

COUNTY OF MADERA
 BUDGET UNIT DETAIL
 BUDGET FOR THE FISCAL YEAR 2023-24

Department: COOP. EXTENSION
 SERVICE (09200)
 Function: Other
 Activity: Ag. Education
 Fund: General

	ACTUAL <u>2021-22</u>	BOARD APPROVED <u>2022-23</u>	DEPARTMENT REQUEST <u>2023-24</u>	CAO RECOMMENDED <u>2023-24</u>
<u>ESTIMATED REVENUES:</u>				
<u>EXPENDITURES:</u>				
SERVICES & SUPPLIES				
720300 Communications	780	1,100	1,500	1,500
721400 Professional & Specialized Services	95,003	99,795	109,684	109,684
TOTAL SERVICES & SUPPLIES	95,783	100,895	111,184	111,184
<u>TOTAL EXPENDITURES</u>	<u>95,783</u>	<u>100,895</u>	<u>111,184</u>	<u>111,184</u>
<u>NET COUNTY COST (EXP - REV)</u>	<u>95,783</u>	<u>100,895</u>	<u>111,184</u>	<u>111,184</u>

COOPERATIVE EXTENSION

COMMENTS

The University of California Cooperative Extension (UCCE) is the county-based research and educational program of the University of California, Division of Agriculture and Natural Resources and is a cooperating partnership between the County of Madera, the University of California and the United States Department of Agriculture.

The Mission of UCCE:

To serve California through the creation, development, extension and application of knowledge in agricultural, natural and human resources.

UCCE serves the local citizens of Madera through:

- Agriculture research and education to develop and improve agricultural practices.
 - Youth development programs to develop life skills, leadership and community service through (hands-on) education.
 - Nutrition education programs that help individuals and families to eat better, stretch their food dollars, handle food safely and improve health.
 - Extending information on sustainable landscape and gardening practices to the community.
- Our mission is accomplished through the education and research programs conducted by UCCE advisors and program leaders. The advisors and program leaders work with agricultural clientele, county residents, youth, families, and community agencies to provide science-based knowledge and solutions to local residents.

A major strength of the UCCE partnership is the ability to leverage internal and external resources to serve the residents of Madera County. For each dollar of County support, more than three additional dollars are leveraged from state, federal and private sources. Although the revenue from increased agricultural productivity resulting from the research and extension programs is difficult to measure in any given year, it is estimated that for \$1.00 invested in agricultural research and extension, there is a return of \$20 to the community.

Programs serving agriculture provide research-based answers to production challenges, assisting local growers and allied industry in the sustainable, economically viable, and safe production of their crops. Advisors serving Madera County cover 4-H Youth Development, Dairy, Horticulture, Livestock and Natural Resources, Sustainable Agricultural Lands, Orchard Crops, and Viticulture. We have a strong Master Gardener program serving the public of Madera County. The CalFresh Healthy Living, UC program provides support and resources to teachers in low-income Madera County Schools.

COOPERATIVE EXTENSION

COMMENTS (continued)

Pursuant to a 2013 agreement with the University of California (UC), Madera County finances clerical staff, office supplies, facilities, and operating expenses for Cooperative Extension (CE). The Multi-County Partnership agreement also includes Fresno County and resources are provided to allow for delivery of the Cooperative Extension services there. UC is responsible for funding salaries and benefits for the academic staff and procuring grant funding for programmatic efforts. The total budget for Fiscal Year 21/22 was \$10,356,115; 7% of which was provided by the Counties and 93% by the University.

4-H Youth Development

In 4-H, youth discover and develop their potential to grow into competent, contributing, and caring citizens. Learn-by-doing activities, youth-adult partnerships, and research-based educational programs help members develop and enhance their leadership skills and build a wide range of life skills. Along with traditional community-based clubs and residential overnight camp programming, 4-H also works with local schools, parks and recreation departments, and the Madera County Fair on collaborative opportunities. Additionally, our 4-H Advisor and Program Representative continue to offer programs targeted to rural, low income, and minority populations to introduce them to the benefits of 4-H.

