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# Agriculture-Related Disasters: Guidance Document for Local Government

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July 2012

# **Agriculture-Related Disasters: Guidance Document for Local Government**

## **Table of Contents**

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**Introduction**

**Roles & Responsibilities**

**Assistance Following An Agriculture-Related Disaster**

**Protecting Public Health & Safety**

**Community Based Organizations**

**Mass-Casualty Decontamination Guidance Overview**

**Integration of Planning Efforts**

**Attachments**

Attachment A - Crop Loss Assessment Process

Attachment B - California County Agricultural Commissioner Disaster  
Report and Instructions for Completion

Attachment C – Acronym List

# Agriculture-Related Disaster Guidance

## INTRODUCTION

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### **PURPOSE**

This document was developed by the Office of Emergency Services, in collaboration with the California Department of Food and Agriculture (CDFA) to fulfill the mandate of Senate Bill 2104, which required the OES to develop a “guidance document” to the State Emergency Plan (SEP) addressing eleven aspects of concern to the agriculture industry by January 2002. Assembly Bill 38 (Nava) required these guidelines be updated by January 2009. The guidance was written to include the following eleven aspects:

- a. roles and responsibilities of the county agriculture commissioners;
- b. roles and responsibilities of the CDFA and other relevant state agencies;
- c. crop damage assessments;
- d. disaster assistance between the time of a request for a federal disaster declaration and a federal declaration;
- e. state assistance in the absence of a federal declaration;
- f. state assistance under a U.S. Department of Agriculture (USDA) designation;
- g. state assistance for long-term unemployment in areas with high unemployment rates;
- h. removal and elimination of extraordinary numbers of dead livestock;
- i. development of an integrated and coordinated response by community-based organizations;
- j. procedures for the decontamination of individuals exposed to hazardous materials; and
- k. integration of various local and state emergency response plans, including, but not limited to, plans that relate to hazardous materials, oil spills, public health emergencies, and general disasters.

The SEP defines the emergency management system used for all emergencies in California. It describes the California Emergency Organization which provides the Governor access to public and private resources within the State in times of emergency. It is supported by other plans and operating procedures that address specific contingencies, such as those relating to agriculture.

### **SCOPE**

This Guidance is intended as a reference document to assist local emergency responders with planning for an agricultural-related disaster, including the response and recovery phases of an event. More comprehensive guidance and assistance can be found in plans and procedures mentioned in this Guidance. It is anticipated that additional agricultural disaster plans and procedures will be developed at various levels of government using this Guidance as a resource and that these future documents will include private sector involvement as needed.

# Agriculture-Related Disaster Guidance

## INTRODUCTION

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### **CONTENT**

The eleven items listed in SB 2104 to be included in the “guidance document” are organized under the following major headings:

- Roles and Responsibilities
- Assistance Following An Agriculture-Related Disaster
- Protecting Public Health & Safety
- Community Based Organizations Involvement During Agriculture-Related Disasters
- Mass-Casualty Decontamination Guidance Overview
- Integration of Planning Efforts
- Attachments

# Agriculture-Related Disaster Guidance

## ROLES AND RESPONSIBILITIES

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In this section, information is provided on the day-to-day role of County Agricultural Commissioners (CAC) and their responsibilities during an agriculture-related disaster. This is followed by a description of various governmental agencies that may have a role during agriculture-related disasters and how they would coordinate with each other. Also included is how damage assessments are carried out.

### **ROLE OF COUNTY AGRICULTURAL COMMISSIONERS (CAC)**

The California Legislature first established the county agricultural commissioner system in 1881. Under the original act, the position was referred to as County Horticultural Commissioner and was charged with protecting and promoting horticultural interests of the state.

Since that time, not only has the name changed but the duties and responsibilities have greatly expanded. Today, the county CACs and staff are local enforcement agents for the CDFA and California Department of Pesticide Regulation.

CACs are licensed by the CDFA and are appointed by their respective county board of supervisors. CACs manage programs and agricultural enforcement activities at the county level as mandated by the California Food and Agricultural Code and the California Business and Professions Code. Chief among these duties is protection of consumers and the environment.

Environmental protection programs safeguard agriculture and the public. This is accomplished by pest prevention activities – exclusion, detection, management and eradication – as well as pesticide regulation enforcement. During an agriculture-related disaster, the CACs are responsible for assessing damage and creating reports based on that damage. There is a process in place that CACs use in determining the extent of damages to crops in their counties. These procedures are outlined in the *County Agricultural Commissioners Handbook*. Attached to this document is a flowchart that describes the process for crop loss notification and assessment (Attachment A). Also attached is a copy of a sample California County Agricultural Commissioner Disaster Report (Attachment B).

Consumer protection entails regulating the quality of eggs, fresh fruits and vegetables; certifying local farmers' markets; regulating organic producers; monitoring conditions of nursery products; and assuring the purity and viability of agricultural seed. CACs also provide apiary (bee-keeping) services upon request.

# Agriculture-Related Disaster Guidance

## ROLES AND RESPONSIBILITIES (Cont'd)

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In addition to these important functions, most CACs also serve as sealers of weights and measures. In this capacity, they perform regulatory testing of weighing and measuring devices. In order to carry out this charge, it is necessary to maintain certified standards that are traceable to the National Institute of Standards and technology. Equity in the marketplace and protection of the public are accomplished by enforcing accuracy of net content statements, specialized measurements, petroleum advertising and weighmaster enforcement.

Some CACs may also have the added responsibilities of air pollution control, underground storage tank inspection, hazardous materials programs, as well as occasionally working on land use planning issues and right-to-farm ordinances.

In promoting agriculture and protecting the public and environment, the CAC's roles and responsibilities continue to create public value and trust.

