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Abstract

This document outlines the purpose and creation of a training resource used by members of the California Association of Standards and Agricultural Professionals (CASAP). The training resource is hosted on the CASAP website and focuses on content included on the eight licenses issued by the California Department of Food and Agriculture (CDFA) for County Agricultural Biologist Inspectors and County Weights and Measures Inspectors.

Respectfully Submitted,

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All those committed to protection of the environment, public, and right to farm.
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Background

Relevance of Production Agriculture in California

In 2018, 11% of the United States population were employed by roughly 22 million jobs in the agriculture and food sector and 13% of American’s income was used directly for food expenditures (Ag and Food Sectors and the Economy, United States Department of Agriculture – Economic Research Service). California farms and ranches had a combined gross income of nearly $50 billion. The top commodities were dairy products, grapes, almonds, cattle, pistachios, strawberries, lettuce, floriculture, tomatoes, and oranges. California agriculture provided “a third of the country’s vegetables and two-thirds of the country’s fruits and nuts” (California Agricultural Production Statistics, California Department of Food and Agriculture). During the same year, nearly 422,320 people were employed in the California agriculture industry (California Agricultural Employment 2018 Annual Average, California Employment Development Department). The agriculture industry in California is vital in food production and therefore must be protected to ensure future agricultural production.

Relationship between Local, State, and Federal Government in Agricultural Regulation

The Federal entity for agricultural regulation is the United States Department of Agriculture (USDA). The Environmental Protection Agency (EPA) is another Federal entity involved in agriculture, specializing in the regulation of pesticides. The National Institute of Standards and Technology (NIST) focuses on regulation of commercial weights and measures and is a division of the United States Department of Commerce. The national organization for weights and measures professionals is the National Conference on Weights and Measures (NCWM).
The California State agency for agricultural regulation is the California Department of Food and Agriculture (CDFA). CDFA has a subdivision that regulates weights and measures on a state level called the Division of Measurement Standards (DMS). The California State Agency responsible for pesticide regulation is the California Department of Pesticide Regulation (CDPR). The state organization for Agricultural Commissioner’s and Sealers of Weights and Measures is the California Agricultural Commissioners and Sealers Association (CACASA). The state organization for county Agricultural Biologist Inspectors and Weights and Measures Inspectors is the California Association of Standards and Agricultural Professionals (CASAP). State agencies adopt Federal laws and regulations.

County Agricultural Commissioner’s (CAC) offices are local government agencies that report to and work with CDFA to implement state programs on a local level. CAC offices are the agencies that have the greatest reach and are the most hands-on with grower relations. CAC offices work with regulation of both agriculture and pesticides. County Weights and Measures Departments are often in conjunction with County Agricultural Commissioner’s Offices. The California Department of Food and Agriculture’s County Relations Office is dedicated to communicating between CDFA and CACASA. Local agencies adopt State and Federal laws and regulations.

CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE
The California Department of Food and Agriculture (CDFA) is the California State agency primarily responsible for the regulation of agricultural products, practices, and permits. The mission of CDFA is to “serve the citizens of California by promoting and protecting a safe, healthy food supply, and enhancing local and global agricultural trade, through efficient management, innovation, and sound science, with a commitment to environmental stewardship”
(Mission Statement, California Department of Food and Agriculture). CDFA focuses not only on preserving agricultural production but emphasizes the importance of environmental consciousness in production agriculture. There are multiple divisions under CDFA regulating animal production, cannabis cultivation, marketing services, and measurement standards.

CDFA oversees many programs involved with production agriculture. Some programs that Agricultural Commissioners are involved with include trapping programs such as the Pierce’s Disease Control Program for the Glassy-Winged Sharpshooter, a variety of crop inspections and certifications, direct marketing “Farmers Market” inspections, and the inspection of weighing and measuring devices (Divisions and Special Programs, California Department of Food and Agriculture).

DIVISION OF MEASUREMENT STANDARDS

The Division of Measurement Standards is a subdivision of the California Department of Food and Agriculture. The Division of Measurement Standards (DMS) regulates weights and measures in California. Activities for the department include ensuring accuracy of commercial weighing and measuring devices, verifying quantities of commodities, and enforcing standards for petroleum products (Division of Measurement Standards, California Department of Food and Agriculture). DMS works with County Weights and Measures Departments to complete inspections, enforce regulations, and conduct trainings.

The mission of the Division of Measurement Standards is to “serve the people of California by aggressively preserving and defending the measurement standards essential in providing the citizens a basis of value comparison and fair competition in the marketplace” (Mission, California Department of Food and Agriculture – Division of Measurement Standards). DMS enforces laws and regulations set forth in the California Business and
Profession’s Code Division 5, and the California Code of Regulations (CCR) Title 4, Division 9. The California Business and Professions Code outlines general business regulations and serves as a charging code in violations of the law. A law is created by the Legislative Branch of government outlining a rule that either requires or prohibits an act. The California Code of Regulations serves as a guideline for enforcement and test procedures and references sections of the California Business and Professions Code. A regulation is a guideline that is created to clarify, interpret, or enforce a law (Training Module 2: Laws and Regulations, California Department of Food and Agriculture – Division of Measurement Standards; Appendix M and Appendix N). For example, if one were to find a violation of the California Code of Regulations, they must also cite the corresponding Business and Professions Code. The California Code of Regulations also adopts regulations and testing procedures set forth by the National Institute of Standards and Technology (NIST).

CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE EXAMINATIONS

The California Department of Food and Agriculture (CDFA) offers five licenses related to the County Agricultural Biologist Inspector position, and three licenses related to the County Weights and Measures Inspector position (Appendix A). The licenses related to the County Agricultural Biologist/Inspector are: Pesticide Regulation, Investigation and Environmental Monitoring, Integrated Pest Management, Commodity Regulation, and Pest Prevention and Plant Regulation. The licenses related to the County Weights and Measures Inspector are: Weight Verification, Measurement Verification, and Transaction and Product Verification.

Prior to examinations, an individual must apply to test for each license. A County Agricultural Biologist/Inspector license candidate must meet minimum qualifications such as possessing one or more licenses as a County Agricultural Biologist/Inspector, or possessing a
Bachelor’s degree in an approved field of study such as agricultural, biological, chemical or physical sciences (County Licensing Program: Licensing Examinations for County Agricultural Inspector/Biologist, California Department of Food and Agriculture – County Relations Office; Appendix B). A County Weights and Measures Inspector license candidate must meet minimum qualifications mentioned above or may qualify a variety of other ways such as substituting years of college study for years of relevant work experience (County Licensing Program: Licensing Examinations for County Weights and Measures Inspectors, California Department of Food and Agriculture – County Relations Office; Appendix C). After a License Candidate has been approved, they must receive an examination score of at least 70% to receive their license. Examinations vary from 85-120 questions depending on the examination. Licenses are valid for five years from the date of issuance and may be renewed without testing if an individual is employed by a County Agricultural Commissioner, the California Department of Food and Agriculture, or the California Department of Pesticide Regulation (County Licensing Program: Licensing Examinations for County Agricultural Inspector/Biologist, California Department of Food and Agriculture – County Relations Office; County Licensing Program: Licensing Examinations for County Weights and Measures Inspectors, California Department of Food and Agriculture – County Relations Office).

In addition to the eight county inspector licenses CDFA offers, they also offer examinations for Deputy County Agricultural Commissioners, Deputy County Sealers of Weights and Measures, County Agricultural Commissioners, and County Sealers of Weights and Measures (California County Exam Bulletins, California Department of Food and Agriculture – County/State Liaison Office).
COUNTY AGRICULTURAL COMMISSIONER DUTIES

County Agricultural Commissioners are “charged with the protection of California agriculture, the protection of the environment as well as the protection of the public’s health and safety” (California’s Agricultural Commissioners, California Department of Food and Agriculture – County/State Liaison Office). The California Department of Food and Agriculture oversees each county department and provides support to counties in a variety of programs. Programs required to be executed by County Agricultural Commissioners include: Pest Exclusion, Detection, Eradication, and Management; Pesticide Enforcement; Seed Certification; Nursery Inspection; Fruit, Nuts and Vegetable Standardization Inspection; Egg Inspection; Apiary Inspection; and Crop Statistics (California’s Agricultural Commissioners, California Department of Food and Agriculture – County/State Liaison Office).

Pest related programs aim to manage the number of harmful pests, prevent invasive pests from entering or spreading, and identify potential pests such as insects, weeds, and animals. Pesticides are commonly used to manage pest pressure. It is a duty of the County Agricultural Commissioner’s Office to enforce pesticide regulation and focus on the protection of workers and the environment. Certification of commodity such as seeds, nursery material, fruits, nuts, vegetables, and eggs allows for fair market comparisons, product cleanliness, and accurate labeling. Apiary Inspections focus on the protection of honeybee colonies used for honey production and pollination services (California’s Agricultural Commissioners, California Department of Food and Agriculture – County/State Liaison Office).

One major task of Agricultural Commissioners Offices is to compile crop statistics each year. This is typically referred to as a “Crop Report” which help to inform industry, government agencies, and the public about agricultural production in each county (2018 Agricultural
Production Report, County of Santa Barbara – Agricultural Commissioner’s Office; Appendix D). All CAC Crop Reports are compiled by CDFA and used to create the California Department of Food and Agriculture Agricultural Statistics Report annually.

**Agricultural Biologist/Weights and Measures Inspector Position**

Employees of the County Agricultural Commissioner’s Office are referred to as Biologists and Inspectors. Nearly all County Agricultural Commissioner’s Offices are combined with the County Weights and Measures Offices. Depending on the county, titles may vary, but overall, there are three classifications for non-managerial staff of Agricultural Commissioner’s Offices: Agricultural Biologist/Inspectors, Weights and Measures Inspectors, and Agricultural/Weights and Measures Inspectors. Some departments appoint their employees to either County Agricultural Biologist/Inspector or County Weights and Measures Inspector positions. Other counties offer combined positions in which a staff member acts as an Agricultural/Weights and Measures Inspector.

Staff members progress through inspector series which allow them to move from Inspector level one (I) to Inspector level three (III). Each level has steps such as “I(a),” “I(b),” “I(c),” etcetera. The requirements for steps vary depending on the employing county, but two variables for the Santa Barbara County Agricultural Commissioner’s Office are time in service and possession of “specific category licenses […] issued by the California Department of Food and Agriculture” (Job and Salary Information “Agricultural/Weights and Measures Inspector I,” GovernmentJobs – County of Santa Barbara).

An Agricultural Weights and Measures Inspector I for Santa Barbara County must obtain two licenses offered by the California Department of Food and Agriculture in approved categories within their first year of employment (Job and Salary Information
“Agricultural/Weights and Measures Inspector I,” GovernmentJobs – County of Santa Barbara; Appendix E). The minimum number of licenses for an Agricultural Weights and Measures Inspector II is five, and the minimum number for an Agricultural Weights and Measures Inspector III is eight (Job and Salary Information “Agricultural/Weights and Measures Inspector I” and “Agricultural/Weights and Measures Inspector II,” GovernmentJobs – County of Santa Barbara; Appendix F and Appendix G).

RELATIONSHIP BETWEEN EXAMINATIONS AND DUTIES

Duties of the County Agricultural Biologist and/or Weights and Measures Inspector coincide with the examinations given by the California Department of Food and Agriculture (CDFA). Depending on the county, some inspectors perform duties covering all license categories or may perform duties covered in only one license category.

Pesticide Regulation is an essential function of County Agricultural Commissioner’s and serves to protect the public, farmers, pest control businesses, nursery producers, agricultural employees, and the environment. Duties of an Agricultural Biologist/Inspector relating to pesticide regulation can include label interpretation, safety of applications, review of Notice of Intents, school site notifications, pesticide use reporting, pesticide use monitoring, essential safety for workers and neighbors, and issuance of pesticide and restricted material permits. Permits are issued to individuals based on their needs, and inspectors must be aware of requirements for each permit. Inspectors also must be aware of required personal protective equipment, proper application equipment, and safe application techniques (County Licensing Program: Licensing Examinations for County Agricultural Inspector/Biologist, California Department of Food and Agriculture – County Relations Office; Appendix B).
In addition to Pesticide Regulation, Investigation and Environmental Monitoring play an important role with the use of pesticides. Unfortunately, misuse does occur with pesticides both intentionally and unintentionally. Serious pesticide related accidents are required to be reported to the local Agricultural Commissioner. Once a report is received, a biologist/inspector investigates to determine cause and provides education to lower the risk of future exposures. During an investigation, an inspector may be required to take samples and must be familiar with sampling techniques. Environmental monitoring is also a duty of Agricultural Commissioner’s staff which may require determining environmental conditions such as temperature or wind speed on a proposed application date. Other examples of Investigation and Environmental Monitoring include complaints, disposal of waste materials, and enforcement actions. Grape pest management is also included under this license which is prevalent in some counties. Lastly, public and media relations are relevant when investigating. Although an Agricultural Commissioner’s staff may not typically be the public relations contact, they may be contacted for statements on investigations and must be aware of departmental policies relating to public comment and media outlets (County Licensing Program: Licensing Examinations for County Agricultural Inspector/Biologist, California Department of Food and Agriculture – County Relations Office; Appendix B).

Integrated Pest Management is one of the broadest licenses but may arguably be the most useful when it comes to production agriculture. Integrated Pest Management uses a variety of methods to minimize pest pressure, including chemical, physical, and biological means. For example, organic farms may find that wasp parasitoids used as biological controls can help defend plants against moth larvae. Trapping is a duty that county staff conduct to determine pest presence as well as the presence and density of biological control agents. Inspectors must be
aware of common plant diseases and pathogens to identify potential problems during cleanliness inspections. Other than insects, weed pests should be recognized and properly prepared for identification (County Licensing Program: Licensing Examinations for County Agricultural Inspector/Biologist, California Department of Food and Agriculture – County Relations Office; Appendix B). Integrated Pest Management focuses on using the least toxic means to lower pest levels down to a manageable or tolerable level. This technique helps in the Agricultural Commissioner’s duty to protect both agriculture and the environment (Integrated Pest Management, Carlsen).

The examination for Commodity Regulation covers a variety of duties related to the regulation side of agricultural production and sales. These duties will include inspections of Farmer’s Markets, which will protect the integrity of “We Grow What We Sell” (Chapter 10.5. Article 1.5. [47004.c.1], California Food and Agricultural Code). During a Farmers Market Inspection, CAC staff shall identify produce defects, seasonality, and geographical area of production. It also covers Certified Producer Certificates issued to growers selling their own product. Egg production is a focus of commodity regulation for egg producing counties and includes grading, sizing, and packaging requirements. The Commodity Regulation license also pertains to organic inspections of produce. Commodity regulation can cross over into some weights and measures duties such as inspections at markets requiring identity, responsibility, and quantity statements (County Licensing Program: Licensing Examinations for County Agricultural Inspector/Biologist, California Department of Food and Agriculture – County Relations Office; Appendix B).

Pest Prevention and Plant Regulation is one of the most straight-forward licenses offered by CDFA and related to Agricultural Commissioner’s staff duties. Import and export of
agricultural products are considered high-risk essential duties. When a shipment is inbounded into a county, it must be inspected to ensure there are no quarantine violations such as insects, weeds, viruses, or diseases. In addition to local orders of quarantine, certain high-risk pests may be covered by an enforceable State or Federal quarantine order. Additionally, when a shipment is to be exported from a county, an inspector should issue a phytosanitary certification and complete an inspection. Quarantine related inspections can occur at a parcel facilities, nurseries, or retail outlets. Seed inspection is another program that falls under the quarantine related category license. Seed inspections help to verify seed cleanliness and lower the risk of noxious weed dispersal (County Licensing Program: Licensing Examinations for County Agricultural Inspector/Biologist, California Department of Food and Agriculture – County Relations Office; Appendix B).

There are three licenses issued for Weights and Measures staff. The Weight Verification license covers inspection of devices and practices used in commercial weighing. This includes requirements and testing a variety of scales ranging from laboratory grade “Class I” scales to livestock “Class IIIL” scales and axle load “Class IV” scales. Additionally, Weight Verification applies to the requirements of weighmasters who verify commercial weights. Inspectors can inspect weighing devices and practices on a regular basis or upon a complaint basis. The Weight Verification license also covers investigative techniques that an inspector may use during an inspection and legal information about enforcement procedures (County Licensing Program: Licensing Examinations for County Weights and Measures Inspectors, California Department of Food and Agriculture – County Relations Office; Appendix C).

Measurement Verification applies to inspecting and testing devices used in the commercial measurement of commodities. Examples of measuring devices are retail motor fuel
meters, such as gas pumps, water and gas submeters, odometers, wire meters, and a variety of other devices. Devices are not limited to volumetric measurement and linear measurement; other examples of things sold by measurement could include time and power. Testing of electrical meters is common, and the Measurement Verification category license examination covers electrical principles and safety. While some devices, such as gas pumps, are common, other devices are more specialized, such as cryogenic liquid measuring devices and hydrogen dispensing devices. Investigative techniques and legal processes are also included (County Licensing Program: Licensing Examinations for County Weights and Measures Inspectors, California Department of Food and Agriculture – County Relations Office; Appendix C).

Transaction and Product Verification regulates quality control of packages and purchases. Inspectors will use outlined test procedures to verify a product for proper weight, measure, or count. Price Verification is also a prominent element of quality control. Every product that is sold must adhere to sets of requirements related to their labeling, advertising, and method of sale. For example, Weights and Measures Inspectors can test products compliance with labeling requirements since all products are required to have statements of identity, responsibility, and quantity, commonly referred to as “IRQ.” Price Verification is done both on an annual and a complaint basis at retail stores to determine if advertised prices match prices charged. Compliance of petroleum product labeling, advertising, and quality are also regulated under this license. As with Measurement and Weight Verification category license examinations, the Transaction and Product Verification license examination covers investigative techniques and legal requirements (County Licensing Program: Licensing Examinations for County Weights and Measures Inspectors, California Department of Food and Agriculture – County Relations Office; Appendix C).
The California Association of Standards and Agricultural Professionals (CASAP) is a professional organization for individuals employed in the County Agricultural Commissioner and/or Weights and Measures Sealer system. Individuals who hold one of the aforementioned California Department of Food and Agriculture licenses are eligible for membership. Individuals who do not have any licenses issued by the California Department of Food and Agriculture may be admitted as members upon approval by the CASAP Board of Directors. The Board of Directors consist of members from various counties in California. Individuals who possess any of the eight appropriate licenses may be eligible for membership as a non-voting associate member regardless of their employer or employment status (Constitution and By-laws, California Association of Standards and Agricultural Professionals; Appendix H).

The California Association of Standards and Agricultural Professionals is “committed to education, communication, and professionalism among its members” (Constitution and By-laws, California Association of Standards and Agricultural Professionals; Appendix H). One of the main events hosted each year by CASAP is the Mock Deputy Oral Examination which helps inspectors prepare for the spoken portion of the deputy licensing process for both Deputy County Agricultural Commissioner license candidates and Deputy Sealer of Weights and Measures candidates. Previously, CASAP hosted a forum on their website which presented unsubstantial useful information on the eight CDFA category license examinations for County Agriculture/Weights and Measures Inspectors (Community Forum, California Association of Standards and Agricultural Professionals; Appendix I). There has long been expressed interest in compiling training resources for member use, but it has not been done until now.
Challenges with Previous Materials

CAC employees are required to obtain CDFA category licenses in the areas of County Agricultural Inspector Biologist and/or County Weights and Measures Inspector. Some counties had significant, useful amounts of study material while others directed their inspectors to overwhelming, non-specific, and out of date CDFA websites. Larger counties who typically host training sessions with state agencies had vast amounts of training materials kept in-house.

Agriculture related license examination content was broad and non-specific. Suggested Reading Material lists per license could reference thousands of pages of legal text in full, which are difficult to read and navigate. The current reading list for Agricultural Inspector/Biologist licenses is “for the year 2017 examinations” (Suggested Reading List for County Agricultural Inspector/Biologist, California Department of Food and Agriculture; Appendix J). Many of the links inside this document are broken or reflect an area of the website that has been moved or removed (Document Not Found, California Department of Pesticide Regulations; Appendix K).

The current reading material list available on the CDFA website for Weights and Measures licenses specifically states that the reading list is applicable “for the year 2012 examinations” (Suggested Reading List for County Weights and Measures Inspector Examination, California Department of Food and Agriculture – Division of Measurement Standards; Appendix L). Weights and Measures examinations had strong, more readily available study material. The Division of Measurement Standards (DMS) created a series of modules titled, “Training for the Weights and Measures Official.” Each of these fourteen modules were comprised of a planned reading section with an embedded verification strategy to ensure content recall through check-for-understanding questions, as well as a visual slideshow presentation that
mirrored content in the corresponding reading (Training Module 2: Laws and Regulations, California Department of Food and Agriculture – Division of Measurement Standards; Appendix M and Appendix N). However, these presentations were recently removed from the DMS training web page and were relocated to a portal that is not readily accessible to most county inspectors (Training Modules, California Department of Food and Agriculture – Division of Measurement Standards; Appendix O).

**TEST INTEGRITY**

Test integrity is vital in all fields of education, but when a state license is being issued, it becomes a matter of legal importance.

The least helpful study materials are question and answer pages which uncomfortably mirror examination questions. Not only is this an ethical dilemma, but it is a legal complication that points to cheating. As a result, tests have been compromised. This has caused tests to be pulled from the online testing format and some tests were completely rewritten. The platform that was used for testing purposes was also given additional security measures. This did not help the cause for county agencies already struggling to obtain useful study materials.

**MATERIAL EXCHANGE**

Paper copies housed in individual counties were typically outdated and covered material no longer included on license examinations. Some of the most useful training materials were not available online but were kept as copies of presentations been given at an in-service training session. These documents were rarely shared between departments due to culture and/or departmental policies which prohibit document exchange.

Through connections with the California Association of Standards and Agricultural Professionals (CASAP) Board members, documents were obtained. Since the CASAP Board of
Directors consists of members from many counties throughout California, each member collected and sent information for organization and review. Out of date material that was queried in a search engine to find the most recent edition when available. By creating a culture of education and information exchange, the CASAP Board of Directors and numerous other agencies assisted in compiling documents and answering clarifying questions.
Goals

PURPOSE

The purpose of this project was to compile resource material for all eight California Department of Food and Agriculture (CDFA) county inspector licensing examinations from local, State, and Federal Agencies. All county Agricultural Biologists and Weights & Measures Inspectors are required to obtain proper licensing in their fields. Each license is obtained through the completion of an examination that varies from 85-120 questions per topic. Training material are difficult to navigate, and typically not shared between counties. There was no functional resource that hosted training documents for the purpose of licensing examination preparation.

