COUNTY OF MONTEREY

OPERATIONAL AREA

EMERGENCY OPERATIONS PLAN

ANNEX A | ANIMAL RESPONSE

SEPTEMBER 2019

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IT IS THE POLICY OF THE COUNTY OF MONTEREY THAT NO PERSON SHALL BE DENIED THE BENEFITS OF OR BE SUBJECTED TO DISCRIMINATION IN ANY CITY PROGRAM, SERVICE, OR ACTIVITY ON THE GROUNDS OF RACE, RELIGION, COLOR, NATIONAL ORIGIN, ENGLISH PROFICIENCY, SEX, AGE, DISABILITY, RELIGION, SEXUAL ORIENTATION, GENDER IDENTITY, OR SOURCE OF INCOME. THE COUNTY OF MONTEREY ALSO REQUIRES ITS CONTRACTORS AND GRANTEES TO COMPLY WITH THIS POLICY.

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ACKNOWLEDGMENTS

THIS DOCUMENT HAS BEEN PREPARED BY A COLLABORATIVE, INTER-DISCIPLINARY TASK FORCE OF OPERATIONAL AREA (OA) PARTNERS AND STAKEHOLDERS REPRESENTATIVE OF THE WHOLE-COMMUNITY. THE FOLLOWING ORGANIZATIONS PARTICIPATED IN THE PLANNING EFFORT.

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PLAN WORKSHEET

OBJECTIVE	Establishes the emergency management organization required to mitigate any significant emergency or disaster affecting animals, both wild and domestic and their guardians within the Monterey County Operational Area.
FEDERAL EMERGENCY SUPPORT FUNCTION	ESF #6 a– Care of Companion and Service Animals; ESF #8 – Public Health and Medical Services; ESF #11 - Food and Agriculture
STATE OF CALIFORNIA EMERGENCY FUNCTION	EF 6 – Care and Shelter; EF 8 - Public Health and Medical; EF 11 - Food and Agriculture
AUTHORITY	Pets Evacuation and Transportation Standards (PETS) Act (H.R. 3858, Oct 6, 2006); California Health and Safety Code § 34070; California Emergency Services Act, California Government Code § 8550-8668; California Animal Response Emergency System (CARES); Monterey County Code Ch 2.68, Emergency Procedures and Organization; Monterey County Code of Ordinances Title 8 – Animal Control; Monterey County Code of Ordinances Title 10 – Health and Safety.
REQUIREMENTS	Standardized Emergency Management System (SEMS); National Incident Management System (NIMS)
REFERENCE	This Plan is an Annex to the Monterey County Operational Area (OA) Emergency Operations Plan (EOP).
HAZARDS ADDRESSED	All hazards resulting in impacts to animals in the county.
OUTCOMES	It provides a structure in which to effectively direct, manage, and control the following activities involving animals during a disaster.
APPROVAL	Approval and recommendation for adoption by the Monterey County Disaster Council (April 2018); Resolution to adopt by the Monterey County Board of Supervisors (July 2019).
UPDATES	Required every 3 years, Next update will commence in 2022.
WEBSITE	https://www.co.monterey.ca.us/government/departments-a-h/administrative-office/office-of-emergency-services/plans

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1. INTRODUCTION

CALIFORNIA IS HOME TO A WIDE ARRAY OF DISASTER POSSIBILITIES SUCH AS EARTHQUAKES, FLOODING, DROUGHT, EXTREME HEAT, SEVERE STORMS, AND WILDFIRES. DISASTER PREPAREDNESS STRATEGIES FOR PETS AND LIVESTOCK SAFETY MUST BE IN PLACE BEFORE A DISASTER OCCURS AND CAN MEAN THE DIFFERENCE BETWEEN UNDUE LOSS AND SUFFERING OF ANIMALS, WHICH ADDS ADDITIONAL TRAUMA TO VICTIMS ALREADY SUFFERING FROM THE DISASTER. STATE AND LOCAL GOVERNMENTS ARE INCREASINGLY REALIZING THAT PLANNING FOR THE EVACUATION, CARE, AND SHELTERING OF ANIMALS IN ANY DISASTER IS ESSENTIAL TO THE WELL-BEING OF ALL RESIDENTS.

THE ANIMAL RESPONSE ANNEX WAS CREATED IN COLLBOARTION WITH PUBLIC AND NON-PROFIT ANIMAL CARE AGENCIES THROUGHOUT MONTEREY COUNTY. THE TASK FORCE PROVIDED GUIDANCE AND RESOURCES FOR THE DEVELOPMENT OF THIS ANNEX. AS AN ANNEX TO THE MONTEREY COUNTY OPERATIONAL AREA EMERGENCY OPERATIONS PLAN, THE ANIMAL RESPONSE PLAN IS INTENDED FOR THE OPERATIONAL AREA THE INCLUDES THE COUNTY AND ALL JURISDICTIONS CONTAINED WITHIN.

1.1.1 SUPERSESSION

The Monterey County Operational Area Emergency Operations Plan – Annex A Animal Response Plan is the first interation, no plan supercedes it.

1.1.2 WHOLE COMMUNITY

Monterey County has embraced FEMA's whole community approach to creating engaged and resilient communities by which residents, emergency management practitioners, community leaders, and government officials can understand and assess the needs of their respective communities and determine the best ways to organize and strengthen their assets, capabilities, and interests.

By engaging communities, we can understand the unique and diverse needs of a population including its demographics, values, norms, networks, and relationships. Monterey County is committed to ensuring that considerations are made for persons with access and functional needs (AFN) at every stage if the emergency management process.

1.2 AUTHORITIES

1.2.1 LOCAL

- Monterey County Code of Ordinances Title 8 – Animal Control.
- Monterey County Code of Ordinances Title 10 – Health and Safety.
- Monterey County Code of Ordinances Chapter 8.16, Ord. 3629.

1.2.2 STATE

- California Emergency Services Act, California Government Code, Sections 8550-8668.
- AB450. Standardized Emergency Management System to Include Preparedness for Animals.
- State of California Emergency Plan
- Standardized Emergency Management System (SEMS)
- National Incident Management System (NIMS)

1.2.3 FEDERAL

- Pets Evacuation and Transportation Standards (PETS) Act (H.R. 3858, Oct 6, 2006), an amendment to the Robert T. Stafford Disaster Relief and Emergency Assistance Act.
- FEMA Disaster Assistance Policy 9523.19
- Americans with Disabilities Act (ADA) of 1990

2. PURPOSE, SCOPE, SITUATION OVERVIEW, AND PLANNING ASSUMPTIONS

RESIDENTS OF MONTEREY COUNTY LIVE WITH THE POTENTIAL FOR LARGE EMERGENCIES SUCH AS FLOODING, STORMS, EARTHQUAKES, DROUGHT, EXTREME HEAT, AND WILDFIRES. THE 2016 FIRE SEASON AND THE 2017 WINTER STORMS DEMONSTRATED THE COUNTY'S VULNERABILITY AND BROUGHT TO LIGHT CHALLENGES INVOLVING THE EMERGENCY EVACUATION, CARE, AND SHELTERING OF OUR ANIMALS. THE MONTEREY COUNTY ANIMAL RESPONSE ANNEX IS AN ANNEX TO THE COUNTY OF MONTEREY EMERGENCY OPERATIONS PLAN. THE ANNEX IS APPLICABLE WITHIN THE GEOGRAPHICAL BOUNDARIES OF MONTEREY COUNTY.

2.1 PURPOSE

The Monterey County Operational Area Emergency Operations Plan (EOP) - Animal Response Annex addresses the planned response to extraordinary emergency situations with disasters affecting animals and the Monterey County community. The plan also addresses integration and coordination with other governmental, private, and non-profit agencies when required. This plan is not intended to address the normal day-today emergency or well-established emergency procedures.

This plan accomplishes the following:

- Establishes the emergency management organization required to mitigate any significant emergency or disaster affecting animals, both wild and domestic and their guardians.
- Establishes the overall operational concepts associated with Monterey County Animal Care and Shelter Unit in the Op Area Emergency Operations Center (EOC) activities and the recovery process.
- Provides guidance to the County of Monterey and its cities on all matters involving animals during a disaster.
- Coordinates with other animal organizations on disaster issues.

2.2 GOALS

This Annex is intended to provide guidance on the processes and procedures established for providing support to emergency animal response operations within the Monterey County Operational Area. The following are the goals and objectives of the Annex:

- **GOAL 1:** Protect the health and safety of the community
- **GOAL 2:** Activate Animal Care and Shelter Unit Leader
- **GOAL 3:** Provide for the immediate care, control and safety of animals
- **GOAL 4:** Minimize animal suffering, loss of life, and potential disability by ensuring a timely and coordinated assistance.
- **GOAL 5:** Create an understanding of the roles and responsibilities of individuals, NGOs, private sector agencies, and governmental agencies in response to an incident.
- **GOAL 6:** Provide for the care of animals brought into shelters, housed in mobile shelters and/or other evacuation sites
- **GOAL 7:** Provide a system for returning animals to their owners

2.3 OBJECTIVES

- **OBJECTIVE 1:** Establish procedures for activating and deactivating this Annex;
- **OBJECTIVE 2:** Provide for the management of animal control services, facilities, activities, and resources in the disaster response and recovery;

- **OBJECTIVE 3:** Provide a framework for emergency animal response including command and control, communications, response coordination, resource management, and emergency animal response operations such as animal sheltering, evacuation, and field care services

2.4 ASSUMPTIONS

This section contains a description of the assumptions that were used in the development of this Plan. The general planning assumptions that will drive the response activities are:

- Depending on the type and scale of the incident, damage could include disruption of infrastructure, transportation, the ability for food and clean water to be delivered; Any one of these could result in and animal being displaced resulting in the need for evacuation, care, and sheltering for animals.
- Local resources within Monterey County will be very limited the first few days on a major disaster;
- Many residents assume governmental resources will be available to rescue them and their pets in an emergency;
- Most pet owners do not make evacuation plans and have not stockpiled resource and supplies to care for their pets;
- Most human evacuation shelters do not allow animals, other than service animals, in facilities. Animal owners requiring emergency shelter must choose between deserting their animals, refusing to evacuate; or evacuating their animals to a pre-determined site;
- Many pet owners will arrive at human care shelters with their pets;
- Some pet owners, especially livestock, will leave pets behind due to lack of transportation equipment;
- Only service animals are allowed in human shelters;
- All other pets and animals will not be allowed in human shelters;
- Many owners will be separated from their animals because of the disaster and animals will arrive at the shelter without any documentation or medical history.

2.5 CONSIDERATIONS

Animals play an integral role in society. In many homes, pets are considered to be members of the family. Working animals provide valuable services to the community and production livestock contribute millions to the economy. It is no wonder then, that when disaster strikes, citizens are intensely concerned about their animals. California is home to nearly 19 million domestic animals. Polls conducted in 2012 estimate that California is home to 6.7 million dogs and 7.1 million cats.

The California Department of Food and Agriculture reported in 2012 that there are over 5.5 million cattle in California, 570,000 sheep, 141,000 goats, 670,000 horses, just over 100,000 hogs, and millions of chickens in the Golden State. Approximately one out of every three households in California owns a dog or a cat.

Due to the large volume of agriculture in the area, it is hard to make an accurate estimate of how many animals are in Monterey County. A possible estimation of the animals could be found using the link stated below:

> *RESOURCE:*
> *https://www.avma.org/KB/Resources/Statistics/Pages/US-pet-ownership-calculator.aspx*

2.5.1 TYPES OF ANIMALS

The California Animal Response Emergency System (CARES) defines "animals" as "affected commercial livestock, companion animals, exhibition animals, captive animals, and exotic pets." This definition is used for state level response activities. The Urban Area Strategic Initiative (UASI) Animals Operations Guide recommends that dogs, cats, rabbits, birds, reptiles, horses, livestock, exotic pets, captive wildlife, and wildlife be considered in disaster planning. Service Animals, defined by the American with Disabilities Act (ADA) as guide dogs, signal dogs, and other animals trained aid individuals with disabilities are exempt from restrictions with regards to facility and transportation access.

For the purposes of the protocols outlined in this Annex, animals will be categorized by the following. Species or Types Used in the Bay Area SUASI Guide:

- Dogs and cats
- Rabbits/small mammals
- Reptiles/amphibians
- Domestic/exotic birds
- Horses/equine
- Chickens/other fowl
- Livestock/farm animals
- Other exotic pets

2.5.2 BIOSECURITY

Trying to maintain animal health following a disaster is extremely important, whether the disaster is a hurricane or a foreign animal disease. Biosecurity plans control the introduction and spread of disease by evaluating and addressing the primary routes of disease transmission. An effective biosecurity plan will control several diseases at one time.

Contagious diseases such as bovine viral diarrhea (BVD) and Salmonella, as well as new or unexpected diseases such as foot and mouth disease, are minimized by assessing disease risks and implementing management steps. The United State Department of Agriculture works closely with the U.S. Department of Homeland Security's (DHS) Federal Emergency Management Agency (FEMA) to provide assistance and coordination during all-hazards emergencies, including natural disasters.

2.5.3 FOREIGN ANIMAL DISEASES

Animal health officials define an exotic or foreign animal disease (FAD) as an important transmissible livestock or poultry disease believed to be absent from the United States and its territories that has a potential significant health or economic impact. Foreign animal diseases are considered a threat to the United States when they significantly affect human health or animal production and when there is an appreciable cost associated with disease control and eradication efforts. Diseases such as classical swine fever (hog cholera), foot-and- mouth disease (FMD), and highly pathogenic avian influenza (HPAI) can cause high death rates or severe illness and production losses. The California Department of Food and Agriculture (CDFA) is the primary State agency responsible for developing emergency animal disease identification, containment, and removal procedures.

2.5.4 AGROTERRORISM

The increasing rate of emerging and reemerging animal diseases, along with threats and attempts by those with nefarious intent to attack food and agriculture, point to the need to reduce the biological risk to America's food and agricultural sector. The Food and Agriculture (F&A) critical infrastructure sector produces, processes, and delivers the systems and commodities that feed billions of people and animals throughout the United States and globally. In 2015, the agriculture, food, and related industries contributed $992 billion (5.5%) to U.S. gross domestic product (GDP), making it one of the largest sectors of the U.S. economy. Given its critical importance to food safety and availability in the United States and around the world, protecting this sector is a matter of national security.

Among the biological threats for which the U.S. Department of Homeland Security (DHS) has issued a Material Threat Determination, all but one (smallpox) are zoonotic, meaning the disease can move between animals and people. Many major infectious disease outbreaks over the last 10 years (e.g., Ebola, Severe Acute Respiratory Syndrome (SARS), Middle East Respiratory Syndrome (MERS)) have originated in animals. Three-quarters of emerging infectious diseases are, in fact, zoonotic in nature. While most of these originate in wildlife, livestock can also act as conduits for infection. The recent U.S. avian influenza outbreaks did not affect humans, but other avian influenza strains in Asia have infected thousands of people; the H7N9 strain alone has infected more than 1,300 people since 2013.

2.6 HAZARD ASSESSMENT

Monterey County is subject to a range of hazards capable of causing significant, wide-spread, emergency impacts. The Monterey County Threat/Hazard Inventory and Risk Assessment identifies the following natural and man-made hazards that may result in the need for emergency animal response.

2.7 HAZARD MATRIX

2.7.1 THREAT	2.7.2 DOGS AND CATS	2.7.3 RABBITS / SMALL MAMMALS	2.7.4 REPTILES / AMPHIBIANS	2.7.5 DOMESTIC / EXOTIC BIRDS	2.7.6 HORSES / EQUINE	2.7.7 CHICKENS / OTHER FOWL	2.7.8 LIVESTOCK / FARM ANIMALS	2.7.9 WILDLIFE	2.7.10 MARINE WILDLIFE	2.7.11 ZOOLOGICAL
Earthquake	X	X	X	X						X
Wildfire	X	X	X	X	X	X	X	X		
Flood / Severe Storms	X	X	X	X	X	X	X	X		
Landslide / Debris Flow	X	X	X	X	X	X	X	X		
Urban Fire	X	X	X	X	X	X				X
Tsunami	X	X	X	X					X	X
Utility outages	X	X	X				X			X
Hazardous incidents	X	X	X	X	X	X	X	X	X	X
Cyberattack										X
Terrorism	X	X	X	X	X	X	X	X	X	X
Disease	X	X	X	X	X	X	X	X	X	X
Drought	X	X	X	X	X	X	X	X	X	
Extreme Heat	X	X	X	X	X	X	X			X

3. PROGRAM ADMINISTRATION

THE ANIMAL RESPONSE ANNEX WAS CREATED BY EMERGENCY SERVICES PLANNERS AND THE EMERGENCY ANIMAL RESPONSE TASK FORCE, A GROUP REPRESENTING THE PUBLIC, AND NON-PROFIT ANIMAL CARE AGENCIES THROUGHOUT MONTEREY COUNTY. THE TASK FORCE PROVIDED GUIDANCE AND RESOURCES FOR THE DEVELOPMENT OF THIS ANNEX.

AS A SUPPORT ANNEX TO THE MONTEREY COUNTY EMERGENCY OPERATIONS PLAN, THE MONTEREY COUNTY ANIMAL RESPONSE PLAN IS INTENDED FOR THE OPERATIONAL AREA THE INCLUDES THE COUNTY AND ALL GOVERNMENTAL JURISDICTIONS CONTAINED WITHIN. COPIES OF THIS PLAN, WHEN COMPLETE, WILL BE DISTRIBUTED TO ALL MONTEREY COUNTY OPERATIONAL AREA RESPONSE PARTNERS AND STAKEHOLDERS WITH ROLES IN ANIMAL CARE AND SHELTER OPERATIONS IN THE COUNTY.

3.1 ANNEX TASK FORCE

The following agencies and organizations are responsible for planning, deploying the resources, and managing the activities of the Emergency Animal Response Annex:

- Monterey County Office of Emergency Services (MCOES)
- Society for the Prevention of Cruelty to Animals for Monterey County (SPCAMC)
- Monterey County Health Department
- Monterey County Environmental Health Bureau
- Monterey County Animal Services
- Monterey County Resource Management Agency

- Monterey County Resource Management Agency, Department of Public Works and Facilities
- American Red Cross
- Monterey County Agricultural Commissioner's Office

3.2 PLAN DISTRIBUTION

As a support annex to the Monterey County Emergency Operations Plan, the Monterey County Animals Annex is intended for the Operational Area (OA) that includes the County and all governmental jurisdictions (cities/special districts) contained within. Copies of this plan, when complete, will be distributed to all Monterey County Operational Area (OA) response partners and stakeholders with roles in emergency services for animals in the County.

3.3 PLAN UPDATES

The Monterey County Office of Emergency Services (OES) will review and update this plan every three years following its adoption and after plan activations/exercises. Changes will reflect improvements identified from activations/exercises, and/or to correlate this plan with changes that are made to the County's Emergency Operations Plan or Emergency Operations Center (EOC) Standard Operating Procedures during the prior years.

3.4 PLAN TESTING, TRAINING, AND EXERCISES

Monterey County conducts drills and exercises pertaining to all-hazards relevant to the Monterey County Operational Area (OA). To the extent practical, elements of this Plan may be incorporated into those drills and exercises that include a anminal element.

3.5 AFTER-ACTION REVIEW

Monterey County conducts all after-action reviews of drills and exercises in compliance with the FEMA Homeland Security Exercise and Evaluation Program.