All 58 counties in California have an agricultural commissioner and sealer however; a few counties have a shared commissioner. For contact information, refer to *Contact Information for California Agricultural Commissioners & Sealers* on CDFA's website at <http://www.cdfa.ca.gov/exec/county/countymap/>

### **GOVERNMENTAL ROLES DURING AGRICULTURE-RELATED DISASTERS (AND OTHER DISASTER TYPES)**

The Cal OES may receive a disaster notification in the form of a local proclamation or a letter of request from the affected city or county government. If the disaster conditions are or are likely to be beyond the capabilities of the local jurisdiction, the disaster notification may include a request for assistance from available state and/or federal programs.

As a result of the request for assistance, the Cal OES Recovery Division facilitates the collection of initial damage information relating to local infrastructure damage (roads, bridges, public facilities, etc.) as well as personal and real property estimates, agriculture losses and damages, unemployment information, and economic impact data. Cal OES may communicate with its regional offices, local agencies in the affected area, County OES coordinators, CACs, and other appropriate state agencies (such as, the Employment Development Department, Department of Public Health, CDFA, California Department of Forestry and Fire Protection, etc.). The Recovery Division's Individual Assistance (IA) Branch may also initiate informal contact with the USDA, U.S. Small Business Administration (SBA), and the Federal Emergency Management Agency (FEMA) to discuss disaster impacts to individuals, businesses, ranchers, and farmers, as well as the availability of federal short-term and long-term recovery assistance.

# Agriculture-Related Disaster Guidance

## ROLES AND RESPONSIBILITIES (Cont'd)

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In some instances, a preliminary on-site damage assessment may be coordinated by Cal OES, comprised of local, state, and federal officials to determine the extent of public infrastructure and real and personal property damage. The data collected is reviewed by Cal OES and based on the nature and extent of the disaster damage a determination is made regarding the types of programs needed for recovery.

If agriculture is the only form of damage being reported, the Cal OES IA Branch works with local CACs to collect crop loss and/or physical loss information. If it appears that damages meet the threshold, Cal OES sends a written request to the Secretary of USDA for a USDA Secretarial Disaster Designation. Once a designation is approved, Cal OES notifies all appropriate local government officials. In addition to this designation, SBA will make available its economic injury disaster loan program to agriculture-related businesses and some private non-profits impacted by the disaster. These businesses include, but are not limited to, truck drivers, packinghouses, and suppliers, etc.

Historically, nearly all agriculture-related disasters only require the coordination of USDA and SBA assistance. However, Cal OES works with the impacted local jurisdiction, as well as other state and federal agencies as appropriate, based on the disaster recovery needs of an impacted community. For agriculture-related disasters, as with all disasters, Cal OES coordinates local, state, and federal resources that may be appropriate for the situation.

# Agriculture-Related Disaster Guidance

## ASSISTANCE FOLLOWING AN AGRICULTURE-RELATED DISASTER

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### STATE AND FEDERAL ASSISTANCE

#### *California Governor's Office of Emergency Services (Cal OES)*

When an agriculture-related disaster results in extraordinary impacts to a community, the Cal OES Recovery Division, IA Branch coordinates the request and implementation of additional local, state, and federal disaster relief programs and resources. Based on the community needs, all available resources are assessed for appropriateness; such as special/emergency legislation, special funding sources, etc. The purpose of providing a comprehensive and integrated recovery operation is to maximize resources, which in some instances may be limited, and ensure a community's short-term and long-term unmet needs are addressed.

A Local Assistance Center (LAC) may be opened by local government with or without a Presidential declaration and modified to meet the needs of the disaster. The purpose of the LAC is to provide services and referrals in one central location for those whose homes, personal property, businesses or farms have suffered damages, or economic recovery programs in disasters that result in a high number of unemployment (such as a freeze or a drought).

Examples of utilizing appropriate resources:

- Multiple LACs were locally operated and staffed by local, state, and federal agency representatives as well as volunteer organizations for the 1998 Valley Freeze which was declared a major disaster by the President of the United States. This declaration included two federally funded programs - Disaster Unemployment Assistance (DUA) and Crisis Counseling programs;
- A LAC was locally operated and staffed primarily by volunteer agencies and local government agency representatives for the 2001 Siskiyou/Modoc County Drought, which was an USDA designation/SBA-only related declaration.
- EDD One-Stop Centers was utilized and staffed by local, state, and nonprofits for the 2007 Valley Freeze which was declared a major disaster by the President of the United States. This declaration included DUA.

A Guide for Establishing a Local Assistance Center is available on-line at <http://www.caloes.ca.gov/PlanningandPreparedness/Pages/Documents-and-Publications.aspx>

NOTE: Historically most incidents resulting in agricultural and business losses have only required USDA/SBA assistance.

For additional information on Individual and Public Assistance following an agriculture-related disaster, see the Foreign Animal Disease Emergency Response Executive Overview (Updated January 2006), available on the CDFA website at [http://www.cdfa.ca.gov/ahfss/Animal\\_Health/pdfs/Overview\\_FAD\\_Response\\_1.pdf](http://www.cdfa.ca.gov/ahfss/Animal_Health/pdfs/Overview_FAD_Response_1.pdf).



# ***Agriculture-Related Disaster Guidance***

## **ASSISTANCE FOLLOWING AN AGRICULTURE-RELATED DISASTER**

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### ***Employment Development Department***

The Employment Development Department (EDD) is responsible for administering California's unemployment insurance (UI) program. For long-term unemployment in areas with high unemployment prior to an emergency, the UI program provides benefits to individuals who are unemployed due to no fault of their own, which in turn provides an economic stimulus to local communities. Additionally, when a potential for a disaster occurs, such as an agriculture-related disaster, the EDD tracks the claims of individuals affected by the potential disaster to help determine if there is a need to request the federal DUA program.