OVERALL GOAL

The overall goal of this project was to create an accessible resource for agricultural regulators and standards officials, such as inspectors, biologists, deputies, and commissioners. All eight applicable California Department of Food and Agriculture (CDFA) county inspector licensing examinations were outlined with supporting documents as study material for the examination as well as a resource for viewers to sharpen and refresh their knowledge. These materials are accessed through the California Association of Standards and Agricultural Professionals (CASAP) website available for CASAP Members. The website training materials were set to be completed by January 2020 and presented to the general assembly of the CASAP State Convention in Visalia, California.

EXPANDED SHORT-TERM GOALS

In July 2019, I met via teleconference with the CASAP Board of Directors regarding their visions for training material and began outlining long and short-term goals for this
undertaking. During this meeting, we spoke with the webmaster about using cloud-based share drives on Google to exchange material.

My goal was to get into contact my Master advisor, Dr. Benjamin Swan, in the California Polytechnic State University’s Agricultural Education Department and discuss this project as an option to fulfil the requirement of “AGED 529: Graduate Internship in Agricultural Education” by the end of July 2019. On July 23, 2019, I accomplished this goal and was given confirmation to proceed forward with specific instruction to document the process and set SMART goals.

CASAP hosts a statewide conference each year in January. The goal was to complete training drives for all eight examinations by January 1st, 2020 that used citable, verified materials to be presented by the 2020 CASAP State Conference.

In July 2019, the examinations were divided up and members of the 2019 CASAP Board of Directors stated they would with materials by the next meeting mid-August. Shared Google Drives were to be sent out to all CASAP Board Members with instructions on how to upload documents by July 6, 2019. They were sent out by July 5, 2019.

I set a goal of going through the Santa Barbara County Agricultural Commissioner’s Office material for license examinations by July 15, 2019 to utilize existing training resource materials and identify areas that were the most in need of material. The two licenses with the least study material were Measurement Verification and Pest Prevention and Plant Regulation.

The goal to create resource folders with an outlined reference list, including authors and affiliations, was set. Each examination was set with a date-specific goal to be completed before January 2020 with a two-week review period before the 2020 CASAP Conference. The goal dates and completion dates for all licenses were as follows:
o Commodity Regulation – Goal: Complete by July 31, 2019
   o License Examination tested for and passed July 26, 2019 (Personal)
   o Resource material and reference list organized and completed July 28, 2019
o Transaction and Product Verification – Goal: Complete by August 31, 2019
   o Resource material and reference list organized and completed August 24, 2019
   o License Examination tested for and passed September 26, 2019 (Personal)

o Weight Verification – Goal: Complete by August 31, 2019
   o Resource material and reference list organized and completed August 29, 2019
   o License Examination tested for and passed August 30, 2019 (Personal)

o Integrated Pest Management – Goal: Complete by September 30, 2019
   o Resource material and reference list organized and completed September 30, 2019
   o License Examination tested for and passed October 25, 2019 (Personal)

o Pesticide Regulation – Goal: Complete by October 31, 2019
   o Resource material and reference list organized and completed October 15, 2019
   o License Examination tested for and passed November 15, 2019 (Personal)

o Investigation and Environmental Monitoring – Goal: Complete by October 31, 2019
   o Resource material and reference list organized and completed October 29, 2019
   o License Examination tested for and passed January 23, 2020 (Personal)

o Pest Prevention and Plant Regulation – Goal: Complete by November 30, 2019
   o Resource material and reference list organized and completed November 24, 2019
   o License Examination tested for and passed February 27, 2020 (Personal)

o Measurement Verification – Goal: Complete by December 23, 2019
   o Resource material and reference list organized and completed December 5, 2019
   o License Examination tested for and passed April 23, 2020 (Personal)

After all materials were compiled, authors were compiled onto one list that was shared with the CASAP Board of Directors on December 7th, 2019. A goal was set to obtain all permissions from authors regarding the use of their material on the CASAP website for training purposes by January 2, 2020. All documents were to be shared with the CASAP Webmaster no later than January 2, 2020 via Google Drive along with a formal outline of all examinations.
All documents were to be made available on the CASAP website by January 16, 2020 at the CASAP Annual Conference in Visalia, California and presented to the general membership during the afternoon of January 16, 2020.
Creation Process

Compilation of Documents

Documents related to the eight license categories were sent to me and sorted into Google Drive folders. Documents were received from members of the 2019 CASAP Board, as well as general CASAP members, non-members, and employees of state agencies.

Any files that were thin or needed more substantial documents, flagged. Multiple e-mails were sent to the CASAP board to seek out additional documents while I requested additional documents from state and federal agencies.

Creation of Google Drives

In the Google Drive, there were two folders “Agriculture” which hosted document folders: “Commodity Regulation,” “Integrated Pest Management,” “Pesticide Regulation,” “Investigation and Environmental Monitoring,” and “Pest Prevention and Plant Regulation.” The second folder was “Weights and Measures” which hosted document folders: “Weight Verification,” “Transaction and Product Verification,” and “Measurement Verification (Appendix P).” Documents were sorted into the appropriate folders and a list was created with the file name, author, responsible agency, and person who submitted the document.

A second set of folders was created on a CASAP owned Google account to host final resources selected.

Review of Documents

Once a license specific folder had enough documents to proceed with a document review, documents were pulled up digitally, or printed for review. Any handwritten notes which contained question-specific information were removed, and out of date material was not included in the final folder. Personal contact information was redacted if present. Any documents that
were handwritten were digitally transcribed. This was only done if the handwritten document was the most complete and beneficial document.

**Obtaining Permissions**

Documents selected for the final compiled resource were placed onto a final resource list. When available, authors of material were reached out to via e-mail and phone. Contact was made by CASAP board members depending on previous experience with the author. During the contact, it was explained that the document would be hosted by CASAP for purposes of training, studying, and education of its members. It was also explained that only CASAP members would be allowed to access this area of the site and all personal contact information was redacted.

Any permission decline triggered immediate removal of the document from the final folder as well as the resource list. Some authors declined to have their document hosted because of departmental policies, while others cited personal reasons. Most authors granted permission – some authors even sent additional training documents. Documents with no authors have been posted in the training resource but will be removed upon request.

**Layout and Publication**

Under the CASAP website’s “Training and Resources” page, all license categories are listed. Each license has a title, a related photo, and the resource list (Appendix Q). Under the resource list is a link “Download Resources.” Once a member clicks on the “Download Resources” link, it directs them to a Google Drive where they can access and save any document in the folder (Appendix R). To ensure that documents were presented in the same order as they were on the resource list, there is a corresponding numerical prefix for each document.

Documents were published on a Google Drive belonging to the CASAP Webmaster. I was given specific permission to edit this folder in case an author requests immediate removal of
their document. All other viewers are not able to make changes, additions, or deletions to the folders.

**Presentation**

On Thursday, January 16th during the second session of the California Association of Standards and Agricultural Professionals 2020 state convention, I was introduced as the creator of this training resource. Using a projector, I navigated through the CASAP web page and showed the membership how to access the training resource.

The “Training and Resource” page was made publicly available to CASAP members after its presentation at the 2020 CASAP Conference. After the presentation, multiple members contacted me and offered to share additional resources. There was an apparent appreciation from the crowd and immediate openness for sharing material that previously had not existed.
Implications
COVID-19: Utilization for Distance Learning

On Thursday, March 19, 2020 California Governor Gavin Newsom issued Executive Order N-33-200, which became known as the “Stay at Home Order” (Executive Order N-33-20, State of California Executive Department; Appendix S). This came in an attempt to slow the spread of the virus due to an influx of cases of the Novel Coronavirus-19 (COVID-19). County Agricultural Commissioners often work with quarantines from federal, state, and local levels; however, these quarantines involve plant and animal related pests, viruses, and diseases. It is important as a public agency that County Agricultural Commissioners uphold any law and adhere to suggestions and requirements regarding COVID-19.

Agricultural Commissioner’s Offices are considered an essential service due to their direct involvement and oversight of the food supply. Throughout the state, there have been many training sessions, conferences, and meetings postponed, rescheduled, or conducted via teleconferencing. Certain counties host “In-Service” study sessions focused on material covered in the state licensing examinations (Appendix T). However, these have been cancelled and closed to neighboring counties because of social distancing measures and reducing inter-county travel to comply with Governor Newsom’s stay at home order. The training resource outlined in this document allows many individuals to supplement training sessions and continue taking license examinations during this time. All documents are available on the website to CASAP members. This is one way that a web-based training material can be used for distance learning.

Plans for Future Expansion

Currently, the I am a member of the 2020 CASAP Board of Directors, in part due to the creation of this training resource gaining popularity with CASAP members (Appendix U).
The 2020 CASAP Board of Directors is planning on setting a specific plan and goal of creating training materials for the Deputy County Agricultural Commissioner License, Deputy County Sealer of Weights and Measures License, County Agricultural Commissioner License, and County Sealer of Weights and Measures License over the next three years. The California Agricultural Commissioners and Sealers Association (CACASA) has posted training videos to assist in studying for deputy licenses. CASAP intends to collaborate with CACASA to make additional training videos.

Currently, the 2020 CASAP Board is working on a webinar for members who have already completed their county inspector license series. This webinar will serve as a mock oral examination preparation. The “Mock Oral” seminar is typically held in person and helps to prepare candidates for the spoken segment of their deputy license examination.

Material for the eight license examinations will be reviewed annually to ensure that all documents are still relevant and that any new editions of publications are used to update the resource files.
# Appendices

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APPENDIX A

State of California
Department of Food and Agriculture

To whom these presents shall come:

Be it known, that Melly Miller has successfully passed the examinations indicated below before the Secretary of the Department of Food and Agriculture. Now, therefore, I, in the name and by the authority of the People of the State of California, do by these presents declare this person eligible to the position of

County Agricultural Inspector/Biologist
- Pesticide Regulation
- Investigation of Environmental Monitoring
- Integrated Pest Management
- Commodity Regulation
- Pest Prevention and Plant Regulation

County Weights and Measures Inspector
- Transaction and Product Verification
- Measurement Verification
- Weight Verification

In Witness Whereof, I have hereunto set my hand at Sacramento, this 23rd Day of April, 2020 A.D.

Karen Ross

Secretary California Department of Food and Agriculture

Registration No. 7764

This License is valid for five years from Date of issue.
APPENDIX B

County Licensing Program

Licensing Examinations For
COUNTY AGRICULTURAL INSPECTOR/BIOLOGIST

Separate exams are being offered for the following licenses:
COMMODITY REGULATION
INVESTIGATION & ENVIRONMENTAL MONITORING
INTEGRATED PEST MANAGEMENT
PEST PREVENTION AND PLANT REGULATION
PESTICIDE REGULATION

Application and Fees

Applications must be filed electronically at: https://apps1.cdfa.ca.gov/countylicensingexam/. A fee of $75.00 will be charged for the administration of each exam. Fees for all exams must be remitted with the electronic application via credit or debit card. Refunds will be issued to candidates not meeting minimum qualifications.

Examination Locations

Exams will typically be administered at the Agricultural Commissioner/Sealer of Weights and Measures office located in each county. Candidates currently employed by a county will be scheduled in that county. Candidates not employed by a county will be scheduled in the county in which they reside.

Written Examination Registration Period

Qualified candidates submitting applications during each registration period will be scheduled for testing in the corresponding administration period indicated below. Applications received before or after the registration period will need to register for a future exam cycle.

Paper exams will be administered twice a year, during the dates below:
Written Examinations

<table>
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<th>Registration Begins</th>
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<tr>
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All first-time applicants, if they have not done so, must submit their transcripts and be approved to take our exams two weeks before the registration period ends to cdfa.county_exams@cdfa.ca.gov.

Electronic Examinations

The new County Licensing Program online examination system is available across the state. Please contact your county Proctor for examination availability in your county.

Notice of Paper Examinations and Rescheduling

Candidates will receive notice of the exam location, date, and time at least twenty-one (21) days prior to the exam date. If you believe you have applied and paid fees for an upcoming exam and have not received this notice, please contact the CDFA Licensing program at 916-653-5866 or cdfa.county_exams@cdfa.ca.gov as soon as possible. Candidates unable to present an examination notice may not be allowed into the exam.

Candidates wishing to reschedule exams must notify the County Licensing Program at least fourteen (14) days before the scheduled testing date. Failure to provide this advance notice, and not appearing for an exam, will result in fee forfeiture and necessitate re-applying for the exam in a future cycle. Candidates noticing the program at least fourteen days before the scheduled testing date will be rescheduled during the current cycle or postponed to the next exam cycle at the discretion of the Licensing Program. No fee refunds will be issued to qualified candidates.

Minimum Qualifications

Candidates must qualify under at least one of the following criteria to be admitted to the exam:

1. Possession of one or more valid statewide specific category licenses as a County Agricultural Inspector/Biologist; or

2. Possession of a Bachelor’s degree from an accredited four-year college with specialization in one or more appropriate disciplines in agricultural, biological, chemical, or physical sciences; or

3. Possession of a Bachelor’s degree from an accredited four-year college in any discipline with a minimum of 30 semester units, or equivalent, in one or any combination of the following disciplines:
- Agricultural Science,
- Biological Science,
- Chemical Science,
- Physical Science,
- Mathematics, and/or
- Statistics

Candidates registered as senior students in an accredited four-year college in one of the specializations listed above may be admitted to exams, but a license will not be issued until proof of graduation is provided by the applicant.

Candidates qualifying under method (2) or (3) above, must submit copies of their qualifying degree and/or transcripts. Degrees and transcripts should be scanned and emailed to the County Licensing Program at cdfa.county_exams@cdfa.ca.gov

**Examination Information and Scope**

No personal effects, including cell phones, calculators, purses, backpacks, and study materials will be allowed in the examination room, and should be stored in a secure location prior to arriving for testing. Electronic calculators are now provided as part of the online examinations.

All exams will consist of multiple-choice questions testing the candidate's knowledge of applicable subject matter as indicated below. Separate exams are given for each subject area.

**Pesticide Regulation**

- Laws and regulations pertaining to pesticides and pest control.
- Licensing and certification requirements.
- Economic poisons; pesticide types, formulations, toxicity, hazards, residues, and labeling.
- Pesticide application equipment, application techniques, and label interpretation.
- Field inspections and record audits.
- Calibration of pesticide application equipment.

**Investigation and Environmental Monitoring**

- Administrative procedures and hearings.
- Enforcement actions and standards.
- Environmental monitoring and hazard assessment.
- Investigative procedures and sampling techniques.
- Pest management systems. (Grapes).
- Public and media relations.

**Integrated Pest Management**

- Identification, life histories, treatments, thresholds, monitoring techniques, hosts, and relative importance of and types of damage caused by common insects, mites, snails and slugs, nematodes, and diseases of agricultural crops and ornamental plants commonly grown in California.
- Principles of plant pest management including chemical, cultural, and biological means i.e. biological control.
- Major crops grown in California and areas of the State where they are grown.
- Botany, plant culture, and physiologic and genetic disorders of plants.
- Identification and protection measures for federally listed endangered species associated with vertebrate pest control.
- The crop depredatating mammals and birds of California and the type depreation they cause.
- The methods and procedures used for the management for each of the depredatating animals.
- The animal-borne diseases transmissible to man, methods of transmission, vectors and the importance of the disease.
- The laws, regulations and guidelines affecting the authority and responsibilities of governmental agencies and private individuals performing vertebrate pest management activities.
- Safe application of agricultural chemicals.
- Fundamentals of economic botany, native flora including classification and distribution of noxious weeds in California.
- Methods, techniques and equipment used in the survey, detection, identification, suppression, control and eradication of noxious weeds.
- Fundamentals of the botany and plant physiology of poisonous plants and their toxic effects.
- Chemical, biological, cultural and other means of control of agricultural weeds.
- The use of herbicides, their mode of action and possible hazard to susceptible crops.
- State and Federal laws pertaining to the control of noxious weeds.
- Weed pest ratings.
- Safe application of agricultural chemicals.
- Food and Agricultural Code provisions pertinent to bee management.
Commodity Regulation

- Defects, maturity, marking and labeling requirements, standard containers and sampling requirements pertaining to fruits, vegetables and eggs.
- Packing and marketing of fruits and vegetables.
- California standardization and egg laws.
- Fruits, vegetables, seasons and their areas of production.
- Direct marketing.
- Organic products.
- Investigative and enforcement techniques.

Pest Prevention and Plant Regulation

- Methods of pest detection; pest and plant identification; commodity treatment; life histories and host plants of pests; distribution of pests, insects, mites, snails, slugs, nematodes, weeds, plant diseases, mammals, and birds.
- Federal and State plant quarantines.
- Plant quarantine provisions of the Food and Agricultural Code.
- Phytosanitary inspection and certification.
- Plant propagation and taxonomy.
- Methods of detection, identification, control and distribution of pests of nursery plants, insects, mites, snails, slugs, nematodes, weeds, and plant diseases.
- Laws, regulations, and inspection procedures and practices pertaining to nursery stock.
- Agricultural seeds, vegetable seeds, weed seeds, and prohibited and restricted noxious weed seeds.
- Laws and regulations pertaining to seed inspection programs including definitions, licensing, assessment, county subvention program, the Seed Advisory Board, seed certifying agencies, labeling requirements, sampling violations, and general procedures pertaining to seed inspection.
- Culture, handling, packaging, labeling and marketing seeds.

Licenses

A minimum rating of 70 percent must be achieved on each exam for a passing score. Upon passing an exam, a license of eligibility will be issued to the candidate. Licenses are valid for five (5) years unless revoked.
California law requires all county employees working in the capacity of Weights and Measures Inspector to possess licenses demonstrating job proficiency. While the CDFA is tasked with overseeing the testing and licensing of potential candidates, each county is responsible for hiring and determining the qualifications of its own employees. To be hired, candidates must qualify for the licenses of eligibility exams and meet all requirements of the hiring county. Counties may require additional experience or education beyond that of the licensing exam requirements.

Expiring licenses may be renewed, at the request of the license holder, without further examination if the holder is employed in any county agricultural or weights and measures position, with the California Department of Food and Agriculture, or with the California Department of Pesticide Regulation. A holder of a license of eligibility who is not employed in one of the above capacities, but who otherwise meets the minimum license qualifications, may apply to renew the license prior to its expiration upon passing a requalifying exam.

Right of Appeal

Exam results may be appealed within thirty (30) days after the Notice of Exam Results has been sent to the candidate. Appeals must be in writing and addressed to the Secretary of the California Department of Food and Agriculture, 1220 "N" Street, Sacramento, CA 95814. To be considered, appeals must include the exam title, date of exam, and basis of appeal. Written examination material will not be made available for review.

For questions or assistance regarding licensing exams, please contact the CDFA County Licensing Program at cdfa.county_exams@cdfa.ca.gov or 916-653-5866

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| **County/State Liaison**  
Hyrum Eastman  
1220 N Street  
Sacramento, CA 95814  
Ph: 916-403-6700  
Fax: 916-651-9079  
hyrum.eastman@cdfa.ca.gov |
| **County Licensing Program**  
Hannah Black  
Ph: 916-653-5866  
Hannah.black@cdfa.ca.gov |
APPENDIX C

County Licensing Program

Licensing Examinations for
COUNTY WEIGHTS AND MEASURES INSPECTOR

Separate exams are being offered for the following licenses:
WEIGHT VERIFICATION
MEASUREMENT VERIFICATION
TRANSACTION AND PRODUCT VERIFICATION

Application and Fees

Applications must be filed electronically at: https://apps1.cdfa.ca.gov/countylicensingexam/. A fee of $75.00 will be charged for the administration of each exam. Fees for all exams must be remitted with the electronic application via credit or debit card. Refunds will be issued to candidates not meeting minimum qualifications.

Examinations Locations

Exams will typically be administered at the Agricultural Commissioner/Sealer of Weights and Measures office located in each county. Candidates currently employed by a county will be scheduled in that county. Candidates not employed by a county will be scheduled in the county in which they reside.

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**Minimum Qualifications**

Candidates must qualify under **at least one** of the following criteria to be admitted to the exam:

1. Possession of one or more valid statewide specific category licenses as a County Weights and Measures Inspector or County Agricultural Inspector/Biologist; or

2. Possession of a Bachelor’s degree from an accredited four-year college with specialization in one or more of the qualifying disciplines listed below; or

3. Possession of a Bachelor’s degree from an accredited four-year college in any discipline with a minimum of 30 semester units, or equivalent, in one or any combination of the qualifying disciplines listed below.
Qualifying disciplines:

- Chemical Science
- Commerce
- Engineering
- Law Enforcement
- Marketing
- Mathematics
- Physical Science
- Physics, and/or
- Statistics

Candidates registered as senior students, in an accredited four-year college, in one of the qualifying disciplines listed above may be admitted to the exam; however, a license will not be issued until proof of graduation is provided by the applicant.

Provided the candidate possesses a minimum of 30 semester units, or equivalent, in one or any combination of qualifying disciplines listed above, experience in one or more of the following may be substituted for up to two years of college on a year-for-year basis:

- Enforcement of weights and measures or agricultural laws,
- The inspection, maintenance, repair or installation of weighing or measuring instruments or equipment,
- Consumer protection or resolution of consumer complaints in a public or private consumer affairs agency,
- Law enforcement or investigation work in a federal, state or local jurisdiction, or
- Responsible quality or quantity control work in the production of consumer commodities. This experience must have been at a level comparable to that of a county weights and measure inspector or agricultural inspector/biologist.

Candidates qualifying under method (2) or (3) above, must submit copies of their qualifying degree and/or transcripts. Degrees and transcripts should be scanned and e mailed to the County Licensing Program at cdfa.county_exams@cdfa.ca.gov

Examination Information and Scope

No personal effects, including cell phones, calculators, purses, backpacks, and study materials will be allowed in the examination room, and should be stored in a secure location prior to arriving for testing. Electronic calculators are now provided as part of the online examinations.
All exams will consist of multiple-choice questions testing the candidate’s knowledge of applicable subject matter as indicated below. Separate exams are given for each subject area.

**Weight Verification**

- Inspecting and testing various types of retail, industrial, farm and specialty scales for accuracy within established tolerance limits and for compliance with specifications and use requirements.
- Auditing of weighmaster operations and records for compliance with California codes and complaint investigation
- Investigative techniques.

**Measurement Verification**

- Inspecting and testing of various types of liquid measuring devices for petroleum products, chemical, water and fertilizers; grain moisture measuring devices, taximeters, compartments and tanks used as volume measures, linear and volumetric measures, and timing devices.
- Inspecting and testing electric watt hour measuring devices, principles of electricity, and electrical safety.
- Inspecting and testing of devices used to measure the quantity dispensed of liquefied petroleum gas in the vapor or liquid states, natural gas, and cryogenic fluids such as liquid nitrogen and oxygen. The measuring devices are located in locations such as mobile home parks, apartments, retail service stations and distribution centers.
- Investigative techniques.

