

# AGRICULTURE DEPARTMENT

## I. DEPARTMENT MISSION AND PROGRAM GOALS

### **Agricultural Department:**

The Department serves the citizens of Contra Costa County through effective enforcement of the California Food and Agricultural Code and the provisions of the California Business and Professions Code. The Department's main mission is protecting and promoting the agricultural industry of the County and its environment, ensuring the health and safety of the Counties citizens, and fostering confidence and equity in the marketplace through education and fair and uniform enforcement of state laws, regulations and county ordinances. Our goal is to achieve compliance at the lowest levels of enforcement when possible, with emphasis on education of the regulated community. Progressive enforcement is used when violations occur.

### **University of California Cooperative Extension (UCCE):**

UCCE is residents' direct connection to UC knowledge and expertise. UCCE is part of the University of California's Division of Agriculture and Natural Resources (UC ANR) a statewide network of University of California researchers and educators dedicated to the creation, development and application of knowledge in agricultural, natural and human resources. Our educators and Advisors work and live in this community, saving public dollars and enhancing the quality of life for people in many ways. Overriding goals are to safeguard our food and water supply by promoting sustainable agriculture and environmental stewardship, improve the health & wellbeing of county residents through good nutrition, and to prepare youth to be positive and productive citizens.

## II. MAJOR PROGRAM DESCRIPTIONS

### A. DEPARTMENT DATA

BUDGET: \$6,239,887

FTE: 35

Permanent/Intermittent Employees: 12.6

U.C. Funded FTE: 10.7

CLASS	ALLOCATED POSITIONS
Agricultural Commissioner-Director Weights & Measures	0
Executive Secretary	1
Clerk – Specialist	1
Clerical experienced Level	0
Assistant Agricultural Commissioner/Sealer	1
Deputy Agricultural Commissioner	2

Agricultural Biologist/Weights & Measures Inspector III*	10
Agricultural Biologist II, I, or Trainee*	7
Agricultural and Standards Aide	2
Lead Pest Detection Specialist – Project	1
Pest Detection Specialist – Project	14
Glassy-winged Sharpshooter Specialist - Project	1
Deputy Sealer of Weights & Measures	1
Weights and Measures Inspector II, I or Trainee*	2
UC Paid Personnel (Director, Advisors, Field Assistants and Nutrition Program Administrative Assistant)	10.7

\* Flexibly staffed based on time in grade and # of state licenses.

**EMPLOYEE PROFILE (county staff):**

	Male	Female	Total	Percent
Caucasian	14	15	29	63%
Hispanic/Latino	5	1	6	13%
African/American	4	0	4	9%
Pacific Is/Asian	4	0	4	9%
Hindi	1	0	1	2%
Native American	0	2	2	4%
Total	60%	40%	100%	100%

**B. ENVIRONMENTAL PROTECTION PROGRAMS**

1. Enforce State and Federal quarantines. Inspect plants and goods arriving in the County for the presence of exotic invasive insects, nematodes, pest animals, diseases, noxious weeds, and seeds that are or might be detrimental to the environment, property of the citizens of the County and to the agricultural industry of the County.
2. Eradicate infestations of exotic pests that threaten agriculture, county residents and the environment.
3. Survey agricultural, commercial, and residential areas for pests and diseases not generally distributed in the County. Deploy and inspect specialized insect traps to intercept new or serious pests of economic significance.
4. Monitor pesticide applications for compliance with State law. Review requests for restricted use pesticide permits and

issue the permits if environmental and safe use conditions and concerns are met. Perform pre pesticide application inspections to assure that safety and environmental issues have been properly evaluated.

5. Enforce Pesticide Worker Safety and other pesticide laws to ensure safe working conditions for employees who may be exposed to pesticides, to ensure compliance with environmental protection requirements, and to ensure safety to the citizens of the County.
6. Investigate all pesticide-related illnesses and complaints alleging misuse of pesticides.
7. Tabulate reports on pesticides used by growers, the pest control industry, and government agencies.
8. Register and inspect apiaries for disease and infestations and supervise the destruction of hives when necessary.
9. Control and eradicate certain noxious weeds to protect the county from damage and invasion into agricultural lands, parklands, open space and endangered species habitat.
10. Continue involvement with the Integrated Pest Management Committee (IPM) and work cooperatively with a diverse set of county stakeholders to maintain, and keep current with the changing times, a comprehensive IPM policy used in regard to managing pests.