EDD and its local partners offer a wide variety of employment services to job seekers and employers at One-Stop Career Centers and EDD Workforce Services Offices throughout the State. Using these job search and training services, job seekers with a legal right to work in the United States can connect with thousands of available jobs through the automated system CalJOBS. Additional information can be found at [www.edd.ca.gov](http://www.edd.ca.gov).

### **INSTRUCTIONS FOR REQUESTING A U.S. DEPARTMENT OF AGRICULTURE (USDA) SECRETARIAL DISASTER DESIGNATION**

Agricultural disasters caused by drought, flood, fire, freeze, winds, and other calamities substantially affect farmers and ranchers throughout California every year. The following sequence of events provides information for requesting a USDA Secretarial designation.

*Each county should determine which entity (e.g., Board of Supervisors, County Emergency Services Manager, or County Agricultural Commissioner's Office) has the lead in coordinating a request for a USDA Secretarial designation. A local proclamation of an emergency is not required to request an USDA Secretarial designation; therefore, the Board of Supervisors' involvement in this procedure will differ from county to county. However, each county should establish a coordination plan to ensure that the applicable parties are aware of the situation.*

- A natural disaster causes severe physical property or production losses adversely affecting local farmers, ranchers, and/or aquaculturists.
- The county (typically the County Agricultural Commissioner) informs the California Governor's Office of Emergency Services (Cal OES) of the situation. The Cal OES Individual Assistance (IA) Branch will provide the county with a copy of the *California County Agricultural Commissioner Disaster Report* form, technical assistance, and follow up with any request for assistance, if necessary.

# Agriculture-Related Disaster Guidance

## ASSISTANCE FOLLOWING AN AGRICULTURE-RELATED DISASTER

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- The county has 60 days from the end of the incident to request a USDA disaster designation through Cal OES.
- The county submits a letter to the Director of Cal OES requesting the state to pursue a USDA disaster designation on behalf of the county, including a completed *California County Agricultural Commissioner Disaster Report* form(s).
- Cal OES IA Branch will review the request and coordinate with the USDA State Office.
- If damage estimates warrant a request to USDA, Cal OES will compose a letter to the USDA Secretary of Agriculture requesting implementation of the Emergency Loan Program.
- Cal OES must submit the request to USDA no later than 3 months from the end of the incident.
- The USDA Secretary's office notifies the USDA State Office in Davis of the request and asks for a Loss Assessment Report (LAR).
- USDA State office requests the local Farm Services Agency (FSA) office, in conjunction with the Agricultural Commissioner, to complete the LAR.
- FSA will work with local USDA agencies and other federal, state, and local agricultural agencies, as appropriate, to conduct an assessment of crop and production losses to complete the LAR.
- The LAR is submitted to the State FSA office. State FSA will review the LAR and then make a recommendation to the USDA Secretary.
- The USDA Secretary will either approve or deny the request and notify the State.
- Cal OES will notify the County Board of Supervisors, County OES, and County Agricultural Commissioner of the decision.
- If the request is approved, the county FSA office notifies farmers, ranchers, and aquaculturists of the availability of the emergency loans and any other USDA assistance that may be available.

# Agriculture-Related Disaster Guidance

## ASSISTANCE FOLLOWING AN AGRICULTURE-RELATED DISASTER

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### **SPECIAL PROVISIONS FOR SEVERE/EXTREME DROUGHT**

The USDA FSA revised its disaster designation process in the 7 Code of Federal Regulations (CFR) – Agriculture, Part 1945, which includes a procedure for the nearly automatic drought designation based on the U.S. Drought Monitor (<http://www.droughtmonitor.unl.edu>). The USDA Secretary will designate a disaster area when a county meets the drought intensity level of at least D2 (Drought-Severe) for 8 consecutive weeks in any portion of the county, or has a portion of its area in a drought intensity value of D3 (Drought-Extreme) or higher at any time during the growing season of the affected crops.

This process does not require the County to submit a request for a disaster designation. However, counties that do not meet the automatic drought designation criteria, or have losses for drought outside of the identified disaster period may follow the process outlined on pages 9 and 10 of this guidance document for requesting a disaster designation through Cal OES.

# Agriculture-Related Disaster Guidance

## PROTECTING PUBLIC HEALTH & SAFETY

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### ANIMAL HEALTH

The 2001 outbreak of Foot and Mouth Disease (FMD) in the United Kingdom was a reminder of the potential consequences of animal diseases. The CDFA and the USDA work cooperatively in California to safeguard our food supply. State and federal programs closely monitor and regulate the movement of livestock and animal products. Despite these efforts, the risk of disease introduction is always present. Viruses, bacteria and pests do not respect borders and are capable of entering on imported animals, meat and other products, travelers' clothing and shoes, equipment, and other contaminated objects.

Effective eradication of a foreign animal disease (FAD) requires three key elements: rapid identification, geographical containment, and removal.

#### Rapid Identification

The first critical element for an effective response is rapid laboratory identification of the biologic agent. This rapid identification is vital, particularly if the agent involved spreads rapidly as is the case with FMD. This virulent disease can spread rapidly among cloven-hoofed animals as it is highly contagious and develops quickly within the affected animal. The 1997 foot and mouth disease outbreak in Taiwan resulted in the loss of almost four million swine. Within two weeks of the outbreak, over 1,300 farms were affected. After six weeks, 6,143 farms were affected. Conclusive lab results are immediately necessary to ensure the appropriate measured response occurs following a suspected outbreak.

#### Geographical Containment

The second strategic element involves containment of the disease. Quarantine of infected and exposed animal and animal products is necessary to stop the spread of disease. However, quarantine comes at a great price to responding authorities and affected individuals. In addition, it may be necessary, initially, to stop all movement of animals and most vehicles to prevent the spread of the agent and assess the magnitude of the outbreak. Orders to hold or quarantine animals cease the operation of enterprises and can impact all those directly or indirectly associated with the enterprise.