**Transaction and Product Verification**

- Inspecting and testing of packaged goods for proper weights, measure, or count, using statistical sampling procedures labeling requirements;
- Method of sale of specific products.
- Inspection of petroleum products for compliance with advertising, labeling, registration, minimum quality requirements as well as product integrity; and complaint investigation
- Investigative techniques.

Suggested reading lists and study topics, specific to each exam, are available on CDFA’s “County Relations” website online at [http://www.cdfa.ca.gov/exec/county/County_Liaison.html](http://www.cdfa.ca.gov/exec/county/County_Liaison.html) by clicking on the “Exams” link.

**Licenses**
A minimum rating of 70 percent must be achieved on each exam for a passing score. Upon passing an exam, a license of eligibility will be issued to the candidate. Licenses are valid for five (5) years unless revoked.

California law requires all county employees working in the capacity of Weights and Measures Inspector to possess licenses demonstrating job proficiency. While the CDFA is tasked with overseeing the testing and licensing of potential candidates, each county is responsible for hiring and determining the qualifications of its own employees. To be hired, candidates must qualify for the licenses of eligibility exams and meet all requirements of the hiring county. Counties may require additional experience or education beyond that of the licensing exam requirements.

Expanding licenses may be renewed, at the request of the license holder, without further examination if the holder is employed in any county agricultural or weights and measures position, with the California Department of Food and Agriculture, or with the California Department of Pesticide Regulation. A holder of a license of eligibility who is not employed in one of the above capacities, but who otherwise meets the minimum license qualifications, may apply to renew the license prior to its expiration upon passing a requalifying exam.

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1220 N Street  
Sacramento, CA 95814  
Ph: 916-403-6700  
Fax: 916-651-9079  
hyrum.eastman@cdfa.ca.gov  |
| **County Licensing Program**  
Hannah Black  
Ph: 916-653-5866  
Hannah.black@cdfa.ca.gov  |
APPENDIX D

2018
Agricultural
Production Report
County of Santa Barbara
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Department Staff

Commissioner/Sealer
Cathy Fisher

Assistant Commissioner/Sealer
Rudy Martel

Deputy Commissioners
Lottie Martin (SM)
Stephanie Stark (SB)
Debbie Trupe (Buellton)

Deputy Sealer
Matthew Maiten

IT Systems Analyst
Gus Maio

Supervising Agricultural Biologists
Alina Cangelosi
Ryan Casey

Supervising Weights and Measures Inspector
Daniel Garcia

Administrative Staff
Traci Lewis
Alicia Morales
Mirtha Pantoja
Kendra Stites

Agricultural IPM Specialist
Mel Graham

Agricultural Detection Canine
Doomis, handled by Chris Tyler

Agricultural Technicians
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Fernando Armenta Perez
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Agricultural Biologists/Weights and Measures Inspectors
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Danely Bagasol
Noah Beyeler
Daniel Delfin
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Julia Kosowitz
Sally Leon-Tondro
Marko Marasco

Molly Miller
Scott Perkins
Adriana Rosales
Jose Ruiz
Tashina Sanders
Andrew Schaeffer
Connor Shanahan
Ian Swisher
Mari Taylor
Chris Tyler
Reilly Walker

Photography by staff unless credited.
Karen Ross, Secretary
California Department of Food and Agriculture

The Honorable Board of Supervisors, County of Santa Barbara
Das Williams, First District
Gregg Hart, Vice Chair, Second District
Joan Hartmann, Third District
Peter Adam, Fourth District
Steve Lavagnino, Chair, Fifth District

Mona Miyasato, County Executive Officer

In accordance with the provisions of Sections 2272 and 2279 of the California Food and Agricultural Code, I am pleased to submit the 2018 Santa Barbara County Crop Report. This report summarizes the acreage, production and gross value of Santa Barbara County’s agricultural commodities.

Agriculture remains Santa Barbara County’s economic leader. In 2018, Santa Barbara County farms and ranches grossed $1,521,520,492, a decrease of 4.9 percent or $74,961,948 when compared with the previous year.

This crop report reveals in tables and charts the gross production of Santa Barbara County’s farmers and ranchers. They produce an astonishing array of products and achieve the highest standards in quality and environmental stewardship.

Farming and ranching can be a tough business, but these are still exciting times for agriculture! As we move further into the 21st century, we see a worldwide demand for food, flowers and fiber that is growing rapidly. We also see a corresponding demand for Santa Barbara County-grown products that will bring tremendous opportunity for producers able to maintain sustainability in the face of challenging circumstances.

Santa Barbara County agriculture has an inspiring story of innovation and resiliency. As we move forward, it’s important to share this story and remember that we’re all in this together as we work to safeguard for future generations what our forebears have provided for us—our Santa Barbara way of life.

The annual Santa Barbara County Crop Report is the result of a joint effort among department staff who collect, analyze and publish this important data. I also wish to express my sincere thanks to our farmers and ranchers and industry representatives, without whose assistance this report would not be possible. As always, we are committed to continued success for Santa Barbara County agriculture.

Respectfully submitted,

Cathleen M. Fisher
Agricultural Commissioner/
Director Weights and Measures
2018 — A Year of Extreme Weather & Events

In December 2017 and January 2018, the Thomas Fire burned 281,883 acres in Ventura and Santa Barbara counties. Orchards, nursery products, cut flowers and vegetable crops on the South Coast were affected. On January 9, the impacts to the local watershed became evident when significant rainfall — 5 inches — fell in a five-minute period, triggering debris flows and flash floods that tragically took 21 lives and destroyed structures in Santa Barbara County.

Growers hit by the Thomas Fire also suffered from the debris flows. Growers experienced loss of perishable goods from the nearly two-week closure of U.S. 101 that shut down commerce and prevented workers from accessing fields.

Despite the heavy rain at the beginning of the year, 2018 was one of the driest years on record and the seventh year of the 2012-2018 drought. Countywide rainfall average was 71 percent of a normal water year (September 1-August 31) and total capacity went down to 30.8 percent for Cachuma Reservoir, 61.3 percent for Gibraltar Reservoir and 57.5 percent for Jameson Reservoir. Groundwater basins continued to suffer, including Carpinteria, San Antonio Creek Valley, Santa Maria River Valley and parts of the Santa Ynez River Valley.*

Frost in February damaged strawberry crops, and another frost advisory was issued in December for the Santa Ynez Valley area. A heat wave in March caused blooming plants to prematurely drop their flowers, affecting next year’s yield. Record-breaking heat in July and high winds affected crops countywide and contributed to the Holiday Fire, which scorched Goleta orchard crops and livestock. For permanent crops, heat can damage both the current crop and also the fruit set for the coming season, packing a two-year punch.

Emerging Crops

Often confronting less-than-ideal weather conditions, Santa Barbara County growers continue to nurture new crops to remain competitive in a worldwide market.

Finger Limes

Also known as Caviar Limes, this specialty citrus is native to Australia. Skin color varies from green to brown to pink. The fruit is filled with “citrus pearls” that are great for adding zing to seafood, salads or mixed drinks.

Coffee

Unlike coffee grown in the tropics, the local cool climate and growing conditions encourage slow ripening of the coffee bean. It can take up to a year to go from flower to fully ripe fruit. This maturation process results in a higher-quality bean with a distinctive, sometimes intense, flavor.

Agave

A large, drought-tolerant plant that looks much like a spiky cactus, blue agave is actually related to the lily plant. This slow-grower takes an average of 7 to 10 years to mature, flower and become ready for harvest. The plant is then dug up, and the leaves and roots are cut off to reveal the pineapple-like center or “pina.” The pina is then distilled into mezcal, a tequila-like spirit.
Top-Ten Commodities

Strawberries
$478,506,788

Wine Grapes
$121,307,213

Nursery Products
$103,820,835

Cut Flowers & foliage
$87,671,505

Broccoli
$80,306,603

Cauliflower
$74,743,511

Lettuce, Head — $60,614,915

Lettuce, Leaf — $53,115,476

Avocados — $52,617,303

Cattle — $50,578,750
# Export Activity Summary

<table>
<thead>
<tr>
<th>Destination Country</th>
<th>Phytos Issued</th>
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<tbody>
<tr>
<td>#1 Canada</td>
<td>4,282</td>
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<td>#2 Japan</td>
<td>699</td>
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<td>#3 Mexico</td>
<td>446</td>
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<td>#4 Saudi Arabia</td>
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<td>#5 United Arab Emirates</td>
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<td>#6 Costa Rica</td>
<td>61</td>
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<td>#7 Taiwan</td>
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<td>#8 Kuwait</td>
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<td>#9 Philippines</td>
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<td>#10 China</td>
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Source: Phytosanitary Certificate Program

### Top-Five Export Data

#### CANADA

<table>
<thead>
<tr>
<th>Commodity</th>
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<tr>
<td>#1 Cucumber</td>
<td>13,749</td>
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<td>#2 Pepper</td>
<td>12,217</td>
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<tr>
<td>#3 Strawberry</td>
<td>8,965</td>
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<td>#4 Cauliflower</td>
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#### JAPAN

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<tr>
<td>#1 Broccoli</td>
<td>1,100</td>
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<td>#2 Celery</td>
<td>963</td>
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<td>#3 Tomato</td>
<td>623</td>
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<td>#4 Cabbage</td>
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#### MEXICO

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<tr>
<td>#1 Strawberry</td>
<td>3,133</td>
</tr>
<tr>
<td>#2 Broccoli</td>
<td>547</td>
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<tr>
<td>#3 Lettuce</td>
<td>355</td>
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<tr>
<td>#4 Celery</td>
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#### SAUDI ARABIA

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<tr>
<td>#1 Strawberry</td>
<td>382</td>
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<td>#2 Raspberry</td>
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<td>#3 Blackberry</td>
<td>45</td>
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<td>#4 Blueberry</td>
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#### UNITED ARAB EMIRATES

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<tbody>
<tr>
<td>#1 Strawberry</td>
<td>256</td>
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<tr>
<td>#2 Raspberry</td>
<td>72</td>
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<tr>
<td>#3 Blackberry</td>
<td>26</td>
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<tr>
<td>#4 Blueberry</td>
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</table>

Inspector looks for pests on strawberries being exported to China.
Ten-Year Comparison

<table>
<thead>
<tr>
<th>COMMODITY</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<tr>
<td>Vegetable Crops</td>
<td>$469,315,254</td>
<td>$436,589,402</td>
<td>$437,149,140</td>
<td>$437,426,912</td>
<td>$471,390,661</td>
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<tr>
<td>Fruit &amp; Nut Crops</td>
<td>$409,969,031</td>
<td>$460,819,293</td>
<td>$442,705,593</td>
<td>$515,353,303</td>
<td>$545,939,874</td>
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<tr>
<td>Wine Grapes</td>
<td>$137,426,625</td>
<td>$97,374,658</td>
<td>$76,958,637</td>
<td>$91,107,064</td>
<td>$163,362,417</td>
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<td>Field &amp; Seed Crops</td>
<td>$22,608,166</td>
<td>$21,868,288</td>
<td>$21,525,912</td>
<td>$21,275,910</td>
<td>$20,764,227</td>
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<tr>
<td>Nursery Products</td>
<td>$66,187,726</td>
<td>$65,154,577</td>
<td>$70,951,710</td>
<td>$77,770,472</td>
<td>$84,332,238</td>
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<tr>
<td>Livestock &amp; Poultry</td>
<td>$23,608,424</td>
<td>$23,176,168</td>
<td>$28,662,090</td>
<td>$34,143,839</td>
<td>$34,904,230</td>
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<tr>
<td>Dairy &amp; Apiary Products</td>
<td>$8,150,727</td>
<td>$8,088,609</td>
<td>$8,089,000</td>
<td>$8,460,550</td>
<td>$8,638,221</td>
</tr>
<tr>
<td><strong>Apiary</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$1,241,400,501</strong></td>
<td><strong>$1,219,995,405</strong></td>
<td><strong>$1,194,379,056</strong></td>
<td><strong>$1,290,971,174</strong></td>
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</table>

<table>
<thead>
<tr>
<th>COMMODITY</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
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<tbody>
<tr>
<td>Vegetable Crops</td>
<td>$493,635,739</td>
<td>$389,846,497</td>
<td>$313,397,033</td>
<td>$358,662,937</td>
<td>$312,648,361</td>
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<tr>
<td>Fruit &amp; Nut Crops</td>
<td>$595,346,546</td>
<td>$582,102,370</td>
<td>$566,727,621</td>
<td>$605,447,793</td>
<td>$622,050,161</td>
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<tr>
<td>Field &amp; Seed Crops</td>
<td>$21,133,935</td>
<td>$20,388,067</td>
<td>$19,487,436</td>
<td>$19,568,781</td>
<td>$15,090,812</td>
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<td>Cut Flower &amp; Cut Foliage</td>
<td>$105,039,374</td>
<td>$105,286,883</td>
<td>$75,040,786</td>
<td>$93,075,276</td>
<td>$87,627,505</td>
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<tr>
<td>Nursery Products</td>
<td>$86,092,464</td>
<td>$85,816,050</td>
<td>$78,911,967</td>
<td>$100,654,079</td>
<td>$103,820,835</td>
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<tr>
<td>Livestock &amp; Poultry</td>
<td>$24,827,984</td>
<td>$31,031,366</td>
<td>$31,804,415</td>
<td>$44,217,922</td>
<td>$58,296,277</td>
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<td>Dairy &amp; Apiary Products</td>
<td>$8,595,030</td>
<td>$8,423,129</td>
<td>$7,665,047</td>
<td>$7,430,595</td>
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<tr>
<td><strong>Apiary</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$1,489,980,853</strong></td>
<td><strong>$1,479,092,562</strong></td>
<td><strong>$1,426,664,069</strong></td>
<td><strong>$1,605,207,498</strong></td>
<td><strong>$1,521,520,492</strong></td>
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* Revised
# Vegetable Crops

<table>
<thead>
<tr>
<th>CROP</th>
<th>YEAR</th>
<th>HARVESTED ACREAGE</th>
<th>YIELD PER ACRE</th>
<th>TOTAL PRODUCTION</th>
<th>UNIT</th>
<th>PRICE PER UNIT</th>
<th>TOTAL VALUE**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bell Pepper</td>
<td>2018</td>
<td>144</td>
<td>2,310</td>
<td>332,638</td>
<td>25lb CTN</td>
<td>$17.07</td>
<td>$5,767,141</td>
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<tr>
<td>Broccoli</td>
<td>2018</td>
<td>12,130</td>
<td>604</td>
<td>7,327,058</td>
<td>22lb CTN</td>
<td>$10.96</td>
<td>$80,305,603</td>
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<tr>
<td></td>
<td>2017</td>
<td>24,470</td>
<td>481</td>
<td>11,770,070</td>
<td>22lb CTN</td>
<td>$13.48</td>
<td>$158,600,544</td>
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<tr>
<td>Cabbage</td>
<td>2018</td>
<td>1,966</td>
<td>999</td>
<td>1,903,504</td>
<td>50lb CTN</td>
<td>$9.80</td>
<td>$19,236,247</td>
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<tr>
<td></td>
<td>2017</td>
<td>1,213</td>
<td>1,015</td>
<td>1,231,150</td>
<td>50lb CTN</td>
<td>$9.73</td>
<td>$11,929,527</td>
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<tr>
<td>Cauliflower</td>
<td>2018</td>
<td>9,445</td>
<td>786</td>
<td>7,424,818</td>
<td>25lb CTN</td>
<td>$10.07</td>
<td>$74,943,511</td>
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<tr>
<td></td>
<td>2017</td>
<td>8,451</td>
<td>862</td>
<td>7,384,762</td>
<td>25lb CTN</td>
<td>$12.92</td>
<td>$94,119,125</td>
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<tr>
<td>Celery</td>
<td>2018</td>
<td>3,170</td>
<td>1,009</td>
<td>3,192,978</td>
<td>60lb CTN</td>
<td>$12.57</td>
<td>$40,183,758</td>
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<tr>
<td></td>
<td>2017</td>
<td>3,849</td>
<td>1,138</td>
<td>4,380,162</td>
<td>60lb CTN</td>
<td>$12.10</td>
<td>$52,999,960</td>
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<tr>
<td>Lettuce, Head</td>
<td>2018</td>
<td>6,057</td>
<td>693</td>
<td>4,198,251</td>
<td>50lb CTN</td>
<td>$14.44</td>
<td>$60,614,915</td>
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<tr>
<td></td>
<td>2017</td>
<td>9,351</td>
<td>701</td>
<td>7,116,111</td>
<td>50lb CTN</td>
<td>$12.69</td>
<td>$90,303,449</td>
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<tr>
<td>Lettuce, Leaf</td>
<td>2018</td>
<td>5,711</td>
<td>669</td>
<td>3,820,678</td>
<td>30lb CTN</td>
<td>$13.90</td>
<td>$53,115,476</td>
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<tr>
<td></td>
<td>2017</td>
<td>4,432</td>
<td>809</td>
<td>3,585,488</td>
<td>30lb CTN</td>
<td>$11.93</td>
<td>$42,774,872</td>
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<td>Spinach</td>
<td>2018</td>
<td>1,237</td>
<td>732</td>
<td>905,638</td>
<td>20lb CTN</td>
<td>$14.44</td>
<td>$13,080,153</td>
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<tr>
<td></td>
<td>2017</td>
<td>1,415</td>
<td>844</td>
<td>1,194,260</td>
<td>20lb CTN</td>
<td>$10.39</td>
<td>$12,408,561</td>
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<tr>
<td>Squash, Summer</td>
<td>2018</td>
<td>717</td>
<td>1,093</td>
<td>1,213,636</td>
<td>26lb CTN</td>
<td>$7.07</td>
<td>$8,585,942</td>
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<tr>
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<td>2017</td>
<td>586</td>
<td>656</td>
<td>384,416</td>
<td>26lb CTN</td>
<td>$6.36</td>
<td>$2,444,886</td>
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<td>Miscellaneous</td>
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<tr>
<td>Vegetables*</td>
<td>2018</td>
<td>9,118</td>
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<td>12,375</td>
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<td>$19,160,594</td>
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<td><strong>TOTAL</strong></td>
<td>2018</td>
<td>49,669</td>
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<td></td>
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<td>$512,648,361</td>
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<tr>
<td></td>
<td>2017</td>
<td>66,587</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$588,662,957</td>
</tr>
</tbody>
</table>

* Includes artichoke, arugula, asparagus, baby vegetables, basil, burt, Brussels sprouts, carrot, celery root, chard, chervil, Chinese cabbage, cilantro, sweet corn, collard greens, cross, cucumber, dandelion, eggplant, endive, escarole, fennel, green beans, herb, kale, kohlrabi, leeks, mizuna, mustard greens, dry onion, green onion, parsley, peas (edible pod), pepper, potato, pumpkin, radicchio, radish, winter squash, tomatillo and tomato.

** Totals may not calculate as a result of rounding.

*Winter carrots are sweeter as they increase sugar content to defend against cold. Sugar acts as a natural anti-freeze by lowering water’s freezing point.*
## Wine Grapes

<table>
<thead>
<tr>
<th>VARIETY</th>
<th>HARVESTED ACREAGE</th>
<th>YIELD PER ACRE</th>
<th>TOTAL PRODUCTION</th>
<th>PRICE PER TON</th>
<th>TOTAL VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pinot Noir</td>
<td>5,315</td>
<td>3.30</td>
<td>17,540</td>
<td>$2,640</td>
<td>$46,304,280</td>
</tr>
<tr>
<td>Chardonnay</td>
<td>5,652</td>
<td>3.98</td>
<td>22,503</td>
<td>$1,550</td>
<td>$34,880,100</td>
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<tr>
<td>Syrah</td>
<td>1,385</td>
<td>3.26</td>
<td>4,514</td>
<td>$2,317</td>
<td>$10,459,379</td>
</tr>
<tr>
<td>Sauvignon Blanc</td>
<td>742</td>
<td>5.12</td>
<td>3,800</td>
<td>$1,746</td>
<td>$6,635,488</td>
</tr>
<tr>
<td>Cabernet Sauvignon</td>
<td>557</td>
<td>2.94</td>
<td>1,638</td>
<td>$2,488</td>
<td>$4,076,095</td>
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<tr>
<td>Grenache</td>
<td>352</td>
<td>3.98</td>
<td>1,401</td>
<td>$2,881</td>
<td>$4,036,411</td>
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<td>Merlot</td>
<td>292</td>
<td>3.64</td>
<td>1,062</td>
<td>$1,549</td>
<td>$1,645,558</td>
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<td>Viognier</td>
<td>203</td>
<td>3.86</td>
<td>783</td>
<td>$2,042</td>
<td>$1,598,239</td>
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<tr>
<td>Pinot Gris</td>
<td>452</td>
<td>2.45</td>
<td>1,107</td>
<td>$1,382</td>
<td>$1,530,316</td>
</tr>
<tr>
<td>Cabernet Franc</td>
<td>152</td>
<td>3.24</td>
<td>492</td>
<td>$2,932</td>
<td>$1,442,389</td>
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<tr>
<td>White Riesling</td>
<td>221</td>
<td>4.02</td>
<td>888</td>
<td>$1,391</td>
<td>$1,235,161</td>
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<tr>
<td>Grenache Blanc</td>
<td>62</td>
<td>6.34</td>
<td>395</td>
<td>$2,514</td>
<td>$887,860</td>
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<tr>
<td>Misc White</td>
<td>239</td>
<td>4.37</td>
<td>1,045</td>
<td>$1,783</td>
<td>$1,862,918</td>
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<tr>
<td>Misc Red</td>
<td>542</td>
<td>3.60</td>
<td>1,953</td>
<td>$2,362</td>
<td>$4,612,020</td>
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<table>
<thead>
<tr>
<th>YEAR</th>
<th>HARVESTED ACREAGE</th>
<th>YIELD PER ACRE</th>
<th>TOTAL PRODUCTION</th>
<th>PRICE PER TON</th>
<th>TOTAL VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>16,196</td>
<td>3.66</td>
<td>59,119</td>
<td>$2,052</td>
<td>$121,307,213</td>
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<td>2017</td>
<td>21,572</td>
<td>3.54</td>
<td>72,600</td>
<td>$1,866</td>
<td>$146,128,595</td>
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</table>

It takes more than three-and-one-half pounds of grapes to produce one bottle of wine.
## Fruit & Nut Crops