BUDGET: \$3,410,150

FTE: 27

### **C. CONSUMER PROTECTION PROGRAMS**

1. Inspect nursery stock, fruits, nuts, vegetables, eggs and agricultural seed to ensure compliance with regulations and quality standards.
2. Inspect Certified Farmers Markets, certified producer operations and organic grower operations to assure that they comply with federal and state laws and regulations.
3. Inspect weighing and measuring devices such as gasoline pumps, taxi meters, electric meters, and retail store scales in order to insure accuracy.
4. Inspect scanners, pre-packaged consumer goods, and petroleum

products to ensure compliance with regulations and accuracy of labeling.

BUDGET: \$1,409,383

FTE: 11

#### **D. SERVICE PROGRAMS**

1. Provide the public with information on control options for minor pests encouraging Integrated Pest Management (IPM) and biological control techniques.
2. Administer a ground squirrel program to protect agricultural land, roadways, dams, earthen levees, and other critical structures.
3. Compile an annual crop and livestock report to show conditions, acreage, production and value.
4. Develop special reports for disaster relief purposes and to provide updates on local conditions for the news media.
5. University of California Cooperative Extension (UCCE) Urban IPM Program: This program is designed to provide education and outreach, informed by collaborative applied research, about IPM principles and practices for use against key urban pests. Clientele include urban pest management professionals, municipalities, housing management professionals, and extenders to the public such as UCCE Master Gardeners and retail home and garden store employees. Outcomes included production of peer-reviewed publications, newsletter articles, blog articles, videos, and dozens of in-person presentations. Impacts included increases in knowledge amongst clientele regarding urban IPM principles and practices, changes in behavior regarding urban pest control, and reduction of negative impacts associated with pest management on communities and the environment.
6. UCCE Agricultural and Natural Resources Program: This program is designed to directly serve and assist the county's 850 farmers and ranchers through sound science. 87% of these are small and/or low income operations with limited resources. 30% are relatively new to agriculture with less than 10 years in the business. Public and private landowners not only provide land for agricultural production but also steward the county's natural resources. The program provides growers with:
  - Basic technical information to get started and to survive

economically; knowledge they need to be good stewards of the land; research-based information to help them address specific local issues.

- Assure the public of a sustainable, safe, and environmentally friendly food system while protecting natural resources and other land uses.
- Provide leadership to the eradication of invasive pests that threaten agriculture viability

7. UCCE Nutrition, Family and Consumer Sciences Program: Provides science-based information to promote a healthy lifestyle free from chronic disease. Families and children are taught healthful ways of eating; where food comes from; how to prepare simple and healthy meals; how to stretch the food dollar. Two financial literacy curricula are offered: Making Every Dollar Count (for adults) and Money Talks (for teens).
8. UCCE Urban Horticulture Program focuses on promoting healthy urban and suburban environments. Advisors deliver programs on urban forestry, integrated pest management, green-waste reduction, and water conservation to landscape and pest management professionals. Master Gardener volunteers deliver information directly to local residents helping them to reduce pesticide and water use and produce fruits and vegetables in their home gardens.
9. UCCE Research: Established a research site with East Bay Municipal Utility District to study pathogen loading from cattle grazing on watershed lands related to safe drinking water concerns. Also provided technical support to Contra Costa Public Works Department involving grazing to reduce pesticide use in flood control channels.
10. UCCE Master Gardener Program: Extends research-based gardening information to residents and agencies. 257 Master Gardeners volunteers, all who receive over 100 hours of training and pass rigorous tests, are the primary source for disseminating information. Goals include:
  - Decrease the use of pesticides in the home garden.
  - Decrease the use of water in the home garden.
  - Teach backyard gardeners how to grow nutrient-rich vegetables.
11. UCCE Urban IPM Program: The Urban IPM Program, led by UC Cooperative Extension Urban IPM Advisor Andrew Sutherland, provides training to structural pest control operators, landscape

managers, pest control advisers, urban agriculture practitioners, municipal staff, UC Master Gardeners and the general public with regards to specific IPM strategies/tactics, invasive pest species awareness/mitigation and urban surface water concerns related to pest management.

BUDGET(County): \$206,420

FTE(County): 2

UC Funded Staff Allocation: 10.2

**E. ADMINISTRATIVE/SUPPORT SERVICES**

1. Provide employee development through training, mentoring and participatory management.
2. Provide personnel, payroll, fiscal administration, department clerical supervision, and automated systems services.
3. Develop policy and direction to meet mandates and respond to local needs.
4. Administer University of California Cooperative Extension program.