Ranchers and farmers may be precluded from moving their animals or find they are limited to an area until clothing and equipment are decontaminated. Milk processors and auction yards may be closed down. Employees of ranches are suddenly out of work and those businesses serving ranchers and farmers suffer a loss of business for a time, or even permanently. Wholesalers and retailers lose product and profit; product prices can be quickly impacted, potentially affecting an entire region or export market. Of most concern is a threat against an animal industry that requires public confidence in the health and safety of its product. Nevertheless, containment and timely elimination of infected and exposed animals are the most feasible options as an unchecked spread of disease can multiply animal welfare, economic and social impacts rapidly.

# Agriculture-Related Disaster Guidance

## PROTECTING PUBLIC HEALTH & SAFETY (Cont'd)

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To be effective, quarantine measures must be quick, decisive and dispensed with a high degree of clarity. Quarantine orders must be tactically developed for an area, authoritatively derived, and clearly understood by ranchers, farmers, allied industries, law enforcement officials and all others in the vicinity of an outbreak. Containment must be understood in the context of not merely limiting access from an area, but containing an infectious disease, especially for zoonotic diseases, which can infect humans.

### Removal

The third critical element of an effective FAD eradication is the humane euthanasia and disposal of affected and exposed susceptible animals and the decontamination of surrounding areas—a process referred to as “removal.” Removal is necessary to eradicate the disease and is a prerequisite to recovery. However, it is also the one element of response that is the most complex, involving containment orders, indemnity procedures, wildlife and environmental impact assessments, decontamination instructions, etc. Consequently, the process of removal will require the most preparation and support by executive management.

Often the most challenging aspect of removal is the balance that must be maintained between the interest of prompt, effective eradication and citizens’ constitutional right to “due process.” Due process in this context refers to the compensation to ranchers and farmers for the taking of animals or “depopulation” during the removal process. The animal agriculture industry and CDFA refers to this compensation as indemnity, and it most often means the reimbursement at fair market value to ranchers and farmers by the government. Prudent, immediate actions to begin removal are sometimes delayed while authorities identify a source of funding for indemnification and arrange for requisite payment. With the operational goal of preparing for depopulation within 24 hours of a confirmed outbreak, securing funds will require significant effort. The potential exists for a large-scale and very costly outbreak; therefore local, state and/or federal proclamations of emergency or disaster may be needed in order to obtain timely access to funds. Consequences of not obtaining funds can range from a subsequent spread of disease to reluctance by ranchers and farmers as responders take drastic actions they deem necessary for the safety of humans, other livestock and the environment.

Depopulation of diseased and exposed susceptible animals in order to contain a FAD will undoubtedly cause concern over necessity and methodologies. Protocols will call for the destruction of all potentially infected and exposed animals within an identified perimeter.

Pre-planning will be required to ensure that eliminating large numbers of animals, as well as disposing of carcasses, is consistent with a deliberate policy. Concern for the numbers destroyed and the manner in which they are euthanized and disposed will be key issues of the removal process. Crucial to this effort will be clear communication with impacted individuals, the public, and the media.

# Agriculture-Related Disaster Guidance

## PROTECTING PUBLIC HEALTH & SAFETY (Cont'd)

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Other significant considerations relating to the removal of a FAD involve environmental concerns. Wildlife may become infected which could decimate populations or carry disease to other unaffected areas. Disposal of dead animals either by burning or burying could also create impacts on air and water quality. Chemicals used for decontamination of affected areas may lead to health and safety and environmental concerns.

Development of clear, standardized methodologies for addressing environmental issues will require executive management to coordinate diverse agency interests. To ensure appropriate environmental outcomes, local, state and federal environmental protection agencies will be expected to coordinate within the established response structures.

Sample methodology used in the event of a FMD outbreak:

Carcass Disposal: In the event of an outbreak of FMD, the major methods of carcass disposal would be burial, incineration or rendering. Many factors must be considered before selecting the particular methods or combinations of methods. In most cases, other State and Federal agencies would need to be consulted.

Of these methods, burial would be the preferred method when the conditions make it practical. Of the methods we have available now, it is the fastest, easiest, and the most economical if the conditions are satisfactory. The site should be on the affected premises or as near as the topography permits. Because state and federal environmental laws regulate burial of large numbers of animals, necessary permits and clearances must be obtained.

The trench for burial needs to be at least 7 feet wide and 9 feet deep. Length will depend on the number of animals to be buried. If conditions permit, wider and deeper trenches can be dug to accommodate more animals. If a burial site is not available on the affected premises, the animals can be transported in sealed containers to a suitable site.

Incineration is difficult and expensive but is an alternative when burial is not feasible. The preferable site would be a flat area away from public view that is accessible to large equipment used to deliver fuel and carcasses. The site needs to be away from overhead wires, buildings and underground utilities. The direction of the prevailing wind is a factor to be considered as well. A variety of fuels can be used but it is suggested that wood, coal, hay, straw and fuel oil be used as the primary fuels.

# Agriculture-Related Disaster Guidance

## PROTECTING PUBLIC HEALTH & SAFETY (Cont'd)

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In some instances an air curtain incinerator may be used if they are available and the numbers of animals are moderate in number. These incinerators burn more efficiently and require less fuel but must be managed properly. Units are available for trench burning as well as with incineration boxes if the topography is not suitable for trenches. It is also necessary to comply with State and Federal agencies responsible for air quality.

Rendering is a good option if facilities are available. Movement of carcasses to rendering plants is a risk and carcasses need to be transported in a manner that will not disseminate the disease. Trucks must have tailgates caulked and sealed and the tops covered and sealed adequately to prevent any dissemination of the virus during transport. Additional cleaning and disinfections and biosecurity procedures need to be put in place at the rendering facility.

