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. DEPARTMENT DATA

BUDGET:$5,950,971
FTE: 32
Permanent/Intermittent Employees: 15.1
U.C. Funded FTE: 10.7

CLASS	ALLOCATED POSITIONS
Agricultural Commissioner-Director Weights & Measures	1
Executive Secretary	1
Clerk – Senior Level	1
Clerical Specialist	1
Assistant Agricultural Commissioner/Sealer	1
Deputy Agricultural Commissioner	3

Agricultural Biologist/Weights & Measures Inspector III*	11
Agricultural Biologist II, I, or Trainee*	6
Pest Detection Program Assistant	1
Lead Pest Detection Specialist	1
Pest Detection Specialist – Project	19
Glassy-winged Sharpshooter Specialist - Project	2
Deputy Sealer of Weights & Measures	1
Weights and Measures Inspector II, I or Trainee*	3
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	19	17	36	65.4%
Hispanic/Latino	5	0	5	9%
African/American	6	0	6	10.9%
Pacific Is/Asian	4	0	4	7.2%
Hindi	1	1	2	3.6%
Native American	0	2	2	3.6%
Total	35%	20%	55%	100

III. MAJOR PROGRAM DESCRIPTIONS

A. 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: $3,234,093
FTE: 31.5

B. 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: $1,148,421
FTE: 9

C. 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 new (2012) 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 counties 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 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!

8. 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).

9. 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.

10. 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.

11. UCCE: 1,396 students, 48 teachers and 379 chaperones participated in nutrition/gardening field trip activities that included agricultural-themed harvesting and tasting of a variety of fresh fruits

and vegetables from the garden making them more aware of the origin of food and how it is grown.

12. UCCE Master Gardener Program: Extends research-based gardening information to residents and agencies. 200 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.

13. UCCE Urban IPM Program: The new (April 2012) 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): $194,279
FTE(County): 1.6
UC Funded Staff Allocation: 10.2

D. 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: $1,374,178 FTE: 5.0
U.C. Funded Staff Allocation: 0.50

IV. 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 2014 our Biologists performed over 47,559 exclusion inspections and discovered, and rejected entrance into California 245 shipments that were in violation of shipping requirements. In addition, during the course of inspecting these shipments, 17 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 11 additional county teams have been established in both Northern and Sothern 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. 1,964 nursery shipments were inspected by our staff for GWSS in 2014. Over the 14 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. On two occasions staff detected very early stages of incipient infestations that had started within nurseries requiring closing and treating those nurseries at their expense. Staff monitored these treatments for efficacy. 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 outreach training sessions on a varied subject matter including plant disease, pesticide safety and pest exclusion, four training sessions were held to train pesticide handlers and agricultural fieldworkers in pesticide safety. The training was presented in Spanish by bilingual staff to 204 workers attending the five 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 18 invasive weed species. Treatments were made on a total of 895 properties that included private farm and ranch land, park lands and open space areas. In total over 175,000 acres were surveyed with 422 net acres treated.

7. Since 2006 forty-nine properties in the county were found to be infested with Japanese dodder. This parasitic plant can grow up to six inches a day. It has the potential to completely engulf, parasitize and kill all landscaping as well as natural and stream vegetation. The department mechanically removed all infested plant material on the 49 sites including mature trees, shrubs and vines. Of the 49 sites within Contra Costa the department has so far successfully eradicated it on 46 of the sites.

8. 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 4 years. Our eradication program won an award from the Western Cooperative Extension Directors' in 2012. Cherries are a multi-million dollar crop in Contra Costa.

B. CONSUMER PROTECTION PROGRAMS

1. Staff performed 164 point-of-sale (scanner) inspections in 2014. 96 violation notices and 28 administrative actions were issued involving $17,150 in proposed fines.

2. Two major weights and measures consumer cases were settled by our District Attorneys based on work performed by our staff. Our departments' investigative data was used in four other statewide District Attorney cases. Our Department received $18,804 in investigative cost recovery. Our District Attorney's office was involved in two of these cases and received about $4,000,000 in direct fines and cost recovery.

C. SERVICE PROGRAMS

1. UCCE: Handled over 300 personal contacts with farmers in the form of farm visits, office visits, e-mails, and telephone calls. Organized or co-organized 13 meetings and delivered 13 presentations reaching 1195 growers. Produced 15 grower newsletters and authored or co-authored 7 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.

2. 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 2014 commercial cherry crop was excellent in quality with very little pest damage.

3. 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%.

4. 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.

5. 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.

6. UCCE (Urban IPM): Involvement in six applied research projects, two statewide outreach projects, and two needs assessment research projects; organization of five educational programs and delivery of 43 educational presentations, reaching approximately 2239 clientele individuals throughout the state; production of four peer-reviewed publications, five clientele newsletter articles, six blog articles, three radio interviews, and dozens of consultations, reaching thousands of clients; and public service via delivery of five public presentations, six public outreach programs, and by dissemination of urban IPM information and resources to 145 members of the general public.