<table>
<thead>
<tr>
<th>CROP</th>
<th>YEAR</th>
<th>HARVESTED ACREAGE</th>
<th>YIELD PER ACRE</th>
<th>TOTAL PRODUCTION</th>
<th>UNIT</th>
<th>PRICE PER UNIT</th>
<th>TOTAL VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avocados</td>
<td>2018</td>
<td>4,932</td>
<td>4.36</td>
<td>22,497</td>
<td>Ton</td>
<td>$2,338.86</td>
<td>$52,617,303</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>4,266</td>
<td>2.46</td>
<td>10,194</td>
<td>Ton</td>
<td>$3,678.72</td>
<td>$38,605,917</td>
</tr>
<tr>
<td>Blackberries</td>
<td>2018</td>
<td>391</td>
<td>9.44</td>
<td>3,691</td>
<td>Ton</td>
<td>$6,097.00</td>
<td>$22,504,271</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>470</td>
<td>7.6</td>
<td>3,572</td>
<td>Ton</td>
<td>$7,040.00</td>
<td>$25,146,880</td>
</tr>
<tr>
<td>Blueberries</td>
<td>2018</td>
<td>349</td>
<td>3.43</td>
<td>1,196</td>
<td>Ton</td>
<td>$9,924.61</td>
<td>$11,868,543</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>308</td>
<td>2.96</td>
<td>912</td>
<td>Ton</td>
<td>$9,920.00</td>
<td>$8,770,362</td>
</tr>
<tr>
<td>Lemons</td>
<td>2018</td>
<td>1,291</td>
<td>21.51</td>
<td>27,773</td>
<td>Ton</td>
<td>$616.28</td>
<td>$17,115,636</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>1,299</td>
<td>13.86</td>
<td>17,879</td>
<td>Ton</td>
<td>$867.15</td>
<td>$15,311,158</td>
</tr>
<tr>
<td>Raspberries</td>
<td>2018</td>
<td>525</td>
<td>9.05</td>
<td>4,752</td>
<td>Ton</td>
<td>$7,621.53</td>
<td>$36,217,516</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>849</td>
<td>8.03</td>
<td>6,737</td>
<td>Ton</td>
<td>$7,520.00</td>
<td>$50,662,240</td>
</tr>
<tr>
<td>Strawberries</td>
<td>2018</td>
<td>7,579</td>
<td>34.45</td>
<td>334,535</td>
<td>Ton</td>
<td>$1,430.36</td>
<td>$478,506,788</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>8,327</td>
<td>33.26</td>
<td>276,976</td>
<td>Ton</td>
<td>$1,650.00</td>
<td>$457,009,208</td>
</tr>
<tr>
<td>Total</td>
<td>2018</td>
<td>126,106</td>
<td>34.45</td>
<td>334,535</td>
<td>Ton</td>
<td>$1,430.36</td>
<td>$478,506,788</td>
</tr>
<tr>
<td>Fresh</td>
<td>2018</td>
<td>—</td>
<td>—</td>
<td>261,097</td>
<td>Ton</td>
<td>$1,589.66</td>
<td>$415,056,356</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>—</td>
<td>—</td>
<td>178,319</td>
<td>Ton</td>
<td>$1,639.99</td>
<td>$308,041,841</td>
</tr>
<tr>
<td>Processed</td>
<td>2018</td>
<td>—</td>
<td>—</td>
<td>73,458</td>
<td>Ton</td>
<td>$864.00</td>
<td>$63,450,432</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>—</td>
<td>—</td>
<td>58,657</td>
<td>Ton</td>
<td>$1,687.22</td>
<td>$98,967,367</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>2018</td>
<td>1,145</td>
<td>—</td>
<td>58,657</td>
<td>Ton</td>
<td>$1,687.22</td>
<td>$98,967,367</td>
</tr>
<tr>
<td>Fruits &amp; Nuts*</td>
<td>2017</td>
<td>2,455</td>
<td>—</td>
<td>58,657</td>
<td>Ton</td>
<td>$1,687.22</td>
<td>$98,967,367</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2018</td>
<td>16,213</td>
<td>—</td>
<td>662,050</td>
<td>Ton</td>
<td>$2,050,161</td>
<td>$605,447,793</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>17,956</td>
<td>—</td>
<td>605,447</td>
<td>Ton</td>
<td>$2,050,161</td>
<td>$605,447,793</td>
</tr>
</tbody>
</table>

* Includes apple, apricot, blueberry, cherimoya, coffee, goose berry, guava, kiwi, lime, melons, olive, orange, passionfruit, persimmon, pistachio, plum, pluot, sapote, tangerine, walnut and watermelon.
Taming the Wild Avocado

As a domesticated fruit for only about 100 years, avocados are relatively new when compared with stone fruit’s 2000 years of cultivation. What current techniques are in use to best manage avocado production?

Avocados are still quite wild, and growers are still learning the best way to manage and optimize crop production, says Dr. Ben Faber, UC Cooperative Extension Farm Advisor. For example, avocado branches are naturally “wild and branchy” and people used to prune very little. A fairly new way to increase productivity is regular pruning. Avocados are alternate bearers, some years yield more than others; this fluctuation can be minimized with good management.

A popular new variety—GEM (Grey E. Martin)—matures more quickly than other varieties and grows more upright, which is a natural fit for increased planting density and higher yield. The GEM is planted at 10 feet by 10 feet rather than the traditional planting density of 20 feet by 20 feet.

Faber says the California avocado market is much smaller and more agile than that of other countries such as Mexico. Growers and packers follow international market trends and react based on the need to optimize sales. Growers can hold fruit on the tree and then pick when the market is best; packers lock to fill supply gaps with local avocados.

In 2018 the effects of drought, fire and debris flow damaged many crops, including avocado trees, which led to lowered yields and production. A March heat wave caused flowers to drop prematurely, affecting fruit set. Another heat wave in July caused premature fruit drop or “cooking” on the branch. The leaves act like radiators by exhausting heat through their stomata or pores.

When temperatures exceed 85 to 90°F, the stomata close to protect trees from water loss. Leaves heat up and the damage looks like fire damage. Good water management is critical to prevent heat stress, so trees should be irrigated at least three days before a heat wave.

Record high populations of brown mites were seen in 2018, which may partially be the result of destruction of lady beetle habitat destroyed by fire. Other new pests and pathogens include the shoot-hole borers, black streak, Laurel wilt and seed weevil.

Regardless of the pest, healthy trees will still be targeted, but they have a much stronger chance of fighting off pests if they are healthy to begin with. Healthy trees don’t get sick, so good management is critical for avocado production.

Drought, fire, flood—all played a role in the 2018 damage to avocados, says Rick Shade, Shade Farm Management. Overall, the Carpinteria Valley was fortunate to not experience tremendous losses. Heat stress, however, caused 2018 fruit to ripen too quickly while being loaded and sent to market and also caused fruit to drop prematurely from trees. The heat also caused some of the 2019 avocados to drop, so this was a one-two punch.

It costs around $20,000 an acre to plant a new avocado orchard. Avocados are relatively low-input, healthy food, and people will continue to plant more avocados locally if land is available. Years back, the preferred way to plant Hass avocados was to add a row of Bacon avocados every fourth row. The thought was to help with pollination because there are “A” and “B” types of flowers on avocados, and the mix provided cross pollination. Bacon avocados don’t sell, so that practice isn’t as prevalent.

Technology, such as automated systems used in greenhouses, helps to improve avocado production. Advances in irrigation, fertilization and precision ag hold potential for new productivity. One example is using aerial drones for surveillance of growing grounds.

In 2018, Mexico was a big player in the avocado market, and they will continue to be. Areas such as Colombia and Jalisco are trying to be more involved in the U.S. market, and Peru could be a potential competitor since their growing season parallels the local growing season. Communities in Asia have potential for new trade channels. Korea, China and Hong Kong could be eager for California avocados.

Critical to the success of California avocados is a stable labor force. If you can keep your workers busy all year, that ensures you have the same crew working together. This may require changing a business model to be competitive, for example offering a service such as tree removal during the off season. But this stability helps build teams and relationships that provide a sense of community; some of the current labor force is the next generation of the initial folks we employed. Employees appreciate being part of the community and donate time to pick fruit for the Carpinteria Avocado Festival’s huge vat of guacamole.
### Livestock & Dairy

<table>
<thead>
<tr>
<th>COMMODITY</th>
<th>YEAR</th>
<th>NUMBER OF HEAD</th>
<th>TOTAL VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breeding</td>
<td>2018</td>
<td>19,754</td>
<td>$29,973,509</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>19,248</td>
<td>$24,541,200</td>
</tr>
<tr>
<td>Market</td>
<td>2018</td>
<td>25,051</td>
<td>$20,604,245</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>11,875</td>
<td>$10,514,718</td>
</tr>
<tr>
<td>Cattle Subtotal</td>
<td>2018</td>
<td>44,805</td>
<td>$50,578,750</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>31,123</td>
<td>$35,055,918</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>2018**</td>
<td></td>
<td>$7,717,557</td>
</tr>
<tr>
<td></td>
<td>2017*</td>
<td></td>
<td>$9,182,001</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2018</td>
<td></td>
<td>$58,296,277</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td></td>
<td>$44,237,902</td>
</tr>
</tbody>
</table>

** Includes aquaculture, breeding stock, chickens, goats, sheep, swine, milk and milk products.
* Includes aquaculture, poultry, goats, sheep, swine, milk, milk products and apiary.

### Aquaculture
The Santa Barbara Channel supports several marine aquaculture operations that grow mussels, abalone and other local catch.

### Rangeland, Field & Seed Crops

<table>
<thead>
<tr>
<th>CROP</th>
<th>YEAR</th>
<th>ACREAGE</th>
<th>TOTAL VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rangeland</td>
<td>2018</td>
<td>573,918</td>
<td>$5,538,399</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>542,326</td>
<td>$5,607,114</td>
</tr>
<tr>
<td>Pasture</td>
<td>2018</td>
<td>2,892</td>
<td>$270,775</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>3,694</td>
<td>$748,589</td>
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<tr>
<td>Beans, Dry Edible*</td>
<td>2018</td>
<td>1,452</td>
<td>$2,120,420</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>1,256</td>
<td>$1,687,851</td>
</tr>
<tr>
<td>Hay &amp; Grain**</td>
<td>2018</td>
<td>2,238</td>
<td>$1,376,036</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>2,824</td>
<td>$1,416,476</td>
</tr>
<tr>
<td>Seeds***</td>
<td>2018</td>
<td>1,605</td>
<td>$5,282,272</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>1,406</td>
<td>$7,916,288</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2018</td>
<td>581,499</td>
<td>$15,090,812</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>564,141</td>
<td>$16,274,318</td>
</tr>
</tbody>
</table>

* Includes fava beans, lima beans, garbanzo beans, etc.
** Includes alfalfa, barley, groenichop, forage oats, silage, straw, sudangrass and wheat
*** Includes vegetable seeds, flower seeds, native grass seeds, bean seeds
### Cut Flowers & Cut Foliage

<table>
<thead>
<tr>
<th>CROP</th>
<th>YEAR</th>
<th>GREENHOUSE (sq. ft.)</th>
<th>OUTDOOR GROWN (acres)</th>
<th>TOTAL VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chrysanthemum</td>
<td>2018</td>
<td>753,860</td>
<td>2.5</td>
<td>$3,125,479</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>1,168,368</td>
<td>4</td>
<td>$8,332,291</td>
</tr>
<tr>
<td>Gerbera</td>
<td>2018</td>
<td>1,249,220</td>
<td>—</td>
<td>$9,858,842</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>2,665,990</td>
<td>—</td>
<td>$20,557,043</td>
</tr>
<tr>
<td>Lily</td>
<td>2018</td>
<td>283,440</td>
<td>1</td>
<td>$2,304,923</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>1,135,125</td>
<td>1</td>
<td>$9,194,740</td>
</tr>
<tr>
<td>Miscellaneous Cut Flowers*</td>
<td>2018</td>
<td>5,261,744</td>
<td>1,474</td>
<td>$72,432,632</td>
</tr>
<tr>
<td></td>
<td>2017**</td>
<td>4,054,034</td>
<td>1,333</td>
<td>$54,890,305</td>
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<tr>
<td>Cut Foliage</td>
<td>2018</td>
<td>51,000</td>
<td>1</td>
<td>$44,629</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>6,001</td>
<td>0</td>
<td>$101,397</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2018</td>
<td>7,548,264</td>
<td>1,477.5</td>
<td>$87,671,505</td>
</tr>
<tr>
<td></td>
<td>2017**</td>
<td>9,023,317</td>
<td>1,338</td>
<td>$95,075,776</td>
</tr>
</tbody>
</table>

* Includes: astilbe, amaranthus, anemone, antirrhium, aster, bells of Ireland, bird of paradise, bellflower, calla lily, carnation, celosia, dahlia, delphinium, dianthus, freesia, gardenia, gladiolus, gypsophila, hydrangea, iris, kangaroo paw, larkspur, liatris, limonium, liatris, narcissus, orchid, ornithogalum, protea, Queen Anne's lace, ranunculus, rose, snapdragon, sedum, solidaster, statice, stephanotis, stock, sunflower, sweet pea, tuberose, tulip and veronica.

** Adjusted 2017 published Crop Report data

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### Nursery Products

<table>
<thead>
<tr>
<th>CROP</th>
<th>YEAR</th>
<th>GREENHOUSE (sq. ft.)</th>
<th>OUTDOOR FIELD GROWN (acres)</th>
<th>TOTAL VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foliage</td>
<td>2018</td>
<td>367,320</td>
<td>0</td>
<td>$805,219</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>372,721</td>
<td></td>
<td>$724,282</td>
</tr>
<tr>
<td>Orchid</td>
<td>2018</td>
<td>1,201,230</td>
<td>0</td>
<td>$27,174,062</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>2,091,751</td>
<td>4</td>
<td>$35,425,449</td>
</tr>
<tr>
<td>Miscellaneous*</td>
<td>2018</td>
<td>3,212,660</td>
<td>189</td>
<td>$75,841,554</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>3,212,660</td>
<td>369</td>
<td>$64,504,348</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2018</td>
<td>4,781,210</td>
<td>189</td>
<td>$101,820,835</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>5,677,132</td>
<td>373</td>
<td>$100,654,079</td>
</tr>
</tbody>
</table>

* Includes: herbaceous perennials, ground covers, turf, bulbs, bedding plants, vegetable transplants, fruit trees and vines, palms, poinsettia and woody ornamentals.
Apriary Products

<table>
<thead>
<tr>
<th>YEAR</th>
<th>TOTAL NUMBER OF HIVES</th>
<th>TOTAL VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>24,598</td>
<td>$635,328</td>
</tr>
</tbody>
</table>

Includes honey, beeswax, pollen and pollination services.

San Marcos Farms Honey Company is a small-scale beekeeping operation owned and operated by Don Cole and his wife, Anne. They sell a variety of bee products such as honey, bee pollen, propolis and beeswax candles, and assist growers with pollinating crops.

Cole started as a beekeeper hobbyist in the 1960s. His commercial business grew from a roadside stand in the 1980s to a flourishing company with sales to local businesses and Farmer’s Markets, mail order, major health food stores, restaurants, wineries, juice companies and chefs.

For pollination services, the bees are moved to different areas of the state, depending on the season. The bees spend a few weeks in the winter in Central Valley almond orchards and return to Santa Barbara County in the spring for citrus and avocado blooms. After that, some colonies are moved to the Santa Ynez Valley for the sage blossom honey production. The hives return to the coast in late summer.

When bees are not pollinating crops and are at home in Santa Barbara County, they are dependent on native plants, eucalyptus and bellflower plants for nutrition. Years of drought have greatly reduced blooming plants and water, stressing the bees and reducing honey production. The bees rely on honey and other bee products to sustain the hive, and this leaves less for sale. It takes three to four days just to create a pound of pollen.

Stressed bees are also vulnerable to pests, like the Varroa mite. This is a tick-like insect that feeds on the body of the bee and spreads viruses that can destroy the hive.

“If you can handle those, you can handle other diseases” says Cole.

To combat pests, many beekeepers reduce pesticide use and strengthen the colony by re-queening frequently and trying to cull their hives. With the recent interest in local beekeeping, he advises new beekeepers to join a group so they can learn from others.

Cole’s message to the community is to “reduce the use of herbicides and plant late blooming plants that are beneficial to bees. What is good for native plants is good for the bees.”

Bee Safe Program
The California Department of Food and Agriculture (CDFA) has a new Bee Safe Program to promote best management strategies for beekeepers, deter theft, ensure the safe movement of bees, protect bee health, and minimize pesticide exposure by providing funds to local Agricultural Commissioner’s Offices.

Bee Where App
This collaborative mapping initiative tracks and safeguards hive locations with the use of online digital mapping tools and a mobile app. Beekeepers register their bees, online, and pesticide applicators and pest control advisors can obtain general information on bee hive locations for notifications. For details go to https://beewherecalifornia.com
### Commercial Fishing

In 2017, commercial fishing operations working from Santa Barbara Harbor, Goleta Beach and Surf Beach landed more than 127 different species of fish, valued at almost $13 million.

The most recent information originates from the California Department of Fish and Wildlife Report. (Commercial fishing value represents 2017 data and is not included in overall agricultural values).

<table>
<thead>
<tr>
<th>SPECIES</th>
<th>POUNDS</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lobster, California spiny</td>
<td>201,067</td>
<td>$3,879,550</td>
</tr>
<tr>
<td>Sea urchin, red</td>
<td>1,788,791</td>
<td>$3,064,420</td>
</tr>
<tr>
<td>Thornyhead, shortspine</td>
<td>214,982</td>
<td>$1,837,387</td>
</tr>
<tr>
<td>Crab, red rock</td>
<td>491,716</td>
<td>$834,274</td>
</tr>
<tr>
<td>Sablefish</td>
<td>288,662</td>
<td>$830,501</td>
</tr>
<tr>
<td>Halibut, California</td>
<td>57,391</td>
<td>$36,601</td>
</tr>
<tr>
<td>Crab, yellow rock</td>
<td>188,130</td>
<td>$220,362</td>
</tr>
<tr>
<td>Crab, brown rock</td>
<td>106,190</td>
<td>$197,184</td>
</tr>
<tr>
<td>Prawn, ridgeback</td>
<td>66,039</td>
<td>$172,532</td>
</tr>
<tr>
<td>Sea cucumber, giant red</td>
<td>32,383</td>
<td>$159,158</td>
</tr>
<tr>
<td>Miscellaneous*</td>
<td>479,163</td>
<td>$1,424,057</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>3,914,520</td>
<td>$12,956,026</td>
</tr>
</tbody>
</table>

*Includes 127 species.

### Direct Marketing Program

Certified Farmers’ Markets (CFMs) provide a great opportunity for small farmers to market their products without the added expenses of commercial preparation. This increases net income and makes it possible for them to stay in business.

For consumers, CFMs are where you can meet the producer and be a part of a larger community that wants to learn more about local farming and values seasonal varieties. There are about 10 Certified Farmers’ Markets and more than 200 certified producers in Santa Barbara County. The Agricultural Commissioner’s Office and state inspectors “certify” markets and producers to ensure they follow certain requirements and uphold the basic premise, “We grow what we sell.”

Thanks to our warm, mild climate, most of the county’s CFMs offer a wide variety of seasonal varieties and operate year-round markets.

### Certified Farmers’ Markets

<table>
<thead>
<tr>
<th><strong>MONDAY</strong></th>
<th><strong>FRIDAY</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>No markets</td>
<td>Montecito</td>
</tr>
<tr>
<td></td>
<td>Lompoc</td>
</tr>
<tr>
<td><strong>TUESDAY</strong></td>
<td><strong>SATURDAY</strong></td>
</tr>
<tr>
<td>Orcutt</td>
<td>Santa Barbara</td>
</tr>
<tr>
<td>Santa Barbara</td>
<td></td>
</tr>
<tr>
<td><strong>WEDNESDAY</strong></td>
<td><strong>SUNDAY</strong></td>
</tr>
<tr>
<td>Santa Maria</td>
<td>Goleta</td>
</tr>
<tr>
<td>Solvang</td>
<td>Lompoc</td>
</tr>
<tr>
<td><strong>THURSDAY</strong></td>
<td></td>
</tr>
<tr>
<td>Carpinteria</td>
<td>Market schedule is subject to change; check our website for current schedule.</td>
</tr>
</tbody>
</table>
Organic Farming


Santa Barbara County inspectors perform inspections of both organic producers and handlers each year. They also take samples of organic produce from markets and fields and submit them for pesticide residue testing.

<table>
<thead>
<tr>
<th>Santa Barbara County Organic Crops in 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Registered Organic Farms</td>
</tr>
<tr>
<td>Total Acreage Farmed by Registered Producers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Top 5 Organic Crops</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rank</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
</tbody>
</table>

Integrated Pest Management

The Agricultural Department has an Integrated Pest Management Specialist dedicated to providing Integrated Pest Management (IPM) services to the agricultural community in order to solve pest problems, while minimizing risks to people and the environment.

What is IPM?
IPM is a strategy that focuses on long-term prevention of pests through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties. Pesticides are used only after monitoring indicates they are needed according to established guidelines.

In IPM, pest identification is key in developing an effective strategy. Contact our office today to learn more about our IPM program.

Integrated Pest Management Specialist performs an inspection.
Inspector looks for seed-borne diseases in an onion field.
Pest Exclusion Program

Our Pest Exclusion program is the first line of defense to prevent pests harmful to agriculture from becoming established in the state. We inspect incoming high-risk plant material to prevent introduction of pests into the area.

