and volunteerism
-
- Public value: promoting local economies, protecting natural resources, improving food systems, among others.

Specialty Crops Farm Advisor

- **Scope:** Contra Costa and Alameda counties
- **Purpose:** conduct a research and educational program for farmers in the east bay.
 - Looking for expertise in crop production (i.e. horticulture, soils, irrigation, crop nutrition, and pest management), particularly in high-value specialty crops.
 - Experience in marketing, agri-tourism, local food networks, ag-urban interface problems, agricultural land conservation, new farmer education, compliance with food safety, labor, pesticide, and water quality regulations also desirable.
- **Timeline:** Hopefully an advisor will be hired by the end of 2018

Delta Crops Resource Management Advisor

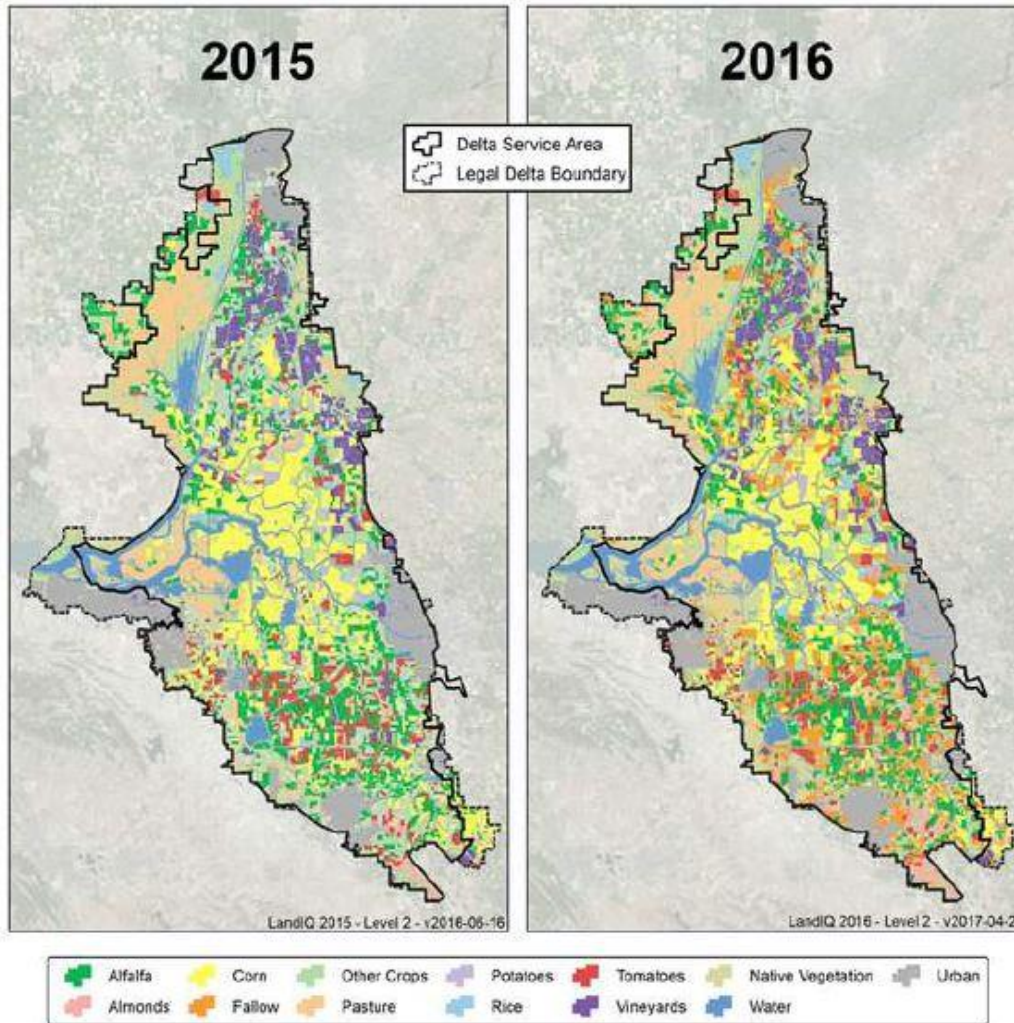
- **Scope:** Delta region of San Joaquin, Sacramento, Yolo, Solano, and Contra Costa counties. Based in San Joaquin County.
- **Purpose:** to lead a multi-county-based extension, education, and applied research program to address water quality and soil conservation issues connected to agricultural practices in the Sacramento-San Joaquin River Delta region.
- **Serve:** farmers, managers, consultants, and industry representatives, as well as members of government agencies and non-government organizations associated with the Delta.

Delta Crops Resource Management

Programmatic Activities in the Delta:

- Crop production practices in agronomic systems (e.g. variety evaluations, pest management, nutrient management)
- Soil and water resource management (e.g. soil health, salinity management, water use)

Delta Crop Diversity



Top crops by acreage:

1. Corn
2. Alfalfa
3. Pasture
4. Vineyards
5. Tomatoes

Other top crops:
almonds, rice, pears,
safflower, potatoes

Figure 1. Land use classes in the Delta in 2015 and 2016.

(Figure from full report. See <https://watershed.ucdavis.edu/delta-et>)

Project Example: Summer Cover Cropping

Background: CDFA developed the Healthy Soils Program and awards grants for projects that improve soil health and sequester carbon.

Funding provided through California Climate Investments (i.e. cap and trade); thus, greenhouse gas monitoring is integrated into HSP projects.

Objective: Determine how cover cropping or compost impact soil quality, greenhouse gas emissions, and/or crop yield.

Introduction to the Project

- Trial sites in San Joaquin, Merced, and Sutter counties from 2018-2020.
- In SJC, we are growing a summer cover crop between winter cereal crops.
 - 4 acres, 3 blocks, 2 treatments (cover crop vs. none)
 - ‘Red Ripper’ cowpea planted at 50 lbs/acre on 7” row spacing
 - Anticipated benefits: Cowpea needs warm soil conditions for germination, fixes nitrogen, and is moderately tolerant of salinity
 - Anticipated challenges: moisture and pests

Summer Cover Crop Monitoring

Cover crop traits: stand count, biomass measurements

Crop yield of the small grains

Soil tests: bulk density, pH, salinity, total C and N, aggregate stability, infiltration, and active C

- 0-6", 6-12", 12-24", and 24-36"

GHG measurements (N_2O , CH_4) around rain events and management practices



*Look for
trial results
in the
coming
years!*

Thank you!

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<http://ucanr.edu/sites/deltacrops/>

<http://ucanr.edu/blogs/sjcfielddcrops/>