4. CONCEPT OF OPERATIONS

IN ACCORDANCE WITH THE SEMS, ALL LOCAL JURISDICTIONS (CITIES, COUNTY OF MONTEREY) WITHIN THE MONTEREY COUNTY OPERATIONAL AREA (OA) ARE RESPONSIBLE FOR DETERMINING THEIR EMERGENCY ANIMAL RESPONSE NEEDS DURING AN INCIDENT. IF LOCAL RESOURCES ARE OVERWHELMED, A REQUEST FOR SUPPORT CAN BE SENT BY LOCAL EMERGENCY MANAGEMENT OFFICIALS WITHIN THE OA TO THE MCOES, WHO WILL ACTIVATE AS THE OA TO COORDINATE ASSISTANCE TO THE AFFECTED LOCAL JURISDICTION(S).

IF ASSISTANCE IS NOT AVAILABLE THROUGH THE MCOES AND ITS LOCAL PARTNERS, MCOES WILL REQUEST ADDITIONAL RESOURCES THROUGH THE CALIFORNIA GOVERNOR'S OFFICE OF EMERGENCY SERVICES (CAL OES) REGIONAL OPERATIONS CENTER (REOC). THE REOC THROUGH THE STATE OPERATIONS CENTER (SOC) COORDINATES ALLOCATION OF RESOURCES FROM OTHER OUT-OF-AREA JURISDICTIONS AND ORGANIZATIONS AS AVAILABLE.

The Operational Area works closely with whole-community partners and stakeholders to plan and provide emergency animal response services throughout the disaster cycle. This plan addresses planning considerations for the following operations:

- Animal Care And Shelter
- Service Animals
- Family Reunification
- Oil Spills And Marine Life
- Impacts On Wildlife
- Zoological Organization

- Livestock
- Euthanasia
- Carcass Disposal

4.1.1 ANIMAL CARE AND SHELTER OPERATIONS

It has become widespread knowledge from past disasters that often people will not evacuate their home unless they can bring their pets and livestock with them. For many people, pets are considered a member of the family. No one wants to leave animals behind, and when asked to do so, many owners will risk their own lives and the lives of others to save their animals.

When people are unwilling to enter a shelter, or refuse to evacuate during an emergency they remain at risk, could be arrested, and place rescue workers at risk. Additionally, many who own livestock are not prepared with specialized transport and holding areas, which may be difficult or impossible to arrange during a sudden disaster.

While owners are ultimately responsible for the care and welfare of their animals, during an emergency the responsibility for supporting animal owners in these activities falls on the local government, the Office of Emergency Services of Monterey County, SPCA for Monterey County, Monterey County Animal Services, and any other partnered agencies. Field level temporary shelters may need to be established at a variety of locations to meet the needs of animals requiring care and shelter in a disaster.

> **THE SPCA FOR MONTEREY COUNTY WILL PROVIDE TEMPORARY ANIMAL CARE AND SHELTER FOR ANY OWNED ANIMAL IN THE COUNTY OF MONTEREY AND WORK WITH LOCAL ANIMAL ENFORCEMENT AGENCIES TO PROVIDE SERVICES FOR ANIMALS.**

SHELTER TYPES

In cooperation with the American Red Cross, SPCA for Monterey County emergency pet shelters are typically co-located on sites with human shelters allowing animal owners to have convenient access to care for their pets. There are three identified animal sheltering models that have been utilized previously.

TYPES OF SHELTERING MODELS

4.1.2 TYPE	4.1.3 DESCRIPTION	4.1.4 CAPABILITY
Co-located Shelter	*A Co-Located Shelter is when both human and animal sheltering has occurred on the same property or facility that has been approved or is most suitable.*	A list of shelters that have the capability to support animal sheltering can be found in the Monterey County Mass Care and Shelter Plan.
Proximate Shelter	*A Proximate Shelter means that co-location is not possible at the facility, but the animal shelter would be close by at an offsite location that is suitable for the need.*	Where co-location is not possible, animal sheltering is provided in a location as close as possible to human shelters, or at the SPCAMC shelter facility.
Shelter -in-Place	*A Shelter in Place means when an agency seeks shelter in a place, building, or area that a person occupies, rather than evacuating the area or seeking out an offsite emergency shelter.*	The SPCA for Monterey County, with the support of the Office of Emergency Services and local law enforcement, will also provide field rescue for animals that were not able to be evacuated by their owners or provide care (including food and other needed services) “in place” to animals that are not able to safely be removed from the property where they reside during the disaster.

ESTIMATED SHELTER NEEDS

It is difficult to estimate the number of people who would bring animals with them to shelters during an evacuation even if they knew there were facilities for animals available. A 1997 study conducted by Purdue University among victims of large-scale disasters that involved mass evacuations found that of the 20% of persons who failed to evacuate, 80% were pet owners. The study also estimated that 30.5% of people did not evacuate because of their pets.

It is difficult to estimate the number of people who would bring animals with them to shelters during an evacuation even if they knew there were facilities for animals available. The following table estimates the number of animals in Monterey County needing temporary housing during an evacuation based on the number of people needing temporary housing.

ESTIMATED NUMBER OF PETS NEEDING TEMPORARY HOUSING BASED ON THE NUMBER OF PEOPLE SEEKING EMERGENCY HOUSING

PERCENT BRINGING PETS	NUMBERS OF PEOPLE NEEDING TEMPORARY HOUSING							
	250	1,000	2,000	5,000	10,000	25,000	50,000	100,000
0.5%	2	5	10	25	50	125	250	500
1%	3	10	20	50	100	250	500	1,000
2%	5	20	40	100	200	500	1,000	2,000
5%	13	50	100	250	500	1,250	2,500	5,000
10%	25	100	200	500	1,000	2,500	5,000	10,000
20%	50	200	400	1,000	2,000	5,000	10,000	20,000

4.1.5 ACCESS AND FUNCTIONAL NEEDS

Monterey County Office of Emergency Services recognizes that no two disasters are ever the same; yet, virtually all incidents disproportionately affect individuals with access and functional needs (AFN) (i.e. people with disabilities, seniors, children, limited English proficiency, and transportation disadvantaged).

There are both practical and legal implications for disability inclusive planning. Local government has an obligation under Title II of the American's with Disabilities Act of 1990, and other Civil Rights laws to ensure that people with disabilities have an equal opportunity to use and enjoy government services, benefits, facilities, and activities. This includes access to emergency communication and disaster services such as accessible shelters and transportation, reasonable modifications to shelter policies and procedures, and the right to remain united with service animals. The policies and procedures contained within this document are consistent with State and Federal Law.

SERVICE ANIMAL POLICY

> SERVICE ANIMALS MUST BE ALLOWED TO ACCOMPANY THE INDIVIDUAL IN ALL AREAS OF THE DISASTER SHELTER WHERE THE PUBLIC IS ALLOWED INCLUDING DORMITORIES, CASE MANAGEMENT OFFICES, DINING ROOM ETC., UNLESS THE ANIMAL IS OUT OF CONTROL OR BEHAVES INAPPROPRIATELY.

Currently the updated 2010 Federal ADA standards define a service animal as a dog of any breed or size, or a miniature horse that is individually trained to do work or perform tasks for the benefit of an individual with a disability, including a physical, sensory, psychiatric, or other mental disability. Examples of work or tasks include, but are not limited to, guiding individuals who are blind or have low vision with navigation and other tasks, alerting individuals who are Deaf or hard of hearing to the presence of people or sounds, assisting an individual during a seizure, alerting individuals to the presence of allergens, providing physical support and assistance with balance and stability to individuals with mobility disabilities, and helping persons with psychiatric and neurological disabilities by preventing or interrupting impulsive or destructive behaviors. Under the law, these dogs are allowed entry into the shelter when the prospective shelter resident with a disability reports to staff that: "this is my service / assistance/ disability dog".

> **IN SITUATIONS WHERE IT IS NOT OBVIOUS THAT THE DOG IS A SERVICE ANIMAL, STAFF MAY ASK ONLY TWO SPECIFIC QUESTIONS: (1) IS THE DOG A SERVICE ANIMAL REQUIRED BECAUSE OF A DISABILITY? AND (2) WHAT WORK OR TASK HAS THE DOG BEEN TRAINED TO PERFORM?"**

All animals admitted into the shelter due to an individual's disability must be trained to behave appropriately and remain under the owner's control at all times in order to remain in the shelter. In alignment with the American Red Cross Service Animal Policy, service animals allowed in Op Area supported shelters are to be accommodated, including feeding, watering, and providing access to a relief area.

4.1.6 OIL SPILL AND MARINE LIFE

Depending on the type of incident either a local, state, federal, private, or a nonprofit response agency will assume authority of the incident and provide guidance on any needs or services required in the Monterey County Op Area.

> *RESOURCE: https://www.wildlife.ca.gov/OSPR/Science, Califonria Department of Fish and Wildlife, Oil Spill Prevention and Response*

4.1.7 IMPACTS ON WILDLIFE

Wildlife generally has no significant problems during natural disasters. The following information should be considered as exceptional circumstances.

- In wild land fires, wildlife will flee and the fire usually consumes those that don't. Wildland Urban Interface fires will have a significant impact on most wildlife; wildlife that cannot outrun the fire will be consumed by it.
- Wildlife fleeing the area can become a traffic hazard if they choose to use the streets, although this has not been reported as a problem in past fires.

- Wildlife are often unaffected by earthquakes.
- If flooding is rapid and water does not recede quickly, wild animals that cannot flee the water will most likely be forced to share dry areas (roof tops, trees, etc.) with people and domestic animals or drown.
- If flooding advances slowly, an increase in animals retreating away from the flooding may occur. Nocturnal animals may move about during the day.

> **SPCA WILDLIFE RESCUE AND REHABILITATION CENTER IS THE ONLY FULL SERVICE WILDLIFE REHABILITATION CENTER SERVING MONTEREY COUNTY.**

4.1.8 ZOOLOGICAL

In order to be accredited by the Association of Zoos and Aquariums, companies in possession of animal collections, such as The Monterey Bay Aquarium, are required to have an integrated emergency management and response system, combining zoo/aquarium personnel and appropriate local agencies in any incident management planning and response.

> *RESOURCE: https://zahp.aza.org/incident-command-system/*

4.1.9 LIVESTOCK

The Monterey County Op Area EOC Operations Section Care and Shelter Branch, Animal Care and Shelter Unit, in conjunction with the Planning Section, will be responsible for identifying appropriate responses for the care and shelter of livestock.

> **FOR LIVESTOCK REUNIFICATION, LOCAL LAW ENFORCEMENT, MONTEREY COUNTY ANIMAL SERVICES, AND SPCA FOR MONTEREY COUNTY WILL WORK WITH THE STATE APPOINTED BRAND INSPECTOR TO DETERMINE THE OWNERSHIP OF LIVESTOCK, CATTLE OR HORSES THROUGH INSPECTION OF THEIR BRANDS.**

SURPLUS REAL PROPERTY AVAILABLE FOR PUBLIC USE

The General Services Administration (GSA) maintains federal real estate properties that are no longer needed by the federal government, which may be made available for public uses to state and local governments, regional agencies, or nonprofit organizations.

4.1.10 EUTHANASIA

For guidance on the ethical euthanasia of stray animals in animal shelters and facilities operated in the Monterey County Operational Area during disasters, refer to SPCA for Monterey County Euthanasia Policies.

> FOR ADDITIONAL GUIDANCE REVIEW THE MONTEREY COUNTY CODE OF ORDINANCES CHAPTER 8.16, ORD. 3629.

4.1.11 CARCASS DISPOSAL

The presence of animal carcasses are a public health and safety risk. Decaying carcasses can contaminate water sources or lead to outbreaks of diseases such as cholera or anthrax. Timely carcass removal is critical. The methods for environmentally acceptable disposal of animal carcasses are limited and become particularly difficult and expensive when there are many large animal carcasses.

> THE MONTEREY COUNTY HEALTH OFFICER, OR DESIGNEE, IS RESPONSIBLE FOR THE IDENTIFYING APPROPRIATE AND REGULATORY METHODS FOR DISPOSAL OF MASS QUANTITIES OF ANIMAL CARCASSES WHEN PUBLIC HEALTH IS THREATENED.

According the California Environmental Protection Agency and California Department of Food and Agriculture the Central Coast Region - Monterey, San Luis Obispo, Santa Barbara and Ventura Counties – experience large watershed drains into reservoirs and the ocean this region making this region environmentally sensitive. The primary livestock production activity in this region is grazing, with over 211,000 cattle and a combined 27,000 sheep and goats on pasture. There are no rendering facilities located in the region, and access to landfills for carcass disposal is also limited.

Monterey County does not maintain a plan or guidance for the emergency disposal and decontamination of animals. Monterey County does not have a policy in place or contingency MOU for mass carcass disposal with any company.

> MONTEREY COUNTY WILL FOLLOW THE GUIDANCE SET FORTH BY THE CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY AND CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE THE CENTRAL COAST REGION *EMERGENCY ANIMAL DISEASE: REGULATORY GUIDANCE FOR DISPOSAL AND DECONTAMINATION;* AND *CHALLENGES TO DISPOSAL OF LIVESTOCK AND POULTRY MORTALITIES AND ANIMAL BY-PRODUCTS IN CALIFORNIA*.

For the disposition of animal carcasses, every resident, occupant or operation of any real property situated in the County shall, upon reasonable notice given by the Health Officer, follow County guidance of the disposal of all carcasses of dead animals which have died or are upon any part of such real property. Monterey County does not recover any dead marine mammals (whales, etc.) washed onto any beaches in the Monterey County Operational Area. Beach property owners or the State of California are responsible for recovery of all dead

marine mammals on their respective beaches.

> *RESOURCE: See Attachment 2 for the CAL/EPA Emergency Animal Disease: Regulatory Guidance for Disposal and Decontamination.*

4.2 ROLES AND RESPONSIBILITIES

Cities, the County, and the SPCA for Monterey County may provide resources and services such as communications, animal care services, or volunteer coordination to assist with County wide response efforts.

4.2.1 INCORPORATED CITIES/TOWNS

Local government is often the first point of contact for residents needing help or services in an emergency. Local government may have limited capacity or resources to meet the needs of evacuating and sheltering animals in a disaster. Most of the jurisdictions in Monterey County are contracted with prepared animal control agencies. Local jurisdictions will request assistance with setting up temporary animal shelters, helping with animal evacuations and care through the Operational Area and the SPCA for Monterey County.

> **SPCA FOR MONTEREY COUNTY CONTRACTS WITH SEVERAL CITIES TO PROVIDE ANIMAL CARE AND SHELTER SERVICES; ANIMAL CONTROL SERVICES ARE THE RESPONSIBILITY OF THE INDIVIDUAL INCORPORATED JURISDICTIONS.**

4.2.2 MONTEREY COUNTY OPERATIONAL AREA

Within the Operational Area, the Monterey County Office of Emergency Services is responsible for coordinating and managing resources during a disaster. It is the primary point of contact for allocating resources within the jurisdictions of Monterey County and requesting resources from the state. The Operational Area includes all cities and special districts such as schools, water, and reclamation. Both within the Emergency Operations Center (EOC) and at the scene of the disaster, the Incident Command System (ICS) will be used to manage response activities.

> **THE COUNTY HAS PARTNERED WITH THE SPCA FOR MONTEREY COUNTY, WHICH WILL ACT AS THE LEAD ANIMAL RESCUE AGENCY TO MITIGATE ANIMAL SUFFERING OR ABANDONMENT BECAUSE OF A DISASTER.**

4.2.3 SOCIETY FOR THE PREVENTION OF CRUELTY TO ANIMALS (SPCA) FOR MONTEREY COUNTY

The primary animal support organization in the Operational Area is the SPCA for Monterey County, which coordinates animal rescue, care, and sheltering operations during emergencies; SPCA for Monterey County provides small and large animal evacuation assistance or field care support when evacuation is not feasible. During a response, this organization may request the activation of this Annex in support of local response efforts. The SPCA for Monterey County, with the support of the Office of Emergency Services and local law enforcement, will also provide field rescue for animals; SPCA for Monterey County will coordinate recovery efforts, such as the reunification of animals and their owns.

> **DURING DISASTERS, THE SPCA FOR MONTEREY COUNTY WILL, WITHIN THE COUNTY OF MONTEREY, ACT AS THE LEAD ANIMAL RESCUE AGENCY TO MITIGATE ANIMAL SUFFERING OR ABANDONMENT AS A RESULT OF A DISASTER.**

4.2.4 AMERICAN RED CROSS

The American Red Cross provides shelter and mass care services to residents throughout Monterey County. American Red Cross generally assumes the responsibility to help government with care and shelter operations.

Initially in a disaster, some shelters may be opened by American Red Cross and some may be opened by the city or county staff and then turned over to ARC as additional resources become available to help with local response. American Red Cross will have a liaison in the Monterey County Op Area Emergency Operations Center (EOC) and provide coordination with other agencies. American Red Cross maintains their respective care and shelter policies, specifically regarding pets and services animals.

> **AMERICAN RED CROSS COORDINATES WITH THE ANIMAL CARE AND SHELTER UNIT LEADER TO CO-LOCATE ANIMAL SHELTERS WITH HUMAN SHELTERS WHEN POSSIBLE.**

4.2.5 MONTEREY COUNTY HEALTH DEPARTMENT

The Monterey County Health Department staffs the Monterey County Operational Area Emergency Operations Center Medical/Health Branch.

MONTEREY COUNTY HEALTH DEPARTMENT HEALTH OFFICER OR DESIGNEE WILL ADVISE ON BIOSECURITY MEASURES (IN CONSULTATION WITH ENVIRONMENTAL HEALTH AND PUBLIC HEALTH); ENFORCEMENT OF BIOSECURITY MEASURES IS THE RESPONSIBILITY OF LAW ENFORCEMENT. BIOSECURITY MEASURES WOULD INCLUDE EXCLUSION OF ACCESS OF AFFECTED OR QUARANTINED AREAS OR ACCESS TO DISEASED ANIMALS OR CARCASSES.

MONTEREY COUNTY ENVIRONMENTAL HEALTH BUREAU

The Monterey County Environmental Health Bureau receives their authority and charter from the Monterey County Code of Ordinances Title 10 – Health and Safety.

Environmental Health responsibilities regarding animals in disasters include:

- Support public health services in animal shelters to include inspections, sanitation and environmental health concerns.
- Provide services to control injuries, bites, and diseases related to the protection of animals.
- Maintain Hazardous Materials Emergency Response capability within the unincorporated area of Monterey County and incorporated cities of Monterey County.
    - Hazardous materials releases and spills
    - Environmental crimes
    - Bioterrorism
    - Illegal Drug Laboratories
    - Sewage spills
    - Food poisoning incidents

MONTEREY COUNTY ANIMAL SERVICES

Monterey County Animal Services is a division of Monterey County Department of Health Environmental Health Bureau. During disasters Monterey County Animal Services is responsible for response to potentially rabid animals, to dangerous/aggressive domestic animals when no owner is present, to injured domestic animals, and to animal bites; Animal Services has a responsibility to reunify domestic pets and their owners throughout recovery. Mandated responsibilities are outline in the Monterey County Code of Ordinances Title 8 – Animal Control.

PUBLIC WORKS AND FACILITIES DIVISION

Monterey County Resource Management Agency Public Works and Facilities Division, which staffs that Public Works Branch of the Op Area EOC Operations Section, is the primary division responsible for the safe transportation of animal carcasses to identified destinations.

4.2.6 MONTEREY COUNTY AGRICULTURAL COMMISSIONER'S OFFICE

California's County Agricultural Commissioners serve as the primary local enforcement agents for State agricultural laws and regulations. Their primary duties were related to the control and eradication of pests harmful to agriculture. The Agricultural Commissioners have a unique and important role in the promotion of agriculture, farm worker health and safety, the protection environmental resources, and the assurance of a fair marketplace.

