

## Practical. Connected. Trusted.

**F**or over 100 years, UC Agriculture and Natural Resources (UC ANR) has been the local UC connection, delivering the power of UC research in agriculture, natural resources, nutrition and youth development to Californians in their own communities to improve lives and livelihoods.

UC ANR achieves its land grant mission through the work of UC Cooperative Extension academics conducting research at nine UC campuses, nine Research and Extension Centers (RECs) and throughout California, serving all 58 counties. By working and living among those we serve, UC ANR expands UC's reach to engage all people and communities in California ensuring equal access to the UC system. In many regions, UC ANR provides access to UC resources for residents who may never set foot on a UC campus.

### Statewide Reach

UC ANR delivers its mission through 13 statewide programs including 4-H Youth Development, UC Master Gardeners, UC Integrated Pest Management, and CalFresh Healthy Living, UC. UC ANR's Nutrition Policy Institute is integral to developing research-based public policies related to nutrition and physical activity, and our California Institute for Water Resources is the state's hub that develops and communicates research-based solutions to water resources challenges.

### Impacting California

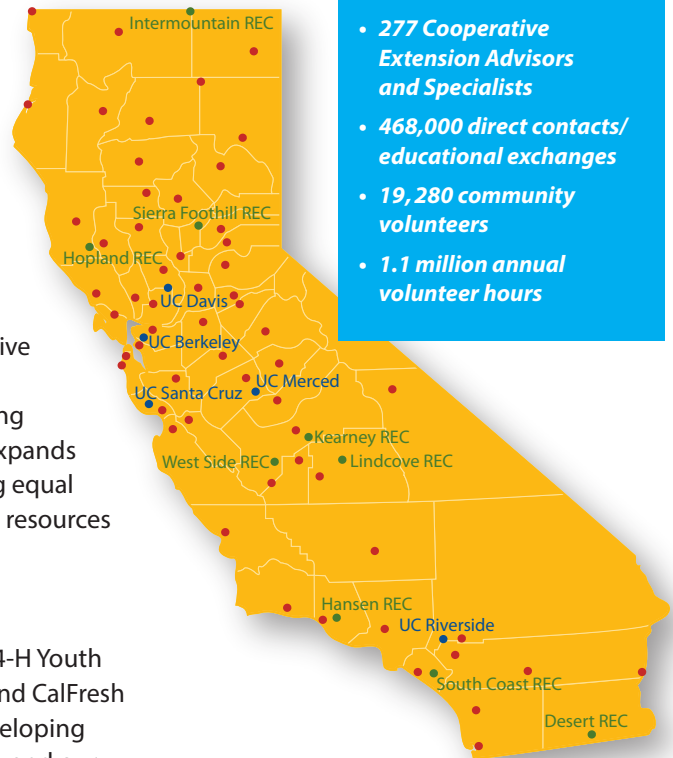
#### Growing tomorrow's leaders

The 4-H Youth Development program provides experiential learning to help culturally diverse youth reach their full potential by developing leadership, citizenship and life skills in supportive environments. Youth can participate in 4-H clubs, camps, after school programs and events. In FY 2022/23, over 57,690 California youth benefited from high-quality 4-H programming efforts which were supported by over 6,415 trained adult volunteers who devoted 660,930 hours of services valued at over \$24.6 million.

UC ANR is in the second year of a Bay Area chapter of "4-H Water Wizards," a science-based program that connects students of color with diverse scientists to imagine career possibilities in STEM fields. A highly anticipated field trip to Elkus Ranch Environmental Education Center provides unique hands-on learning opportunities on agriculture, natural habitats, and environmental stewardship.

#### Increasing food economies and markets

Finding new plant cultivars that can adapt to climate change is crucial to maintaining California's agricultural industry. Recognized by TIME magazine as one of the "200 Best Inventions of 2023" in its Food and Drink category, the newly commercially released "Luna UCR" avocado variety was co-created by two UC scientists at the South Coast Research and Extension Center. Luna's flavor is similar to the popular Haas avocado but the rind turns black when it's ripe – an easy sign for consumers. For growers, Luna is equally prolific as the Haas but its smaller trees are easier to manage and require less land and water.



- 277 Cooperative Extension Advisors and Specialists
- 468,000 direct contacts/ educational exchanges
- 19,280 community volunteers
- 1.1 million annual volunteer hours

- UC Cooperative Extension
- Research and Extension Center
- UC Ag Experiment Station Campus

#### Compared to their peers, 4-H youth are:

- 4 times more likely to make a positive contribution to their communities
- 1.7 times more likely to take courses/pursue STEM careers





### Wildfire prevention and recovery

California's wildfire season has required increased resources each year due to climate change and more people moving to fire-prone areas. UC Fire Advisors routinely host science-based wildfire prevention and recovery workshops throughout California, helping private landowners and government officials understand the benefits and techniques for fire resiliency, such as prescribed burning and home hardening.

*Since 2017, wildfires have burned through over 11 million acres in California.*



### Forestry workforce development

The UC ANR Fire Network collaborated with community partners to deliver the Forestry and Natural Resources Career Mentorship Program, a statewide mentoring program aimed at training new members of the forestry and natural resources workforce. The program supported 248 early-career professionals and students, particularly those who identify as women, nonbinary, Black, Indigenous, Latinx, Asian, Pacific Islander, or LGBTQIA. Professional mentors recognized the value of the workshops, with one citing they "are essential for progressing forestry to a more inclusive profession."

### Improved water-supply security

A collaborative study led by a UC Cooperative Extension specialist at UC Merced found that covering California's 4,000 miles of water canals with solar panels could save 63 billion gallons of water annually and generate 13 gigawatts of solar power. The findings led to the Turlock Irrigation District constructing solar panels over its water canals with \$20 million in funding from the California Department of Water Resources.



### Managing pests and increasing agricultural productivity

As a result of UC ANR's Almond Pest Management Alliance Project, use of mating disruption as an ecologically sustainable pest management practice tripled over two years by growers and pest control advisers who influence over 400,000 acres of almonds in the San Joaquin Valley. The Navel Orangeworm is the most damaging pest of nut crops, with significant economic loss to farmers every year. UC IPM research showed that crop loss could be halved (saving \$18 per acre) when a new 'green' technology is applied to disrupt mating in the Navel Orangeworm. If adopted by 25% of California's nut acreage, this technology could save nut growers \$10 million annually.



### Improving food security for low-income families in California

In 2023, CalFresh Healthy Living, UC, worked to reach over 137,000 youth and adults in 34 California counties through policy, systems, and environmental change efforts that increase access to healthy food and/or physical activity. In addition, EFNEP served more than 7,000 youth and 2,610 adults (impacting 11,235 family members). Adult graduates reported a 98% improvement in diet quality while also increasing their food resources management skills by 96%. They reported saving an average of \$63.95 in monthly food costs; in one year, California EFNEP families collectively saved over \$2 million.

*Studies have shown that for every \$1 invested in EFNEP, more than \$8 is saved in current and future healthcare costs.*