Dairy

The dairy extension program goal is to provide clientele with applied research and extension education programs across a spectrum of industry issues as they relate to the dairy production system strengthening the competitiveness of California dairy industry. This includes environmental stewardship, quality assurance, animal welfare, animal health, food safety and labor and production efficiency in order to assist dairy producers in making their operations compatible with current and future environmental concern and contribute to the success of their operations.

ENVIRONMENTAL HORTICULTURE AND MASTER GARDENER VOLUNTEERS

The mission of the Master Gardener program is to provide research-based information for gardening practices and technologies of home horticulture, integrated pest management (IPM), and environmental resource conservation. In 2022 we trained 4 new Master Gardener volunteers and in 2023 Madera Master Gardener have 7 new volunteers joining our program. Madera MG volunteers help with presentations at the Home & Garden show, zoom and in person presentation at Madera Library, local nurseries and at the Three Sisters Garden on the Madera College campus. On Madera campus we support in garden classes for Health Services, hands on training in the garden with Madera professors and their students. This will be the third year that we aid the Madera School district in collaboration with the Cal Fresh program. The collaborative partnership gained recognition of UCANR State Cal Fresh Program and was featured in one of their Town Halls.

COMMENTS (continued)

Madera County grounds crew has received support from the MG program in the Maintenance at the Oakhurst Library and North Fork library and Front planter beds at the UCANR office. It is all drought tolerance plants and California natives. Explore Valley Gardens was a collaborative partnership with gardens in the central valley. The Master Gardener program kicked off this new venture with Celebration National Public Garden week in May of 2022. The marketing firm is working with us again for 2023.

LIVESTOCK AND NATURAL RESOURCES

Livestock and natural resources research and extension assists local producers in maintaining livestock production, a key economic sector in Fresno and Madera Counties, while conserving and enhancing natural resources and ecosystem services on working landscapes.

The livestock and natural resources program connects to clientele through social media, quarterly newsletters, and webinars, workshops, and symposia. Recent topics include:

- Integrated crop-livestock systems
- Regulatory updates on rodenticide use in rangelands
- Small acreage weed management
- Economic impacts of meatpacker policy changes
- *Coming soon:* post-fire forest and rangeland management workshops

Annual forage production data are used by USDA Farm Service Agency to help determine drought impacts to local livestock operations. A new study with sites in Fresno and Madera Counties tests remote sensing to complement or replace physical forage sampling, to better detect drought and expedite compensation to ranchers in need.

A new blue oak monitoring project will document oak mortality and growth rates to empower landowners to manage for better oak survival on working landscapes.

COMMENTS (continued)

NUTRITION, FAMILY, AND CONSUMER SCIENCES

The CalFresh Healthy Living, University of California Cooperative Extension (CFHL, UCCE) serves Fresno and Madera counties using its research-based and science-informed education about food and nutrition, physical activity, policy, systems and environmental (PSE) changes, food safety, and food resource management education at no-cost, to improve the health and lives of CalFresh eligible individuals and families. In Madera County, CFHL, UCCE actively collaborates with Local Implementing Agency partner Madera County Department of Public Health Department to synergistically make an impact in the health and nutrition of our CalFresh Healthy Living participants. The Madera CFHL, UCCE program serves over 24 sites and partnerships which include but are not limited to the Madera Unified School District, Community Action Partnership Madera County, Dairy Council of California, the Madera County Department of Social Services Madera Career Club, Madera Housing Authority, and the City of Madera Parks and Community Services Department.

Every programmatic year, CFHL, UCCE nutrition educators provide direct and indirect nutrition and physical activity education focused classes, extender (teacher) trainings, food resource management education, and policy, systems, and environmental supports. Based on our program evaluation results, CFHL, UCCE reached a total of 206 individual adults and 4,869 youth with direct education and 1,942 youth, adults, and families at 3 sites through PSE (adoption and implementation) in Madera County. Youth and adult program participants reported improved knowledge and behaviors after participating in the CFHL, UCCE program- two crucial factors linked to lower obesity and chronic disease risks. Additionally, CFHL, UCCE Madera program evaluation suggests that 91% of teachers reported they agree or strongly agree that “students are more aware now of the connection between food and health” and “the importance of physical activity to good health, whereas 70% of adult participants reported they will use the “Nutrition Facts” on the food label to choose foods the next time they shop.