> MONTEREY COUNTY'S AGRICULTURAL COMMISSIONER'S OFFICE IS NOT A REGULATORY AGENCY FOR FOREIGN ANIMAL DISEASES OR ZOONOTIC DISEASES IMPACTING LIVESTOCK OR POULTRY; HOWEVER, DUE TO THE NATURE OF THEIR RELATIONSHIP WITH THE AGRICULTURE AND FARMING COMMUNITY, THEY MAY ASSIST IN COORDINATION WITH STAKEHOLDER GROUPS, SUCH AS CATTLE FARMERS.

4.3 EMERGENCY OPERATIONS CENTER

The Monterey County Op Area Emergency Operations Center (EOC) is activated when a disaster occurs to coordinate resource management and information sharing for the Operational Area. The Op Area EOC is staffed by County employees with the emergency responsibilities, as well as liaison representatives from other agencies and jurisdictions.

4.3.1 ACTIVATION

> THE ACTIVATION OF THIS ANNEX SHALL BE AUTHORIZED BY THE ACTIVATION AUTHORITIES OUTLINED IN THE OPERATIONAL AREA EMERGENCY OPERATIONS PLAN AT THE REQUEST OF THE SPCA FOR MONTEREY COUNTY, MONTEREY COUNTY HEALTH OFFICER, MONTEREY COUNTY ENVIRONMENTAL HEALTH BUREAU, MONTEREY COUNTY ANIMAL SERVICES, STATE AND FEDERAL REGULATORY AGENCIES.

4.3.2 POSITION ROLES AND RESPONSIBILITIES

MASS CARE AND SHELTER BRANCH

> THE ANIMAL CARE AND SHELTER UNIT IS HOUSED UNDER THE CARE AND SHELTER BRANCH IN THE OPERATIONS SECTION; THE ANIMAL CARE AND SHELTER UNIT IS ACTIVATED WHEN THE EOC IS FULLY ACTIVATED.

ANIMAL CARE AND SHELTER UNIT

Monterey County recognizes the critical importance of coordinating animal evacuation, care, and sheltering services during the response to an incident or disaster. Since the County does not have the resources, requests for resources to support animal care and shelter will come through the Op Area EOC Animal Care & Shelter Unit Leader to determine availability and the allocation of the agency resources in response to the request. The Animal Care and Shelter Unit Leader will serve as the single point of contact on all animal issues in the Op Area.

> THE ANIMAL CARE AND SHELTER UNIT LEADER IS ACTIVATED BY THE CARE AND SHELTER BRANCH DIRECTOR. THIS POSITON IS STAFFED BY THE SPCA FOR MONTEREY COUNTY.

MEDICAL HEALTH BRANCH

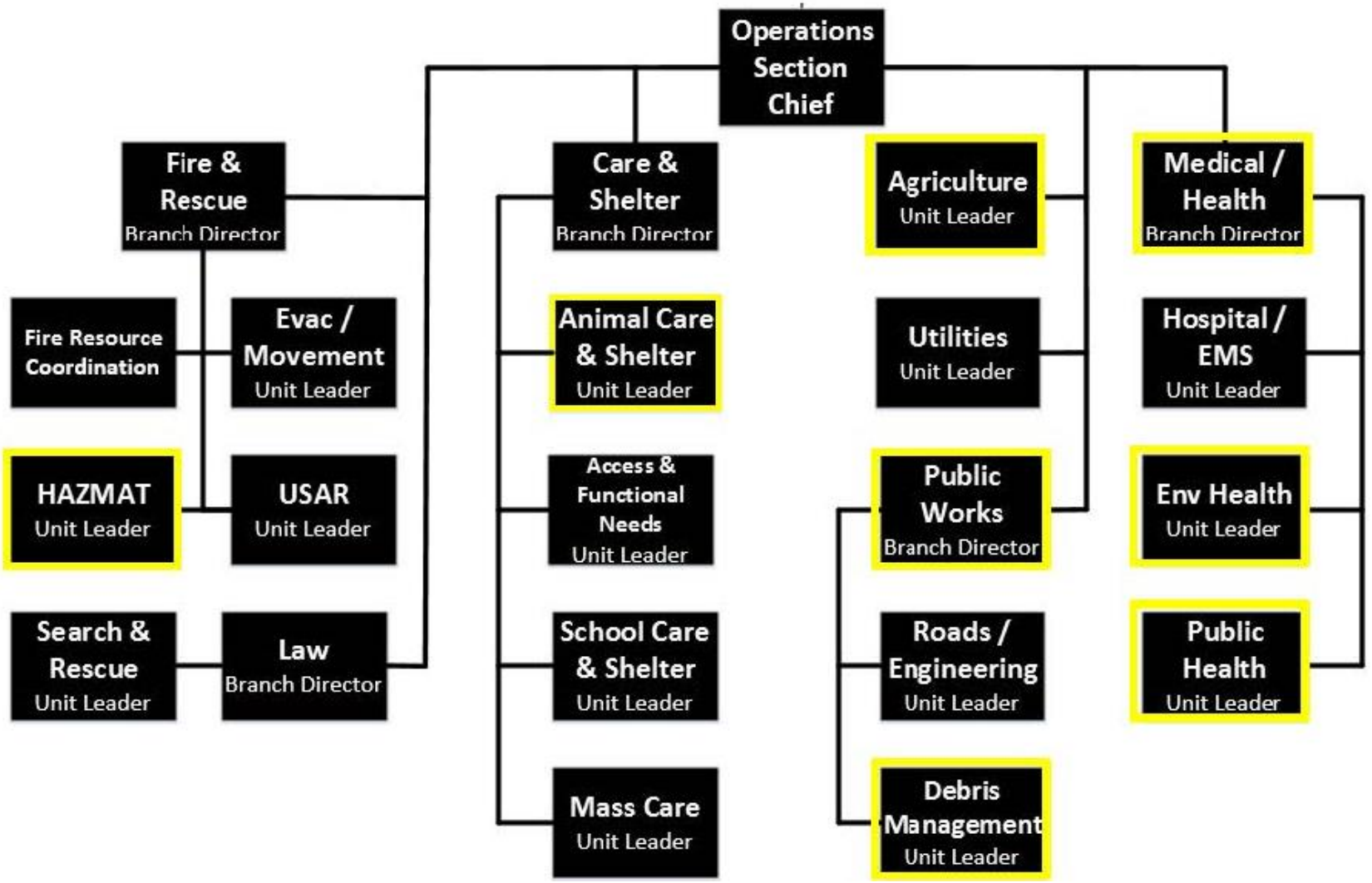
Maintaining animal and human health following a disaster is extremely important, whether the disaster is an earthquake or a foreign animal disease. The Medical Health Branch supports the assessment of risk to public health, including potential animal disease that may threaten public health; the Health Officer may order inspection of the animal.

> IF AN ANIMAL(S) POSES A THREAT TO PUBLIC HEALTH, THE HEALTH OFFICER WOULD HAVE LEGAL AUTHORITY TO TAKE ACTION TO PROTECT THE PUBLIC HEALTH.

ENVIRONMENTAL HEALTH UNIT

The Environmental Health Unit is housed under the Medical / Health Branch in the Operations Section. The Environmental Health Unit is responsible for assisting coordination of response to hazardous materials incidents involving permitting, ensuring compliance with regulations, and inspecting facilities that handle solid waste, such as animal carcasses, animal shelters, landfills, transfer stations, and compost facilities.

FIGURE 1 - OP AREA EOC: OPERATIONS SECTION ORGANIZATION CHART



4.4 MUTUAL AID SYSTEM

In accordance with the California Master Mutual Aid Agreement, local and state emergency managers have responded in support of each other under a variety of plans and procedures, including a coordinated emergency management concept called the Emergency Management Mutual Aid (EMMA) system. EMMA provides a valuable service during the emergency response and recovery efforts by providing a mechanism to deploy emergency managers and other technical specialists not covered by Law Enforcement or Fire Mutual Aid plans in support of emergency operations and response throughout California. Technical specialists can include support for operations providing care and shelter for animals, such as an Animal Control Officer.

> THE MONTEREY COUNTY EMERGENCY SERVICES MANAGER SHOULD BE NOTIFIED IF ANY COUNTY RESOURCE (EQUIPMENT, STRIKE TEAMS) IS DEPLOYED TO OTHER COUNTIES THROUGH MUTUAL AID.

4.5 DIRECTION, CONTROL, AND COORDINATION

This section describes the framework for all direction, control, and coordination activities. It identifies who has tactical and operational control of response assets. Additionally, the section explains how multi-jurisdictional and multi-agency coordination systems support the efforts of organizations to coordinate efforts across jurisdictions while allowing each jurisdiction to retain its own authorities.

4.5.1 DIRECTION AND CONTROL

In the event of an animal health emergency, an immediate response is necessary to protect both animals and people, coordinated through the Operational Area Emergency Operations Center. While a considerable amount of animal response efforts will be concentrated in animal care and shelter, the Monterey County Operational Area has a range of partners and stakeholders that are responsible for specific animal response considerations. This section provides an overview of relevant response operations that may require coordination and collaboration through the Monterey County Operational Area EOC.

4.5.2 COORDINATING WITH FIELD-LEVEL INCIDENT COMMAND POSTS

Field-level responders organize under ICS and coordinate with their local government DOCs or EOCs depending on the jurisdiction. For Monterey County, ICS functional positions at the field level coordinate with the applicable DOC and OA EOC Units, such as Health Department Operations Center, Environmental Health Unit, and Animal Care and Shelter Unit.

HAZARDOUS MATERIALS MANAGEMENT SERVICE (HMMS)

The Monterey County Environmental Health Bureau maintains a Hazardous Materials Management Service (HMMS) providing response to emergency incidents requiring Health Department oversight. The Level II Hazardous Materials Emergency Response team response to hazardous materials releases and spills; Decontamination; Environmental crimes; Bioterrorism; Food poisoning incidents.

4.5.3 EOC/IMT INTERFACE

The Monterey Operational Area EOC serves as the county multi-agency coordination center for Monterey County providing the architecture to support coordination of or incident prioritization, critical resource allocation, communications systems integration, and information coordination. The Op Area EOC Animal Care and Shelter Unit or Medical / Health Branch do not command the tactical response to the incident or events.

Rather the Op Area EOC, such as the Animal Care and Shelter Unit, supports the on scene Incident Commanders with information and resources. Communication and coordination between the Incident Management organization and the EOC is essential for ensuring a common operating picture; efficient logistical ordering of resources and sharing of public information strategies through a joint information system.

The Monterey County Environmental Health Bureau Hazardous Materials Emergency Response Team (ERT) respond and work with local fire and police agencies, California Highway Patrol, Cal-Trans, U.S. Coast Guard and National Martine Sanctuary personnel.

4.5.4 COORDINATING WITH LOCAL GOVERNMENT EOCS

When activated, the Monterey County Operational Area EOC coordinates with local governments through their activated EOC to facilitate the request and acquisition of resources and to share information.

4.5.5 COORDINATING WITH THE STATE OF CALIFORNIA

CALIFORNIA GOVERNOR'S OFFICE OF EMERGENCY SERVICES

California Governor's Office of Emergency Services California Animal Response Emergency

System (CARES) will coordinate resources and decisions once an incident escalates to a state-level emergency. As a county or local area exhausts its resources, it will contact Cal OES through the Regional Emergency Operations Center (REOC) to request assistance for additional resources and to make decisions on how best to respond. The REOC will coordinate with California Department of Food and Agriculture to identify and approve requested resources. This is all part of the response strategies of CARES as organized within the structure of the Standardized Emergency Management System (SEMS).

4.5.6 COORDINATING WITH NONGOVERNMENTAL/PRIVATE SECTOR ORGANIZATIONS

Nongovernmental organizations and private-sector businesses that provide resources and services in response to a disaster are encouraged to provide liaisons to the EOC. The Monterey County EOC has designated space to facilitate the support of these liaisons. These organizations and businesses will comply with ICS and SEMS standards.

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5. INFORMATION COLLECTION, ANALYSIS, AND DISSEMINATION

OBTAINING SITUATIONAL AWARENESS IS ONE OF THE MOST CRITICAL TASKS FOLLOWING AN INCIDENT OR CATASTROPHIC DISASTER. INFORMATION COLLECTION CONSISTS OF THE PROCESSES, PROCEDURES, AND SYSTEMS TO COMMUNICATE TIMELY, ACCURATE, AND ACCESSIBLE INFORMATION ON THE INCIDENT'S CAUSE, SIZE, AND CURRENT SITUATION TO THE PUBLIC, RESPONDERS, AND ADDITIONAL STAKEHOLDERS (BOTH DIRECTLY AFFECTED AND INDIRECTLY AFFECTED). INFORMATION MUST BE COORDINATED AND INTEGRATED ACROSS JURISDICTIONS AND ACROSS ORGANIZATIONS; AMONG FEDERAL, STATE, TRIBAL, AND LOCAL GOVERNMENTS; AND WITH THE PRIVATE SECTOR AND NGOS.

5.1 INFORMATION COLLECTION

Information is collected during and after an incident or catastrophic disaster to gain situational awareness. Information is gained from field-level responders, windshield surveys, and status calls and situation reports from human and animal shelters, 2-1-1/United Way hotline, and other agencies at all levels of government and other critical service providers.

5.1.1 SITUATIONAL AWARENESS

During an emergency, the EOC Director convenes briefings on a regular basis. The Op Area EOC Animal Care and Shelter Unit will attend the briefings and provide verbal and/or written summaries of existing problems, actions taken, priorities, timetables, and the potential for new issues that need to be incorporated into the Incident Action Plan (IAP).

5.1.2 ANALYSIS

All information acquired by Monterey County Op Area EOC Animal Care and Shelter Unit should be analyzed and confirmed prior to disseminating it further and prior to providing direction to staff or making other decisions based on the information. As part of the analysis information should be dated, given a credibility rating, and compared to other information collected for the same or similar subject matter.

5.1.3 DISSEMINATION

Once information is gathered and its accuracy confirmed, it can be shared with response partners and released to the public when appropriate. The key County internal policies that govern how OES interacts with other organizations and the public during a crisis are outlined in the crisis communications plan. The Operational Area EOC serves as the Joint Information Center (JIC) for the County.

> **THE ANIMAL CARE AND SHELTER UNIT LEADER IS RESPONSIBLE FOR WORKING WITH THE OP AREA EMERGENCY OPERATIONS CENTER PUBLIC INFORMATION OFFICER TO COORDINATE ALL MEDIA ACTIVITIES AND PRESS RELEASES IN ASSOCIATION WITH ANIMAL RESPONSE ACTIVITIES.**

5.2 OP AREA PUBLIC INFORMATION OFFICER

Information for the public is disseminated through several mechanisms under the control and advice of the Chief Public Information Officer (PIO). The PIO handles inquiries from the media, the public, and elected officials, emergency public information and warnings, rumor monitoring and response, media monitoring, and other functions required to gather, verify, coordinate, and disseminate accurate, accessible, and timely information related to the incident, particularly regarding information on public health, safety, and protection. The specific responsibilities of the PIO and are listed in the EOC position checklists contained in the EOC SOPs document. Public information specific to animals in disasters can include:

- Provide preparedness information concerning pet evacuation.

- Delivering instructions to the public to prepare their pets for an impending emergency and instruction for minor medical responses (first aid) for injured pets.
- Notifying the public of appropriate animal or pet friendly shelters–locations, regulations, contact personnel, etc.
- Initiating a system to direct inquiries on lost pets to appropriate shelters.
- Other information appropriate to the emergency and recovery operations.

> **PUBLIC AND MEDIA INQUIRIES FOR INFORMATION OR REPORTING OF INCIDENTS INVOLVING ANIMALS ARE TO BE DIRECTED TO THE ANIMAL CARE AND SHELTER UNIT.**

5.2.1 MESSAGE DEVELOPMENT AND APPROVAL

Messages intended to be disseminated to the public or to other agencies or organizations may be developed by in collaboration with the Medical / Health Branch, Environmental Health Unit, and Animal Care and Shelter Unit and/or subject matter experts working in support the County's response efforts.

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APPENDIX A | GLOSSARY

The following key terms, acronyms and definitions are used throughout this plan.

ANIMAL – For the purposes of responding to animal issues during emergencies, Monterey County defines "animals" as – "affected commercial livestock, companion animals, exhibition animals, captive wildlife, and exotic pets." This definition does not include feral animals or non-captive wildlife.

ANIMAL CARE & SHELTER UNIT LEADER (ACSUL)- Is the individual activated to provide communication and and coordinate resources when a disaster or incident occurs in the Monterey County Area.

COUNTY OF MONTEREY – The local political subdivision responsible for providing government services to the unincorporated areas of Monterey County. Typical government services include public works management, public health programs, public safety and emergency services, parks and recreation programs, and animal services.

DISASTER CYCLE – As used in this plan the disaster cycle describes the continuum of emergency management activities that include: planning, preparedness, prevention/mitigation, response, and recovery.

EMERGENCY OPERATIONS CENTER (EOC) – An EOC is a facility designated for emergency incident support activities at the local, OA, State levels. In Monterey County, local EOC's (city, County of Monterey) through their Incident Management Teams (EOC Staff) coordinate local jurisdiction response efforts. When an incident exceeds the capabilities of local resources, the Monterey County Office of Emergency Services activates and staffs the County EOC in the role of OA EOC to provide support and coordination of local government assistance from the OA, State, and Federal governments.

GOVERNOR'S OFFICE OF EMERGENCY SERVICES (CA OES) – Cal OES is the State level agency responsible for emergency management throughout the disaster cycle at the State level.

LOCAL GOVERNMENT – Local governments include cities, counties, and special districts. In accordance with State law and the SEMS, local governments manage and coordinate the overall emergency response and recovery activities within their jurisdiction.

MONTEREY COUNTY OFFICE OF EMERGENCY SERVICES (MC OES)– The Monterey Co. Office of Emergency Services, under the County Administrative Officer's office, is the agency responsible for the coordination of emergency management activities for the County of Monterey throughout the disaster cycle. During large scale emergencies MCOES serves as the coordinating entity for the Monterey County Operational Area through the OA Emergency Operations Center (EOC).

MONTEREY COUNTY OPERATIONAL AREA (OA) – The Monterey County Operational Area is established under the Standardized Emergency Management System adopted by the State of California. Under the SEMS the operational area is an intermediate level of the state's emergency management organization which encompasses the County of Monterey and all political subdivisions located within the County including cities and special districts.

NATIONAL INCIDENT MANAGEMENT SYSTEM (NIMS) – The National Incident Management System describes the incident management structure used by the Federal government for response to disasters. It includes the Incident Command System (ICS), as well as programs and frameworks for managing emergencies throughout all phases of the disaster cycle.

SOCIETY FOR THE PREVENTION OF CRUELTY TO ANIMALS FOR MONTEREY COUNTY (SPCAMC) –SPCAMC is an independent, Monterey County-based organization providing a wide range of animal services to the Monterey County community. Services include public education, animal rescue, animal adoptions, and emergency animal response, sheltering, and care.

STANDARDIZED EMERGENCY MANAGEMENT SYSTEM (SEMS) – Adopted by the State of California under Government Code Section 8607(a), the SEMS provides guidance on the response to emergencies and the sharing of resources across multiple jurisdictions and agencies. SEMS consists of five operational levels which include: field response; local government; operational area; regional; and the State.