Disinfections and Decontamination: Infected farms will be cleaned and disinfected as soon as possible after depopulating and disposing of susceptible animals. Vehicles, articles, and other means of conveyance of the virus off the farm or from an infected zone will be disinfected before leaving the premises or zone. This will include animal health personnel and other personnel involved in controlling the disease.

For more information about responding to and recovering from an animal disease outbreak, the following two plans would be helpful.

*Foreign Animal Disease Emergency Response Executive Overview (Updated January 2006)*

This document, written by CDFA and Cal OES, orients executive management, elected officials and emergency operation center personnel to the general response required to successfully eradicate a foreign animal disease. This Overview is available on the CDFA's website at

[http://www.cdfa.ca.gov/ahfss/Animal\\_Health/pdfs/Overview\\_FAD\\_Response\\_1.pdf](http://www.cdfa.ca.gov/ahfss/Animal_Health/pdfs/Overview_FAD_Response_1.pdf).

*Mobilization Plan for Emergency Animal Disease of Livestock (Updated January 2006).*

This plan, developed by CDFA, outlines the roles and responsibilities of the potential public and private organizations that may partake in a State or Federal response to a foreign animal disease outbreak in California. This plan augments the statewide plan developed by CDFA and Cal OES. Together, these plans act as a basis for foreign animal disease outbreak planning, response, recovery, and mitigation actions. Though this plan is still in draft, you can obtain a copy by contacting CDFA/Animal Health Branch. Much of the information in this guidance document has been extracted from the previous identified plans. The Mobilization Plan is available on CDFA's website at

[http://www.cdfa.ca.gov/ahfss/Emergency\\_Preparedness/pdfs/MobilizationPlan\\_EmergencyAnimalDiseaseLivestock.pdf](http://www.cdfa.ca.gov/ahfss/Emergency_Preparedness/pdfs/MobilizationPlan_EmergencyAnimalDiseaseLivestock.pdf).

# Agriculture-Related Disaster Guidance

## PROTECTING PUBLIC HEALTH & SAFETY (Cont'd)

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### PLANT HEALTH

Agricultural-related disasters involving plants and crops do not present the same public health concerns. However, there are significant impacts to the public should a disaster occur in this area (e.g., freezes, droughts, pests). Therefore, considerable effort is taken to protect plant health and exclude pests.

The Division of Plant Health and Pest Prevention Services, one of the seven divisions in the CDFA, is responsible for the protection of the state's agriculture and natural resources against damage caused by exotic and recently introduced plant pests. It provides this protection through a comprehensive pest prevention system. Four organizational branches administer this system: Pest Exclusion, Pest Detection/Emergency Projects, Integrated Pest Control and Plant Pest Diagnostics.

#### Pest Exclusion

Pest Exclusion keeps serious plant pests out of the state and stops or minimizes the spread of newly arrived pests or diseases. Each year, California's agricultural border stations intercept thousands of unwanted pests from cars, trucks, and buses entering the state. Plant quarantines are enforced within the state by investigators, inspectors, and biologists, with the help of dog teams trained to sniff out unauthorized agricultural commodities. A program for nursery, cotton and seed ensures the highest quality planting materials and fiber.

#### Pest Detection/Emergency Projects

The primary responsibilities of the Pest Detection/Emergency Projects Branch are the early detection and prompt eradication of serious agricultural pests from California. This is accomplished through the operation of a statewide detection trapping program, special detection surveys, and the maintenance of emergency projects response teams.

Pest Detection: The primary objectives of the statewide pest detection system are to find insect pests before they infest one square mile and plant diseases before they exceed one-half of a square mile. The Branch administers the statewide detection-trapping program through trapping contracts with 46 county departments of agriculture. State personnel conduct trapping in Inyo/Mono, Orange, San Francisco, Santa Barbara, Santa Clara, Marin, Mendocino, Yolo, and Yuba Counties. Insects targeted for detection by the statewide network of traps include exotic fruit flies (particularly species of *Bactrocera*, *Dacus*, *Ceratitis*, and *Anastrepha*), Japanese beetle, khapra beetle, gypsy moth, European corn borer, and European pine shoot moth.



# Agriculture-Related Disaster Guidance

## PROTECTING PUBLIC HEALTH & SAFETY (Cont'd)

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Emergency Projects: The primary objective of the emergency project component is to quickly and efficiently eradicate incipient infestations of serious agricultural pests, thereby preventing permanent establishment and subsequent spread in California. There have been numerous eradication programs since 1987 involving various fruit flies, moths, beetles, snails and plant diseases. Other activities include:

- Preparing specific “action plans” for such unwanted agricultural pests.
- Maintaining properly trained and equipped pest response teams situated at strategic locations around the state.

### The Pierce’s Disease Control Program

The CDFA and its many cooperators in government and agriculture have implemented a statewide, comprehensive, integrated program for dealing with a serious challenge from the glassy-winged sharpshooter and Pierce’s disease, an insect-disease complex that threatens to damage key agricultural, ornamental, and native plants. The program consists of the following activities:

- Slowing the spread of the glassy-winged sharpshooter by regulating the movement of nursery stock, citrus, and other commodities that may harbor the pests;
- Conducting a statewide survey for the glassy-winged sharpshooter, to find out where infestations are present;
- Supporting local pest management areas and rapid response activities, to prevent, prepare for, and quickly respond to new infestations;
- Conducting extensive public outreach to ensure stakeholders and the public are aware of the serious threat posed by the sharpshooter and how each can contribute towards reducing its impacts; and
- Conducting research to meet California’s needs for short and long-term solutions to the glassy-winged sharpshooter and Pierce’s disease.

The program has been successful on several fronts including:

- Glassy-winged sharpshooter populations in 2001 were found to be markedly smaller in areas that were treated in 2000, indicating good success from collaborative rapid response activities.
- Sixty-three research projects are in progress against Pierce’s disease and the glassy-winged sharpshooter.