“Students looked forward to the lessons. It was the highlight of their week. The biggest change was in their eating. They were able to comment on foods that gave them fuel vs foods that were only good for the taste. They want to eat more fruits and vegetables... This has been an amazing experience for my class. Their emotional growth is evident and their desire to learn more about life science and healthy eating has really been vital in helping them view themselves as a whole being.” -Special Day Class Teacher

COMMENTS (continued)

ORCHARD CROPS

The Orchard Crops program encompasses research and extension activities to help Madera orchard growers, PCAs, and crop consultants improve their productivity and sustainability. Dr. Gordon's extension program includes a podcast (Growing the Valley), a website (www.sjvtandv.com), annual meetings, as well as working with orchard decision makers individually through emails, phone calls, and more than 100 farm calls. In the spring of 2022, she held two commodity focused meetings, almond and pistachio; a field day exhibiting a long-term almond variety trial, and a fall meeting focused on improving irrigation management. Her research program includes an almond variety trial, where she manages one of three sites that are evaluating 30 different almond varieties. Several of these varieties are experimental and show great promise with high yields, low disease susceptibility, and are self-pollinating, which will simplify almond orchard management. An additional program that has recently been wrapped up has revealed that phosphorus fertilization in the first year of an almond tree's life improve growth. Other ongoing projects are examining the effect of boron, salinity, and soil oxygen levels on pistachio performance; developing new methods to reduce insect infestation in dried figs; and investigating pistachio kernel quality.

SUSTAINABLE AGRICULTURAL LANDS PROGRAM

Cristina aided in drafting a \$500,000 Tulare County SALC Planning Project, which was approved (December 2022). She is working with Tulare County, Eastern Tule GSA, and newly emerging land trust, Tule Basin Land and Water Conservation Trust in preparing the project. She is seeking recommendations for ag land and hydrology consultants and advisory committee members with expertise in local land and water management.

In other Department of Conservation news, it seems that the newly established **Multi-benefit Land Repurposing Program (MLRP)** will continue to be funded in 2023. Currently there are two \$10 million block grants rolling out in the Central Valley, these include:

- County of Madera, with Co-applicants Merced/ Chowchilla RCD, Madera County Farm Bureau, Madera Ag Water Association & California Farmland Trust (Chowchilla Madera, Delta-Mendota Subbasin)
- State-side Support Team: Self-Help Enterprise & Environmental Defense Team California Water Team (\$2 million)

Cristina is tracking projects in the area to increase communication between SALC, MLRP and associated support.

The completed **Regional SALC Planning Capacity Needs Assessment** (presented to Department of Conservation in October 2022) is available upon request. The presentation examines barriers and opportunities to sustainable agriculture and planning in the Central Valley region.

COMMENTS (continued)

VITICULTURE

Karl continues his work on rootstocks within the San Joaquin Valley. His work with new nematode-resistant rootstocks has identified nutrient uptake, canopy growth, water management, and yield differences between these rootstocks that will help growers better understand how to use these new rootstocks. Funding has been secured to identify differences in fruit quality between the different rootstocks. Funding to identify wine quality effects these nematode-resistant rootstocks have is currently being requested.

Karl, along with his colleagues in the Fresno office, established another rootstock trial at the University of California West Side Research and Extension Center (WSREC) near Five Points, CA in 2021. This trial will look at the interaction between rootstock, lower-quality irrigation water, and drought stress. This is an important trial to identify which rootstocks can handle less and lower quality irrigation water, while still returning yields that are profitable for local growers. Initial data collection is slated to begin during the 2023 growing season.

In addition, Karl continues to work on vineyard mechanization. With the cost of labor rising many tasks have been mechanized. This gives San Joaquin Valley growers an interesting opportunity as some of the tasks that have been mechanized were tasks that previously had been only used in higher-end wine production. Multiple mechanical management tools are now being trialed to see if they improve wine quality and pest management outcomes locally.

SERVICES AND SUPPLIES

Services and supplies are recommended based on the Multi-County Partnership Agreement.

720300 **Communications** (\$1,500) is recommended for telephone and fax costs as required under the Multi-County Partnership Agreement.

721400 **Professional and Specialized** (\$109,684) is recommended and reflects a \$9,889 increase in the contribution to the University of California Cooperative Extension through a Multi-County Partnership Agreement.