APPENDIX B | REFERENCES

ADA 2010 Revised Requirements - Service Animals, US Department of Justice. https://www.caloes.ca.gov/AccessFunctionalNeedsSite/Documents/Service_Animals_2010.pdf

Agriculture-Related Disasters: Guidance Document for Local Government, California Governor's Office of Emergency Services (Cal OES), 2012. https://www.caloes.ca.gov/PlanningPreparednessSite/Documents/Ag%20related%20disasters-guidance%20for%20local%20govt.pdf

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Animal Care And Shelter Planning Toolkit, Bay Area UASI, 2018. https://www.dropbox.com/sh/518yei08hhu3ulv/AADBT_PGRZGzgeDH72zk-Jnla/Animals%20in%20Disasters?dl=0&subfolder_nav_tracking=1

Animal Emergency Planning Guide For Operational Areas, CARES, 2018. https://www.dropbox.com/sh/518yei08hhu3ulv/AADBT_PGRZGzgeDH72zk-Jnla/Animals%20in%20Disasters?dl=0&subfolder_nav_tracking=1

Animal Emergency Preparedness Plan, ASPCA. https://www.aspcapro.org/resource/disaster-cruelty-disaster-response/sample-plans-evacuation-and-sheltering

California Department of Food and Agriculture (CDFA) Animal Planning Guide for Counties

California Department of Fish and Wildlife, Office of Spill Prevention and Response. https://www.wildlife.ca.gov/OSPR/Science

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The Guide To Accreditation Of Zoological Parks And Aquariums, Association of Zoos and Aquariums, 2019. https://www.speakcdn.com/assets/2332/guide_to_accreditation.pdf

Zoo and Aquarium All Hazards Preparedness, Response and Recovery (ZAHP) Fusion Center. https://zahp.aza.org/incident-command-system/

APPENDIX C | APPROVAL & PROMULGATION

THE PRESERVATION OF LIFE, PUBLIC HEALTH, IMPROVED PROPERTY, AND THE ENVIRONMENT ARE INHERENT RESPONSIBILITIES OF LOCAL, STATE, AND THE FEDERAL GOVERNMENT. WHILE NO PLAN CAN COMPLETELY PREVENT ERROR, REASONABLE PLANS – CARRIED OUT BY KNOWLEDGEABLE AND WELL-TRAINED PERSONNEL - CAN MINIMIZE LOSS OF LIFE, INCREASE FINANCIAL STABILITY, AND REDUCE NEGATIVE IMPACTS TO PROPERTY AND THE ENVIRONMENT.

This Plan (or Plan), is a functional Annex to the Monterey County Emergency Operations Plan and establishes the emergency organization, assigns tasks, specifies policies and general procedures, and provides for coordination of planning efforts for respective staff.

This Annex is reviewed by all departments/agencies assigned a primary function in the County's Animal Response Annex. An approved Annex gives both the authority and the responsibility to organizations to perform their tasks; formalizes their responsibilities with regard to preparing and maintaining their own procedures/guidelines; and commits them to carrying out training, exercises, and plan maintenance necessary to support the Animal Response Annex.

A signature from the designated head of each department confirms that the department has read the Annex and has no conflicts with its content at the time of publishing. Upon review and written concurrence by the departments/agencies, the Annex is submitted to the Monterey County Operational Area (OA) Coordinating Council for review and approval. Upon approval by the Council, the Annex is officially adopted and promulgated by the County Board of Supervisors.

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LEW BAUMAN Date
County Administrative Officer, County Administrative Office

NICK CHIULOS Date
Assistant County Administrator, County Administrative Office

GERRY MALAIS Date
Emergency Services Manager, Office Of Emergency Services

ROSANNA LEIGHTON Date
Director Of Operations, Spca For Monterey County

ELSA JIMENEZ Date
Director, Health Department

RICHARD ORDONEZ Date
Chief Deputy, Agrcilutral Commissioner's Office

PATSY GASCA Date
Disaster Program Manager, American Red Cross – Central Coast Chapter

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APPENDIX D | RECORD OF DISTRIBUTION

THE MONTEREY COUNTY OFFICE OF EMERGENCY SERVICES PREPARES, COORDINATES, PUBLISHES, AND DISTRIBUTES THIS PLAN AND ANY REVISIONS MADE TO IT. THE PLAN IS DISTRIBUTED TO ALL DEPARTMENTS/AGENCIES IDENTIFIED BELOW. THE PLAN IS ALSO AVAILABLE UPON REQUEST BY THE EXTERNAL ORGANIZATIONS ALSO IDENTIFIED BELOW.

County Departments / Agencies	Local Governments / Special Districts	Other Organizations

County Departments / Agencies	Local Governments / Special Districts	Other Organizations

APPENDIX E | RECORD OF CHANGES

ANY APPROVED ADDITIONS OR MODIFICATIONS TO THE CARE AND SHELTER WILL BE DOCUMENTED AND NOTED IN THIS SECTION. THE DATE OF THE CHANGE, THE TITLE OF THE PERSON MAKING THE CHANGE, AND A SUMMARY AND REASON FOR THE MODIFICATIONS, WILL BE INSERTED INTO THIS SECTION OF THE PLAN. IF ANY MAJOR OR SIGNIFICANT CHANGES TO THIS PLAN NEED TO BE MADE, THEN THE REVISED PLAN WILL BE CONSIDERED AN UPDATE, AND THE COVER PAGE, PROMULGATION PAGE, AND APPROVAL AND IMPLEMENTATION PAGE SHOULD REFLECT THAT IT IS A NEW PLAN.

After any modification to this plan, the Emergency Services Planner will ensure that the updated version is distributed to all previously listed departments and agencies, and that the revised plan is uploaded to any share sites and/or webpages where this plan resides. Printed material will be available at the Emergency Operations Center (EOC). Personnel with a role in executive leadership, coordination and management, and operational implementation of emergency procedures are encouraged to have digital access to this plan, or a printed copy of this plan available to them at all times.

Change Number	Date of Change	Section	Summary of Change	Change Made By (Title or Name)
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APPENDIX F | OP AREA EOC ANIMAL CARE AND SHELTER UNIT LEADER JOB ACTION SHEET

If an event should occur and the SPCAMC is unable to staff the Operational Area EOC Animal Care and Shelter Unit Leader position, it is the responsibility of the EOC to fill the positon with a qualified trained representative from an animal services organization. This person will act as the single point of contact for management decisions relating to responding to the needs of animals during a disaster.

- ❑ Establish communications with SPCAMC
- ❑ Ensure establishment of field animal shelters (as needed)
- ❑ Assign coordinator to make outside agency contacts
- ❑ Respond to requests from city EOCs and field units
- ❑ Provide support services for designated field animal shelters
- ❑ Responding Organizations should maintain communications with County Op Area EOC Animal Care and Shelter Unit Leader and/ or Incident Commander

RESPONSIBILITIES

- ❑ Coordinate the animal field services division responsible for law enforcement and public safety functions:
- ❑ Asses the status of the Operational Area animal shelters and communicates needs for additional temporary animal sheltering:
- ❑ Communicate the need for animal care and veterinary services:

- ❑ Develop a plan for meeting Operational Area animal/welfare needs for the duration of the emergency.

- ❑ Coordinate as necessary with the Medical/ Health Branch Coordinator and the other EOC positions on animal care and welfare issues and legal requirements.
- ❑ Coordinate rescue and recovery efforts in the field and the operations of designated animal organizations

ACTIVATION PROCEDURES

- ❑ Check in with the personnel unit (in logistics) upon arrival at the Monterey County Op Area EOC.
- ❑ Report to Care and Shelter Branch Leader, or other assigned supervisors.
- ❑ Set up your work station and review your positon responsibilities.
- ❑ Establish and maintain a log which chronologically describes your actions.
- ❑ Determine your resource needs, such as a computer, phone, plan copies, maps, and any other reference documents.

RESPONSE

- ❑ Establish and maintain your login and files.
- ❑ Contact all field Animal Service officers/ Representatives and any off-duty personnel to determine their status and ability to function.
- ❑ Determine the extent of damage to, and the operational capacity of animal shelter facilities
- ❑ Obtain the current level of staffing and anticipated needs for additional personnel (including volunteers).
- ❑ Provide the Operations Section Chief and the Planning/Intelligence section with an overall summary of the Animal Services Branches/Organizations Operations periodically during the operations period or when requested.
- ❑ Work with the Logistics Section to determine locations and the status of major incidents involving a threat to or from animals.
- ❑ Provide estimate of the emergency's impact on area animals, and the need for animal control/organizations and the care needed when requested.
- ❑ Participate in EOC planning meetings, as required.
- ❑ Contact Operational Area animal welfare originations (public and private) and determine their status and ability to provide aid.
- ❑ Representatives will coordinate with logistics on the transfer of overflow domestic pets and livestock from our permanent and temporary shelters to approved public and private animal rescue organizations.
- ❑ Activate an inquiry registry services to reunite pets and families.
- ❑ Assist in the transition planning from our temporary pet friendly animal shelters to our permanent facilities.

- ❑ Complete and maintain the animal care and shelter status reports

- ❑ Prepare objectives for the animal care and shelter division for the subsequent operation periods and provide them to the Care and Shelter Branch Leader prior to the end of the shift and the next Action Planning Meeting.
- ❑ Refer all contacts with the media to the Animal Care and Shelter Unit Leader
- ❑ Thoroughly brief all relief staff before you leave your work station.

DEMOBILIZATION

- ❑ Deactivate your assigned positon and close out logs when authorized by the EOC Director/Manager.
- ❑ Complete all required forms, reports, and other documentation. All forms should be submitted through your supervisor to the Planning/Intelligence Section, as appropriate, prior to your departure.
- ❑ Be prepared to provide input for the after-action report.
- ❑ Clean up your work area before you leave.
- ❑ Leave a forwarding phone number where you can be reached.

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APPENDIX G | ZOONOTIC DISEASES IN SHELTERS

A ZOONOTIC DISEASE IS AN INFECTION THAT IS NATURALLY TRANSMITTED FROM VERTEBRATE ANIMALS TO HUMAN BEINGS. POTENTIAL ZOONOTIC AGENTS INCLUDE BACTERIA, VIRUSES, FUNGI, INTERNAL PARASITES AND ARTHROPODS. THERE ARE MANY FACTORS COMMON IN ANIMAL SHELTERS THAT MAKE ZOONOTIC DISEASE A PARTICULAR CONCERN IN THIS ENVIRONMENT. FOR THE PROTECTION OF SHELTER STAFF AND VOLUNTEERS AS WELL AS THAT OF THE PUBLIC, IT IS CRITICAL THAT ANIMAL SHELTER PROFESSIONALS AND VOLUNTEERS BE FAMILIAR WITH THE MOST COMMON ZOONOTIC THREATS IN A SHELTER ENVIRONMENT, AND THE GENERAL PRINCIPLES OF PREVENTING TRANSMISSION OF ZOONOTIC DISEASE.

THIS APPENDIX IS INTENDED TO FAMILIARIZE SHELTER PROFESSIONALS AND VOLUNTEERS WITH SOME OF THE GENERAL CONSIDERATIONS IN PREVENTING ZOONOTIC DISEASE. VIRTUALLY ALL SPECIES CAN BE CARRIERS OF ZOONOTIC DISEASE, AND UNUSUAL DISEASES MAY ALSO BE SEEN IN THE MORE COMMON SPECIES SEEN IN SHELTERS. THIS APPENDIX IS BY NO MEANS EXHAUSTIVE.

FACTORS IN A SHELTER ENVIRONMENT THAT INCREASE THE RISK OF ZOONOTIC DISEASE

An animal shelter is unlike virtually any other environment in which animals are maintained, and poses unique challenges for the control of infectious disease in general and zoonotic disease in particular.

There is often a high degree of turnover of the population of animals in a shelter, meaning that there is always a new group of animals at risk of contracting disease. Stress, poor nutrition, and presence of concurrent disease or parasitic infestation are common problems that increase the risk of transmission of infectious disease and the likelihood that infected animals will shed significant amounts of disease causing agents into the environment.

Many shelters struggle to care for animals in older facilities that may be difficult to properly sanitize, and may be characterized by poor ventilation, overcrowding, and uncomfortable temperature extremes, all of which contribute to the ready spread of infection. Treatment with antibiotics, common at many shelters for such conditions as kennel cough and upper respiratory infection, further reduces animals' resistance to some gastrointestinal infections, and can increase the spread of such zoonotic infections as salmonellosis.

In addition to the general difficulties of controlling infectious disease in a shelter environment, certain factors common in sheltered animals specifically increase the risk of various zoonotic diseases. Animals frequently enter shelters without a history of proper veterinary care or vaccination. Zoonotic diseases more likely to occur in unvaccinated animals include rabies and leptospirosis.

Many animals in shelters have a history of roaming outdoors, hunting or scavenging. This increases the risk of infection with such zoonotic conditions as echinococcosis, leptospirosis, salmonellosis, and rabies. Animals that have spent time outdoors and received minimal care are more likely to be infested with external parasites. Some external parasites can be directly transmitted to humans (i.e. scabies, cheyletiella), or they can serve as vectors for zoonotic disease such as Lyme disease and Rocky Mountain spotted tick fever.

Finally, animals entering shelters are often frightened, disoriented, and of unknown temperament. Staff handling these animals are at increased risk of being bitten or scratched. Besides the injury and infection that can occur due to the wound itself, this can serve as a means of transmitting zoonotic diseases such as rabies and cat scratch fever.

GENERAL PRINCIPLES OF PREVENTION AND CONTROL OF ZOONOTIC DISEASE IN A SHELTER ENVIRONMENT

Many animals infected with and potentially shedding a zoonotic disease show minimal or no clinical signs. Diseases for which animals are usually or commonly asymptomatic include toxocariasis, salmonellosis, leptospirosis, cat scratch fever, and toxoplasmosis. In addition to the existence of clinically unapparent diseases, many animals will continue to shed infectious agent for some time after recovery from clinically apparent disease, as can be the case for ringworm, salmonella, leptospirosis and others. It is imperative, therefore, that shelter staff realize the potential for any animal to be a potential source of infection, and maintain protective measures as a matter of routine, not just when disease is recognized.

GENERAL PRINCIPLES OF SANITATION AND INFECTIOUS DISEASE CONTROL APPLY TO CONTROL OF ZOONOTIC DISEASES.

- A fomite is any inanimate object that can spread disease. Fomites include hands, dishes, and tools such as grooming implements and poop scoopers. Hands should be washed and disinfected after animal contact, including indirect contact from cleaning cages, handling dishes or litter pans. Toys, blankets and dishes should be machine washed or discarded between animals, or should go home with newly adopted animals.
- Special attention should be paid to incoming animal processing areas and exam rooms. Exam surfaces should be cleaned between each animal, and the whole area cleaned thoroughly at least once a day. Areas that multiple animals pass through each day, such as "getting acquainted" areas where animals and adopters meet, should be cleaned after each use and thoroughly disinfected at least once a day.
- Feces should be cleaned up at least once a day from runs and cages, and should be removed immediately from common play areas and disposed of properly.
- Feces should be cleaned up at least once a day from runs and cages, and should be removed immediately from common play areas and disposed of properly.
- Dirt and grass play yards, while aesthetically pleasing, can serve as a reservoir for resistant agents such as roundworm. It is particularly important that puppy and kitten play areas be readily cleaned and disinfected, as these young animals are most likely to be affected by many infectious agents.
- Routine disinfection should be performed using agents effective against most bacteria and viruses. Acceptable choices include bleach (diluted at 1:32) and quaternary ammonium compounds. Shelter staff should be aware of agents, such as ringworm and many parasitic infestations that require more rigorous or specific disinfection procedures.
- Animal flow and handling order should be planned to reduce spread of infectious disease.

CARE AND TREATMENT OF SYMPTOMATIC ANIMALS

Many animals with zoonotic conditions show no outward signs. However, when zoonotic diseases do cause signs, they often present with vague signs similar to other common infectious conditions in shelters. Therefore, extra precautions should be taken whenever handling sick animals.

Such preventive measures protect the shelter population as well as human health.

- Sick animals should be housed in isolation, and the number of staff caring for these animals should be limited.
- Staff handling sick animals should wear protective clothing, which should be removed after leaving isolation wards.
- Appropriate diagnostics should be performed when zoonotic disease is suspected.
- It may not be practical or warranted to isolate animals with mild conditions such as diarrhea, but these animals should be clearly identified as suffering from a possibly infectious condition and should not be walked or socialized in common areas that can't be easily cleaned.
- Volunteers should be trained to perform a visual health check before socializing with any animal, and notify shelter staff before handling the animal if any sign of disease is noted.
- When a zoonotic condition is specifically diagnosed or suspected, the animal's cage should be clearly posted with the name of the condition and any precautionary measures (such as protective clothing or special cleaning procedures) required.

PARASITE AND PEST CONTROL

Internal and external parasites contribute to a STATE of general ill health and increase susceptibility to infectious conditions. In addition, internal and external parasites may be directly infectious to humans, or may serve as vectors to spread disease. Parasite control increases animals' comfort and adoptability as well as protecting human health.

- Internal parasite control should, at minimum, include routine treatment of puppies, kittens and nursing mothers for roundworms and hookworms (see discussion below under specific disease descriptions).
- Ideally, all incoming animals should be treated with an age and species-appropriate product effective against fleas and ticks as needed depending on region and time of year. If this is too costly, severely infested animals should be individually treated.
- Environmental treatment of group housing and common areas of shelter as needed for flea control.
- Rodents and insects can spread zoonotic disease, as well as spreading non-zoonotic infections.
- Food should be stored in sealed containers and not left in runs overnight where rodents are a problem. Further rodent and insect control measures should be undertaken as needed.

PROTECTION OF STAFF AND VOLUNTEERS

It is vital that staff and volunteers have the knowledge and equipment they need to perform their jobs effectively while protecting themselves from zoonotic disease. The following guidelines should apply:

- Provide training and continuing education for staff on the risks of zoonotic disease.
- Provide appropriate clothing and other protective equipment to prevent transmission of disease.
- Train all staff to wash hands frequently, after handling animals, before eating and at the end of each shift.
- Post guidelines detailing what to do in case of a bite or suspected zoonotic disease exposure, including phone numbers for medical emergencies, public health, physician and veterinary contacts.
- Provide staff with pre-exposure rabies vaccination according to Center for Disease Control guidelines. Maintain written records for staff members regarding vaccination status for rabies and tetanus.

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APPENDIX H | AVIAN FLU AND PETS

CATS AND DOGS INFECTION

Avian influenza viruses lack the receptors needed to infect mammals efficiently. However, the infection of humans observed in two previous H5N1 outbreaks demonstrates that transmission from birds to mammals can occur despite this lack of receptors. The very small number of human cases - despite abundant and widespread opportunities for exposure and subsequent infection - strongly suggests that transmission of H5N1 from birds to mammals, including cats as well as humans, is a rare event.

The infection of domestic cats with avian influenza type A (H5N1) has been documented over the last few years both experimentally and "in the field". It has been further confirmed that domestic cats can be infected by eating infected birds, and that infected cats can spread infection to other cats, most likely through feces, urine, and secretions from the respiratory tract. In fact, cats are not the only mammal beings infected with avian influenza. Dogs can also become infected. However, there is no evidence at this time that dogs become sick or transmit avian influenza.

INFLUENZA AND FERRETS

Though illegal in the State of California, Ferrets are an excellent mammalian host for studies of influenza virus pathogenicity and host immunity, and the manifestations of influenza virus infection in ferrets closely resemble those in humans. Studies have shown that H5N1 viruses that have been isolated from humans can cause severe disease in ferrets including lethargy, diarrhea, neurological signs and death. It is therefore important for shelters to consider all their mammals and birds to be at risk should avian influenza be found in North America. In fact, ferrets may be even more susceptible. Therefore, it is imperative to remember that control measures as outlined below be instituted for all species.