BUDGET: \$771,220

FTE: 6

U.C. Funded Staff Allocation: 0.50

### **III. DEPARTMENT ACCOMPLISHMENTS**

#### **A. ENVIRONMENTAL PROTECTION PROGRAMS**

1. High Risk Exclusion work continues with early morning quarantine inspections of all express carriers. This facilitates industry's need to expedite deliveries and improves our ability to intercept potentially devastating exotic pest organisms. In 2017 our Biologists performed over 36,612 exclusion inspections and discovered, and rejected entrance into California 96 shipments that were in violation of shipping requirements. In addition, during the course of inspecting these shipments, 12 significant pests with potential detriment to our agriculture, environment and urban landscaping were intercepted.
2. As a part of the High Risk Exclusion work two county Agricultural Canine Handler positions were created as a state pilot program in 2006. The handlers were sent to a 10 week USDA training program and were issued USDA canines that specialize in detecting agricultural commodities contained within parcels. The two Contra Costa teams have now branched out and work in twelve Bay Area counties at UPS, FedEx and the U.S. Post Office parcel facilities. The teams were so successful that 15 additional county teams have been established in both Northern and Southern California. Salary and expenses for our two teams are reimbursed through a contract with the California Department of Food and Agriculture using pass-through USDA money.
3. The Glassy-winged Sharpshooter (GWSS) presents a threat to agricultural crops, backyard fruit crops and landscape plants. Our program continues to be very successful in keeping this pest out of Contra Costa County. 1,867 nursery shipments were inspected by our staff for GWSS in 2017. 1 Nursery had received GWSS through shipments this year. Over the 15-year span of the program a number of nursery shipments were found with live life stages of GWSS and were destroyed or rejected entry into our county. No new infestations have been detected in our county since the eradication of GWSS from Brentwood in 2003.
4. Agriculture Department and UCCE: In addition to numerous outreaches, training sessions on a varied subject matter including plant disease, pesticide safety and pest exclusion, training sessions were held to train pesticide handlers and agricultural fieldworkers in pesticide safety. The training was presented in English and Spanish by bilingual staff to 401 workers attending the 15 classes.

5. The California Department of Pesticide Regulation continues to perform annual effectiveness evaluations on our Pesticide Use Enforcement program. Suggestions for improvement to keep pace with changes in pesticide laws and regulations have been incorporated into our existing program and have met with approval by state evaluators.
6. The noxious weed program involved controlling 2 invasive weed species. Treatments were made on a total of 49 properties that included private farm and ranch land, park lands and open space areas. In total over 43,000 acres were surveyed with 51 net acres treated.
7. Agriculture Department and UCCE: Implemented an aggressive Cherry Buckskin eradication program. Teams surveyed over 600 acres for Cherry Buckskin and since its discovery in 2002 have curtailed spread and confined this disease to one orchard for the last 5 years and we have not seen evidence of the disease in over. Cherry Buckskin has been successfully eradicated from Contra Costa County in 2016 and there has been no evidence of it resurfacing.

## **B. SERVICE PROGRAMS**

1. UCCE: Coordinated research on controlling Spotted Wing Drosophila, a new pest that infects cherries. Information was disseminated through local grower meetings. As a result, the 2017 commercial cherry crop had very little pest damage.
2. UCCE: Continued testing walnut rootstocks developed at UC Davis to find walnut blackline disease resistance. This disease is the main limiting factor to walnut production in Contra Costa. As a result of the trials UC Davis officially released a new walnut rootstock that will prevent this disease and walnut acreage has increased by 20%.
3. UCCE: Conducted successful research on finding reduced risk alternatives to control insect pests on peppers. This is a new crop (with new pests) for Contra Costa County and this work helped local vegetable growers produce a better crop in a safer manner.
4. UCCE: Conducted studies to understand public perception attitudes toward grazing and as a result have developed outreach materials and an interpretive trail for park users to understand the value of working rangeland to ecosystems.
5. UCCE: Engaged youth in the yearlong 4-H youth development



programs. Participating 4-H youth were 1.6 times more likely to report better grades (B or better), 1.8 times more likely to go to college, 3 times more likely to contribute to their communities, and 4-H girls were two times more likely to have plans to pursue science careers vs. non 4-H girls.