2018 Pest Find Highlights

<table>
<thead>
<tr>
<th>COMMON NAME</th>
<th>SCIENTIFIC NAME</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flea Beetle</td>
<td>Ceratophyllus spp.</td>
<td>A</td>
</tr>
<tr>
<td>Light Brown Apple Moth</td>
<td>Pseudococcus aurantii</td>
<td>A</td>
</tr>
<tr>
<td>Ant</td>
<td>various genera</td>
<td>A</td>
</tr>
<tr>
<td>Ant</td>
<td>various genera</td>
<td>Q</td>
</tr>
<tr>
<td>Oystershell Scale</td>
<td>Aulacaspis yezoensis</td>
<td>A</td>
</tr>
<tr>
<td>Fig Wax Scale</td>
<td>Carophila fructicola</td>
<td>A</td>
</tr>
<tr>
<td>Mealybug</td>
<td>Dysmicoccus pseudotsugae</td>
<td>A</td>
</tr>
<tr>
<td>Elongate Hemlock Scale</td>
<td>Furtica externa</td>
<td>A</td>
</tr>
<tr>
<td>Scale</td>
<td>Pernice indica</td>
<td>A</td>
</tr>
<tr>
<td>Burying Dung Beetle</td>
<td>Phyllonaryss pseudotatus</td>
<td>A</td>
</tr>
<tr>
<td>Boxwood Scale</td>
<td>Pseudophyllus pseudotsugae</td>
<td>A</td>
</tr>
<tr>
<td>Lesser Shoot Scale</td>
<td>Phytomyza sp.</td>
<td>A</td>
</tr>
<tr>
<td>Western Mite</td>
<td>Phylloxera minor</td>
<td>A</td>
</tr>
<tr>
<td>Magnolia White Scale</td>
<td>Pseudococcus cockerelli</td>
<td>A</td>
</tr>
<tr>
<td>Whitefly</td>
<td>Myzus coleus</td>
<td>Q</td>
</tr>
<tr>
<td>Plant Bug</td>
<td>Micicle</td>
<td>Q</td>
</tr>
<tr>
<td>Asian Citrus Psyllid</td>
<td>Diaphorina citri</td>
<td>A</td>
</tr>
<tr>
<td>Aphid</td>
<td>Aphidaceae sp.</td>
<td>Q</td>
</tr>
<tr>
<td>Leafhopper</td>
<td>Cicadellidae sp.</td>
<td>Q</td>
</tr>
<tr>
<td>Roach</td>
<td>Blattidae</td>
<td>Q</td>
</tr>
<tr>
<td>Coccid</td>
<td>Coccus sp.</td>
<td>Q</td>
</tr>
<tr>
<td>Tetranymphid Mite</td>
<td>Tetranymphid sp.</td>
<td>Q</td>
</tr>
</tbody>
</table>

Rating definitions

“A” – An organism of known economic importance, subject to enforcement action involving eradication, quarantine regulation, containment, rejection, or other holding action.

“Q” – An organism or disorder requiring temporary “A” action pending determination of a permanent quarantine rating. The organism is suspected to be of economic importance, but its status is uncertain because of incomplete identification or inadequate information.

The Dog Team (right) consists of Doomis and his handler, Chris Tyler. Doomis is a 72-pound Shepherd/Labrador mix rescued from an animal shelter prior to entering the USDA Detector Dog Training program in 2014. He is one of 13 dogs in the state trained to sniff out packages containing plant material that can threaten California agriculture.

Inspector uses flagging tape to hold a shipment of fir trees due to elongate hemlock scale, an A-rated pest. Inset — close up of elongate hemlock scale.

The dog team works the conveyor belt at a parcel facility.
Weights & Measures Program

The primary function of the weights and measures program is to ensure consumer protection, fair competition in the marketplace, and safeguard accurate value comparison for consumers. This is accomplished by routine testing and certification of commercial weighing and measuring devices for accuracy. The Division verifies the net quantity and proper labeling of packaged commodities and inspects the price accuracy of point of sale (scanners) systems.

Weights and Measures supports the agricultural industry by certifying devices used to weigh crops and livestock, and testing the accuracy of meters that deliver fertilizer and fuels.

<table>
<thead>
<tr>
<th>WEIGHING DEVICE</th>
<th>NUMBER OF INSPECTIONS</th>
<th>MEASURING DEVICE</th>
<th>NUMBER OF INSPECTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computing/Counter Scales</td>
<td>1,180</td>
<td>Retail Fuel Meters</td>
<td>2,900</td>
</tr>
<tr>
<td>Vehicle Scales</td>
<td>65</td>
<td>Tacti Meters</td>
<td>115</td>
</tr>
<tr>
<td>Dartmat/Platform Scales</td>
<td>275</td>
<td>Wholesale Meters</td>
<td>50</td>
</tr>
<tr>
<td>Livestock Scales</td>
<td>35</td>
<td>Liquid Propane Gas Meters</td>
<td>55</td>
</tr>
<tr>
<td>Hanging/Scale Scales</td>
<td>90</td>
<td>Vapor/Water/Electric</td>
<td>1,640</td>
</tr>
<tr>
<td>Jewelry Scales</td>
<td>50</td>
<td>Submeters</td>
<td></td>
</tr>
<tr>
<td>Other Devices</td>
<td>10</td>
<td>Vehicle Meters</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Retail Water Vending</td>
<td>203</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INSPECTION TYPE</th>
<th>NUMBER OF INSPECTIONS</th>
<th>ITEMS SAMPLED</th>
<th>RESULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price Verification</td>
<td>450</td>
<td>9,850</td>
<td>11 percent had overcharges.</td>
</tr>
<tr>
<td>Package and Labeling</td>
<td>30</td>
<td>5,450</td>
<td>243 packages ordered off sale.</td>
</tr>
</tbody>
</table>

Inspector uses a Weights and Measures device to test the accuracy of a taxi meter.

Inspector operates Weights and Measures heavy equipment to check accuracy of cattle weighting scales.

Department of Weights & Measures

In California, the inspection of devices began in 1913.
Education & Outreach

In 2018, the Agricultural staff provided education and outreach to farmers, farm workers, businesses and the public on regulatory compliance, integrated pest management, reduced risk pesticide use and pests of concern. Outreach allows us to build relationships with the regulated community, strengthens existing partnerships with the State and other agencies, and prepares our staff for future leadership opportunities.

Staff verifies crop production in the field for the Farmers’ Market program.

Staff participates in a career fair at a local high school.

A bilingual inspector addresses a group of Spanish-speaking field workers during an outreach session.

Staff speaks at the UCCE Strawberry Production and Research meeting in Santa Maria.

Santa Barbara County

Staff developed an activity book for children that educates them about local agriculture. A free copy can be obtained from any of our offices or downloaded from our website.
Agricultural/Weights & Measures Inspector I

Bargaining Unit: Admin, Tech, Office & Health Services, Non-Supervisory

SALARY RANGE

$28.54 - $34.17 Hourly
$4,983.35 - $5,942.73 Monthly
$59,560.14 - $71,312.72 Annually

DESCRIPTION:
Under specified degrees of supervision depending upon the level of the class, provides professional inspection, investigation and enforcement services to the community by executing local, state and federal mandated consumer protection and environmental programs in both agricultural and weights and measures disciplines; and performs related work as assigned.

DISTINGUISHING CHARACTERISTICS: Agricultural/Weights & Measures Inspector I is the entry level in the series. Under direct supervision Incumbents learn to apply and enforce a variety of agricultural and/or weights and measures laws and regulations. The Incumbents are expected to obtain at least two licenses in agricultural or weights and measures inspection issued by the California Department of Food and Agriculture within the first twelve months of employment. With experience, incumbents will independently perform field inspections and investigations within the two areas of required licensure while gaining training and experience to obtain five required state licenses and function at the II level. At the discretion of the appointing authority and with at least five required licenses obtained and two years of increasing responsibilities, incumbents may be eligible for promotion to the II level.

EXAMPLES OF DUTIES:
The following duties are performed by employees in this classification; however, employees may perform related duties at an equivalent level. Each individual in the classification does not necessarily perform all duties listed.
1. Investigates fraud and consumer complaints through interviews, investigations, and records examination
2. Develops case files; prepares, analyzes, maintains and presents evidence; prepares correspondence and reports; and provides information for litigation.
3. Promotes legal compliance by conducting educational outreach to new businesses.
4. Investigates and works with district attorneys to prosecute businesses engaged in deceptive pricing and/or product packaging, both locally and statewide.
5. Verifies the accuracy of commercial devices such as gas pumps, taxi meters, propane meters, electric meters and commercial weighing devices.
6. Safely handles hazardous materials such as herbicides, rodenticides, insecticides and other pesticides, as well as gasoline, diesel, aviation fuel, and propane.
7. Enforces regulations related to pesticide use and storage, and worker health and safety; issues permits and monitors applications of pesticides; and registers agricultural pest control operators and advisors.
8. Investigates complaints related to agricultural pesticides, certain pests, and violations of County, State, or Federal laws; and conducts a variety of inspections of agricultural products to ensure compliance with regulations, and/or to verify certificate requirements for export/import and pest cleanliness.
9. Detects and prevents the introduction of detrimental pests through examination, surveys, trapping, sampling, and regulation of possible carriers; and controls and/or eradicates pest plants, insects, diseases, and nematodes in accordance with approved procedures.
10. Inspects nurseries and evaluates nursery license applications to determine compliance with State requirements.
11. Gathers and compiles evidence and prepares reports; collects, prepares, and submits official samples required for the enforcement or verification of various regulations; and obtains, compiles, and disseminates statistical data on agricultural commodities produced in the County.

EMPLOYMENT STANDARDS:

1. Possession of two or more valid statewide specific category licenses as a County Agricultural Inspector/Biologist issued by the California Department of Food and Agriculture; OR,
2. Bachelor's degree from an accredited four-year college with specialization in one or more appropriate disciplines in agricultural, biological, chemical, or physical sciences, Mathematics, or statistics; OR,
3. Bachelor's degree from an accredited four-year college in any discipline with a minimum of 30 semester units, or 45 quarter units, in one or any combination of the following disciplines: Agricultural Science, Biological Science, Chemical Science, Physical Science, Mathematics, and/or Statistics.

Additional Requirements:

1. Incumbent must obtain within one year of appointment two category licenses as a County Agricultural Inspector/Biologist issued by the California Department of Food and Agriculture in: Pesticide Regulation, Pest Prevention and Plant Regulation, Investigation and Environmental Monitoring, Commodity Regulation, Integrated Pest Management, Weight Verification, Measurement Verification, Transaction and Product Verification.
2. Possession of a valid California Class C Driver's License is required at the time of appointment. Driver's license must be kept valid throughout the term of employment. Incumbents must be able to travel independently throughout County of Santa Barbara.
3. Some assignments in the classification may require incumbent to obtain a certificate of completion from the United States Department of Agriculture (USDA) for their 10 week Basic Canine Handler Training.

Additional Qualifications May be required:
1. A California Class B Commercial Driver's License at the discretion of the appointing authority, dependent on assigned job duties. Appointees to those positions requiring a Class B license will be subject to mandatory testing for drugs prior to beginning work; once on the job, incumbents will be subject to mandatory testing for drugs and/or alcohol on a random, reasonable suspicion, post-accident, return-to-duty, and follow-up basis.

2. Obtain an Accredited Certifying Officer (ACO) credential from the United States Department of Agriculture at the discretion of the appointing authority, dependent on assigned job duties.

Knowledge Of: Laws, codes, orders, regulations and practices governing agriculture and weights and measures programs and pesticide management; Principles of identification, preservation and presentation of evidence; Techniques of case management, record keeping and report preparation; Safety principles and equipment used for handling chemicals and responding to hazardous materials incidents; Basic use of current business applications and mobile communication devices; correct English usage.

Ability To: Learn to Interpret, apply, explain and enforce various state and federal agricultural and weights and measures laws, codes and regulations; Learn to apply interviewing techniques to obtain needed information; Learn to gather, assemble and analyze data and make sound recommendations regarding mitigation or enforcement matters; Prepare and maintain accurate, concise and effective records, reports, correspondence and other written materials; and using correct grammar, spelling, and punctuation; Make accurate mathematic calculations; Establish and maintain effective working relationships with those contacted in the course of the work; Learn to safely handle hazardous materials such as herbicides, rodenticides, insecticides and other pesticides, as well as gasoline, diesel, and propane; Maintain situational awareness while confidently approaching unknown environments with changing circumstances.

The physical demands and working conditions described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.

Physical Demands: While performing the duties of the job, the employee is regularly required to use hand to eye coordination; and handle, feel or operate objects, tools, or controls. The employee is frequently required to stand and/or walk for extended periods of time over varied terrain; climb or balance; andstoop, kneel, crouch, or crawl. Requires strength to lift and carry equipment and samples weighing up to forty pounds and heavier weights with proper equipment; vision to read printed materials and a computer screen and to distinguish among various colors; and hearing to converse in person and over the telephone.

Working Conditions: Must be willing to work out-of-doors, in all weather conditions and with potential exposure to hazardous materials and conditions such as heat, dust, diesel, exhaust or chemical odors. Must be willing to work scheduled overtime, weekend or off-hours shifts as Department needs require.

**ADDITIONAL CLASS INFORMATION:**

Class # 0330
EEOC 2
JGP 9U
Medical D
Vits Pts: Yes
Bargaining Unit 24

EST: 3.18
REV:
To Replace Ag Bio I & Weights & Measures Insp I
Agricultural/Weights & Measures Inspector II

Bargaining Unit: Admin, Tech, Office & Health Services, Non-Supervisory

SALARY RANGE

$32.42 - $59.16 Hourly
$6,518.27 - $13,742.28 Biweekly
$8,674.01 - $16,810.45 Monthly
$68,088.12 - $101,725.36 Annually

DESCRIPTION:

Under specified degrees of supervision depending upon the level of the class, provides professional inspection, investigation and enforcement services to the community by executing local, state and federal mandated consumer protection and environmental programs in both agricultural and weights and measures disciplines; and performs related work as assigned.

DISTINGUISHING CHARACTERISTICS: Agricultural/Weights & Measures Inspector II is a flexibly staffed series, with placement dependent upon the licenses earned, and the experience and proficiency to perform the full range of duties within specific areas of state licensure. The Department shall designate the specific California State licenses or Federal certifications required to train in, and the examinations to be taken for each employee.

Agricultural/Weights and Measures Inspector II is the journey level classification in the series. Under general supervision, incumbents independently perform inspections and investigations of agricultural and/or weights and measures laws and regulations. The incumbents are required to obtain at least five licenses in agricultural or weights and measures inspection issued by the California Department of Food and Agriculture and has two years of experience. At the discretion of the appointing authority and with at least eight required licenses obtained and four years of increasing responsibilities, incumbents may be eligible for promotion to the III level, in which staff may perform in all program activities and may train and act in a lead capacity.

EXAMPLES OF DUTIES:

The following duties are performed by employees in this classification; however, each individual in the classification does not necessarily perform all duties listed.

1. Investigates fraud and consumer complaints through interviews, investigations, and records examination.
2. Develops case files; prepares, analyzes, maintains and presents evidence; prepares correspondence and reports; and provides information for litigation.
3. Promotes legal compliance by conducting educational outreach to new businesses.
4. Investigates and works with district attorneys to prosecute businesses engaged in deceptive pricing and/or product packaging, both locally and statewide.
5. Verifies the accuracy of commercial devices such as gas pumps, taxi meters, propane meters, electric meters and commercial weighing devices.
6. Safely handles hazardous materials such as herbicides, rodenticides, insecticides and other pesticides, as well as gasoline, diesel, aviation fuel, and propane.
7. Enforces regulations related to pesticide use and storage, and worker health and safety; issues permits and monitors applications of pesticides; and registers agricultural pest control operators and advisors.
8. Investigates complaints related to agricultural pesticides, certain pests, and violations of County, State, or Federal laws; and conducts a variety of inspections of agricultural products to ensure compliance with regulations, and/or to verify certificate requirements for export/import and pest cleanliness.
9. Detects and prevents the introduction of detrimental pests through examination, surveys, trapping, sampling, and regulation of possible carriers; and controls and/or eradicates pest plants, insects, diseases, and nematodes in accordance with approved procedures.
10. Inspects nurseries and evaluates nursery license applications to determine compliance with State requirements.
11. Gathers and compiles evidence and prepares reports; collects, prepares, and submits official samples required for the enforcement or verification of various regulations; and obtains, compiles, and disseminates statistical data on agricultural commodities produced in the County.

**EMPLOYMENT STANDARDS:**

Possession of combined total of five valid statewide specific category licenses as a County Agricultural Inspector/Biologist and Weights & Measures Inspector issued by the California Department of Food and Agriculture; **AND,**

1. Two years of increasingly responsible experience as an Agriculture Biologist I, Weights & Measures Inspector I, or Agricultural/Weights & Measures Inspector I; or,
2. Two years experience performing duties equivalent to that of an Agricultural/Weights & Measures Inspector I with Santa Barbara County.

**Additional Requirements:**

- Possession of a valid California Class C Driver's License is required at the time of appointment. Driver’s license must be kept valid throughout the term of employment. Incumbents must be able to travel independently throughout County of Santa Barbara.
- Some assignments in the classification may require incumbent to obtain a certificate of completion from the United States Department of Agriculture (USDA) for their 10 week Basic Canine Handler Training.

**Additional Qualifications May be required:**

1. A California Class B Commercial Driver's License at the discretion of the appointing authority, dependent on assigned job duties. Appointees to those positions requiring a Class B license will be subject to mandatory testing for drugs prior to beginning work; once on the job, incumbents will be subject to mandatory testing for drugs and/or alcohol on a random, reasonable suspicion, post-accident, return-to-duty, and follow-up basis.
2. Obtain an Accredited Certifying Officer (ACO) credential from the United States Department of Agriculture at the discretion of the appointing authority, dependent on
assigned job duties.

Knowledge Of: Laws, codes, orders, regulations and practices governing agriculture and weights and measures programs and pesticide management; Principles of identification, preservation and presentation of evidence; Techniques of case management, record keeping and report preparation; Safety principles and equipment used for handling chemicals and responding to hazardous materials incidents; Basic use of current business applications and mobile communication devices; correct English usage.

Ability To: Interpret, apply, explain and enforce various state and federal agricultural and weights and measures laws, codes and regulations; Apply interviewing techniques to obtain needed information; Gather, assemble and analyze data and make sound recommendations regarding mitigation or enforcement matters; Prepare and maintain accurate, concise and effective records, reports, correspondence and other written materials; and using correct grammar, spelling, and punctuation; Make accurate mathematic calculations; Establish and maintain effective working relationships with those contacted in the course of the work; Safely handle hazardous materials such as herbicides, rodenticides, insecticides and other pesticides, as well as gasoline, diesel, and propane; Maintain situational awareness while confidently approaching unknown environments with changing circumstances; Assist in training of other staff members.

The physical demands and working conditions described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.

Physical Demands: While performing the duties of the job, the employee is regularly required to use hand to eye coordination; and handle, feel or operate objects, tools, or controls. The employee is frequently required to stand and/or walk for extended periods of time over varied terrain; climb or balance; and stoop, kneel, crouch, or crawl. Requires strength to lift and carry equipment and samples weighing up to forty pounds and heavier weights with proper equipment; vision to read printed materials and a computer screen and to distinguish among various colors; and hearing to converse in person and over the telephone.

Working Conditions: Must be willing to work out-of-doors, in all weather conditions and with potential exposure to hazardous materials and conditions such as heat, dust, diesel, exhaust or chemical odors. Must be willing to work scheduled overtime, weekend or off-hours shifts as Department needs require.

ADDITIONAL CLASS INFORMATION:

Class # 0331
EEOC 2
JGP 9U
Medical D
Vets Pts: No
Bargaining Unit 24

EST: 3.18
REV:
Replacing Ag Bio II & Weights/Measures Inspector II
Agricultural/Weights & Measures Inspector III

Class Code: 0352

COUNTY OF SANTA BARBARA
Established Date: Mar. 1, 2015
Revised Date: Jan. 18, 2018

Bargaining Unit: Admin, Tech, Office & Health Services, Non-Supervisory

SALARY RANGE

$35.74 - $42.96 Hourly
$6,215.62 - $7,471.72 Monthly
$74,587.41 - $89,660.59 Annually

DESCRIPTION:
Under specified degrees of supervision depending upon the level of the class, provides professional inspection, investigation and enforcement services to the community by executing local, state and federal mandated consumer protection and environmental programs in both agricultural and weights and measures disciplines; and performs related work as assigned.

DISTINGUISHING CHARACTERISTICS: Agricultural/Weights & Measures 1/11/11 is a flexibly staffed series, with placement dependent upon the licenses earned, and the experience and proficiency to perform the full range of duties within specific areas of state licensure. The Department shall designate the specific California State licenses or Federal certifications required to train in, and the examinations to be taken for each employee.

Agricultural/Weights and Measures Inspector III is the fully experienced classification in the series. Incumbents have full licensure in all eight categories issued by the California Department of Food and Agriculture and have four years of enforcement experience. Under general direction, Incumbents independently perform inspections and investigations of agricultural and/or weights and measures laws and regulations. Incumbents may also serve as program lead, provide direction or act as program coordinator. Incumbents may be assigned to any specialty area within the department. The Agricultural/Weights & Measures Inspector III is distinguished from the Supervising Inspector by the latter’s responsibility for programmatic oversight and supervision of staff.

EXAMPLES OF DUTIES:

The following duties are performed by employees in this classification; however, each individual in the classification does not necessarily perform all duties listed.

1. Investigates fraud and consumer complaints through interviews, investigations, and records examination.
EMPLOYMENT STANDARDS:

Possession of all eight valid statewide specific category licenses as a County Agricultural Inspector/Biologist and Weights & Measures Inspector issued by the California Department of Food and Agriculture; AND,

1. Two years of increasingly responsible experience as an Agricultural Biologist II, Weights & Measures Inspector II, or Agricultural/Weights & Measures Inspector II; or,
2. Two years experience performing duties equivalent to that of an Agricultural/Weights & Measures Inspector II with Santa Barbara County.

Additional Requirements:

- Possession of a valid California Class C Driver’s License is required at the time of appointment. Driver’s license must be kept valid throughout the term of employment. Incumbents must be able to travel independently throughout County of Santa Barbara.
- Some assignments in the classification may require incumbent to obtain a certificate of completion from the United States Department of Agriculture (USDA) for their 10 week Basic Canine Handler Training.

Additional Qualifications May be required:

1. A California Class B Commercial Driver’s License at the discretion of the appointing authority, dependent on assigned job duties. Appointees to those positions requiring a Class B license will be subject to mandatory testing for drugs prior to beginning work; once on the job, incumbents will be subject to mandatory testing for drugs and/or alcohol on a random, reasonable suspicion, post-accident, return-to-duty, and follow-up basis.
2. Obtain an Accredited Certifying Officer (ACO) credential from the United States Department of Agriculture at the discretion of the appointing authority, dependent on assigned job duties.

**Knowledge Of:** Laws, codes, orders, regulations and practices governing agriculture and weights and measures programs and pesticide management; Principles of identification, preservation and presentation of evidence; Techniques of case management, record keeping and report preparation; Safety principles and equipment used for handling chemicals and responding to hazardous materials incidents; Basic use of current business applications and mobile communication devices; correct English usage.

**Ability To:** Interpret, apply, explain and enforce various state and federal agricultural and weights and measures laws, codes and regulations; Apply interviewing techniques to obtain needed information; Gather, assemble and analyze data and make sound recommendations regarding mitigation or enforcement matters; Prepare and maintain accurate, concise and effective records, reports, correspondence and other written materials; and using correct grammar, spelling, and punctuation Make accurate mathematic calculations; Establish and maintain effective working relationships with those contacted in the course of the work; Safely handle hazardous materials such as herbicides, rodenticides, insecticides and other pesticides, as well as gasoline, diesel, and propane; Maintain situational awareness while confidently approaching unknown environments with changing circumstances.