TAMIFLU AND OTHER ANTIVIRALS

There are basically two kinds of antiviral medications available that have shown efficacy against influenza viruses. These include the now well-known neuramidase inhibitor oseltamivir (Tamiflu). Several reports of emerging resistance to Tamiflu have been published which should inspire us to devise pandemic strategies that do not favor the development of oseltamivir-resistant strains. Improper use of personal stockpiles of oseltamivir may promote resistance, thereby lessening the usefulness of our frontline defense against influenza, and should be strongly discouraged.

We must be careful that we do not expose circulating influenza to these drugs in such a way as to facilitate the selection of resistant viruses. This includes not using this drug in domestic animals where it has not been shown to have any effect. Use of these drugs either for prophylaxis or treatment is **highly discouraged in any shelter situation** as it is unlikely to confer any benefit to the shelter population and could cause irreparable harm in being able to use antivirals in future human epidemics.

APPENDIX I | DISASTER COST RECOVERY PROGRAMS

DISASTER VETERINARY ANIMAL CARE REIMBURSEMENT

AGENCY: AMERICAN VETERINARY MEDICAL FOUNDATION (AVMF)

AVMF helps veterinarians provide medical care to the animal victims during and after any disaster. Funds are provided for the reimbursement of veterinary care provided for the medical care of animal victims of a disaster. Up to $5,000 per request is currently available for qualified applicants.

DISASTER VETERINARY PRACTICE RELIEF

AGENCY: AMERICAN VETERINARY MEDICAL FOUNDATION (AVMF)

AVMF helps veterinarians provide medical care to the animal victims during and after any disaster. Funds are provided for the restoration of veterinary infrastructure affected by disaster. Up to $2,000 per request is currently available for qualified applicants.

CONOMIC INJURY DISASTER LOANS

AGENCY: U.S. SMALL BUSINESS ASSOCIATION (SBA)

Working capital loans to help small businesses, small agricultural cooperatives, small businesses engaged in aquaculture, and most private, nonprofit organizations of all sizes meet their ordinary and necessary financial obligations that cannot be met as a direct result of the disaster. These loans are intended to assist through the disaster recovery period.

EMERGENCY HAYING AND GRAZING

AGENCIES: UNITED STATES DEPARTMENT OF AGRICULTURE (USDA); FARM SERVICE AGENCY (FSA)

A voluntary program available to agricultural producers to help them safeguard environmentally sensitive land. Producers enrolled in CRP establish long-term, resource-conserving covers to improve the quality of water, control soil erosion, and enhance wildlife habitat. In return, FSA provides participants with rental payments and cost-share assistance. Contract duration is between 10 and 15 years. Haying and grazing of CRP acreage is authorized under certain conditions to improve the quality and performance of the CRP cover or to provide emergency relief to livestock producers due to certain natural disasters. There are two types of haying and grazing authorization: managed and emergency.

FARM OWNERSHIP LOANS

AGENCIES: UNITED STATES DEPARTMENT OF AGRICULTURE (USDA); FARM SERVICE AGENCY (FSA)

FSA's Direct Farm Ownership loans provide farmers and ranchers the opportunity to purchase farmland, construct and repair buildings, and make farm improvements.

EMERGENCY FARM LOANS

AGENCIES: UNITED STATES DEPARTMENT OF AGRICULTURE (USDA); FARM SERVICE AGENCY (FSA)

USDA's Farm Service Agency (FSA) provides Emergency loans to help producers who own or operate located in a county declared by the President or designated by the Secretary of Agriculture as a primary disaster area or quarantine area. All counties contiguous to the declared, designated, or quarantined primary counties also are eligible for Emergency loans.

INVASIVE SPECIES MANAGEMENT

AGENCY: UNITED STATES ARMY CORPS OF ENGINEERS (USACE)

Invasive species can be plants, animals and other organisms. They threaten our nation's natural resources; seriously hinder navigation; adversely affect flood risk management, hydropower generation and water supply; and limit recreation use by the public. To manage the threat of invasive species, USACE employs the latest economically efficient technologies and research; and biological, mechanical and chemical control methods.

LIVESTOCK FORAGE DISASTER PROGRAM (LFDP)

AGENCIES: UNITED STATES DEPARTMENT OF AGRICULTURE (USDA); FARM SERVICE AGENCY (FSA)

LFP provides compensation to eligible livestock producers who have suffered grazing losses due to drought or fire. LFP payments for drought are equal to 60 percent of the monthly feed cost for up to five months. LFP payments for fire on federally managed rangeland are equal to 50 percent of the monthly feed cost for the number of days the producer is prohibited from grazing the managed rangeland, not to exceed 180 calendar days.

LIVESTOCK INDEMNITY PROGRAM (LIP)

AGENCIES: UNITED STATES DEPARTMENT OF AGRICULTURE (USDA); FARM SERVICE AGENCY (FSA)

Authorized to provide benefits to livestock producers for livestock deaths in excess of normal mortality caused by adverse weather, including losses because of hurricanes, floods, blizzards, disease, wildfires, extreme heat, and extreme cold. The livestock death losses must also have occurred in the calendar year for which benefits are being requested.

EMERGENCY ASSISTANCE FOR LIVESTOCK, HONEY BEES, & FARM-RAISED FISH (ELAP)

AGENCIES: UNITED STATES DEPARTMENT OF AGRICULTURE (USDA); FARM SERVICE AGENCY (FSA)

Provides Emergency relief to producers of livestock, honey bees, and farm-raised fish. Covers losses from disaster such as adverse weather or other conditions, such as blizzards and wildfires not adequately covered by any other disaster program.

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SEPTEMBER 2019

ATTACHMENT 1 | CAL/EPA EMERGENCY ANIMAL DISEASE: REGULATORY GUIDANCE FOR DISPOSAL AND DECONTAMINATION

CAL/EPA

Emergency Animal Disease

Regulatory Guidance for Disposal and Decontamination

October 20, 2004

Developed for the Interagency Foreign Animal Disease Working Group, by the Emergency Animal Disease Removal Working Group, and Emergency Response Management Committee (ERMAC)

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Introduction:

The term "emergency animal disease" (EAD), as used in this document, refers to a number of biological threats to poultry, livestock, and wildlife in the United States. Though their effects differ somewhat, each disease presents substantial risk to animal or human health, the environment, the economy, and society overall. An effective response to a large-scale EAD outbreak requires the combined resources of various agencies and the ability to rapidly deliver appropriate support.

Effective eradication of a particular EAD occurrence requires three key elements: rapid identification, geographical containment, and “removal” of affected animals – each element presents significant challenges for agencies. The California Department of Food and Agriculture (CDFA) is the primary State agency responsible for developing emergency animal disease identification, containment, and removal procedures. This document focuses on aspects of “removal” involving environmental oversight expertise.

The removal process involves the humane euthanasia and disposal of affected and exposed susceptible animals and may include removal of manure, bedding, feed, structures, etc, and the decontamination of surrounding areas. Removal is necessary to eradicate the disease and is a prerequisite to recovery. Disposing of large numbers of animal carcasses exposed to a devastating animal disease will immediately overwhelm routine disposal channels. Alternative methods of disposal, such as burning or burying, could create impacts on air and water quality. Chemicals used for decontamination of affected areas have environmental concerns.

This document anticipates the environmental and human health issues arising from the immediate disposal of a large number of animal carcasses. The primary focus is an animal disease outbreak, with a secondary recognition that emergencies can result from toxic exposure or a natural disaster. The document describes disposal options that can be rapidly implemented under most emergency conditions.

Scope and Use of this Document

This document is a partial guide to State of California regulatory programs that may, in the discharge of their respective responsibilities to protect human health and the environment, impact disposal and decontamination options in the event of an emergency animal disease (EAD outbreak. The information contained herein is intended to guide State and local officials responsible for supervising and/or conducting removal activities. It may serve, secondarily, as a resource for the public, especially those in the agricultural industry, involved in contingency planning for such an event. In either case, this document does not constitute an abrogation of any regulatory authority nor an endorsement , nor permitting of any otherwise prohibited activity. The document serves to prepare the reader for the issues and options encountered on a case-by-case basis should an EAD actually impact California.

This dynamic document will change over time; experience and periodic reviews will lead to revisions and improvements. Also, this document only attempts to focus on macro removal issues – whole or part carcass disposal and basic facilities and equipment decontamination. Removal issues certainly go beyond the initial scope of this document. Removal of bedding, feed, manure, stock ponds, etc. may occur during an EAD; the appropriate agency should be contacted if there is a question concerning removal of these materials.

Finally, this document complements other federal and State efforts to address EAD emergency response. In particular, this document augments the plan developed by the Office of Emergency Services and CDFA, titled “California Response to Foreign Animal Disease: A Multi-Agency, Statewide Plan for Response” and other documents, including CDFA’s “Local Planning Guide for Animal Disease Emergency Response,” and the United States Department of Agriculture’s “National Animal Health Emergency Management System Guidelines: Operational Guidelines: Disposal.” While this document augments other works, it is important to remember that California-specific laws must be followed when evaluating and mitigating environmental and human health risks from an EAD outbreak.

This document supports the statutorily established Standardized Emergency Management System (SEMS) implemented throughout California during state and local emergency response. The law is found in the Government Code, Section 8607; regulations governing SEMS became effective September 2, 1994. Since enactment, SEMS has proven to be an invaluable tool in responding to a variety of natural and man-caused disasters. Local government and state agencies can utilize SEMS in responding to EAD emergencies as well. SEMS provides the organizational structure, functional division of roles and responsibilities, support resources, and communication routes already utilized by local and state response agencies. It also provides an established conduit to federal resources if the emergency escalates to the federal level.

The Governor's Office of Emergency Services (OES) was a valuable partner in the preparation of this document and continues to support planning and response for EAD incidents. A reference copy of the OES brochure on SEMS is contained in the Appendices.

Development of a Removal Hierarchy

An early priority in any EAD outbreak is to develop a carcass disposal hierarchy. The hierarchy choices must protect public health, safeguard the environment, and ensure uncompromised disease control. The disposal cost, while important, is a lower hierarchy priority. This hierarchy cannot anticipate every circumstance. Disposal and decontamination choices are specific to each individual outbreak.

There are two key elements to consider when determining a removal hierarchy:

(1) The evaluation and choice of a disposal methodology, and
(2) The selection of a disposal site.

This section presents a brief evaluation of the various options for disposal and proposes a sequence in which that evaluation should occur to determine an appropriate removal hierarchy

DISPOSAL METHODS

The optimal disposal method varies according to circumstances. It is important to focus on the overall goal of the EAD response: to control, contain, and eradicate the disease. Some common disposal options and their potential shortcomings follow:

Burial
Burial has been a historical practice for animal disposal throughout the world. However, concerns about the contamination of groundwater have caused many states to ban the practice of burying animal carcasses. In California, a regional water quality control board (Regional Board) may still allow burial for disposal of routine mortality (deaths that are not associated with an infectious disease) and, under certain circumstances, for emergency animal disposal. Prior to burial of animal mortality, the owner or operator of the site where the animals are proposed for burial must submit a Report of Waste Discharge (ROWD) to the appropriate Regional Board. The Regional Board will then determine if burial is appropriate and issue Waste Discharge Requirements (WDRs) for the disposal. In the event of a declared emergency, the Regional Board may establish special burial conditions that, if followed, will allow the Regional Board waive the requirements to file a ROWD and obtain WDRs prior to the burial.

[See the agency-specific guidance pages of the State Water Resources Control Board and Regional Boards.]

Burning
Burning of animal carcasses is an effective, often expedient method of disposal that also destroys most pathogens. The benefits of burning include reduction in volume of the solid waste and reduction in the potential for groundwater pollution from the decomposing carcass.

However, burning produces air pollution. The burning of carcasses without emissions controls produces dense smoke and offensive odors that can create an illegal public nuisance and can result in significant public opposition if conducted near populated areas.

There are two basic methods used to burn carcasses — open burning and biological incineration.

Open Burning
An exemption to the California Health and Safety Code permits open burning for the purpose of disease abatement and prevention (Health and Safety Code, Section 41801(f)). Any public officer, including the Governor, under his/her authority for the declaration of emergencies, may permit such fires. There is no requirement for an air pollution control district permit or for the burning to be conducted on a permissive burn day, but burning cannot cause a public nuisance (Health and Safety Code, Section 41700).

Airborne contaminants resulting from the open burning of animal carcasses include those common to other sources of open burning such as large bonfires, wildfires, and agricultural burning. The smoke from these fires is extremely high in particulate matter and produces offensive odors. Soot (fine particulate matter) is the primary air pollutant of concern. Hydrocarbons, carbon monoxide, oxides of nitrogen, and sulfur dioxide are also emitted.

Open burning of animal mortality can be conducted at the site of the animal facility or at an alternative site; pyres may be above ground or in trenches. The use of accelerants such as diesel fuel, or auxiliary fuels such as wood and straw is required to achieve the combustion temperatures necessary for the complete destruction of animal carcasses. Specific procedures used to burn large numbers of animal carcasses are described in the U.S. Department of Agriculture's Animal and Plant Health Inspection Service – Veterinary Services (APHIS VS) emergency disease guidelines.

The efficiency and effectiveness of open burning can be significantly enhanced by using an *air curtain destructor* (ACD). An ACD is a mechanical device that forcefully projects a high volume curtain of air into a pit or trench while open burning is conducted. The air curtain increases combustion efficiency and reduces visible emissions and odors. ACDs are expensive, require specially trained operators, and are not presently available in California. There are only a few manufacturers of ACDs in the United States. For further, information visit ACD manufacturers' Web sites at http://www.airburners.com and http://conceptproducts.com.

Burning results in the destruction of most pathogens, a significant reduction in the volume of solid wastes, and minimization of potential impacts on water quality. There is no absolute assurance that open burning prevents further spread of all pathogens. Burning will leave residues that must be disposed of by composting, burying, or

transporting to a landfill.

Biological Incineration
High temperature (biological) incineration is a method of thermal destruction of both the carcass and pathogens. Biological incinerators operate at extremely high temperatures — in excess of 2000^{o}F in some cases — to convert volatile gases, vapors, and particulate matter to carbon dioxide, water, and ash. In a properly designed and operated biological incinerator, the combustible portion of the carcass is burned, producing a residue free of pathogens. An afterburner on the incinerator exhaust stack is extremely effective in eliminating residual odorous compounds. A properly designed and operated biological incinerator with an afterburner produces a stack gas virtually free of odors and particulate matter emissions.

There currently are no large biological incinerators in California. The incineration process is expensive, and access to an incineration facility with the capacity required to accommodate large animal carcasses in mass quantities is currently not possible. Other high temperature combustion devices, such as cement kilns and coke calciners, are not designed for carcass incineration.

Biological incinerators are “fixed-facilities” that do not fall under the exemption for open burning and are subject to the rules, regulations, and permitting requirements of the local air pollution control district.

[See the agency-specific guidance pages of the Air Resources Board.]

Composting
Composting is the aerobic decomposition and stabilization of organic matter under conditions that allow development of thermophilic temperatures as a result of biologically produced heat. It is a natural process, enhanced and accelerated by the mixing of organic waste with other ingredients in a prescribed manner for optimum microbial growth. Composting transforms a waste product (manure and dead animals) into a useful soil amendment.

During the past three decades, considerable interest has developed in composting as a method of waste disposal. The process has been widely used in Europe and Japan but is not as prevalent in the United States. The heat developed in the composting process kills most eggs of parasites and also kills many bacteria. The lethal temperatures usually extend to within 4 to 8 inches of the surface of the compost.

Composting can be difficult to manage and can result in objectionable odors. Supervision of the composting process by a knowledgeable person is necessary to ensure complete decomposition and a stable composted material. If the material being composed is not properly turned, the destruction of pathogens, especially heat resistant bacteria and spore-formers, cannot be assured. Flies, mosquitoes, rats, wildlife, and other disease vectors attracted to compost can spread disease. Large bones and hides will not compost readily and serve as deterrents to the composting process. While

composting is used for the disposal of certain forms of solid waste, the process has severe limitations for disposing of large numbers of animals.

Currently California regulations prohibit the composting of mammalian flesh, organs, unprocessed hide, blood, bone and marrow, absent a declaration of emergency (Title 14, California Code of Regulations, Section 17852(i).)

[See the agency-specific guidance pages of the Integrated Waste Management Board.]

Solid Waste Landfills

Depositing dead animals in the local landfill is a practice used by some producers for many years. This option is commonly used for disposal of a small numbers of large animal carcasses or a larger number of smaller animal carcasses. Identification of permitted solid waste landfills suitable for the disposal of carcasses should be part of ongoing contingency plans. Only landfills that satisfy requirements for siting with respect to flooding and aquifers, engineered containment, leachate management, and gas management regimes together with prerequisite permit conditions should be considered. Landfills permitted by the CIWMB with WDRs from the Regional Water Quality Control Boards (RWQCB) meet these criteria. Local county environmental health departments, the CIWMB, the RWQCB, or local landfill operators can help identify appropriate permitted landfills.

Carcasses disposed in a landfill undergo chemical, bacteriological, and physical changes. Depending on the material and site conditions, decomposition in a landfill can proceed very slowly over widely varying temperatures that are inadequate for the inactivation of heat resistant organisms and spore formers. There is also a potential for groundwater and surface water contamination from the release of landfill leachate, and the off-site migration of carbon dioxide, and methane gases. Small amounts of poisonous and noxious gases including hydrogen sulfide may also be emitted from landfills.

[See the agency-specific guidance pages of the Integrated Waste Management Board and the State Water Resources Control Board and Regional Boards.]

Rendering

Rendering is a commercial cooking and drying process that converts by-products from meat and poultry production, including animal carcasses, into usable commodities such as animal protein supplements for livestock and pet foods, tallow (a source of energy for feed rations), and fatty acids used in manufacturing processes.

Scientific data confirms that the time–temperature processes of the rendering industry — varying from 240 F to 280 F — will easily inactivate most viruses and even the most resistant strains of bacteria. The only infectious agents that the rendering process may not completely inactivate are prions. These particles are considered the most plausible cause of the transmissible spongiform encephalopathies (TSEs), commonly known as “Mad Cow Disease.”

Rendering as a means of animal disposal offers a relatively safe and integrated system that complies with the fundamental requirements of environmental quality and disease control. The rendering industry must abide by State laws regarding “dead stock” disposal. These laws establish a time limit within which the disposal must take place — usually 24 or 48 hours after death — to avoid nuisance odors and the potential transmission of disease causing pathogens from the carcasses. The “dead stock” is picked up by specially designated and equipped trucks to preclude any possibility of roadway contamination. The trucks are cleaned and disinfected on a schedule after specific routes, are subject to regular inspection, and are legally authorized to enter only licensed and approved facilities. These requirements allow monitoring and regulation of disposal methods assuring compliance with sanitation and hygiene standards. The whole process is necessary for prevention of infectious agents and subsequent disease transmission.

Unfortunately, rendering capacity in California is limited. Most plants are currently operating close to allowable capacity. Urban encroachment has reduced the hours of operation for several key facilities. Local air quality and nuisance regulations would need modification in a declared emergency so that these facilities could increase capacity by extending their hours of operation. Even operating at full capacity, a large-scale EAD would overwhelm California’s rendering plants within a few days.

Because the rendering plants left in California are few and widely scattered, animal carcasses may have to be transported long distances to reach a facility. Unless strict protocols are followed, this transportation can lead to further disease spread.