# Agriculture-Related Disaster Guidance

## PROTECTING PUBLIC HEALTH & SAFETY (Cont'd)

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- A website was activated in March 2000 to provide cooperators, stakeholders, and the public with current and reliable information. New outreach materials were developed for distribution and use by local cooperators. These include a media directory, color brochure, reference card, and question and answer sheet, available on the CDFA website, [www.cdfa.ca.gov/pdcp/](http://www.cdfa.ca.gov/pdcp/).
- An Environmental Impact Report (EIR) is being prepared to thoroughly assess the environmental effects of the Pierce's Disease Control Program. This will cover the statewide program and the activities of county cooperators.

In 2001 a state law (AB 238) was passed that gives growers a tax break if they suffer a loss due to Pierce's disease and its vectors. CDFA is the agency that will determine if the losses were due to Pierce's disease and its vectors.

### Integrated Pest Control

The Integrated Pest Control Program directs seven pest control and eradication programs and one pest control research program. Efforts to combat the pink bollworm, cotton boll weevil, and curly top virus, are directed by this program. It is responsible for protecting rangeland, waterways, crops and urban areas through the weed and vertebrate pest programs. California's largest biological control program is managed from this area. A team of scientists evaluates, rear, and release beneficial insects to provide long-term management of serious pest problems.

### Plant Pest Diagnostics Lab

More than 35 scientists and support staff identify plant diseases, weeds, and insect pests from 70,000 samples submitted annually by CDFA pest prevention programs, county agricultural agencies, universities, and the public. This state-of-the-art diagnostic facility houses the state's largest insect collection and herbarium containing 20,000 plant specimens. Experts from this team also assist California's agricultural export market by determining whether certain agricultural products can be certified as free of serious pests and diseases.

The information on Plant Health was extracted from materials available on the CDFA website ([www.cdfa.ca.gov](http://www.cdfa.ca.gov)). Other valuable information includes:

- Plant Quarantine Manual
- Bringing Plants and Animals Into California
- Agriculture Parcel Inspection Program
- Preventative Release Program
- Target Pests and Disease Information
- The Exotic Fruit Fly Regulatory Response Manual

# Agriculture-Related Disaster Guidance

## COMMUNITY BASED ORGANIZATIONS' INVOLVEMENT DURING AGRICULTURE-RELATED DISASTERS

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There are a number of community-based organizations (CBOs), such as the Red Cross, the Salvation Army, and farm worker interest groups that can help communities with the potentially negative economic impacts of agricultural disasters. In many instances, individuals and families living at marginal economic levels are most severely impacted by agricultural disasters. For example, the loss of income for migrant farm workers may result in a reduced ability to pay for housing, food, and clothing. Agricultural losses may have a ripple effect on the economic community and may devastate ancillary businesses, such as agricultural trucking. Community disaster planners should include CBOs in the disaster planning process, so that potential “safety nets” can be identified for those most likely to be impacted adversely by an agricultural economic disaster. In this context, mental health professionals may also need to be included in the planning process.

There is also a potential role for professional associations in the actual response to a disaster. For example, in the case of a FAD outbreak, professional associations, such as the California Veterinary Medical Association (CVMA), may ask their members to help with the disaster response. Also, animal rescue groups have played a role during disasters and can conceivably be tapped as a response asset during an agricultural disaster—depending upon the nature of the event. Planners should again evaluate the capabilities and availability of CBOs and associations to incorporate them into potential agricultural disaster response plans. The importance of identifying potential support from CBOs and associations can not be stressed enough—it is much easier to work from an established plan and structure than to create a response entity under pressure and on an ad hoc basis.

Possible strategies for integrating CBOs into victim response:

- Identify elements of and ensure coordination with volunteer organizations and agencies that represent multiple volunteer organizations as well as local CBOs. Examples of “umbrella” agencies: Northern California Voluntary Organizations Active in Disasters (NorCal VOAD), Southern California Voluntary Organizations Active in Disasters (SCVOAD), California Association of Information Referral System (CAIRS).
- Enhance operational protocols among existing and established CBOs, volunteer organizations, and volunteer resource coordinators (local, state, and federal levels) for the continuous improvement of disaster assistance services delivery.

# Agriculture-Related Disaster Guidance

## MASS-CASUALTY DECONTAMINATION GUIDANCE OVERVIEW

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### **Introduction**

The purpose of the *Mass-Casualty Decontamination Guidance for Field Responders (2006)* is to provide decontamination guidance to local first responders; and can be found on the web at: <http://www.calema.ca.gov/HazardousMaterials/Pages/Publications.aspx>. The driving force for this document is two-fold. On November 15, 1999, a HazMat incident occurred in Tulare County (Earlimart) that resulted in the drift of a fumigant into the community. The decontaminated victims expressed that they were not treated in a humanitarian manner by the local emergency responders. Subsequently, SB 2104 was chaptered into law September 27, 2000, requiring Cal OES to develop guidance by January 2002 on decontamination procedures for individuals who have been or may have been exposed to hazardous materials. It required a guidance that specified the humane treatment of individuals.

### **Content**

The Mass-Casualty Decontamination Guidance includes the following information:

- SEMS background, including the identification of HazMat/Mass-Casualty Operation responder positions, responsibilities and actions;
- Incident characterization, identification of HazMat agents' (chemical, biological, radiological) and their acute exposure effects, and decontamination methods and procedures; and
- Humanitarian efforts: sensitivity to the victims' cultural and language differences, personal concerns, modesty, and personal items.

### **Development**

The following are the steps taken in the development of this guidance:

- Project initiation – April 2000;
- Convened Focus Group of federal, state, and local government agencies and private hospitals and associations to discuss content;
- Distributed the draft document to the Focus Group for review and comment;
- Worked concurrently with CSTI to develop Mass-Casualty Decontamination Training and guidance for local emergency responders; and
- Conducted a field responder Pilot Class with California Specialized Training Institute (CSTI) and Fresno Fire Department (November 7, 2000).