The physical demands and working conditions described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.

**Physical Demands:** While performing the duties of the job, the employee is regularly required to use hand to eye coordination; and handle, feel or operate objects, tools, or controls. The employee is frequently required to stand and/or walk for extended periods of time over varied terrain; climb or balance; and stoop, kneel, crouch, or crawl. Requires strength to lift and carry equipment and samples weighing up to forty pounds and heavier weights with proper equipment; vision to read printed materials and a computer screen and to distinguish among various colors; and hearing to converse in person and over the telephone.

**Working Conditions:** Must be willing to work out-of-doors, in all weather conditions and with potential exposure to hazardous materials and conditions such as heat, dust, diesel, exhaust or chemical odors. Must be willing to work scheduled overtime, weekend or off-hours shifts as Department needs require.

**ADDITIONAL CLASS INFORMATION:**

Class # 0332  
EEOC 2  
JGP 9U  
Medical D  
Vts Pts: No  
Bargaining Unit 24

EST: 3.18  
REV:
APPENDIX H

CALIFORNIA ASSOCIATION OF STANDARDS AND AGRICULTURAL PROFESSIONALS

MISSION STATEMENT
California Association of Standards and Agricultural Professionals (CASAP) is a voluntary organization of California state licensed agricultural and veterinary professionals committed to education, communication, and professional development opportunities for its members. CASAP organizes and conducts professional development opportunities for its members. CASAP creates a communication link with the California Agricultural Commissioners and Dealers Association (CACADA).

CONSTITUTION AND BYLAWS

ARTICLE I - NAME
This association shall be known as the CALIFORNIA ASSOCIATION OF STANDARDS AND AGRICULTURAL PROFESSIONALS (CASAP).

ARTICLE II - RELATIONSHIP WITH CACADA
This Association is an affiliate of the California Agricultural Commissioners and Dealers Association formed in accordance with Article 3, Section 6 of the Constitution and Bylaws of California Agricultural Commissioners and Dealers Association (CACADA).

ARTICLE III - PURPOSE
The purpose of this association shall be:
· To promote professionalism, education, and professional among its members;
· To promote professional development for members;
· To provide a communication network among its members and a communication link with the California Agricultural Commissioners and Dealers Association;
· To conduct and provide input to CACADA on matters affecting the professional standards of association members.

This Association shall not be construed as a collective bargaining unit nor participate in employee and employer relationships, nor shall the Association develop, promote, or oppose legislation except in conjunction with the California Agricultural Commissioners and Dealers Association.

ARTICLE IV - MEMBERSHIP

Section 1 - Active Members
Any licensed professional of the County Agricultural Commissioners and Dealers staff shall be eligible for membership in this Association. Any nonlicensed staff professional of the Agricultural Commissioner and Dealers office may be eligible for approval by the Board of Directors. Upon payment of association dues, annually in advance, members shall be entitled to all rights and privileges subject to the provisions of these by-laws.

Section 2 - Associate Members
Any nonlicensed professional of the County Agricultural Commissioners and Dealers office or persons possessing a license but not employed by a county agricultural commissioner or dealer, upon payment of dues, may participate and attend meetings of this Association but are not eligible for active membership. Associate members cannot hold elected office or vote, but enjoy all other privileges of active membership.

Section 3 - Termination of Membership
The membership of any member shall terminate upon the occurrence of any of the following events:
· The resignation of the member;
· The occurrence of any event which renders such member ineligible for membership;
· Any member may be suspended or terminated by vote of the majority of the total membership at a regularly scheduled meeting.

Any member shall be entitled to receive all notices of meetings of the Association and its committees and to attend all meetings of the same.

Section 4 - Resignation
Any member may resign from the Association by delivering his resignation in writing to the Secretary at any time.

ARTICLE V - BOARD OF DIRECTORS

Section 1 - Membership
The Board of Directors shall consist of five board members at-large, the President, and the President-elect and such officers as set forth in Section VI. Vacancies on the board of directors may be filled by appointment by the President and confirmed by the board by majority vote. The President shall serve as chairman of the Board of Directors.

Section 2 - Election of Directors
Section 2. Duties
   a. The Board of Directors shall have the duty to:
      1. Conduct, manage and control the affairs and business of the Association, and to make rules and regulations in respect to its management;
      2. Carrying out and executing any program which may seem to best serve the interests of all members and further the purposes for which the Association was created.
   b. No Director may be removed from office, for sufficient cause, by the affirmative vote of the majority of the whole number of Directors of the Association, after notice and hearing.
   c. Directors shall receive no compensation from the Association.

Section 4. Board of Directors Meetings
   Board of Directors meetings should be held as necessary, or as required by Association by-laws.

Section 5. Quorum
   A majority of the authorized number of Directors shall constitute a quorum for the transaction of business.

Section 6. Removal from Office, Vacancies
   The failure of a Director to perform the duties of office, from inability or otherwise, shall be cause for removal. The Association’s Board of Directors may, by a two-thirds vote, declare any elective office vacant. The Association’s Board of Directors shall then elect an appropriate person to fill the vacancy until the next general election of officers.

ARTICLE VI OFFICERS AND THEIR DUTIES

Section 1. Elected Officers
   The Officers of the Association shall be:
   a. President
   b. Vice President North Region shall be elected from any county located North of the City of Deona, California
   c. Vice President Southern Region shall be elected from any county located South of the city of Deona, California
   d. Executive Secretary
   e. Executive Treasurer
   f. Webmaster/Social Media Coordinator
   g. The Association may also have such other offices as are deemed necessary by the Board of Directors.

Section 7. Duties of the President
   a. The President shall be the Executive Officer of the Association and shall, subject to the approval by the Board of Directors, have supervision, direction and control of the business and affairs of the Association.
   b. Shall be ex-officio member of all committees.
   c. Shall preside at all meetings of the Board of Directors and the annual meeting of the members.
   d. Shall appoint the heads of all committees.
   e. Shall have such other powers and duties as may be prescribed by the Board of Directors or by these by-laws.
   f. As Chairperson of the Board of Directors, the President shall have the power to call special meetings with due regard to reasonable notice to the members.
   g. Shall perform such powers, as requested by the President.
   h. Shall present an annual report to the members.
   i. Shall serve as a voting member of the Board of Directors for the term expired (as Past President) until a new Past President is appointed.

Section 8. Duties of the Vice President
   a. In the absence, disability, or refusal of the President to act, the Vice President, appointed by the county geographically closest to that of the President, shall perform all the duties of the President. If this Vice President is absent, disabled, or refuses to act, the other Vice-President shall perform the duties of the President.
   b. When acting, the Vice President shall have the powers of, and be subject to, all the restrictions upon the President.
   c. Develop agendas for all regular Board of Directors meetings.
   d. The Vice President shall perform the duties required by the by-laws of this Association and be available for any special assignments as required by the President.
   e. The Vice President shall provide technical support and may represent the Association as they deem necessary.

Section 9. Duties of the Executive Secretary
   a. The Executive Secretary shall keep or cause to be kept for the Association:
      1. Minutes of all meetings.
      2. A membership list containing the names, addresses, status, and assigned membership number of each member.
2. Receive or authorize receipt of all monies due the Association.
3. Disburse or cause to be disbursed the funds of the Association as may be directed by the Board of Directors.
4. When requested, render an account of the financial condition of the Association.
5. When requested, prepare or cause to be prepared, the financial statements to be included in the annual report to the members.

b. In general, perform all duties incident to the office of Executive Treasurer and such other duties as may be required by law, these by-laws, or which may be assigned from time to time by the Board of Directors.

c. PROCEDURAL GUIDELINES FOR TRANSITION OF EXECUTIVE TREASURER INTO OFFICE:
1. The treasurer will serve a term of 2 years starting March 31, and ending February 28th.
2. The president of CASAP will issue a letter to the treasurer stating the new treasurer's name, address, and the term.
3. The president will notify the CASAP webmaster of the new treasurer to be put on the membership application and listed on the website.
4. When the new treasurer takes office, the previous treasurer shall send all the following documents and information as soon as practicable:
   A. Unpaid checks.
   B. All previous membership applications.
   C. All bank statements, balance sheets and treasurer's reports.
   D. All other account information required to complete banking.
   E. All recent transactions.
   F. Any other pertinent information.
   G. All previous financial reports.
   H. Account number and identification number.
   I. Current treasurer report to include:
      1. Account balance
         a. Total members to date for previous year with a list of member's names.
         b. A new signature card will be issued.
         c. Treasurer will change the address on the account to his/her address.
         d. The new treasurer upon receipt of the treasurer's report from the previous treasurer will have 10 days to send the treasurer's report to the president and vice president with a letter either agreeing or disagreeing with the figures provided.

d. Procedures for handling cash at workshops and events:
1. Have member fill out either the current year membership application or the training registration form, or both, if both are completed staple forms together.
2. Have member pay fees and issue a receipt.
3. The following must be included on the receipt:
   A. Name
   B. Date
   C. Check #, if cash, write "cash"
   D. Who payment is for, i.e. membership, lunch, workshop, etc.
   E. Amount received
   F. Signature of person who issued the receipt.
4. Have member sign a sign-in sheet which shall include the following:
   A. Name and email address.
   B. Employee, county, affiliation.
   C. Phone number.
   D. Position held, i.e. Ag. W/M, Commissioner, Deputy.
   E. Member.
   F. Nonmember.
   G. Amount Paid
5. After all monies have been collected please place in envelope and forward the following to the Treasurer by mail or personally:
   A. A copy of all receipts given out that day.
   B. A copy of the sign-in sheet.
   C. All checks.
   D. All membership applications and registration forms.
   E. A training announcement or agenda, if possible.
6. The treasurer will deposit all checks and cash as soon as practicable upon receipt.
7. Upon receiving receipts or invoices for all expenses accrued for workshops the treasurer shall issue a check for reimbursement as soon as is practicable.
8. A check over the amount of $500.00 will not be issued unless there is board approval.
9. Two identical signatures will be required for any amount over $400.00.
10. All receipts must be reviewed by the treasurer within 30 days from the date of purchase in order for reimbursement to be made.

Section 2: Duties of the Webmaster/Social Media Coordinator:
1. The Webmaster/Social Media Coordinator shall keep or cause to be kept for the Association:
   1. The CASAP website.
   2. The CASAP electronic calendar.
   3. The CASAP digital archive.
ARTICLE VII - LIAISON REPRESENTATIVE:

a. The Association shall select a representative from the Board to act as liaison with the California Agricultural Commissioners and Sealer's Association.

b. The liaison shall provide a direct means of communication between the California Agricultural Commissioners and Sealer's Association and the Association. The liaison shall attend California Agricultural Commissioners and Sealer's Association meetings as necessary to fulfill the purpose of both Associations.

ARTICLE IX - STATE MEETINGS

Section 1. Annual Meeting:

a. The annual meeting of the members shall be held on such date as determined by the Board of Directors. The time and place for the annual meeting shall also be determined by the Board of Directors.

b. The purpose of the annual meeting is to conduct Professional Development Programs and Association business.

c. Written notice of each such meeting and the agenda of business to come before the meeting shall be announced at least thirty (30) days prior to the date of the meeting.

d. Non members may attend Professional Development Programs for payment of the appropriate fees.

e. General meetings shall be held in Sacramento by the Board of Directors to address association business.

f. There shall be held at least annually, two weeklong pre-conference sessions for Deputy and Commissioner/Sealer oral exam.

Section 2. Special Meetings:

Special meetings of the members may be called by the President, by a majority of the Board of Directors, or by written request of 25 percent of the active membership.

Section 3. Procedures:

Robert's Rules of Order shall be followed unless inconsistent with the Constitution and by-laws of this Association.

ARTICLE X - USE OF ASSOCIATION NAME

No member of this Association shall, by innuendo or otherwise, either directly or indirectly, misuse or abuse the name of this Association or their connection therewith, nor shall they imply that this Association will sponsor or be responsible for any written or printed material, report, policy, or practice of any member or firm, association, corporation or the government agency by which the member is employed or with which the member is associated. Any member who desires the use of this Association's name in connection with any personal endeavor shall first receive written authority from the Board of Directors.

ARTICLE X - AMENDMENTS

Section 1. Proposed Amendments:

Any active member may propose an amendment to the by-laws by submitting it in writing to the Board of Directors.

Section 2. Voting and Ratification:

If a majority of the Board of Directors approves a proposed amendment, it shall be submitted to the membership for vote. An amendment must receive a two-thirds majority vote by active membership. The Board of Directors shall determine the manner of voting. Amendments shall not be effective until ratified by the CACASA.

Section 3. Adoption:

A copy of the proposed amendment shall be posted at least 30 days before the vote is taken.

CASAP Board approved August 14, 2016 / CASAP Membership Approval March 31, 2017 / CASA ratified May 31, 2017
<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Posts</th>
<th>Comments</th>
<th>Follow</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FORUM RULES</strong></td>
<td>Welcome to the CASAP Forum. Please read these forum rules and p...</td>
<td>152</td>
<td>3</td>
<td>Follow</td>
</tr>
<tr>
<td><strong>CASAP Events</strong></td>
<td>The Conference, Trainings, Mock Ovals, and anything else</td>
<td>164</td>
<td>5</td>
<td>Follow</td>
</tr>
<tr>
<td><strong>Commodity Regulation</strong></td>
<td>Here is a place where you can discuss all things pertaining to Agric...</td>
<td></td>
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<td>Follow</td>
</tr>
<tr>
<td><strong>General Discussion</strong></td>
<td>No matter what, you've got at least a couple things in common with</td>
<td>758</td>
<td>5</td>
<td>Follow</td>
</tr>
<tr>
<td><strong>License Exams</strong></td>
<td>Talk about exam study materials and test taking tips. Don't Post Eva...</td>
<td>574</td>
<td>3</td>
<td>Follow</td>
</tr>
<tr>
<td><strong>Pesticide Use Enforcement</strong></td>
<td>Here is a place where you can discuss all things pertaining to Pestici...</td>
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<td><strong>Quarantine</strong></td>
<td>Here is a place where you can discuss all things ranging from Complic...</td>
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<tr>
<td><strong>Weights &amp; Measures</strong></td>
<td>Here is a place where you can discuss all things pertaining to Weight</td>
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LICENSE EXAMS

Talk about exam study materials and test taking tips: Don’t Post Exam Questions, please.

Filter: All posts Sort by: Recent Activity

Does anyone have information or subjects to study for the Enviro...  
Fitch Avila • Discussion

Which CDFA Inspector Exam did you find the most challenging a...  
CeeMaghi • Discussion

Mill Tax  
(sage-webmaster • Discussion)
SUGGESTED READING LIST

for

COUNTY AGRICULTURAL INSPECTOR/BIOLOGIST

The California Department of Food and Agriculture has compiled the attached reading list which may be helpful to candidates studying for the County Agricultural Inspector/Biologist examinations. It is not possible to make this list all inclusive, or to include all the material which may be necessary to pass the examinations. All material which is in bold print are publications candidates should focus on for the year 2017 examinations. The majority of the examination questions will come from the items in bold print.

SOURCES OF INFORMATION

Many of the suggested references can be found in public libraries or may be available for review in County Agricultural Commissioners’ Offices. Copies of University publications can usually be reviewed at offices of the Agricultural Extension Service.

The Plant Industry (Food and Agricultural Code extracts) which is shown as a reference on the following pages is a compilation of the following divisions of the Food and Agricultural Code: State Administration (Division 1); Local Administration (Division 2); Plant Quarantine and Pest Control (Division 4); Animal and Poultry Quarantine and Pest Control (Division 5); Vessels and Aircraft Garbage (Division 8); Bee Management and Honey Production (Division 13); Field Crops, Seeds, Seed Potatoes, One-Variety Cotton Districts, and Nursery Stock Grades and Standards (Division 18). This information is also available online at no charge at www.leginfo.ca.gov/calaw.html

*Prices are subject to change.

Last Revision 9/29/2017
SUGGESTED READING LIST

COUNTY AGRICULTURAL INSPECTOR/BIOLOGIST EXAMINATIONS

1. Pesticide Regulation

Items that are in bold print are publications candidates should focus on.

1. California Food and Agricultural Code Extracts Division 6 - Volume One section 11401 - 12500 and Division 7 - Volume 2 section 12501 - 32500, pertaining to Pesticides and Pest Control Operations. Available online: https://leginfo.legislature.ca.gov/faces/codesTOCSelected.xhtml?tocCode=FAC&tocTitle=+Food+and+Agricultural+Code+$FAC

2. Title 3. California Code of Regulations (Pertaining to Pesticides and Pest Control Operations. Available online: www.cdpr.ca.gov/docs/legbills/opramenu.htm

3. Structural Pest Control Act with Rules and Regulations. Available through the Structural Pest Control Board, 1418 Howe Avenue, Sacramento, CA 95825, (916) 263-2544. Make check or money order payable to SPCB. $5.00


6. Methyl Bromide Field Fumigation: Methyl bromide field fumigation regulations which include worksite plans, notification and buffer zone requirements, fumigation methods and worker safety protection. Updated in October 2004. Available online: http://www.cdpr.ca.gov/docs/county/training/methbrom/mebrman.pdf


8. Enforcement Options Chart: The following materials were presented at the 2004 Structural Symposium held in Sacramento on March 23, 24 2004. The materials presented here can be very useful in training new staff on conducting the structural enforcement program. Available online: http://www.cdpr.ca.gov/docs/enforce/pentffrm/pent072.pdf
2. Environmental Monitoring and Investigation

Available from County Agricultural Commissioners’ Offices or Department of Pesticide Regulation, Pesticide Enforcement Branch, 1001 I Street, P.O. Box 4015, Sacramento, California 95812-4015, (916) 323-3885.

Items in bold print are publications candidates should focus on:

1. **Division 6 and 7 of the California Food and Agricultural Code, pertaining to Pesticides and Pest Control Operations:** Available online: [https://leginfo.legislature.ca.gov/faces/codesTOCSelected.xhtml?tocCode=FAC&tocTitle=+Food+and+Agricultural+Code+-+FAC](https://leginfo.legislature.ca.gov/faces/codesTOCSelected.xhtml?tocCode=FAC&tocTitle=+Food+and+Agricultural+Code+-+FAC)

2. **California Code of Regulations, Title 3, Food and Agriculture, Division 6, Pesticides and Pest Control Operations:** Available online: [http://www.cdpr.ca.gov/docs/legbills/calcode/chapter.htm](http://www.cdpr.ca.gov/docs/legbills/calcode/chapter.htm)

3. **Business and Professions Code, Division 3, Structural Pest Control Operators:** Available online: [http://www.pestboard.ca.gov/pestlaw/pestact.pdf](http://www.pestboard.ca.gov/pestlaw/pestact.pdf)

4. **California Code of Regulations, Title 16, Professional and Vocational Regulations, Division 19, Structural Pest Control Board:** Available online: [http://www.pestboard.ca.gov/pestlaw/pestact.pdf](http://www.pestboard.ca.gov/pestlaw/pestact.pdf)

Items 3 and 4 are additionally available as a priced publication in a print version in the form of: **Structural Pest Control Act with Rules and Regulations.** This publication contains applicable Business and Professions Code and Title 16 sections. Contact the Structural Pest Control Board at 2005 Evergreen Street, Suite 1500, Sacramento CA 95815-3831; (916) 263-2544.


8. **Pesticide Use Enforcement Program Standards Compendium:** Available online: [http://www.cdpr.ca.gov/docs/enforce/compend.htm](http://www.cdpr.ca.gov/docs/enforce/compend.htm)

9. **Pesticide Regulation: Enforcement Response Policy (ERP), August 2005 and Enforcement**
Response Regulation (ERR), December 2006:
ERF Available online:
ERR Available online: http://www.cdpr.ca.gov/docs/county/cacitr/penftrs/penf2006/2006036.htm

10. Enforcement Guidelines, Technical Revision, August 2005:
Available online: http://www.cdpr.ca.gov/docs/enfcmpli/guidelines.pdf

11. Memorandum of Understanding Between the Department of Industrial Relations, Department of Pesticide Regulation, and the California Agricultural Commissioners and Sealer Association for Employee Protection at the Pesticide Workplace, Attachment to ENF-93-9.

12. Memorandum of Understanding Between the Department of Pesticide Regulation, the Department of Consumer Affairs, and the California Agricultural Commissioners and Sealer Association Pertaining to Structural Pest Control Activities. Attachment to ENF 98-036.

13. Memorandum of Understanding Between the Department of Fish and Game, the Department of Pesticide Regulation and the California Agricultural Commissioners and Sealer Association, January 26, 1995. Attachment to Pesticide/Wildlife Incident Response Plan, April 2000: Available online:

14. Cooperative Agreement Between the State of California Department of Pesticide Regulation, California Agricultural Commissioners and Sealer Association and the United States Environmental Protection Agency, November 17, 2003:

15. Hearing Officer Roundtable Project, June 2004:
Available online: http://www.cdpr.ca.gov/docs/county/training/hrngofcr/hearofficer.htm

In addition, we recommend reviewing Food and Agricultural Code sections 11735, 12999.5, 12999.6, 13000, and 14008; Business and Professions Code sections 8617 and 8662; 3CCR section 6130; and 16CCR section 1922.


http://ipm.ucanr.edu/IPMPROJECT/ADS/manual_ipminpractice.html


21. Information on specific pest control business and individual license types and requirements is available online: [http://www.cdpr.ca.gov/docs/license/lictypes.htm](http://www.cdpr.ca.gov/docs/license/lictypes.htm)

* DPR Price Publication is available from the Department of Pesticide Regulation, 1001 I Street, P.O. Box 4015, Sacramento California 95814-4015; or call (916) 323-3885. Make checks payable to: "Cashier, Department of Pesticide Regulation." Some of these publications may also be available for review at County Agricultural Commissioner Offices.

** Not Available from DPR. See contact information in description. May be available from: Publications, Division of Agricultural and Natural Resources, University of California, 6701 San Pablo Avenue, Oakland, CA 94608; or call (510) 642-2431. These publications may also be available from: Agricultural Information Publications, University of California, Davis, CA 95616; or call (916) 757-8930. Make checks payable to: "Regents of the University of California" (sales tax is included). In addition, various University of California Agricultural and Natural Resources publications may be ordered online at [http://anrcatalog.ucdavis.edu](http://anrcatalog.ucdavis.edu); some publications may also be available for review or sale at the local County Farm Advisor’s Office.
3. Integrated Pest Management

Items in bold print are publications candidates should focus on.

a. Insect and Disease Pest Management and Biological Control

1. State of California Reference Materials:
   b. California Agricultural Resources Directory.

   Available from the Department of Food and Agriculture, Division of Plant Industry, 1220 "N" Street, Suite 344, Sacramento, California 95814.