6. UCCE: Trained and supported 4-H volunteers who each donated a minimum of 75 hours to the 4-H program.
7. UCCE: Educated future farmers and consumers, youth and adults, on the importance of agriculture and where food comes from. Proudly based in agriculture, 4-H offered projects covering a range of interests including raising livestock (i.e., swine, beef, goat, poultry, sheep, etc.), vegetable gardens and crops, farm machinery, entomology, food preparation (i.e., cooking, nutrition, preservation, table setting, etc.), plus projects in science, engineering, technology, rocketry, sports, money management, drama, arts, woodworking, etc. Reaching out to the community, 4-H youth educate the public at various venues.
- 9 UCCE: Trained teachers who delivered nutrition education in their classroom. They delivered an average of 6 hours of nutrition education to students (pre-K-12th grade). Surveys of students showed improvements in choosing healthy foods, food safety, and physical activity.
- 10 UCCE: Coordinated an after school program for at-risk youth focusing on building healthy living skills through nutrition and fitness related activities, food preparation, and edible gardening. The youth reported improved nutrition knowledge, eating habits, and cooking skills.
- 11 UCCE: Trained/managed over 200 Master Gardener volunteers who educated local residents on a wide range of topics that promote healthy and sustainable homes and communities: proper plant problem diagnosis; safe pest management techniques that minimize pesticide use; water conservation and drought tolerant landscaping; composting and green waste reduction; and home food production with an emphasis on food security and healthy eating.
- 13 UCCE Urban Horticulture Program focuses on promoting healthy urban and suburban environments. Advisors deliver programs on urban forestry, integrated pest management, green-waste reduction, and water conservation to landscape and pest management professionals. About 200 well trained Master Gardener volunteers deliver information directly to local residents helping them to reduce pesticide and water use and produce fruits and vegetables in their home gardens.

- 14 UCCE: Provided instruction and technical assistance to school and community gardens. UC Master Gardeners in partnership with UC Nutrition Education have helped many schools develop gardens to grow edibles. The food goes either directly to the students or into the cafeteria for consumption. In collaboration with the public libraries, the Master Gardeners delivered talks to the public on topics including garden pests, protecting wildlife, growing vegetables in small spaces, soil testing, water conservation.
- 15 UCCE: Made a large variety of research-based information available to the public on their website: <http://ccmg.ucdavis.edu/>

### **C. ADMINISTRATIVE/SUPPORT SERVICES**

1. Our service contract with Department of Information Technology continues to work extremely well in dealing with troubleshooting, technology updates, and the general technological help on computer- related issues and problems. The technologist assigned to our department has become very familiar with the departmental specialized programs and needs and therefore has become an invaluable asset to the Department.

## **IV. DEPARTMENT CHALLENGES**

### **A. INTERNAL TO DEPARTMENT**

1. Providing the right type and balance of training necessary to keep existing staff current on issues and regulations, while at the same time keeping staff in the field to meet program workloads, the Department is charged with a wide array of complex functions. Almost two-thirds of the staff are state-licensed professionals. Staff training and development are essential to maintain our staff at a high standard.
2. Providing adequate and qualified staff for seasonal program demands.
3. Continuing to work with stores that use scanning systems for pricing through education in an attempt to improve the level of compliance in what they charge the consumer.
4. Developing staff expertise necessary to keep computer systems running effectively and efficiently and to keep our website vibrant and current.

5. Developing effective e-government options that will benefit the regulated community as well as the citizens of the county.
6. Training new staff to achieve the high level of quality work that is required in the inspection and enforcement arena.
7. Developing the expertise to work with emerging issues such as air and water quality, endangered species, agricultural preservation and new technology.
8. Our Pest Detection Program has a staff of 14 part time employees with 2 permanent positions to help maintain this program. The 2 positions have helped to give the program some more stability.

**B. INTERNAL TO COUNTY OPERATION**

1. Working with a limited Human Resources Department staff.
2. Finding a way to make the new building for Agriculture and UC Cooperative Extension fit within our budget
2. Continue to develop and improve, where opportunities arise, the departmental Integrated Pest Management program.

**C. EXTERNAL TO COUNTY OPERATION**

1. Expanding local efforts to resolve Agriculture/Urban interface issues.
2. Preserving a viable agricultural industry and working with the Agricultural Land Trust and government agencies.
3. Addressing environmental issues involving endangered species, water quality, air quality, and habitat preservation.
4. The California Department of Food and Agriculture (CDFA) Noxious Weed and Biocontrol programs have been eliminated due to state budget cuts. The coordinated oversight that CDFA provided statewide will be missed; populations of some noxious species are anticipated to increase.
5. Addressing concerns over invasive weeds in agricultural and open space areas with reductions in available funding.

6. Alternative fuel hydrogen and electric vehicles are entering the marketplace. This will involve greater staff time and new equipment needs as weights and measures inspectors will be required to check new measuring devices.
7. Taxi meter other measuring device technology is evolving resulting in increased staff training and inspection time.
8. New ride sharing services using new devices are coming into the market, bringing with them a number of challenges as far as testing, fairness in the marketplace and other potential issues.
9. Responding to budget cuts in the most effective manner possible.