# Agriculture-Related Disaster Guidance

## MASS-CASUALTY DECONTAMINATION GUIDANCE OVERVIEW

(Cont'd)

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### **Distribution**

The *Mass-Casualty Decontamination Guidance For First Responders (2006)* is distributed as follows:

- Available manually/electronically to local hazardous material emergency responder trainers and other interested parties by contacting the Cal EMA Hazardous Materials Unit.
- To students at CSTI's Mass-Casualty Decontamination Classes.

In addition, the *Mass Casualty Decontamination Guidance For First Responders (2006)* is available on the Cal OES website,

<http://www.caloes.ca.gov/HazardousMaterials/Pages/Publications.aspx>

# Agriculture-Related Disaster Guidance

## INTEGRATION OF PLANNING EFFORTS

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California possesses a well-organized and well-tested emergency management organization that typically deals with a wide variety of natural disasters (floods, wildfires, earthquakes, etc.). In the early 2000s, CDFA and Cal OES began a concentrated effort to plan for agricultural disasters, especially in the context of the FAD outbreaks in the United Kingdom. Another impetus for the planning effort was the anthrax scares shortly after the September 11, 2001, World Trade Center terrorist event. The prospect of a biological or agro-terrorist incident increased during that time for the United States and California. The emergency management community in California must be prepared to meet this threat.

As a result of these events, planning for agriculture-related disasters has made substantial progress. At the state and federal levels, key players participate in a FAD working group responsible for overseeing a FAD response effort. This working group is sponsored by CDFA. One outcome of this planning process has been the identification of key potential coordination issues. For example, the law enforcement community has now become part of the planning effort, due to issues revolving around quarantines and movement restrictions. Concurrently, there is an identified need for the CACs, the emergency managers, and public health personnel to engage in coordinated planning at the local level. This coalition of efforts represents a departure from the tendency for disciplines to “stove-pipe” their activities.

Planners at the local level can request assistance from both Cal OES and CDFA regional offices to work on development of local agricultural disaster response plans. Both agencies have developed planning guidance documents that can be used for the process. In terms of the planning process, a multi-discipline, multi-agency approach is strongly recommended. The approach should incorporate all levels of government and the appropriate representation from the private sector. Agricultural disaster planners may want to use the methodology followed by the “terrorism working groups (TWGs).” These groups typically include a wide range of stakeholders from various disciplines, meet to discuss planning issues, work on planning documents, and, in some instances, serve as the basis for actual disaster response groups during an event.

It is anticipated that Cal OES, CDFA, and other state departments and agencies will continue to work on agriculture-related disaster planning within the immediate future. Federal partners, such as the USDA, FEMA, and the SBA will also be involved. A major focus of this effort will be to ensure consistency and interconnection between planning activities and planning documents. There will also be emphasis on an exercise program to test planning concepts and approaches. Again, local agencies interested in agricultural disaster response planning should contact either the Cal OES or CDFA regional offices for assistance.

# Agriculture-Related Disaster Guidance

## ATTACHMENTS

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**Attachment A** – Crop Loss Assessment Process

**Attachment B** – California County Agricultural Commissioner Disaster Report and Instructions for Completion

**Attachment C** – Acronym List



# Crop Loss Notification and Assessment Process

**Discovery**

**Notification Role**

**Monitoring Damages**

**Evaluation of Crop Losses**

**Request for Designation < 3 months**

**Designation Notification Role**

	Discovery	Notification Role	Monitoring Damages	Evaluation of Crop Losses	Request for Designation < 3 months	Designation Notification Role
<b>County Agricultural Commissioners (CAC)</b>	News Forecasts or Public Report of Localized Adverse Weather or Natural Disaster	Informs Industry, Regional CDFA Coordinators, State CDFA, and County OES. Requests producers and packers to start monitoring and reporting damages.	Work with Industry to assess damages, collect data, and periodically report to County/State liaison.	When significant damages are realized (more than 30% losses based on 5-year Avg.), Farm Service Agency Forms from Cal OES Individual Assistance (IA) Branch should be completed and submitted to Board of Supervisors.	Track request for Secretarial Designation with Cal OES and CDFA.	Notify Industry of the Secretarial Designation and Eligibility for Disaster Relief.
<b>County OES</b>	News Forecasts or Public Report of Localized Adverse Weather or Natural Disaster	Informs Cal OES Region Office/Cal OES IA Branch and CAC – Inform & request CAC monitor agriculture losses.				Notify CACs and Industry of the Secretarial Designation and Eligibility for Disaster Relief.
<b>County Board of Supervisors</b>				Evaluate agriculture losses and consider Local Proclamation/ Letter to Secretary of Cal OES or Governor to request federal assistance.	Request Disaster Designation within 60 days of the Event.	Notify Industry of the Secretarial Designation and Eligibility for Disaster Relief.
<b>Regional County Ag Commissioner (CAC) Disaster Coordinators</b>	News Forecasts or Public Report of Localized Adverse Weather or Natural Disaster	Inform CDFA and area CACs. Request crop loss monitoring begin. <ul style="list-style-type: none"> <li>• Sacramento Northern and Sacramento Valley</li> <li>• Madera San Joaquin Valley</li> <li>• San Luis Obispo Coast and Southern CACs</li> </ul>				
<b>Regional Cal OES Office</b>	News Forecasts or Public Report of Localized Adverse Weather or Natural Disaster	Inform Cal OES IA Branch. Information from County Coordinator or CAC	Maintain communication with Cal OES IA Branch and County OES Coordinator			
<b>California Governor's Office of Emergency Services (CalOES) Recovery Division Individual Assistance (IA) Branch</b>	News Forecasts or Reports of Adverse Weather Conditions or Other Natural Disaster	Cal OES IA Branch requests the CAC complete the <i>California County Agricultural Commissioner Disaster Report</i> Form for purposes of identifying and recording crop loss information, if necessary, and return to Cal OES IA within 60 days of incident.	IA monitors damages and coordinates gathering agriculture damages with CAC, county OES Coordinator, Cal OES Regional Office and CDFA	IA reviews crop loss information and, if necessary, requests evaluation from CDFA and USDA State Office in Davis	If crop losses warrant a request for a USDA Secretarial Designation, IA prepares a request letter to the Secretary of Agriculture for Cal OES Secretary's signature. IA ensures letter is sent to USDA within 3 months of the event. IA then tracks and monitors the request for a decision.	Upon Receipt of Secretarial Designation, IA prepares a written notification to local government officials (which includes primary and contiguous counties), and copies CDFA and Cal OES Regional Offices of the Designation.
<b>California Dept. of Food and Ag (CDFA) Co/State Liaison Standardization</b>	News Forecasts or Reports of Adverse Weather Conditions or Other Natural Disaster	Informs Cal OES and CAC Regional Coordinators – Request affected CACs monitor crop losses.	Periodically (weekly or as appropriate) Collect estimated Crop Loss Data from CACs	Evaluate Crop Loss Estimates and Compare to 5-year average Crop Production for the County Affected.	Track Request for Secretarial Designation with Cal OES and USDA	Coordinate notification of Secretarial Designation and Eligibility for Disaster Relief with CACs.