DISPOSAL SITE OPTIONS

The selection of optimal disposal sites in an animal health emergency involves a variety of factors and concerns. Some of these factors are discussed below.

On-Site Disposal

Historically, diseased carcasses were disposed on the infected premises to avoid spreading the infection by off-site transport. The two most common on-site disposal methods — burial and burning — have potentially serious environmental consequences. Title 27, California Code of Regulations, currently prohibits on-site disposal.

Off-Site Disposal

For off-site disposal, the primary concern is carcass transport in a safe, sanitary, and timely fashion, while not spreading the disease or endangering public health. On-site disposal reduces exposure routes and, for this reason, is preferable to off-site disposal. Methods of carcass disposal, such as rendering and incineration, require off-site transport.

Temporary Storage
Temporary storage may be necessary when off-site disposal is required because of factors such as: climate (e.g., equipment accessibility concerns); highly concentrated animal populations; the presence of wild animals (e.g., coyotes or feral pigs); and insects as disease vectors. In other situations, carcasses or materials may need temporary storage until conditions suit disposal activities (e.g., until rendering or incineration capacity becomes available or until infected premises are more accessible).

Carcasses and other items awaiting disposal must be secured to prevent unauthorized access and potential disease spread to susceptible species. Piling carcasses in a closed building or cold storage facility is one option for temporary storage. Another option is piling the carcasses outdoors on a surface that prevents leaching or runoff, spraying them thoroughly with an appropriate disinfectant, and covering them securely with a tarpaulin. A third approach uses earth-moving equipment to arrange the carcasses in piles on or above the ground surface before covering with soil. Always consider control measures for insects, other fomites, and vectors during temporary carcass storage.

Emergency Carcass Disposal Decision Tree
CDFA veterinarians brought back several recommendations after observing the United Kingdom's (UK) attempts to combat the 2001 foot and mouth disease outbreak. CDFA veterinarians recommend, "California should continue its effort to establish carcass disposal capabilities by region. The capacity of each option and evaluation of possible challenges faced from environmental regulations should be included." We agree that each county or region should make the following evaluations BEFORE a disease outbreak.

1. **Evaluate the ability to temporarily store and/or transport the carcasses.**
   This evaluation impacts the subsequent consideration of other options. Special procedures must be followed to prevent the spread of disease when transporting contaminated material from infected premises to off-site locations. In the event of an EAD outbreak, CDFA approves all carcass transportation procedures. Transportation and temporary storage planning prior to an EAD is critical.

2. **Evaluate the capacity to render or incinerate the carcasses.**
   In the UK's recent foot and mouth disease outbreak, all stakeholders agreed that rendering and fixed-plant incineration were the preferred methods of disposal. It was clear from the start of the outbreak that renderers and incinerators were not immediately available and, even at full capacity, could only partially meet disposal needs. This limited renderer and incinerator capacity is likely in California if large numbers of carcasses need disposal. Regional or local carcass rendering is always the first choice for off-site disposal. Transport of the carcasses must be accomplished in a safe, sanitary, and timely fashion while not spreading the disease or endangering public health. Fixed-plant incineration is the next preferred disposal option. However, the few incineration plants in California are not large enough to accommodate large animal carcasses.

3. **Evaluate the available capacity of licensed, commercial landfills.**
   Because of the containment technologies used at permitted commercial landfills, these sites are the third best environmental solution to the disposal of carcasses. Disease risk from storage and transportation must be well managed in order to use this disposal method.

4. **Evaluate the remaining disposal options, including on-site burning, burial, chemical digesters, and composting; then choose the method of animal carcass disposal.**
   The California Environmental Protection Agency (Cal/EPA), in coordination with the California Department of Health Services (DHS), CDFA, and local jurisdictions, can provide recommendations for the most appropriate method(s) for disposal of dead animals. If burning is utilized, Cal/EPA can recommend fuels and procedures to minimize environmental impact. For burial, Cal/EPA can make best-practice recommendations, and determine, in coordination with CDFA, if dead animal-contaminated materials should be buried on site or transported to an offsite location. If animal mortality and related materials are transported for disposal, Cal/EPA can identify the offsite location and make recommendations in conjunction with the California Department of Transportation, regarding specific transportation requirements. All disposal recommendations will take into consideration biosecurity standards established by the Multi-Agency Coordination Group.

5. **Evaluate the environmental impacts of and best management practices for disinfectants.**
   Cal/EPA and CDFA can consider environmental impacts and make best practice recommendations with regard to disinfectant use for cleaning vehicles, equipment, and facilities. DHS and other appropriate agencies can evaluate potential risks to worker safety, and can make recommendations regarding best practices for worker protection from the disease agent, affected carcasses, or disinfectant chemicals. Cal/EPA can coordinate with local jurisdictions to identify and secure the issuance of any necessary permits, and can record any allowed exemptions from permitting requirements.

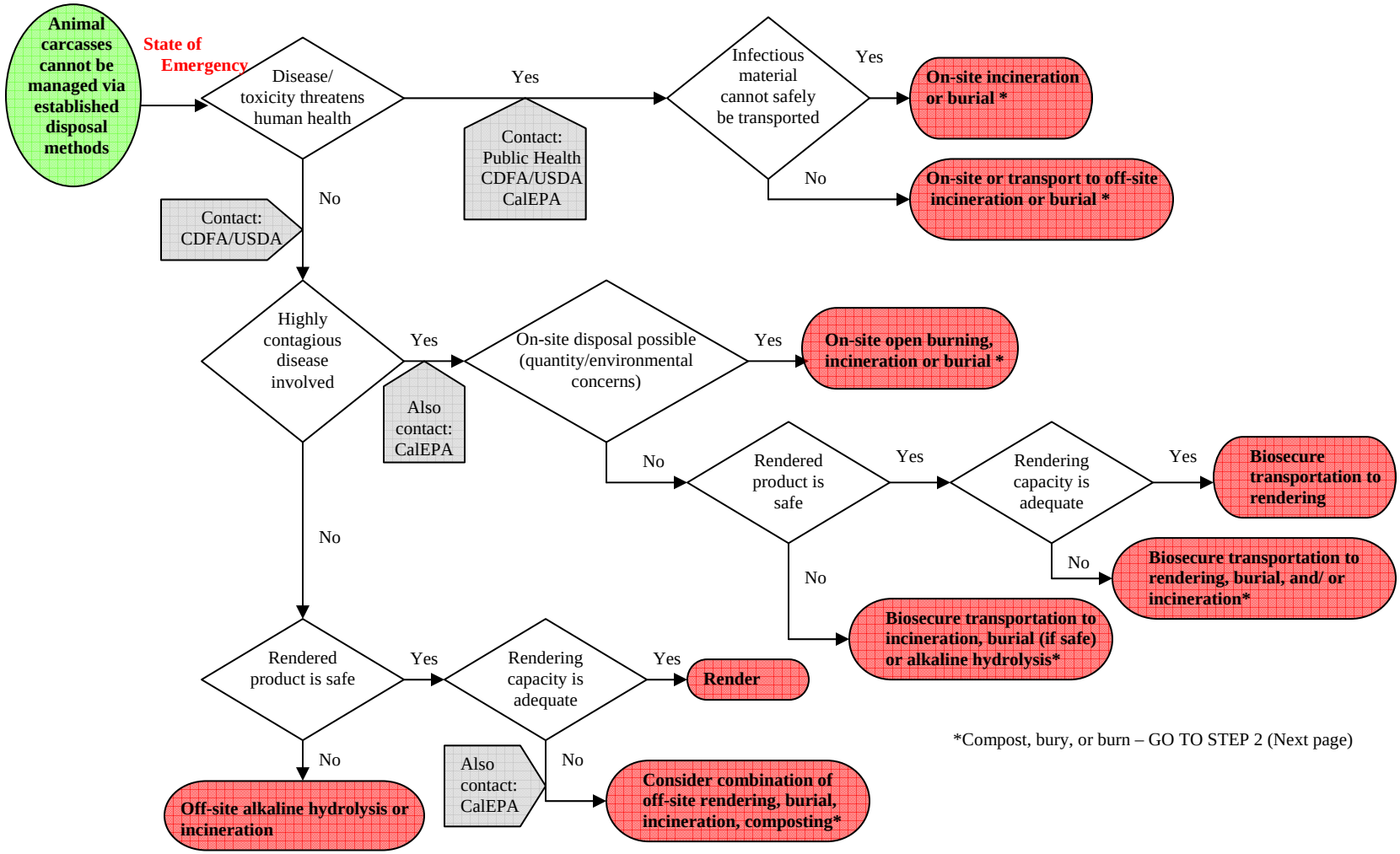
   In the event of a carcass disposal emergency, select the disposal method that offers the best disease control without creating unacceptable human health and environmental risks. More than one method of carcass disposal may be required.

   Refer to the "Emergency Animal Carcass Disposal Decision Tree" on the following page.

EMERGENCY ANIMAL CARCASS DISPOSAL DECISION TREE

Step 1: Determine site

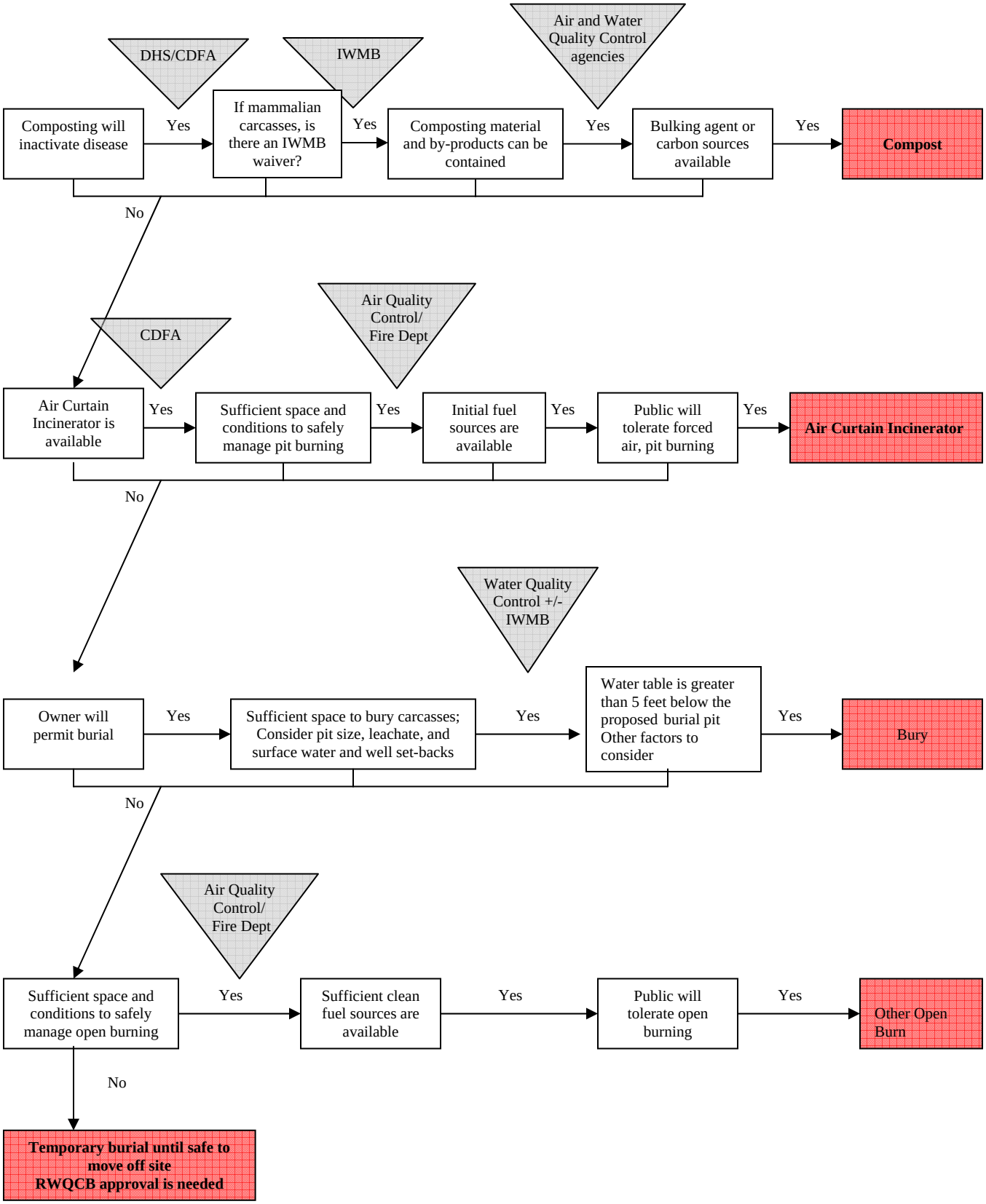
All disposal decisions must be made **after** consultation with public health, animal health, and environmental oversight agencies. An animal carcass disposal emergency may occur after a large, unexpected die-off of animals due to a natural disaster, disease or toxic exposure, or during certain animal disease eradication programs. Factors that will influence disposal decisions include cause of death, urgency of disposal, location, scale of carcass disposal need, costs, and environment oversight concerns.



*Compost, bury, or burn – GO TO STEP 2 (Next page)

Note: The above flow chart offers *basic* guidance for emergency carcass disposal decisions. Actual disposal methods will be determined on a case-by-case basis, and the decision – making process will likely involve additional factors.

***Step 2: Compost, bury, or burn at the site identified in Step 1. As mass to dispose of increases, you may need to use a combination of options.**



Note: The above flow chart offers *basic* guidance for emergency carcass disposal decisions. Actual disposal methods will be determined on a case-by-case basis, and the decision –making process will likely involve additional factors.

Air Resources Board:

1. Purpose and Use of Guidance

The purpose of this section is to outline considerations of an Emergency Animal Disease response for executive managers and staff of the Air Resources Board (ARB) and to discuss coordination with emergency operation center personnel, and other local, state and federal responders. This section anticipates the environmental and/or human health issues within the authority of ARB arising from the immediate disposal of large numbers of animal carcasses. Potential regulatory conflicts and their remedies are described.

2. Program Description

ARB is the State agency charged with overseeing California's air pollution control program. The focus of the program is to achieve State and federal health-based air quality standards. ARB works with local air pollution control districts to make continuous and expeditious progress toward attainment of the federal and State air quality standards throughout California; attain federal air quality standards by the applicable deadlines; continue California's progress in reducing public exposure to toxic air contaminants; and implement and oversee specific air pollution control programs necessary to achieve and maintain air quality standards.

3. Program Authorities

- State law gives ARB the responsibility for implementing specific programs to comply with the State and federal Clean Air Acts. ARB also conducts oversight of local air pollution control district programs.
- ARB provides local districts with technical assistance, guidance, and oversight. ARB works with districts on control technology assessments, reviews district rules, and performs district program audits.
- State law directs ARB to monitor air pollutants in each air basin in the state, in cooperation with local air pollution control districts. ARB uses air quality data to determine the nature of basin pollution problems and to assess effectiveness of control programs. ARB's statewide network of stations monitors for toxic air contaminants as well as for the "criteria" pollutants: ozone, carbon monoxide, nitrogen dioxide, particulate matter, sulfur dioxide, sulfates, and lead.

4. Program Oversight Responsibilities

- ARB oversees district enforcement programs for stationary sources of air pollution. ARB assists industry and district enforcement personnel by providing new technology and regulatory training courses.
- The primary authority for control (and permitting) of non-vehicular sources of air pollution in California rests with the local air pollution control districts. ARB conducts local program reviews and oversight.

5. Expertise

ARB provides personnel, technical advice, ambient air monitoring of public exposure, air sample analyses, air quality impact modeling and other public health assistance to local agencies during significant hazardous materials incidents or catastrophic events.

6. Carcass Disposal

The ARB recommends using the most environmentally safe methods of animal carcass disposal during an emergency animal disease response. Methods such as landfilling at commercial facilities and fixed-plant incineration offer controlled and monitored disposal situations. The ARB can provide assistance in locating fixed-plant incineration sites, or can link animal emergency response personnel with regional and local contacts to aid in carcass disposal assessments.

Open burning of animal carcasses has been used in past animal disease outbreaks, notably in the United Kingdom's foot and mouth outbreak of 2000-01. This disposal method presents environmental and aesthetic challenges. Ash and other residues may threaten groundwater if left in place or buried. Smoke and particulants may cause health and appearance concerns. Open fires may be hazardous in dry windy conditions. All of these problems must be considered when assessing this disposal option. The following recommendations are intended if open burning of animal carcasses is considered as a disposal option.

7. ARB Recommendations for Open Burning of Animal Carcasses for the Prevention or Abatement of Disease or Pests

If open burning of carcasses is conducted:

- Notify the local air pollution control district and local fire agency of the need to burn, the expected amount of burning, and the expected timing of a burn;
- Do not conduct burning if the local air pollution control district determines that it will cause a public nuisance;
- Notify nearby residents and community members of the need to burn and the expected timing of a burn;
- Avoid burning in close proximity to populated areas, however;
  - If burning must be conducted in close proximity to populated areas, ambient air monitoring in the populated areas should be conducted for fine particulate matter (PM_{10}). Sulfur dioxide monitoring should also be conducted if coal or other high sulfur fuel is used in burning.
- Prepare burn site and dead carcasses in accordance with recommended US Animal and Plant Health Inspection Service – Veterinary Services (APHIS VS) emergency disease guidelines (see Appendix B) and CDFA procedures, incorporating local fire and air pollution control district recommendations;
- Use clean fuel oil such as diesel or kerosene and unpainted/untreated wood for burning;
- Notify the local air pollution control district and local fire agency on the day of the burn prior to ignition;

- Assure that all fire safety and public health protection requirements are met prior to ignition, and, to the extent feasible, ignite the fire on a permissive burn day as determined by the ARB, the local air quality agency, and the local fire agency;
- Initiate burning during acceptable air pollution control district burn hours (typically between 10:00 a.m. and 5:00 p.m.);
- Consider using an *Air Curtain Incinerator* for more efficient open burning. An Air Curtain Incinerator is a mechanical device that forcefully projects a high volume curtain of air into a pit or trench in which open burning is being conducted so that combustion efficiency is increased and smoke and other odors are reduced. However, Air Curtain Incinerators are expensive (~$95,000), require specially trained operators, and are not readily available California at this time. For further information visit manufacturers' Web sites at http://www.airburners.com and http://conceptproducts.com)

8. Air Pollution Permitting Requirements

- When there is no reasonable alternative, open burning of disease-infected or exposed animals is exempt under California Law from open burning prohibitions and air pollution control district permitting requirements.

In California Health & Safety Code §41800, *No Person Shall Use Fires to Dispose of Waste*, prohibits open burning of waste.

> 41800. Except as otherwise provided in this chapter, no person shall use open outdoor fires for the purpose of disposal or burning of petroleum wastes, demolition debris, tires, tar, trees, wood waste, or other combustible or flammable solid or liquid waste; or for metal salvage or burning of motor vehicle bodies.

However, Health & Safety Code §41801, *Authority to Set or Permit Fires; Purposes*, provides exemptions to the open burning prohibition.

> 41801. Nothing in this article shall be construed as limiting the authority granted under other provisions of law to any public officer to set or permit a fire when such fire is, in his or her opinion, necessary for any of the following purposes:
> (a) The prevention of a fire hazard, which cannot be abated by any other means.
> (b) The instruction of public employees in the methods of fighting fire.
> (c) The instruction of employees in methods of fighting fire, when such fire is set, pursuant to permit, on property used for industrial purposes.
> (d) The setting of backfires necessary to save life or valuable property pursuant to Section 4426 of the Public Resources Code.
> (e) The abatement of fire hazards pursuant to Section 13055.