## **V. PERFORMANCE INDICATORS**

1. We have been inspecting nurseries, farms, and other areas to monitor for the Light Brown Apple Moth to ensure it does not spread out of Contra Costa County, while keeping the lines of commerce open for our local businesses.
2. We have been working to ensure that our Pest Detection program is in line with the state's protocols at the same time working on efficiencies in the program. We are currently prepping our department to use an electronic system to help make the program more efficient.
3. We currently have 2 staff members in the areas of Heavy Capacity and Industrial Scales Inspection and have others who are being trained to assist in these programs. All Weights and Measures staff attends training for different aspects of Weights and Measures programs, including hearing and investigations, to keep them up with the ever changing industry.
4. The number of weights and measure devices inspected relative to the hours expended on this program continues at a high rate. This is a reflection of focused training, staff experience and efficiency, and specialized testing equipment that was obtained for this program. Equipment is still being upgraded to be more efficient and accurate for our testing and to keep up with the ever evolving industry

5. Staff performed 372 point-of-sale (scanner) inspections in 2017. 94 violation notices and 11 administrative actions were issued involving \$10,200 in proposed fines.
6. UCCE has many personal contacts with farmers in the form of farm visits, office visits, e-mails, and telephone calls. Organized or co-organized meetings and delivered presentations reaching over 1000 growers. Produced grower newsletters and authored or co-authored other grower oriented publications. Set up an Agricultural Resources website with a wealth of sound, science based information relevant to all aspects of growing crops in Contra Costa County.
7. Master Gardener volunteers help educate local residents on a wide range of topics including safe pest management techniques that minimize pesticide use, water conservation, and drought tolerant landscaping.
8. UCCE 4-H Youth and Community Development Program: Engaged/Educated future farmers and consumers on the importance of agriculture and where food comes from; Youth also learned citizenship, leadership and life skills necessary to be competent and productive adults. 4-H is accessible throughout the County, from El Cerrito to Brentwood, Martinez to Tassajara, there is a total of 9 4-H clubs in Contra Costa County and growing!
9. UCCE: Graduated low-income parents from the "Eating Smart Being Active" nutrition series (completed 6-8 lessons) and tracked marked improvements in nutrition and food resource management practices made by participants.
10. The Dog teams continue to find tens of thousands of parcels with many of them being unmarked. This is quite notable as the human inspectors only find the parcels that are marked as containing plant material, are leaking, or odiferous, while unmarked parcels slip by unnoticed. This gives the canine inspectors a huge advantage over human inspectors.
11. The Agricultural Department has worked on controlling Artichoke and Purplestar Thistle by conducting surveys and spot treatments of historically infested sites each year. Work is done on parkland, rangeland, open space, and infested areas adjacent to cropland. In addition, the Department has treated new areas in East Bay Regional Park's Wildcat Canyon and Tilden Park under contract to help them reclaim their open space from artichoke thistle and other targeted noxious weed species 100% of the extremely heavily

artichoke thistle infested park is now under the treatment program. The Department completed the fifteenth year of a contract with Mt. Diablo State Park. All of this parks 20,000 lightly infested acre were surveyed and treated. In total the department targets 2 noxious weed species. The noxious weeds at these sites are mostly greatly suppressed.

	<b>Artichoke Thistle</b>		<b>Purple Starthistle</b>	
	<b>Acres Treated</b>		<b>Acres Treated</b>	
<b>Year</b>	<b>Net</b>	<b>Gross</b>	<b>Net</b>	<b>Gross</b>
<b>2004</b>	369	79,126	129	13,724
<b>2005</b>	296	80,359	116	17,106
<b>2006</b>	59	86,994	74	12,096
<b>2007</b>	207	56,256	155	8,158
<b>2008</b>	394	45,536	29	94,327
<b>2009</b>	128	67,858	97	16,046
<b>2010</b>	143	82,323	91	27,182
<b>2011</b>	206	67,037	153	22,787
<b>2012</b>	105	185,524	61	27,089
<b>2013</b>	179	181,566	91	29,902
<b>2014</b>	206	153,823	140	20,137
<b>2015</b>	113	61,547	35	2,086
<b>2016</b>	49	71,195	12	6,106
<b>2017</b>	45	41,239	5	24,335

In addition to protecting the natural environment of Contra Costa County and endangered species habitat, the control of noxious weeds helps to reclaim and protect land from pests that render it unusable for continued agricultural and open space enjoyment.

Our Department provides technical assistance to the public and agencies on the proper control methods for ground squirrels. We also perform work at cost to protect critical infrastructure that includes highway and railroad rights-of-way, flood control, reclamation and sanitation plant levees, water canals, earthen dams and county maintained roads.