7. UCCE: Engaged 481 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

2 times more likely to have plans to pursue science careers vs. non 4-H girls.

8. UCCE: Trained and supported 162 4-H volunteers who each donated a minimum of 75 hours to the 4-H program, contributing an estimated 12,150 hours which is valued at $320,031 (Volunteer-Time Valued at $26.34/hr for California in 2013.

9. 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 170 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. For example, at the annual Contra Costa County fair, various 4-H presentations and exhibits reached an estimated 19,571 individuals.

10. UCCE: Trained 147 teachers who delivered nutrition education in their classroom. They delivered an average of 6 hours of nutrition education to 3,618 students (pre-K-12th grade). Surveys of 1664 students showed improvements in choosing healthy foods, food safety, and physical activity.

11. UCCE: 230 low-income 4th and 5th grade students and 9 teachers participated in a nutrition event, which is a collaborative effort with the Food Bank and Pittsburg Unified School District. Teachers reported that the event favorably impacted had their students' nutrition and physical activity habits.

12. 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.

13. UCCE: Graduated 312 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.

14. UCCE: 1,601 students, 48 teachers and over 400 chaperones participated in a nutrition/gardening field trip activity that included harvesting and tasting a variety of fresh fruits and vegetables from the

garden. Teachers reported that they had used or planned to use the follow up nutrition related lessons and 100% agreed that their students were more aware of the origin of food after participating in the garden and agricultural-themed activities.

15. UCCE: Trained/managed 200 Master Gardener volunteers who contributed 17,300 hours (valued at $428,200) educating 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.

16. UCCE: In collaboration with the Contra Costa Times, offered weekly classes from April – October, to the public at their edibles demonstration garden. The garden raised over 10,000 pounds of fresh produce that was donated to low-income residents in the Monument Corridor.

17. 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.

18. UCCE: Provided instruction and technical assistance to school and community gardens. UC Master Gardeners in partnership with UC Nutrition Education have helped 11 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 15 talks to 310 members of the public on topics including garden pests, protecting wildlife, growing vegetables in small spaces, soil testing, water conservation.

19. UCCE: Made a large variety of research-based information available to public on their website: http://ccmg.ucdavis.edu/

D. 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.

V. 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 21 and has long needed program support staff to coordinate the activities within the pest detection districts. Though a position was approved by the Board unexpected funding shortfalls in our proposed budget does not provide enough funds to fill this position.

B. INTERNAL TO COUNTY OPERATION

1. Working with a limited Human Resources Department staff.

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. As the price of gasoline increases, so does the number of complaints involving gasoline dispensing devices. This involves greater staff time.

8. Taxi meter other measuring device technology is evolving resulting in increased staff training and inspection time.

9. Responding to budget cuts in the most effective manner possible.

VI. PERFORMANCE INDICATORS

A. Environmental Protection Programs

1. The Dog teams statistics for the period of July 1, 2013 – June 30, 2014 truly displays great performance. During that time the teams alerted on 43,503 total parcels with 197 being unmarked and containing agricultural commodities. This is quite notable as the normal human inspectors only catch the parcels that are marked as containing plant material or are leaking or odiferous, unmarked parcels slip by unnoticed. Of these total alerts, 23 actionable pests were intercepted 2 of which would have severe implications to multi-billion dollar crop industries in California.

B. Consumer Protection Programs

1. 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. In the last 2 years equipment is being upgraded to be more efficient and accurate for our testing.

C. Service Programs

It has been the Departments long term goal to reduce artichoke thistle, purple starthistle and certain other rated noxious weeds. This is to the benefit of our agricultural and ranch lands as well as to the natural environment and biodiversity of Contra Costa County.

By the 1970's Contra Costa County had one of the heaviest infestations of these weeds in California with over 100,000 acres infested. Since 1979 the Department has gradually worked to control these weeds in most areas of the county adding new sites as workload permitted. Work includes survey and spot treatment of historically infested sites each year. Work is done on parkland, rangeland, open space areas 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 thirteenth 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 18 noxious weed species. Four of these species are only found at a single site in the county and eleven are found at less than ten site locations. In total there are 895 sites that range in size from one acre to 5,000 acres. The noxious weeds at these sites are mostly greatly suppressed.

	Artichoke Thistle		Purple Starthistle	
	Acres Treated		Acres Treated	
Year	**Net**	**Gross**	**Net**	**Gross**
2004	369	79,126	129	13,724
2005	296	80,359	116	17,106
2006	59	86,994	74	12,096
2007	207	56,256	155	8,158
2008	394	45,536	29	94,327
2009	128	67,858	97	16,046
2010	143	82,323	91	27,182
2011	206	67,037	153	22,787
2012	105	185,524	61	27,089
2013	179	181,566	91	29,902
2013	206	153,823	140	20,137

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.