(f) Disease or pest prevention, where there is an immediate need for and no reasonable alternative to burning.
(g) The remediation of an oil spill pursuant to Section 8670.7 of the Government Code.

The open burning disposal of animals infected with or exposed to disease would be considered as non-agricultural burning covered under Health and Safety Code Section 41801(f). This section of code provides authority for non-agricultural open burning for the prevention or abatement of disease or pest prevention where there is an immediate need and no reasonable alternative to burning exists. Any public officer, including the Governor, may permit such fires. Unlike what is required for other types of non-agricultural open burning (such as for non-industrial wood waste — see Health and Safety Code Section 41804.5b), there is no requirement for obtaining an air pollution control district permit nor for the burning to be conducted on a permissive burn day.

Accordingly, when there is no reasonable alternative, open burning of disease-infected or exposed animals is exempt from open burning prohibitions and air pollution control district permitting requirements. Note: Using a biological incineration facility for the disposal of animals is not open burning, and would be subject to the rules, regulations, and permitting requirements of the local air pollution control district with jurisdiction over the facility.

9. Estimated Emissions:

In the event that open burning of diseased animal carcasses is utilized in California, ARB staff has attempted to estimate emissions of criteria pollutants and precursors that would be associated with two methods of burning cattle carcasses. The estimated emissions focus on cattle only. According to USDA staff, the population of other species, such as swine and sheep, susceptible to an EAD is relatively small. However, other non-EAD situations such as floods, fires, etc, can potentially result in large numbers of carcasses needing disposal.

The first method of burning animal carcasses discussed is based on the suggested USDA method. This method uses a combination of fuel oil, coal, wood, old tires, and straw bales. The second method of burning carcasses is based strictly on using fuel oil (50 gallons of fuel oil used to burn one 1200 lb. cattle carcass). **(This method has been used in the San Joaquin Valley in the 1990s.)** The estimated emissions using the different methods of disposing of animal carcasses are contained in the following table (see Attachment 1 for more detail):

Emissions from the Disposal of Cattle Carcasses

(in tons per 1000 head of cattle)

Method of disposal	ROG	NOx	PM
Burial	0	0	0
USDA method	5.5	8.3	14.2
Disposal with fuel oil	0.5	3.8	1.1

Department of Pesticide Regulation:

1. Purpose and Use of Guidance

The purpose of this section is to outline considerations of an emergency animal disease response for executive managers and staff of the Department of Pesticide Regulation (DPR) and to discuss coordination with emergency operation center personnel and other local, state and federal responders. This section anticipates the environmental and/or human health issues within the authority of the DPR arising from the immediate disposal of large number of animal carcasses. Potential regulatory conflicts and their remedies are described.

2. Program Description.

DPR regulates all aspects of the registration, review and use of pesticides in the state. DPR is authorized by the USEPA to implement federal laws and standards at the state and local level. DPR is also responsible for California-specific pesticide laws and regulation.

3. Program Authorities.

In the event of an EAD, DPR's oversight is limited to the use of pesticides, including disinfectants, used to control the disease and/or vectors of the disease. DPR's authority derives from the Food and Agriculture Code, Division 6 and Division 7 and the California Code of Regulations, Title 3, Division 6.

DPR and local County Agricultural Commissioners could conduct inspections and investigations to determine if pesticides used in a EAD outbreak are properly registered or otherwise authorized by the USEPA and DPR for the intended use; that commercial applicators are licensed by DPR and registered in the county where they work; and that pesticide labels, with required human/environmental warnings and use directions, are on site. Pesticide applicators must comply with all pesticide label requirements, regulations, and permit conditions (if applicable). Commercial pesticide applicators under contract to USDA or CDFA shall be licensed by DPR and registered by the local agricultural commissioners in the counties where work is performed. When required, government/agency pesticide applicators are properly certified by DPR and registered in the county where the work is performed. Pesticide handlers (employees) shall be trained and properly supervised during pesticide applications. Training records, use reports, etc., and other documentation shall be maintained, submitted if required, and made available upon request for inspection.

4. Expertise.

DPR provides support information on the proper use of pesticides registered in the state. Questions concerning pesticide exposure to people and the environment may be directed to DPR. DPR and/or its local enforcement agents, the county agricultural commissioners, may conduct investigations of pesticide misuse, take samples relating to pesticide misuse, or conduct inspections of pesticide use.

Department of Toxic Substances Control:

1. Purpose and Use of Guidance

The purpose of this section is to outline considerations of an Emergency Animal Disease response for executive managers and staff of the Department of Toxic Substances Control (DTSC), and to discuss coordination with emergency operation center personnel, and other local, state and federal responders. This section anticipates the environmental and/or human health issues within the authority of (DTSC), arising from the immediate disposal of large numbers of animal carcasses. Potential regulatory conflicts and their remedies are described.

2. Program Description.

The mission of DTSC is to protect public health and the environment from harmful exposure to hazardous substances without unnecessarily impacting sustainable growth and development.

Protection of public health and the environment is the focus of all DTSC programs; and all permitting, site cleanup, pollution prevention, environmental technology certification, public participation, and education activities are driven by this mandate.

DTSC is responsible for regulating hazardous waste facilities and overseeing the cleanup of hazardous waste sites in California. DTSC also provides emergency response removal and technical assistance to other state and local agencies.

3. Program Authorities.

DTSC is authorized, Health & Safety Code (HSC) Chapter 6.5, to regulate all activities involving hazardous wastes including:

- Generation
- Transfer and Handling
- Transportation
- Storage
- Treatment and Recycling
- Disposal

The State is authorized by USEPA to implement the Federal Resource Conservation and Recovery Act (RCRA). Regulations covering these authorities include Title 22, California Code of Regulations (Division 4.5) and Title 40, Code of Federal Regulations (Parts 260-279).

Facility Permitting, Closure, Corrective Action, and other grants of authorization are regulated by the Hazardous Waste Management Program, as are Inspections, Enforcement Orders, Complaint Response, Financial responsibility reviews, and Transporter Registrations. Some aspects of the regulatory programs, including Hazardous Waste Generator and Onsite Tiered Permitting programs, have been delegated to local jurisdictions called Certified Unified Program Agencies (CUPA).

Generally, non-hazardous waste activities, including those involving “solid wastes” and “infectious wastes” are unregulated by DTSC.

DTSC is authorized, under Health & Safety Code (HSC) Chapter 6.8, to investigate and remediate releases of hazardous substances that pose a threat to public health or the environment. Authorities are provided for enforcement actions against responsible parties or to expend state funds on orphan sites or to meet the statutorily required match for Federal Superfund sites under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

4. Program Oversight Responsibilities.

Hazardous Waste Landfills – State and federal statutes and regulations administered by DTSC do not expressly prohibit acceptance of dead animals, but these landfills do have site-specific prohibitions in their permit conditions. Acceptance of dead animals or infectious or biological wastes is expressly prohibited in permits. These landfills are specifically designed to minimize the production of leachate and gases. Land disposal restrictions mandated by federal and State regulations (CCR Title 22, Chapter 18) mandate the control of liquid and gas production in regulated disposal units. The addition of large numbers of dead animals would be incongruent with those mandates and incompatible with measures designed to preclude mobility of contaminants and exposure to workers, the public, and the environment.

Note: Solid Waste Landfills are regulated by the California Integrated Waste Management Board and are considered an appropriate disposal option for animal carcasses.

The open burning of dead animals would not be regulated by DTSC unless hazardous waste derived fuels were utilized. Guidance from USDA and CDFA provides recommendations on disposal of animal carcasses. The use of “clean” fuel sources is recommended in these documents. Health and Safety Code § 41801(f) provides exemption to prohibitions for non-agricultural burning for “disease or pest prevention, where there is immediate need for and no reasonable alternative to burning.”

Direct burial of dead animals is not specifically regulated by DTSC unless it encroaches on a hazardous substance release site or treatment, storage, or disposal facility regulated by DTSC. On-site disposal of dead animals, as recommended by USDA and CDFA, would not necessitate further discretion of DTSC.

5. Expertise.

DTSC has emergency response staff located at five of six regional offices around the State. Even though not specifically trained to deal with EAD, biological or infectious disease threats, they are trained and experienced in managing hazardous substance aspects of transportation and industrial facility accidents, fires, floods,

man-made disasters, and removal of threats at illegal drug manufacturing laboratories. These individuals are familiar and experienced with the Standardized Emergency Management System (SEMS) utilized in California for disaster response.

Other support capabilities that have analogous roles in the hazardous waste field might include:

- Hauler registration
- Manifesting of waste (cradle to grave)
- Information management
- Public information
- Community relations
- Industrial health and safety
- Toxicology (some Veterinary staff have EAD experience)
- Engineering support
- Legal
- Contract procurement and administration

It should be noted that few, if any, DTSC staff have current training or familiarity with dealing with EAD or infectious waste response.

Integrated Waste Management Board:

1. **Purpose and Use of Guidance**
   The purpose of this section is to outline considerations of an Emergency Animal Disease response for executive managers and staff of the Integrated Waste Management Board (IWMB), and to discuss coordination with emergency operation center personnel, and other local, state and federal responders. This section anticipates the environmental and/or human health issues within the authority of IWMB arising from the immediate disposal of large numbers of animal carcasses. Potential regulatory conflicts and their remedies are described.

   The guidance provided in this document does not apply to hazardous waste [as defined in Public Resources Code (PRC), section 40141] or medical waste [regulated pursuant to the Medical Waste Management Act (Health and Safety Code, Division 104, Part 14)]. The Department of Health Services does not consider diseased dead animals to be medical waste.

   In the event of a state of emergency or local emergency, many of the regulations and permit conditions referenced below can be waived pursuant to California Code of Regulations, Title 14, Div. 7, Ch. 3, Article 3. Local Enforcement Agency (LEA) Advisory #41 (http://www.ciwmb.ca.gov/LEAAdvisory/41/default.htm) provides guidance on the emergency waiver approval process, including examples of requests for and approvals of a waiver. LEA Advisory #43 (http://www.ciwmb.ca.gov/LEAAdvisory/43/default.htm) provides additional general guidance on disaster assistance.

2. **Program Description**
   IWMB is responsible for protecting the public's health and safety and the environment through proper management of solid waste (including waste tires, used oil, and household hazardous waste). IWMB works in partnership with local government, industry, and the public to divert or recover valuable resources from the waste stream, reduce waste disposal, and ensure environmentally safe solid waste and waste tire facilities.

3. **Program Authorities**
   IWMB is authorized to regulate solid waste handling, transfer, composting, transformation, and disposal. IWMB has adopted regulations that set forth:

   - Permitting requirements and operating standards for **transfer/processing operations and facilities** and **composting operations and facilities**;
   - Performance-based standards for the management of **agricultural wastes**;
   - Permitting requirements, operating standards, closure/postclosure standards, and financial assurances requirements for **solid waste landfills**.

The governing body of a county or city may designate a LEA. Upon certification by IWMB, LEAs implement delegated IWMB programs and locally designated activities. LEAs have the primary responsibility for ensuring the correct operation and closure of solid waste facilities in the state. They also guarantee the proper storage and transportation of solid wastes. See the Contact Information heading below for LEA contact information.

Generally, if occurring on-site on agricultural land, the burial, burning, or composting of the following materials is not regulated as a solid waste landfill, transfer/processing operation or facility, nor composting operation or facility:

- Animal carcasses;
- Animal by-products (e.g., manure, milk, urine);
- Animal feed;
- Animal bedding;
- Ash resulting from the burning of animal carcasses, by-products (e.g., manure, milk, urine), feed, or bedding.

For guidance related to these activities on agricultural land, interested parties should contact the appropriate Regional Board, USDA and/or CDFA.

4. Program Responsibilities

- **Transfer/Processing Operation or Facility – CCR, Title 14, Division 7, Chapter 3, Article 6**

If it is necessary to transport animal carcasses or any other contaminated materials, 14 CCR 17403.5 provides for the establishment and operation of an emergency transfer/processing operation to assist with the recovery and clean-up from a state or local emergency.

- **Composting Operation or Facility – CCR, Title 14, Division 7, Chapter 3.1**

The composting of mammalian flesh, organs, unprocessed hide, blood, bone and marrow at a composting operation or facility is prohibited by 14 CCR 17852(i). This means that mammalian carcasses cannot be transported offsite to a composting facility. The composting of manure, feed, or bedding is not prohibited; however, great caution should be taken if composting is utilized as a management measure. The composting process requires feedstock preparation, which typically includes the mechanical reduction in the size of feedstock materials. This preparation could significantly increase the exposure to disease pathogens.

- **Agricultural Solid Waste Management Standards - CCR, Title 14, Division 7, Chapter 3, Article 8**

Generally, if occurring on-site on agricultural land, the burial of animal carcasses is not regulated as a solid waste landfill. However, the following standards are intended to eliminate excessive vectors or other adverse public health/well-being effects associated with agricultural operations and to promote conditions under which agricultural operations and residential or public use of properties can co-exist.

14 CCR 17820. Agricultural Solid Wastes As a Public Health/Well-Being Hazard.
(H) Any person who sustains, stores, manages or receives agricultural by-products or other waste materials generated as a result of the operation of any agricultural property or produce processing plant shall do so in such a manner as to prevent the spread of disease, the occurrence of excessive vectors, odor, dust, or feathers or other such adverse conditions related to the public health and well-being. In addition:
(a) The presence of excessive vectors on the property shall be prima facie evidence that an adverse public health/well-being hazard exists.
(b) The determination of the presence of excessive vectors shall be made by an Enforcement Agency or the Department.
(c) The determination of the presence of excessive vectors shall take into account the proximity of the agricultural operation to neighboring human habitation and use areas, the population density of the entire area and the severity of the public health/well-being hazard posed by said vectors.

14 CCR 17822. Correction of Adverse Public Health/Well-Being Conditions.
(H) When the Enforcement Agency or the Department determines that design and layout of agricultural operations or management of agricultural wastes result in the occurrence of excessive vectors or any other adverse public health/well-being related conditions, the owner or operator of the property shall be informed in writing of a violation of these standards and shall be required to institute appropriate measures promptly to correct the condition in a manner approved by the Enforcement Agency or the Department.

14 CCR 17823.5. Dead Animals.
(H) The carcasses of animals with any contagious disease shall be disposed of by means prescribed by the California Department of Food and Agriculture, Division of Animal Industry. Animal carcasses from confined animal operations shall be collected, stored, and removed from the property to an approved processing facility or disposal site prior to the creation of adverse public health/well-being conditions, or processed or disposed of on the property in a manner approved by the Enforcement Agency. Animal carcasses from animals on pasture or rangeland shall be managed so as to prevent the creation of excessive vectors or other adverse public health/well-being conditions.

In addition to the guidance provided in the USDA Foot-And-Mouth Disease Guidelines, Section 7.7 - Disposal (see Appendix), persons burying animal carcasses or ash should adhere to the following in addition to requirements established by the appropriate Regional Board:

- To the extent feasible, cremation should use only clean fuel sources (i.e., no trash; garbage; treated wood; or tires) so as to avoid production of contaminated ashes.
- Disturbed soils should be seeded/mulched for erosion control after burial.

- A location map/report for all burial activities should be filed with local environmental health officials.
- The site selected for burial and cremation should be as great a distance from surface water and groundwater as possible.

Tires are not recommended as a fuel source. Please refer to the ARB section discussion of open burning.

If tires are used as a fuel source, the ash may be oily/sticky (depending on the temperature reached) and it will be difficult to prevent any oil from seeping into soils. If the ash will be buried on-site, the disposal pit should be dug prior to cremation and as near as possible to the pyre so the ash can be moved as soon as it can be handled.

- **Solid Waste Landfills - CCR, Title 27, Division 2, Subdivision 1**

State solid waste statutes and regulations administered by the IWMB do not expressly prohibit acceptance of dead animals, but landfills may have site-specific permit conditions. Acceptance of diseased dead animals will depend on each individual permit, and whether or not it prohibits/limits/allows/is silent on disposal of dead animals.

If the permit prohibits dead animals or the number of dead animals exceeds permit limits, the owner/operator may seek a waiver (See LEA Advisory #41 in Appendix for guidance on issuance of waivers).

If the number of dead animals disposed does not exceed permit limits, the owner/operator of the landfill should verify that the Report of Disposal Site Information for the landfill adequately addresses acceptance of dead animals. If not, the owner/operator must submit an amendment to the Report of Disposal Site Information pursuant to 27 CCR 21665.

If the permit is silent, dead animals may be acceptable without a permit revision or waiver in accordance with the following standard:

27 CCR 20890. CIWMB - Dead Animals. (T14: §17744)
Dead animals may be accepted if allowed by local regulations and shall be covered immediately or at a frequency approved by the Local Enforcement Authority.

Landfill operators can find guidance on burial of animal carcasses in:

- USDA Foot-And-Mouth Disease Guidelines, Section 7.7.1. - Burial (see Appendix B), and
- Recommended Interim Practices for Disposal of Potentially Contaminated Chronic Wasting Disease Carcasses and Wastes (see Appendix C.)

The open burning of solid waste, except for the infrequent burning of agricultural wastes, silvicultural wastes, landclearing debris, diseased trees, or debris from

emergency cleanup operations, is prohibited at any solid waste facility pursuant to Public Resources Code Section 43022(a). Animal carcasses, by-products (e.g., manure, milk, urine), feed, or bedding resulting from an emergency animal disease outbreak may be considered debris from an emergency cleanup and can not be burned at a solid waste facility.

5. Expertise

Methane Monitoring

Methane is a colorless, odorless gas produced by anaerobic bacterial decomposition of plant and animal matter. At room temperature, methane is a gas less dense than air. It is not very soluble in water. Methane is combustible, and mixtures of about 5 to 15 percent in air are explosive. Methane is not toxic when inhaled, but it can produce suffocation by reducing the concentration of oxygen inhaled.

Federal and state standards for the control of methane require owner/operators of solid waste landfills to ensure that the concentration of methane gas generated by a facility does not exceed:

- 25 percent of the lower explosive limit for methane (1.25% by volume) in on-site structures;
- The lower explosive limit for methane (5% by volume) at the facility boundary.

Monitoring is not required by the Integrated Waste Management Board for on-site burial (e.g., not at a solid waste landfill) however, it is highly recommended. The anaerobic bacterial decomposition of buried animals will produce methane. Monitoring will alert control agencies of potential hazardous conditions and the need to employ mitigation measures. IWMB staff and IWMB-certified local enforcement agencies are trained to monitor for methane, have monitoring equipment available, and are available to assist with the development and implementation of monitoring programs.

Office of Environmental Health Hazard Assessment:

1. Purpose and Use of Guidance

The purpose of this section is to outline considerations of an Emergency Animal Disease response for executive managers and staff of the Office of Environmental Health Hazard Assessment (OEHHA), and to discuss coordination with emergency operation center personnel, and other local, state and federal responders. This section anticipates the environmental and/or human health issues within the authority of (OEHHA), arising from the immediate disposal of large numbers of animal carcasses. Potential regulatory conflicts and their remedies are described.

2. Program Description.

OEHHA's mission is to protect and enhance public health and the environment by objective scientific evaluation of risks posed by hazardous substances.

3. Program Authorities.

OEHHA's Program Authority is the Emergency Response Administrative Order under the authority of the California Emergency Services Act, the Governor's letter to Agency Secretaries dated 9/12/00, Executive Order W-9-91 dated 5-29-91, and the California State Emergency Plan

4. Program Oversight Responsibilities.

OEHHA does not have direct regulatory authority over EAD eradication programs.