2. University of California Reference Materials:

   a. University of California Series - Study Guides for Agricultural Pest Control Advisors:
      - Insects, Mites and Other Invertebrates ...................................................... Pub. 4044
      - Nematodes and Nematicides ................................................................. Pub. 4045
      - Plant Diseases ....................................................................................... Pub. 4046
      - Principles & Methods of Integrated Pest Management ............................ Pub. 3418

   b. University of California Series - Integrated Pest Management for:
      - Alfalfa Hay ............................................................................................ Pub. 4101
      - Almonds .................................................................................................. Pub. 3308
      - Apples & Pears ...................................................................................... Pub. 3340
      - Citrus (2nd Edition) ............................................................................. Pub. 3303
      - Cole Crops & Lettuce ........................................................................... Pub. 3307
      - Cotton ................................................................................................. Pub. 3305
      - Floriculture & Nurseries ...................................................................... Pub. 3402
      - Grapes (2nd Edition) ........................................................................... Pub. 3343
      - Nurseries .............................................................................................. Pub. 3332
      - Pests of the Garden and Small Farm .................................................... Pub. 3332
      - Potatoes ................................................................................................. Pub. 3316
      - Rice ........................................................................................................ Pub. 3280
      - Small Grains .......................................................................................... Pub. 3333
      - Tomatoes ............................................................................................... Pub. 3294
      - Walnuts ................................................................................................. Pub. 3270

   Available from University of California, Division of Agriculture and Natural Resources, 6701 San Pablo Avenue, Oakland, California 94608, (510) 987-0505 or through the County Cooperative Extension Program, 1-800-994-8849 or on the Internet @ http://anrcatalog.ucdavis.edu/.

3. Biological Control & Insect Pest Management:

   Biological Control & Insect Pest Management ........................................ Pub. 4096
   Grape Pest Management ........................................................................... Pub. 3343
   Pear Pest Management ............................................................................. Pub. 4081
   The Safe and Effective Use of Pesticides ................................................ Pub. 3324
   Pests of the Garden and Small Farm ....................................................... Pub. 3332

Integrated Pest Management Continued......
University of California Reference Materials:

a. University of California Series - Study Guides for Agricultural Pest Control Advisors: Insects, Mites and Other Invertebrates ......................................................... Pub. 4044

b. University of California Series - Integrated Pest Management for:

1. Apples & Pears ............................................................................................... Pub. 3340
2. Citrus ............................................................................................................ Pub. 3303
3. Cotton .......................................................................................................... Pub. 3305
4. Walnuts ........................................................................................................ Pub. 3270

Available from University of California, Division of Agriculture and Natural Resources, 6701 San Pablo Avenue, Oakland, California 94608; (415) 642-2431 or through the County Cooperative Extension Program, 1-800-994-8849 or on the Internet at http://anrcatalog.ucdavis.edu.

Other Reference Materials:


d. Biological Control of Insect Pests and Weeds, P. Debach. Chapter 1 and 23.


f. Subtropical Fruit Pests. W. Ebeling. 1959. Chapter 7. (Available from University of California, Division of Agriculture and Natural Resources, 6701 San Pablo Avenue, Oakland, California 94608; (415) 642-2431 or through the County Cooperative Extension Program, 1-800-994-8849 or on the Internet at http://anrcatalog.ucdavis.edu.)

4. Pest Management (Food and Agriculture Code) pertaining to pesticides and pest control operations. Title 3 can be purchased from Barclays Law Library: (415) 244-6611 or available on the internet @ https://leginfo.legislature.ca.gov/faces/codes.xhtml.

5. Other Reference Materials:

a. Destructive & Useful Insects. Metcalf, Flint, & Metcalf
c. Urban Entomology. Walter Ebling

d. MOU, regarding IPM signed by DPR, CACASCA and CDFA, June 15, 2001
b. **Vertebrate Pest Management**

1. Publication 21385, *Wildlife Pest Control Around Gardens and Homes*. Available from University of California, ANR, 6701 San Pablo Avenue, Oakland, California 94608-1239, (530) 642-2431 or through the County Cooperative Extension Program, 1-800-994-8849 or on the Internet @ [http://anrcatalog.ucdavis.edu](http://anrcatalog.ucdavis.edu).

2. **Weed Control**

1. University of California Extension Circulars. Available from Offices of Farm Advisors, County Agricultural Commissioner, public libraries or University of California, ANR, 6701 San Pablo Avenue, Oakland, California 94608-1239, (415) 642-2431. Also available through the County Cooperative Extension Program, 1-800-994-8849 or on the Internet @ [http://anrcatalog.ucdavis.edu](http://anrcatalog.ucdavis.edu).

2. *Weeds of California* by Robbins, Bellue, and Ball. Available at public libraries.


4. **Study Guides for Agricultural Pest Control Advisors:**


   b. *Study Guide 4050: Weed Control*

      Available from local libraries or University of California, ANR, 6701 San Pablo Avenue, Oakland, California 94608-1239, 1-800-994-8849, [http://anrcatalog.ucdavis.edu](http://anrcatalog.ucdavis.edu).


6. *Weed Control Handbook*. Available from University of California, Agricultural Information and Publications, 1441 Research Park Drive, University Services Bldg. #110, Davis, California 95616 (530) 757-8930. $70.00

7. *Pest Ratings of Noxious Weed Species and Noxious Weed Seed*. Available from Department of Food and Agriculture, Integrated Pest Control Branch, 1220 "N" Street, Sacramento, California 95814, and County Agricultural Commissioners Offices. [http://pi.cdfa.ca.gov/weedinfo/synonymstable.htm](http://pi.cdfa.ca.gov/weedinfo/synonymstable.htm)

8. Weed Bibliography: [http://pi.cdfa.ca.gov/weedinfo](http://pi.cdfa.ca.gov/weedinfo)


d. **Apiary Regulations**

1. Plant Industry (Apiary Section) (Food and Agricultural Code extracts.) Available on internet @ [https://leginfo.legislature.ca.gov/faces/codes.xhtml](https://leginfo.legislature.ca.gov/faces/codes.xhtml).

4. Commodity Regulation

1. Fruit and Vegetable Quality Control
   a. Food and Agricultural Code: Division 17 (Fruit & Vegetable Standardization). Available on the internet @ https://leginfo.legislature.ca.gov/faces/codes.xhtml.
   e. California Department of Food and Agriculture, Synopsis of Standardization Codes and Procedures. Available through on the internet @ http://www.cdfa.ca.gov/.

2. Egg Quality Control

Shell Egg Inspection Manual. Available through California Department of Food and Agriculture, Egg Quality Control Program at (916) 445-4243. (Price $25.00)

3. Organic

4. Direct Marketing
5. Pest Prevention and Plant Regulation

Note: Code 475 is used for all portions of the Pest Prevention and Plant Regulation examination.

Items in bold print are publications candidates should focus on.

a. Plant Quarantine and Pest Detection


2. Plant Quarantine Manual, County Pest Exclusion Training Manual and Quarantine Commissioner's Circulars. Available for review at County Agricultural Commissioners' Offices and also online at www.cdfa.ca.gov/pqm.

3. Annual Report for Division of Plant Industry. Available from Department of Food and Agriculture, Pest Exclusion Branch, Suite 344, 1220 "N" Street, Sacramento, California 95814 (Headquarters Office) or district offices.

4. Pest Detection Trapping Guide. Available for review at County Agricultural Commissioners Offices or Department of Food and Agriculture, Pest Detection and Emergency Projects Branch, 1220 "N" Street, Suite 344, Sacramento, California 95814.


b. Nursery and Seed Regulation

A. Nursery Regulation

Fert Prevention and Plant Regulation Continued……

2. Sunset Western Garden Book (Plant nomenclature and characteristics) OR other reference which gives information on characteristics and scientific and common names of horticulturally-important plants.


4. General reading on plant propagation, plant pathology and entomology.

5. Food and Agricultural Code: Sections 5001 to 5010, 6701 to 6970, and 53301 to 53564. Available on internet @ https://leginfo.legislature.ca.gov/faces/codes.xhtml

6. California Code of Regulations: Division 4, Chapter 3, Subchapter 2, Article 10. Sections 3055 through 3055.6, Nursery Stock Nematode Certification; Division 4, Chapter 4, Subchapter 4, Section 3640, Nematodes: Commercially Clean Nursery Stock for Farm Planting. Available on internet @ http://www.calregs.com

B. Seed Regulation

1. The California Seed Law and Regulations. Available from the Department of Food and Agriculture, Pest Exclusion Branch, Nursery, Seed and Cotton Programs, 1220 "N" Street, Suite 344, Sacramento, California 95814.
Document Not Found

We are sorry, but we are unable to locate the document you requested on the Department of Pesticide Regulation website.

The document you requested may have been removed from our website or is currently being updated to meet our latest web posting standards. If you would like a copy of this document, please submit a request for a public record or contact cdprweb@cdpr.ca.gov for a copy of the document.

You can also try the following:

- Use the top navigation and header to browse for information.
- Go to the A-Z Index to see the major topics on our site.
- Use the search box in the top right corner.
- If you typed the file URL rather than cutting-and-pasting it, make sure that it is exactly as it originally appeared. Our site is case-sensitive.
APPENDIX L

SUGGESTED READING LIST

for

COUNTY WEIGHTS AND MEASURES INSPECTOR EXAMINATION

The references listed below may be helpful in preparing for the County Weights and Measures Inspector examinations. It is not possible to make this list all-inclusive, or to include all the material which may be necessary to pass the examinations. Items in bold print are publications candidates should focus on for the year 2012 examinations.

The latest edition of the following material is recommended for all exams.

1. California Business Professions Code (Division V) Extracts
   (Internet address: www.leginfo.ca.gov/cgi-bin/textquery?codesection=hp&codebody=&hits=20)

2. Division 9 "Weights and Measures" (Division of Measurement Standards) Field Reference Manual.

3. Device Enforcement Program Manual (includes the Examination Procedure Outline for Commercial Weighing and Measuring Devices)


7. Division of Measurement Standards Training Module CDROM (available online at www.cdfa.ca.gov/dms at no cost, or from Division of Measurement Standards, 6590 Florin Perkins Road, Sacramento, CA 95828, contact: Karen Green 916-229-3000. Cost: $5.00)

The following material is recommended for the Measurement Verification exam only.

8. Knopp Type FS-9 Portable Unload Test Set, Leaflet & Drawing (Dwg.) Numbers:
   - Knopp Type FS-9 Portable Unload Test Set ................................................................. Leaflet Number 176
   - Schematic Wiring Diagram, Type FS-9 ...................................................................... Dwg. Number 9637
   - Meter Hook-Up for 120V, 2 Wire .............................................................................. Dwg. Number 7750
   - Meter Hook-Up for 240V, 3 Wire .............................................................................. Dwg. Number 7751
   - Meter Hook-Up for 120/208V, 3 Phase, 3 Wire, Network .......................................... Dwg. Number 7752
   Available from Knopp Inc., 1307 - 66th Street, Emeryville, California 94608, (510) 653-1661; (800) 227-1848 (Toll Free); (510) 653-2202 (FAX).


The following material is recommended for the Transaction & Product Verification exam only.

10. Quality Control Program Manual


12. Business and Professions Code, Division 5, Weights and Measures Chapter 7 -- Weighmaster, Chapters 14 and 15 -- Petroleum. [Internet address: www.leginfo.ca.gov ]

13. California Code of Regulations, Title 4, Division 9 chapters 7, 8 and 9. [Internet address: www.calrega.com]
APPENDIX M

Acknowledgment

Developing a training program for weights and measures officials is a challenging and ambitious project. It requires time, dedication, and expertise from many individuals.

It is impossible to list the names of the many people who contributed to the development of this course. However, gratitude is extended to the following group whose dedication and commitment made this training module a reality.

Module Team
David Baier

Editing Team
Dennis Johnson
David Baier
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Production Team
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Angie Annett

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Introduction

Welcome to “Laws and Regulations.” This is the second module in the series “Training for the Weight and Measures Officer.” It will introduce you to the legislative process in California. It will also outline how and where regulations affecting weights and measures law come from.

At the end of each segment in this module you will find a set of self-evaluation questions to test your knowledge. Although you are not required to complete the self-evaluation, we encourage you to take a few minutes to read the questions before moving on to the next segment. Answers are provided at the end of the module. If you are unsure of a response, review the training material and it will give you the information you need.

Module Objectives

When you have completed the module you will know:
- The difference between a law and a regulation.
- How a law becomes a proposed law.
- How a proposed law makes its way through the Legislature.
- What happens to a law after the Legislature passes it and it is sent to the Governor.
- How regulations are proposed and adopted.
- Where weights and measures regulations come from.

How Laws and Regulations Differ

What is a law?

A law is a body of rules of action, adopted by the Legislature, after requiring you to do something or prohibiting you from doing something. The failure to act in accordance with these requirements of a law will subject you to the penalties prescribed therein applied to that law. Laws may be self-executing, which means, or susceptible to interpretation.

Laws that are specific in that they do not need to be interpreted by regulation. For example, "The principal overweighter license fee is $75.00 per year." This type of law is enforceable on its face.

Laws that have a legal effect without the enactment of a regulation. For example, "The Department shall establish specifications for engine exhaust and recycled engine coolant that stimulate the public safety in the operation of motor vehicles." This type of law cannot be enforced unless a regulation is adopted to establish the specifications for engine coolant.

Laws that interpretation may be enforced without regulations, but may need a regulation for its enforcement. For example, "The area between parked cars in a public parking lot shall not be obstructed by a curb or sidewalk." This law is subject to interpretation, but not without a clarifying regulation, the enforcement will become significant difficult.

California weights and measures laws are found in the California Business and Professions Code, Division 9.

Laws and Regulations

The California Constitution separates the powers of the state government into the Legislative, Executive, and Judicial Branches. It also provides that persons charged with the violation of one of these powers may not exercise either of the other two except as permitted by the Constitution. The Constitution vests only the Legislative Branch with the power to make laws (also called statutes) and also reserves the rights of the people to create and change laws through the initiative and referendum processes. The Executive Branch, of which weights and measures is a part, is not given the power to make laws.

What is a regulation?

A regulation generally is a set of guidelines that regulate, implement, or change a law, adopted by the agency responsible for enforcing the law in accordance with the Administrative Procedures Act. The law does not necessarily require the adoption of implementing regulations.

For example, in the case of the public parking lot, what constitutes "adequate space between parked cars?" The agency charged with enforcing the law could write regulations to adopt regulations that clarify the ambiguous statement and make it easier to enforce. A regulation regarding this might state:

"Parking spaces in public parking lots shall be spaced so that side-by-side parked cars are at least 3.0 feet apart. No parking space shall be narrower than the width of an automobile, and no parking space shall be obstructed by a curb or sidewalk that interferes with the use of the space.

California weights and measures regulations are found in the California Code of Regulations, Title 14, Division 9.

A word of caution to the weights and measures official:

As a weights and measures official, you will be provided with various program manuals, operating procedures outlines, and other useful information that explains how to do your job. You must remember that these various manuals are only guidelines to assist you in proper testing procedures, inspection procedures, and办案 procedures. They are not the law and are not given any official status. You may not rely upon these guidelines as part of a notice of violation, a citation (citation to appear), or criminal court filing. You must refer to the Provessional Business and Professions Code and the appropriate Code of Regulations statements. The various manuals may only be used to explain how you performed your inspection, sampling, or testing.
SELF-EVALUATION QUESTIONS

1. How are the powers of state government separated and what are their responsibilities?

2. What is a bill?

3. What is a regulation?

How an Idea Becomes a Law

The process of government by which laws are considered and laws expired or corrected is controlled by the Legislative Process. The California State Legislature, made up of both Senators and Assembly Members, is the state body that makes laws. The California Constitution sets forth the fundamental law by which the State of California is governed. It is divided into a number of sections, each of which has its own specific purpose. The California Constitution is a comprehensive collection of laws that are subject to change.
Self-Evaluation Questions

1. The California State Legislature is made up of how many members with what number of members in each?
2. Who can approve legislation?
3. When do most new laws go into effect?

How a Bill Becomes a Law

California courts have recognized that under the Constitution, the Legislature may by law delegate quasi-legislative powers to a state agency in the Executive Branch so long as adequate safeguards are provided to the State agency. Therefore, every regulatory rulemaking action must be based upon a statutory delegation of rulemaking authority to the Legislature. For instance, Section 11461 gives the Secretary authority to make necessary regulations. This having been said, regulations can be promulgated by a State agency by their own initiative, or on the petition of an individual or business, using the method described in the Government Code Sections 11406.1 and 11461.

Section 11407. Rules and Regulations Authorized

The Director may make such rules and regulations as are reasonably necessary for the purposes of carrying out the provisions of this division.

What does a state agency do once it decides to conduct a rulemaking activity?

First, the agency develops the four documents that are necessary to initiate the formal rulemaking process:

- Proposed Text of the Regulation
- Initial Statement of Reasons explaining the need for the regulation
- Final Impact Statement
- Notice of Proposed Rulemaking

Second, the agency must provide the parties affected by the proposal a 45-day opportunity to submit written, telephonic, or e-mail comments on all or part of the proposed rule.

Third, the agency must make a decision to either approve or disapprove the proposed rule upon the submission of the Notice of Proposed Rulemaking. The Notice of Proposed Rulemaking is published in the California Regulatory Notice Register. The notice also tells interested parties how to obtain access to the proposed text and the initial statement of reasons, and who to contact if they have questions or comments.

A rulemaking agency must summarize and respond to the record in timely comments that are approved at the rulemaking proposal of the procedure followed. The summary and response to comments demonstrate that the agency has understood and considered all relevant material presented to it before adopting, amending, or repealing a regulation. The agency must explain how it amended or revised the proposal to accommodate the comments, or explain the reasons for making no change to the proposal. An agency's summary and response to comments are included as part of the Final Statement of Reasons.
The Rulemaking Process

The process is initiated when a regulation is proposed by the responsible agency. After a public comment period, the rule is finalized and implemented.

Where Weights and Measures Regulations Come From

The American Society for Testing and Materials (ASTM) is an international organization that develops standards for materials, products, systems, and services. The National Institute of Standards and Technology (NIST) provides technical assistance to ASTM committees.

National Conference on Weights and Measures

The National Conference on Weights and Measures (NCWM) is an advisory committee that makes recommendations to the National Institute of Standards and Technology (NIST) on the development of weights and measures regulations. The conference is attended by representatives from federal, state, and local government agencies, as well as the private sector.

Self-Evaluation Questions

1. What is the oversight authority for regulations? (Collective Organization)
2. What is the length of time required for the initial public comment period for a proposed regulation? (Collective Organization)
and interests of affected parties. Specifically, it requires measurable advance notice of contemplated actions, access to be considered for action, and timely or definite recommendations for action, and provides that all interested parties have an opportunity to be heard.

Anyone introducing an issue to one of the committees shall provide the regional weights and measures associations to initially consider its merits. Using the regional associations ensure discussion and evaluation of issues at the grass-roots level by involving the regional member in the development, evaluation, and justification of proposals. The regions include the Central, Northeastern, Southern, and Western Weights and Measures Associations. All issues to be considered by the committees for action at the upcoming regional meeting must be submitted in writing to the committee at least two weeks prior to the meeting. The issues shall be reviewed and revised by the November 1 deadline and automatically placed on the Committee's agenda meeting. The AWMA has two meetings per year, the mid-year meeting in January where the proposals are discussed and worked up into interim rules, and the conference in July when the proposals are voted upon.

**Western Weights and Measures Association**

The Western Weights and Measures Association (WWMA) is made up of weights and measures officials for the following states: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

Issues for changes to weights and measures regulations can come from many different places. In California, it may be the regional division, smaller groups, the regional order groups, the California Agriculture Commissioner’s Weights and Measures Division (CARM), the Division of Measurement Standards, or national boards. Once an idea is developed, it can then be presented to the WWMA for consideration. If the regional association approves the proposal, it can then be incorporated into the WWMA's regulations. This is where we initiate proposals for changes to the various handbooks that we adopt by reference (Handbook 44, Handbook 103, and Handbook 153). Here are examples of this process.

For example, if the committee decides to change the various handbooks that we adopt by reference (Handbook 44, Handbook 103, and Handbook 153), here are two examples of the changes that would be made.

**EXAMPLE (Page 2)**

It was determined that the solution was to amend the definition of "contract sale" to address the current "contract sale" scenario. The language in the new version is almost precisely as presented in the Specifications and Tolerances (S & T) Handbook. The old language had been deleted and the new language was inserted. Under the new definition, the contract sale is defined as a sale where the consumer, club, or person, or some combination of the three, agrees to purchase a product on a fixed price, a price above cost, or an agreement from the producer for a price in the future.

**EXAMPLE (Page 3)**

The current definition of "contract sale" is "a sale where there is a written agreement stating the price as either a fixed price, a price above cost, or an agreement from the producer for a price in the future." This definition is unnecessary and in some cases, it may be misleading. It is not clear from the current definition if the contract sale is intended to cover all sales where there is an agreement for a price in the future.

The current definition of "contract sale" should be "a sale where there is a written agreement stating the price as either a fixed price, a price above cost, or an agreement from the producer for a price in the future."
SELF-EVALUATION QUESTIONS

1. Name three of the five organizations from which the Division of Measurement Standards obtains weight and measures regulations by reference.

2. What is the purpose of the Uniform Laws and Regulations adopted by the National Conference on Weights and Measures?

3. How do ideas for changes to the Uniform laws and Regulations and from California to the National Conference on Weights and Measures?

GLOSSARY

A LISTING OF TERMS AND ACRONYMS MOST COMMONLY USED BY WEIGHTS AND MEASURES OFFICIALS.

ABM – American Society for Testing and Materials

CCASAA – California Agricultural Commissions and Assessors Association

California Business and Professional Code – A body of California law, first enacted in 1931, which regulates the manner in which businesses and professionals conduct their business. Often used in these classes, especially relevant in accounting and measurement and inspection products.

California Code of Regulations – A body of California law that regulates, defines, and carries out provisions of California law. Often used in these classes, specifically Title 4, Division 3.

Legislative Counsel – A nonpartisan public agency that drafts legislative proposals, prepares legal opinions, and provides other informal legal services to the Legislature.

NCSL – National Conference on Weights and Measures

NBS – National Institute of Standards and Technology

Notice of Violation – Written notification of a violation to the violator.

OAL – Office of Administrative Law

Regulation – A rule or order having the force of law issued by the executive branch of government.

Statute – A law enacted by the Legislature.