13. Total Farms in County: (Use most recent U.S. Farm Census number.)		Number			
14. Farms with Production Losses of:		Number			
100%					
90 to 99%					
80 to 89%					
70 to 79%					
60 to 69%					
50 to 59%					
40 to 49%					
30 to 39%					
20 to 29%					
Less than 20%					
15. Livestock and Poultry Losses of:		Number Destroyed/Damaged	3-Year Avg. Price (From Annual Crop Report)	Dollar Loss	
Cattle (Excluding milk cows)					
Milk Cows					
Milk Production					
Sheep					
Hogs					
Poultry					
Aquaculture					
Apiary					
Other					
16. Farms with <u>Physical</u> Losses of:		Number			
Major					
Minor					
17. Farm Facilities Damaged:		Number			Dollar Loss
		Destroyed	Major	Minor	
Dwellings & Service Buildings					
Structures					
Machinery & Equipment					
Land Damages (Acres)					
Other					

Remarks:

**INSTRUCTIONS FOR  
CALIFORNIA COUNTY AGRICULTURAL COMMISSIONERS' DISASTER REPORT**

Any crisis situation results in heavy demands for current, news-worthy information. Unfortunately, many agricultural damages cannot be adequately assessed for weeks or even months after the fact. By that time, the news value has been lost. News media look to government to authenticate and to somehow provide an "official" loss number.

1. County: County reporting
2. Date of Disaster: Date(s) on which natural disaster began and ended.
3. Type and Brief Description of Disaster: **Example**: Flood -- Levees burst throughout county.
4. Crops Damaged: List damaged crops, including hay and pasture, normally planted/growing in the order of importance to the county's agricultural economy.
5. 5-Year Average Yield: Take from Annual Crop Report.
6. 5-Year Average Price: Take from Annual Crop Report.
7. Acres Planted: List total acres planted/growing in county in disaster year.
8. Acres Damaged: List damaged acres planted/growing of crop acreage.
9. Acres Not Planted: List acres normally planted that were not planted to any crop during the disaster year. Acres not planted must be due to the natural disaster.
10. Estimated Yield: Estimate disaster year yield per acre as realistically as possible.
11. Estimated Dollar Loss: Calculate by (a) taking yield reduction [*Column 5 minus Column 10*] times acres planted [*Column 7*] plus (b) average yield [*Column 5*] times acres not planted [*Column 9*], summing and multiplying by 5-year average price [*Column 6*].
12. County's Total Crop Acres: Record total crop acreage, including hay and pasture, within the county. (i.e., all crop acreage.)
13. Total Farms in County: Use number from latest U.S. Census of Agriculture, if better number not available.
14. Farms with Production Losses of: Estimate number of farms in county by loss category.
15. Livestock and Poultry Losses of: List by specie the number destroyed/damaged, 3-year average price (from Annual Crop Report), and dollar loss. Use the average market price for each type for preceding 36 months.
16. Farms with Physical Losses of: Number of farms with minor and major physical losses.
17. Farm Facilities Damaged: List by type of facility the number destroyed, number with major damage, number with minor damage, and dollar loss. Use reasonable estimates of value. Include damages and losses to fences, drainage systems, irrigation systems, etc.

**Agriculture-Related Disaster Guidance  
Acronym List**

AB	Assembly Bill
BOS	Board of Supervisors
CAC	County Agricultural Commissioner
CAIRS	California Association of Information Referral System (CAIRS)
Cal OES	California Governor's Office of Emergency Services
CBO	Community Based Organization
CDFA	California Department of Food and Agriculture
CVMA	California Veterinary Medical Association
DUA	Disaster Unemployment Assistance
EDD	Employment Development Department
FAD	Foreign Animal Disease
FEMA	Federal Emergency Management Agency
FMD	Foot and Mouth Disease
FSA	Farm Services Agency
IA	Individual Assistance
LAC	Local Assistance Center
NorCal VOAD	Northern California Voluntary Organizations Active in Disasters
OES	Office of Emergency Services
SBA	United States Small Business Administration
SCVOAD	Southern California Voluntary Organizations Active in Disasters
SEP	State Emergency Plan
TWG	Terrorism Working Groups
UI	Unemployment Insurance
USDA	United States Department of Agriculture