WMA – Western Weights and Measures Association

BIBLIOGRAPHY AND REFERENCES

American Society for Testing and Materials Web site: www.astm.org

California Legislative Counsel Web site: www.leginfo.ca.gov

California State Assembly Web site: www.assembly.ca.gov

California State Senate Web site: www.senate.ca.gov

National Conference on Weights and Measures Web site: www.ncsl.org

National Institute of Standards and Technology Web site: www.nist.gov

Office of Administrative Law Web site: www.ocal.ca.gov

SELF-EVALUATION ANSWERS

Segment 1

1. The California State Constitution establishes the government into three branches.
   - The legislative – This branch is responsible for making laws.
   - The executive – This is the branch of government that carries out the laws.
   - The judicial – This is the branch that is responsible for the courts and the interpretation of laws.

2. A law is a body of rules adopted by the Legislature, which requires you to do something or prohibits you from doing something.

Segment 2

1. Two houses, the Senate with 40 members and the Assembly with 80 members.
2. A private citizen, a special interest group, or industry.
3. Most new laws take effect on the 1st of January of the next year.

Segment 3

1. The Office of Administrative Law.
2. The initial comment period is 45 days.
SELF-EVALUATION ANSWERS

Segment 4

1. The American Society for Testing and Materials
   The National Conference on Weights and Measures
   The National Institute of Standards and Technology
   The Federal Trade Commission

2. The purpose is to achieve standardization in weights and measures laws and regulations among the various states and local jurisdictions in order to facilitate trade between the states, prevent confusion among businesses, and to provide uniform protection to consumers in commercial transactions. (Page 19)

3. Ideas for changes can come from many different places. They may come from the California Regional Weights and Measures Office through the California Agricultural Commissioner and Sealer-Association at the Director of Measurement Standards. Those proposals are then presented to the Western Weights and Measures Association, where if they are approved, they are forwarded to the NCMAM for discussion and voting. (Page 17)

Training Module 2 Feedback

We would appreciate your taking a few moments to complete our training evaluation feedback form. We welcome your comments and any suggestions you might have regarding Training Module 2. You may E-mail your response to us at SFS@ofs.co.gov or mail to Division of Measurement Standards at 6390 Penin Perkins Road, Suite 100, Sacramento CA 95828-1613.

1. Did this module meet your expectations?
2. What did you like/dislike about this module?
3. What areas would you like to see improved?
4. What specific changes, if any, would you recommend?
5. How could this module be better organized to make it easier to follow and learn from?
6. Was this module too basic or too advanced for someone with an entry level background in weights and measures?
7. Additional comments or suggestions.
Laws and Regulations

The California Constitution separates the powers of State government into three branches
- The Legislative Branch
- The Executive Branch
- The Judicial Branch

Laws and Regulations are Different

What is a law?
- A body of rules of action
- Adopted by the Legislature
- Requiring you to do something or prohibiting you from doing something
- May have penalties attached

Types of Laws

- Self-Executing
  "The principal weighmaster license fee is $70.00 per year."
  This type of law is enforceable on its face.
- Wholly Enabling
  "The Department shall establish and regulate engine emission standards to promote the public safety or health of motor vehicles."
  This type of law cannot be enforced until a regulation is adopted.
- Susceptible
  "There shall be adequate space between parked cars in a public parking lot."
  This law could be enforced on a case-by-case basis, but the enforcement would present significant difficulties.

Regulations

What is a Regulation?
- Guidelines that are adopted by the agency responsible for enforcing the law, interpreting the law, implementing the law, and/or clarifying the law
- Adopted in accordance with the Administrative Procedures Act (APA) through the Office of Administrative Law (OAL)

Words of Caution to Weights and Measures Officials

- Program manuals and Examination Procedures Outline (EPO) are only guidelines to assist you with your job
- Program manuals and EPO are not the law
- They cannot be referenced as violations when issuing a Notice of Violation, or writing a citation, criminal or civil case
- You need to reference the correct Business and Professions Code or the California Code of Regulations section

How Does an Idea Become a Law?

- Idea or concept
- Sponsor
- Author
- Legislative Process
- Governor
- Secretary of State
From Idea to Law

The Rulemaking Process

OAL’s Review Process

The Rulemaking Process

Weights and Measures Regulations

Input Sources for Weights and Measures Regulations

For additional information about the ‘Rulemaking Process’, visit OAL’s website at http://www.oal.ca.gov.

Are found in the California Code of Regulations, Title 4, Division 9

Many are adopted from another organization’s standards, publications or handbook

- ASTM
- SAE
- NST
- FTC
- NHTSA – US DOT

Western Weights and Measures Association (WWMA)

- Ideas for changes come from regional dealers, industry, or citizens
- Ideas, if changes to HB 44, HB 130, are presented to the WWMA for discussion and consideration

National Conference on Weights and Measures (NCVM)

- Proposals from regional associations are presented to the National Conference for discussion and voting. If passed, the amendment or addition is adopted into HB 44, HB 130, or HB 1230
DIVISION OF MEASUREMENT STANDARDS

Training Modules

Training Modules are available to weights and measures officials on the DMS County Portal.

Quick Links

- File a Complaint
- Listing of Public Scales
- Online Weighmaster Renewal
- Hydrogen Fuel
- Developmental Fuel Variances
- DMS Policy and Procedural Guidelines (DMS Notices)
APPENDIX P

My Drive  ➔  County Licensing Exam Preparation  ➔  Agriculture

My Drive  ➔  County Licensing Exam Preparation  ➔  Weights and Measures

My Drive  ➔  County Licensing Exam Preparation  ➔  Agriculture  ➔  Commodity Regulation

My Drive  ➔  County Licensing Exam Preparation  ➔  Agriculture  ➔  Integrated Pest Management

My Drive  ➔  County Licensing Exam Preparation  ➔  Agriculture  ➔  Investigation and Environmen...
APPENDIX Q

TRAINING & RESOURCES

INFORMATIONAL RESOURCES TO HELP YOU ADVANCE YOUR CAREER

PESTICIDE REGULATION

Topics & Resources:
- Laws and Regulations
  - Answer Sheet (Blank)
- Notes and Presentations:
  - Pesticide Safety – A Reference Manual for Private Applicators
  - Typical this can be found within a department, but you may also order it online.
  - Notes on Pesticide Regulation – Beyer (Santa Barbara County)
- Calculations:
  - Nutrition & Fertility – Texas A&M
  - Fertilizer Calculations for Greenhouse Crops – University of Massachusetts Amherst
  - Fertilizer Calculations ppm – Keeler (Auburn University)

Download Resources

INTEGRATED PEST MANAGEMENT

Topics & Resources:
- Principles of IPM
  - Integrated Pest Management – Larson (CEU Framm)
  - Economic Injury Level and Threshold in IPM – Hunt (Extension)
- Vertebrate Pests
  - Vertebrate Pests – CDFA
  - Vertebrate Pests – Hortpiker (CDFA)
  - Common Diseases Associated with Vertebrate Pests
  - UC IPM Guide on Rats – UC IPM
- Quick Reference Birds
- Quick Reference Mammals

Download Resources
INVESTIGATION & ENVIRONMENTAL MONITORING

Topics & Resources:
- Regulation and Code
  - FAQs
  - Division 6
  - Division 7
  - California Code of Regulations
    - Title 3, Division 6
      - Title 16
        - Business and Professions Code Title 3, Structural Pest Control Operators
        - Additional DPR Regulations
          - https://www.cdpr.ca.gov/docs/enforce/compandreg/2rexempt.htm
          - Memorandum of Understandings (MOU)
          - MOU Employee Protection at the Pesticide Workplace
          - MOU Pesticide Wildlife Incident Response Plan
          - List of Casable Sections (Code) - DPR
          - Investigation Techniques and Guidelines
            - A Guide to Pesticide Regulation in California - DPR
            - Investigation Procedures, Vol 5 - DPR
            - Preparing for Your Administrative Pesticide Penalty Hearing Except - DPR
            - Notes for Investigation and Environmental Monitoring
          - Enforcement
            - Enforcement Response Policy - DPR and CACASA
            - Enforcement Guidelines: A Uniform Approach - DPR and CACASA
          - Additional Resources
            - How to Manage Pests - UC IPM
*NOTE* Material in the Pesticide Regulation and/or Integrated Pest Management sessions may be useful for this training examination as well.
Download Resources

COMMODITY REGULATION

Topics & Resources:
- Regulation and General
  - Commodity Regulations and Certified Farmers Market - Abdel-Fattah (LA County)
  - Fruits & Vegetables Standardization - CDFA
  - 40CFR 200.1700
- Labeling and Standardization
  - Labeling Requirements
  - Symposium of Standardization - CDFA (August 2018)
- Certified Farmers Market/Organics
  - CACF Basic Info and New Regulation Changes
  - Organic Study Session - County of Los Angeles
  - Organic Labeling at Farmer's Markets - USDA National Organic Program
  - Guide to Organic Certification - USDA
- Eggs
  - Shell Eggs - Abdel-Fattah (LA County)
  - Egg Materials Study Guide
  - Egg Defense - CDFA
Download Resources
PEST PREVENTION AND PLANT REGULATION

Topics & Resources:
- Regulation and Code
  - NRS Title 7, Chapter 2
  - Oregon Administrative Code 630-090.060
  - Oregon Administrative Code 630-090.040
- Plant Quaranine
  - Plant Quarantine Manual Quick Reference - CDFA
  - Memorandum of Understanding Packet - CARAS
- Quarantine
  - Quarantine Training Study Guide for County, Licensing Examination – Washington (CDFA)
  - Quarantine Training Study Guide – Washington (CDFA)
- Pest Detection
  - Pest Detection - Detect Pest Class - Lamin (LA County)
  - Pest Detection - Detect Pest Class - Bronx (NY County)
- Pest Detection Study Guide
- Nursery and Seed Law
  - Nursery & Seed Law Presentation – Kerr, Akin (CDFA)
  - Seed and Nursery Verification Study Guide – Kansas (CDFA)

Download Resources

TRANSACTION & PRODUCT VERIFICATION

Topics & Resources:
- Regulations and General Codes
  - NIST Handbook 120
  - NIST Handbook 133
  - Quantity Control Program Manual 2005 (Older edition)
  - NIST Handbook 120
- Business and Professional Codes, Chapter 14, Article 1
  - Study Guide for Sections 1500, 1520
- Quantity Control
  - Quantity Control Program – Study Guide – CDFA and DNS
  - Quantity Control Program – Study Guide – CDFA and DNS
  - Quantity Control Program – Study Guide – CDFA and DNS
- Petroleum
  - Petroleum Enforcement Manual (CDFA)
  - Petroleum Quick Reference
- Specific Relevant DNS Training Modules
  - 12- Petroleum Products (Presentation / Text)
  - 13- Quantity Control (Presentation / Text)

Download Resources

MEASUREMENT VERIFICATION

Topics & Resources:
- Regulations and General Code
  - CCR Title 4, Division 9
  - Divorce Enforcement Program Manual
  - NIST Special Publication 200
- Business and Professional Codes, Chapter 14, Article 1
  - Sections 3, 4, & 5
- Training
  - Measuring Device Training – Paul Jordan (DNS)
  - Electronic Device Training – Paul Jordan (DNS)
- Specific DNS Training Modules
  - 10- Measuring Devices (Presentation / Text)

Download Resources
WEIGHT VERIFICATION

Resources:
- Regulations and General Code
  - California Business and Professions Code - Section 12500-12517
- COR Title 5, Division 9
- Device Enforcement Program Manual
  - ERG Tolerance Tables (0.1 to 3.0)
  - Shift Test Positions (A-F)
- California Code of Regulations - Table 6 - Tolerance Values
- Slides
  - State Inspection Training Notes from LA County Presentation of Paul Jordan
  - Weight Verification - Notes Sheet
- Weightmaster Enforcement
  - Business and Professions Code - Weightmaster - Chapter 7
  - Weightmaster Enforcement Program Manual
- CA Weightmaster Program - Overton (ICRAI - DMS)
- Weightmaster Enforcement - Camarillo (LA County)
- Specific DMS Training Modules
  - 9 - Weighing Devices (Basket / Text)
  - 11 - Weightmaster Enforcement (Basket / Text)

Download Resources

TERMS OF SERVICE
LAST UPDATED: DECEMBER 10, 2019

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APPENDIX R
EXECUTIVE DEPARTMENT
STATE OF CALIFORNIA

EXECUTIVE ORDER N-33-20

WHEREAS on March 4, 2020, I proclaimed a State of Emergency to exist in California as a result of the threat of COVID-19; and

WHEREAS in a short period of time, COVID-19 has rapidly spread throughout California, necessitating updated and more stringent guidance from federal, state, and local public health officials; and

WHEREAS for the preservation of public health and safety throughout the entire State of California, I find it necessary for all Californians to heed the State public health directives from the Department of Public Health.

NOW, THEREFORE, I, GAVIN NEWSOM, Governor of the State of California, in accordance with the authority vested in me by the State Constitution and statutes of the State of California, and in particular, Government Code sections 8567, 8627, and 8665 do hereby issue the following Order to become effective immediately:

IT IS HEREBY ORDERED THAT:

1) To preserve the public health and safety, and to ensure the healthcare delivery system is capable of serving all, and prioritizing those at the highest risk and vulnerability, all residents are directed to immediately heed the current State public health directives, which I ordered the Department of Public Health to develop for the current statewide status of COVID-19. Those directives are consistent with the March 19, 2020, Memorandum on Identification of Essential Critical Infrastructure Workers During COVID-19 Response, found at: https://covid19.ca.gov. Those directives follow:

ORDER OF THE STATE PUBLIC HEALTH OFFICER
March 19, 2020

To protect public health, I as State Public Health Officer and Director of the California Department of Public Health order all individuals living in the State of California to stay home or at their place of residence except as needed to maintain continuity of operations of the federal critical infrastructure sectors, as outlined at https://www.cisa.gov/Identifying-critical-infrastructure-during-covid-19. In addition, and in consultation with the Director of the Governor’s Office of Emergency Services, I may designate additional sectors as critical in order to protect the health and well-being of all Californians.

Pursuant to the authority under the Health and Safety Code 120125, 120140, 131080, 120130(c), 120135, 120145, 120175 and 120130, this order is to go into effect immediately and shall stay in effect until further notice.

The federal government has identified 16 critical infrastructure sectors whose assets, systems, and networks, whether physical or virtual, are considered so vital to the United States that their incapacitation or
destruction would have a debilitating effect on security, economic security, public health or safety, or any combination thereof. I order that Californians working in these 16 critical infrastructure sectors may continue their work because of the importance of these sectors to Californians’ health and well-being.

This Order is being issued to protect the public health of Californians. The California Department of Public Health looks to establish consistency across the state in order to ensure that we mitigate the impact of COVID-19. Our goal is simple, we want to bend the curve, and disrupt the spread of the virus.

The supply chain must continue, and Californians must have access to such necessities as food, prescriptions, and health care. When people need to leave their homes or places of residence, whether to obtain or perform the functions above, or to otherwise facilitate authorized necessary activities, they should at all times practice social distancing.

2) The healthcare delivery system shall prioritize services to serving those who are the sickest and shall prioritize resources, including personal protective equipment, for the providers providing direct care to them.

3) The Office of Emergency Services is directed to take necessary steps to ensure compliance with this Order.

4) This Order shall be enforceable pursuant to California law, including, but not limited to, Government Code sections 8665.

IT IS FURTHER ORDERED that as soon as hereafter possible, this Order be filed in the Office of the Secretary of State and that widespread publicity and notice be given of this Order.

This Order is not intended to, and does not, create any rights or benefits, substantive or procedural, enforceable at law or in equity, against the State of California, its agencies, departments, entities, officers, employees, or any other person.

IN WITNESS WHEREOF I have hereunto set my hand and caused the Great Seal of the State of California to be affixed this 19th day of March, 2020.

GAVIN NEWSOM
Governor of California

ATTEST:
ALEX PADILLA
Secretary of State
APPENDIX T

November 2019/December 2019 – IN-SERVICE TRAINING FOR STATE LICENSING EXAMS

** PLEASE SUBMIT FORM TO HUMAN RESOURCES 1 WEEK PRIOR TO TRAINING DATE **

### AGRICULTURAL SPECIALTIES

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Subject</th>
<th>Location</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/19/2019</td>
<td>1:00 p.m. – 3:30 p.m.</td>
<td>Nursery and Seed Regulation</td>
<td>Arcadia</td>
<td>Leo Cortez (CDFA)</td>
</tr>
<tr>
<td>11/19/2019</td>
<td>9:30 a.m. – 11:30 a.m.</td>
<td>Plant Quarantine</td>
<td>Arcadia</td>
<td>Nara Mnatsakanian (CDFA)</td>
</tr>
<tr>
<td>12/02/2019</td>
<td>10:30 a.m. – 11:30 a.m.</td>
<td>Pest Detection</td>
<td>Arcadia</td>
<td>Geoff Burch, Khoa Lam</td>
</tr>
</tbody>
</table>

### PESTICIDE REGULATION

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Subject</th>
<th>Location</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/02/2019</td>
<td>8:00 a.m. – 10:00 a.m.</td>
<td>Pesticide Regulation</td>
<td>Arcadia</td>
<td>Erin Zavala</td>
</tr>
</tbody>
</table>

### COMMODITY REGULATION

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Subject</th>
<th>Location</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/21/2019</td>
<td>8:00 a.m. – 12:30 p.m.</td>
<td>Commodity Regulation</td>
<td>South Gate</td>
<td>Ibrahim Abdel-Fatah</td>
</tr>
</tbody>
</table>

### INTEGRATED PEST MANAGEMENT

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Subject</th>
<th>Location</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/04/2019</td>
<td>10:30 a.m. – 12:30 p.m.</td>
<td>Plant Disease Management</td>
<td>South Gate</td>
<td>Jerold Turney</td>
</tr>
<tr>
<td>12/04/2019</td>
<td>1:30 p.m. – 2:30 p.m.</td>
<td>Insect Pest Management</td>
<td>South Gate</td>
<td>Juan Limon</td>
</tr>
</tbody>
</table>

### INVESTIGATION AND ENVIRONMENTAL MONITORING

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Subject</th>
<th>Location</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/02/2019</td>
<td>2:00 p.m. – 4:00 p.m.</td>
<td>Investigation &amp; Environmental Monitoring</td>
<td>Arcadia</td>
<td>TBA</td>
</tr>
</tbody>
</table>

### WEIGHTS & MEASURES SPECIALTIES

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Subject</th>
<th>Location</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/12/2019</td>
<td>8:00 a.m. – 9:30 a.m.</td>
<td>Weightmaster</td>
<td>South Gate</td>
<td>Pilar Carrillo</td>
</tr>
<tr>
<td>12/12/2019</td>
<td>9:30 a.m. – 12:00 p.m.</td>
<td>Weighing Devices</td>
<td>South Gate</td>
<td>Hermes Angeles</td>
</tr>
</tbody>
</table>

### TRANSACTIONS AND PRODUCT VERIFICATION

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Subject</th>
<th>Location</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/16/2019</td>
<td>8:00 a.m. – 10:00 a.m.</td>
<td>Petroleum Products</td>
<td>South Gate</td>
<td>Ardeshir Famili</td>
</tr>
<tr>
<td>12/16/2019</td>
<td>11:00 a.m. – 1:00 p.m.</td>
<td>Quantity Control of Packaged Commodities</td>
<td>South Gate</td>
<td>Pilar Carrillo</td>
</tr>
</tbody>
</table>

### MEASUREMENT VERIFICATION

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Subject</th>
<th>Location</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/19/2019</td>
<td>8:00 a.m. – 11:00 a.m.</td>
<td>Measuring Devices &amp; Compressed Gases</td>
<td>South Gate</td>
<td>Kanit Vittayawongvanch</td>
</tr>
<tr>
<td>12/19/2019</td>
<td>1:00 p.m. – 3:00 p.m.</td>
<td>Electric Measuring Devices</td>
<td>South Gate</td>
<td>Edgar Lobst</td>
</tr>
</tbody>
</table>

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TO: Tanya Marchese
TMarchese@acwrm.browncounty.gov
Phone: (626) 575-5464
Fax: (626) 652-0780

FROM:                   EMP NO: __________________________
(Print Name)             COUNTY: __________________________
PHONE #: __________________
E-Mail: __________________

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AGRICULTURAL SPECIALTIES

- 12/02/2019 Pest Detection
- 11/19/2019 Plant Quarantine
- 11/19/2019 Nursery & Seed Regulation
- 12/02/2019 Pesticide Regulation
- 11/21/2019 Commodity Regulation
- 12/04/2019 Plant Disease Management
- 12/04/2019 Insect Pest Management
- 12/18/2019 Apiary Regulation
- 12/18/2019 Vertebrate Pest Management/ Wood Control
- 12/02/2019 Investigation & Environmental Monitoring

WEIGHTS & MEASURES SPECIALTIES

- 12/12/2019 Weightmaster
- 12/12/2019 Weighing Devices
- 12/16/2019 Petroleum Products
- 12/16/2019 Quantity Control of Packaged Commodities
- 12/19/2019 Measuring Devices & Compressed Gases
- 12/19/2019 Electric Measuring Devices

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Submit Registration Form 1 Week Prior to Training Date

Revised 10/30/2019
Wednesday, February 26, 2020

CASAP Membership,

It has been an honor to serve as the 2019 President for the CASAP Organization. I look forward to working with the new leadership in providing continuity, support and guidance as we move forward into 2020. I would like to thank each of you for being members and supporting this organization. As members of this organization I would like to encourage you to reach out to the Board if there are specific topics, speakers or trainings that you feel would benefit the organization. One of the first tasks of the new Board of Directors will be planning and hosting the North Mock Orals. Please join me in welcoming the new Board of Directors.

It is my pleasure to announce the 2020 CASAP Board of Directors:

President: Jose Arriaga (Contra Costa County)
VP North: Alex Nguyen (Solano County)
VP South: Ameer Atrash (Ventura County)
Treasurer: David Brown (Yolo County)
Secretary: Mary Canehola (Stanislaus County)
Webmaster: David Navarro (San Diego County)
Members at Large:
- Rudy Valencia (Riverside County)
- Christopher Greer (Tulare County)
- Molly Miller (Santa Barbara County)
- Monica Winters (San Diego County)
- Ryan Fernandez (Placer County)
Past President: Katherine Vanderwall (Lake County)

Katherine Van Der Wall
Deputy Agricultural Commissioner
Deputy Sealer of Weights & Measures
Lake County Department of Agriculture/Weights & Measures
883 Lakeport Blvd
Lakeport, CA 95453
(707) 993-0217
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“Suggested Reading List for County Agricultural Inspector/Biologist.” California Department of

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“Training Module Two: Laws and Regulations.” California Department of Food and Agriculture

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