OEHHA will coordinate with the appropriate responding agencies to provide timely and accurate health effects information to:

- Provide health information to incident command.
- Provide consultation on environmental sampling and residual risks associated with remediation.
- When consistent with SEMS, support local health agencies and health professionals following chemical releases, providing toxicological information.
- Provide information on public health risk and environmental threats of hazardous substances.
- Identify, document, and when practical, implement those activities that potentially could reduce or lessen the impact of an emergency.

5. Expertise.

- Assist responders in assessing potential exposures for decisions on re-entry.
- Assist in environmental fate assessment, determining health and environmental consequences of breakdown products, reaction products, and intermedia transfers.
- In consultation with DHS, OEHHA performs or contracts epidemiological studies to ascertain health effects related to exposure to hazardous materials.

State Water Resources Control Board and Regional Water Quality Control Boards:

1. **Purpose and Use of Guidance**
   This section provides information for executive managers and staff of the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCBs) related to EAD response activities. The following issues are addressed:
   - Coordination with emergency operation center personnel and other responders
   - Identification of the environmental and/or human health issues within the purview of the SWRCB and/or RWQCB that may arise from the need to immediately dispose of a large number of animal carcasses
   - Identification of potential regulatory conflicts, and development of remedies that can be rapidly implemented under emergency conditions.

2. **Program Description.**
   The following is a summary of the preparedness, response, recovery, and mitigation activities that SWRCB and/or RWQCB may undertake in response to an EAD. The full range of activities is described in the SWRCB-RWQCB Administrative Order in the California State Emergency Plan.
   - Maintain a listing of Hazardous Waste Disposal Sites.
   - Maintain databases containing information on water quality and water users.
   - Coordinate with local government and state agencies to issue Cleanup and Abatement Orders (CAO), Cease and Desist Orders (CDO), or other water quality orders; and to assess Administrative Civil Liability (ACL) penalties for violations of the California Water Code.
   - Provide geologists and engineers to advise on the integrity of landfill liners, slopes, and surface impoundments.
   - Provide technical staff to advise on regulatory requirements and the potential impact to water quality from emergency response and recovery activities, and to recommend methods for control and mitigation of such impacts.
   - Provide technical staff to advise on the potential impacts of a hazardous material incident on water resources.
   - Conduct surface and groundwater sampling, monitoring, analyses, and assessment activities. Provide water quality monitoring support including trained staff, equipment, vehicles, boats, and analytical laboratory services.
   - Provide available information on quality, location, and downstream users of both surface and groundwater.
   - Facilitate the release of available funding for appropriate cleanup and abatement, recovery, and mitigation activities.
   - In consultation with the Department of Toxic Substances Control (DTSC), provide guidance on options concerning diversion, containment, treatment, and temporary storage of hazardous waste.

- Review the environmental documentation for recovery and mitigation activities, and any applications for federal permits for activities that discharge to surface waters.

3. Program Authorities.

State law and regulations pertaining to this issue can be accessed at SWRCB's home page (http://www.swrcb.ca.gov). Additional Web site URLs are provided in Section 6. Applicable laws, regulations, and policies are identified below.

- **State Regulations and Policies:**
  - California Code of Regulations:
    - Title 22 Regulations: reclamation, and hazardous waste generation and disposal
    - Title 27 Regulations: Class II and Class III landfills and confined animal facilities
    - Title 23 Regulations: Class I landfills, SWRCB procedures and the California Environmental Quality Act
    - Title 14 Regulations: California Environmental Quality Act compliance
  - SWRCB Resolution 68-16: Anti-degradation Policy:
    - Best practical treatments are required to prevent nuisance and maintain the highest quality water
    - New discharges cannot result in exceedances of water quality objectives
  - SWRCB Resolution 88-63: Sources of Drinking Water Policy:
    - Establishes that all waters not otherwise designated are sources of drinking water
    - A Basin Plan amendment is needed to implement exceptions
  - SWRCB Resolution 92-49: Cleanup procedures and policies:
    - Requires cleanup to achieve lowest pollution level technically and economically feasible
    - Requires that water quality objectives or criteria for containment zones be achieved
    - Allows enforcement through Cleanup and Abatement Orders
  - RWQCB responsibilities for protecting the waters of the State, as defined in Division 7, Chapter 4 of the California Water Code:
    - Adopt Regional Water Quality Control Plans, also known as Basin Plans, to establish water quality objectives that will ensure the reasonable protection of beneficial uses, and to implement a program for achieving water quality objectives
    - Require Technical Reports that will provide a basis for water quality protection decisions
    - Adopt Waste Discharge Requirements (WDRs) that implement the Basin Plan
    - Adopt Progressive Enforcement Orders if needed to Enforce the WDRs
    - Refer cases of non-compliance to the Attorney General for enforcement
  - RWQCB responsibilities for protecting the waters of the United States, as defined in Division 7, Chapter 5.5 of California Water Code:

- Act in a manner consistent with the Federal Clean Water Act (CWA)
- Prepare and adopt National Pollutant Discharge Elimination System (NPDES) Permits that contain effluent limits that will meet federal water quality standards and other provisions of the CWA
- Take appropriate enforcement action, as needed

- ***Adoption of Waste Discharge Requirements***
  Under Water Code §13260(a), any person discharging or proposing to discharge waste within any region that could affect water quality is required to file a Report of Waste Discharge (ROWD). If the ROWD indicates that water quality could be affected by the proposed discharge, the RWQCB has a statutory obligation to prescribe WDRs, which may include a prohibition against the discharge. While an RWQCB can delegate to its Executive Officer a wide variety of powers and duties under the Water Code, the issuance of waste discharge requirements is a non-delegable function (Water Code §13223(a)). All WDRs must be formally adopted by the RWQCB.

  In accordance with §13269 of the Water Code, the statutory mandate that WDRs be adopted may be conditionally waived by an RWQCB for up to five years where such waiver is not against the public interest (see Waivers, below).

- ***General Waste Discharge Requirements***
  Both SWRCB and RWQCBs can prescribe general WDRs that apply to a category of discharges (Water Code §13263(i)). All of the following criteria must apply before either body issues general WDRs:
  - The discharges must be produced by the same or similar operations;
  - (2) The discharges must involve the same or similar types of waste;
  - (3) The discharges require the same or similar treatment standards, and
  - The discharges are more appropriately regulated under general discharge requirements than individual discharge requirements

  Thus, either SWRCB or RWQCBs, after complying with the California Environmental Quality Act (CEQA), could adopt general requirements that apply to all mass animal carcass burial operations conducted to abate the effects of an emergency animal disease outbreak. Because adopting general WDRs in this manner could take many months, such action should be initiated as soon as possible.

- ***Waivers***
  <u>Five-Year Waiver</u>
  Pursuant to Water Code §13269(a), an RWQCB may waive the discharger's obligation to file an ROWD and obtain WDRs if the waiver is not against the public interest. The waiver, which cannot be valid for more than five years without being renewed, must impose conditions on the discharge and is subject to RWQCB or SWRCB enforcement (Water Code §13269(a)).

Emergency Waiver

Land disposal or burial of dead animals on site would normally be considered waste disposal under the Water Code and would require submittal of an ROWD, public notice of the proposal, and formal approval by a RWQCB through formal issuance of WDRs or a waiver from WDRs by an RWQCB. Under emergency conditions where the Governor has declared a state of emergency, the discharge of waste may be allowed by an RWQCB without adoption of either WDRs or a waiver from WDRs, in accordance with provisions contained in Water Code §13269(c) and (d), which provide an alternate regulatory procedure.

For immediate emergency work necessary to protect life or property in a disaster-stricken area, including the disposal of animal carcasses, the requirement to file an ROWD and obtain WDRs will be temporarily waived for that area only as long as the discharger notifies the RWQCB before commencing the emergency work (Water Code §13269(c)(1)).

- ***Cleanup and Abatement Orders (CAO)***
  In the event that on-site disposal activities related to an EAD threaten to impact water quality, the RWQCB could issue an individual or region-wide CAO requiring each waste disposal site owner and operator to conduct cleanup activities. Under Water Code §13304, the RWQCB may issue a CAO to anyone who "has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state." The RWQCB will order the discharger to clean up the waste or take other action necessary to remedy the actual or potential discharge. If necessary, the RWQCB will refer CAO violators to the California Attorney General, who then seeks an injunction with the Superior Court of the affected county.

- ***Regulation of Waste Disposal Sites***
  SWRCB's regulations for waste disposal sites are in CCR Title 23, Division 3, Chapter 15, (23 CCR), and CCR Title 27, Division 2, Subdivision 1 (27 CCR). Those regulations define four types of waste: hazardous waste, designated waste, nonhazardous solid waste, and inert waste.
  - Hazardous waste as defined by DTSC (23 CCR §2521(a)), excludes from its definition infectious waste that consists solely of the carcasses of animals not otherwise hazardous, and that are handled, stored, and disposed of according to CDFA's requirements, found in the Food and Agricultural Code, Chapter 1, Part 1, Division 5 (commencing with section 9101), and Chapter 5, Part 3, Division 9 (commencing with section 19200).
  - Designated waste consists of nonhazardous waste that could degrade waters of the State (see also Water Code §13173).
  - Nonhazardous solid waste is defined as solid waste that does not contain hazardous or designated wastes (27 CCR §20220(a)).
  - Inert waste is that subset of solid waste that does not contain hazardous waste or soluble pollutants at concentrations in excess of applicable water

quality objectives, and does not contain significant quantities of decomposable waste.

Designated wastes may be discharged only at Class I or Class II waste units that have been specifically approved for containment of the particular type of waste to be discharged (27 CCR §20210). Nonhazardous wastes may be discharged at any classified landfill, including Class III units, that is authorized to accept the specific waste (27 CCR §20220(b)). All new Class III units must meet the requirements in 27 CCR, SWRCB Resolution 93-62, and 40CFR Part 258. These landfills must have a composite liner consisting of clay and geosynthetic material and a leachate collection and removal system.

Because burial areas used for animal mortality are considered waste management units as defined in 27 CCR §20164, WDRs would normally be developed for such disposal areas (27 CCR, §21710). However, these regulations *will not apply* if the RWQCB waives submittal of an ROWD pursuant to Water Code §13269(a) or (c).

If an RWQCB requires submittal of an ROWD, the RWQCB may waive WDRs pursuant to the emergency provisions of Water Code §13269(c), or may issue WDRs that implement 27 CCR. If the RWQCB issues WDRs, the discharger must follow whatever waste management unit provisions are prescribed. The RWQCB may approve an engineered alternative to the construction or prescriptive standards in 27 CCR if the discharger can demonstrate that the waste management unit design standard is not feasible, and that the engineered alternative affords equivalent protection against water quality impairment (27 CCR §20080(b and c). These provisions may be applicable during an EAD outbreak. If applicable, the RWQCB could approve an alternative only after determining that the alternative affords equivalent protection against water quality impairment.

4. Program Oversight Responsibilities.

The primary interests of the SWRCB and RWQCBs in responding to an outbreak of an EAD are the protection of water quality and the prevention of the spread of disease. The principal threat is believed to be percolation of nitrates and other constituents to groundwater from the decomposition of animal carcasses buried on-site, but carcass burning may also threaten groundwater. Runoff to surface waters from exposed carcasses and leakage from containers during transport are considered lesser threats. Disposal at an unlined landfill is also considered a lesser, but not insignificant, threat. The principle contaminants of concern are pathogens, nutrients, biochemical oxygen demand (BOD) and unburned fuels or residuals of combustion from carcass burning. SWRCB and RWQCB oversight responsibilities are discussed in more detail in Section 3, above.

5. Program Expertise.

- If a large quantity of animal mortality is transported to a landfill:

  - The RWQCB may impose additional groundwater monitoring requirements on the landfill for pathogens and other potential contaminants from the carcasses (e.g., fecal coliform and nitrogen species), pursuant to 27 CCR.
  - Landfills that accept EAD-infected animals need a contingency for potential BOD or other contaminant loads that may adversely impact operation of the leachate treatment system.
- If a large number of diseased animal carcasses require burning:
  - The emergency response team may need to collect any residual ash and carcass remains for disposal in an appropriate landfill. If transporting residual ash to an off-site location is not feasible, the residual ash and carcass remains in the on-site burial trench should be monitored in accordance with Title 27 regulations.
  - The volume and type of any chemicals or additives used to accelerate the burning process should be recorded and submitted in a disposal report to the RWQCB.
  - Any related disposal methods are to be conducted in accordance with Title 27 regulations.
- If a large number of diseased animals require on- or off-site burial:
  - In many situations, burial is the least preferred option Burial should be implemented only if there is a small quantity of animals or residual ash and carcass material. All burial methods should be conducted in accordance with Title 27 regulations. BSE-infected animals should <u>not</u> be buried under any circumstance because of the potential for groundwater contamination.
  - An assessment of groundwater depth should be completed prior to burial. The bottom of the excavation trench must be more than 5 feet above the first encountered groundwater. However, it is recommended that the burial trench be placed in an area with appropriate soils (loam or finer) and with groundwater greater than 10 feet below the bottom of the trench.
  - EAD-infected carcasses should not be buried within 1,000 feet of any water supply well.
  - Large quantities of body fluids may be generated during decomposition if animals are buried without first treating the carcasses. A liner effective in containing body fluid leakage in the burial trench may be necessary. However, constructing lined disposal trenches or pits may not be practical during an initial emergency response action. Therefore, unlined excavations or mounds may be utilized for temporary and prompt disposal of animal mortality. Approximately 3 feet of soil cover should be placed on the temporary burial trenches to control flies and vermin. If unlined trenches or pits are used, replacement burial trenches and/or pits should be constructed in accordance with Title 27 regulations.
  - A licensed surveyor should survey the burial location after burial has been completed. A burial report, including a description of the burial trench liners, shall be submitted to the local RWQCB or SWRCB.

6. Laws and Regulations

The California Water Code can be accessed on the Internet at:
http://www.leginfo.ca.gov/cgi-bin/calawquery?codesection=wat&codebody

The land disposal regulations can be accessed on the Internet at:
http://www.swrcb.ca.gov/

The California Code of Regulations (CCR) can be accessed on the Internet at:
http://ccr.oal.ca.gov/

APPENDICES

Appendix A

1. California Environmental Quality Act Compliance
2. Cal/EPA Boards and Departments Contact Information

Appendix B Foot-And-Mouth Disease Emergency Disease Guidelines, Revised June 1992, Chapter 7.7, Disposal: United States Department of Agriculture, Animal and Plant Health Inspection Service, Veterinary Service

Appendix C Recommended Interim Practices for Disposal of Potentially Contaminated Chronic Wasting Disease Carcasses and Wastes

APPENDIX A

California Environmental Quality Act Compliance
CEQA provides a statutory exemption from all CEQA requirements for "specific actions necessary to prevent or mitigate an emergency," and the definition of an emergency would include a possible outbreak of animal disease (see Public Resources Code §21060.3). Additionally, it would not be necessary for either the state or federal government to officially declare that an "emergency" exists. An exemption from CEQA requirements is provided for any situation that meets the CEQA definition of an "emergency," and this definition (in Public Resources Code 21060.3) does not require that the state or federal government must take any official action to declare an "emergency" before the exemption is triggered.

Contact Information
A staff directory for Cal/EPA and each of its Boards, Departments, and Offices (listed below) is available at http://www.calepa.ca.gov/StaffDirectory/.

- **Cal/EPA** http://www.calepa.ca.gov
- **Air Resources Board** http://www.arb.ca.gov
- **Department of Pesticide Regulation** http://www.cdpr.ca.gov
  - Enforcement Branch: for information concerning the interpretation of pesticide labels.
  - Registration Branch, Information Center: for information concerning the registration status of pesticides.
  - Licensing and Certification Program: for information concerning the status of licensed commercial applicators.
  - County Agricultural Commissioners can assist pesticide users. County Agricultural Commissioner addresses are listed in local phone directories under county government offices, or on the CDPR and CDFA websites.
- **Department of Toxic Substances Control** http://www.dtsc.ca.gov
- **Integrated Waste Management Board** http://www.ciwmb.ca.gov
  - Local Enforcement Agencies http://www.ciwmb.ca.gov/LEACentral/LEADirectory/
- **Office of Environmental Health Hazard Assessment** http://www.oehha.ca.gov
- **State Water Resources Control Board** http://www.swrcb.ca.gov
  - Regional Water Quality Control Boards http://www.swrcb.ca.gov/contact/docs/rwqcbs_directory.pdf

USDA

United States
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Agriculture

Marketing and
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Animal and Plant
Health Inspection
Service

Veterinary Services

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FOOT-AND-MOUTH DISEASE
EMERGENCY DISEASE GUIDELINES

Prepared by

UNITED STATES
DEPARTMENT OF AGRICULTURE

Animal and Plant Health
Inspection Service

Veterinary Services
Riverdale, Maryland

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7.7 Disposal - Methods of carcass disposal include burial, burning, and rendering. Many factors must be considered and often other State or Federal agencies have to be consulted before the method of disposal is selected. Upon recommendation of the State or Federal agencies, the EPS Chief Staff Veterinarian may consider other disposal methods.

7.7.1 Burial - Burying is the preferred method of disposal and should be used whenever practical. Digging the disposal trench should begin as soon as possible after confirmation of the diagnosis. The site should be on the affected premises or as close to the premises as topography permits. When selecting a burial site, consideration should be given to underground cables, water or gas lines, septic tanks, water wells, etc. If possible, an area away from public view should be chosen. Disposal methods must be approved by the READEO environmental quality officer. The burial of a large number of animals will come under the jurisdiction of State and Federal environmental laws and regulations. Necessary permits and pre-clearance to proceed with the burial must be obtained.

a. Information should be supplied to the READEO Contract Officer concerning trench dimensions, cubic yards of material to be moved, price per yard, charges for blasting or other special techniques, and provision for trench filling and possibly refilling several weeks later after the carcass and fill dirt has settled. This information is needed for drawing up a contract for heavy equipment use.

b. Trench dimensions. A burial trench should be ar least 7 feet wide and 9 feet deep. At this depth, 14 square feet of floor space is required for each bovine carcass (5 mature hogs or sheep equal one bovine carcass). If equipment and soil conditions permit, it may be desirable to dig deeper (12 to 20 feet) and wider trenches. For every additional 3 feet in depth, the number of animals per 14 square feet of floor space can be doubled.

c. Disposal of feed, milk, manure, and miscellaneous items. Contaminated manure, feed, small volume of milk, and other items may be placed in the trench with the carcasses and covered with at least 6 feet of soil or disposed of by other approved methods. Do not pack the trench. Decomposition and gas formation will crack a tightly packed trench causing it to bubble and leak fluids.

d. Designated burial site. If a suitable site is unavailable on the infected premises, the carcasses should be transported in biologically secure transport vehicles to a pre-approved designated burial site. The site should be inaccessible to animals, removed from populated areas, not used for agricultural purposes, clearly marked, and properly protected. Disposing of carcasses in a designated site assumes the existence of an agreement between the USDA and the locality permitting the burial as well as clearance or compliance with existing environmental laws. Arrangements to secure leak proof transport

vehicles must also be made. Guidelines for trench dimensions and burial techniques are as above.

7.7.2 Burning - Burning carcasses is difficult and expensive in terms of labor and materials used. Burning should be used only when burial is not feasible. A high water table, excessive rock conditions, or public health and environmental protection reasons may prevent use of burial as a method of disposal and allow burning instead. A holding pen for confining animals prior to depopulation should be available near the burn site. In some instances, farmyards and existing holding pens may be adapted for this purpose. In other cases, new pens may have to be constructed. Burning a small number of carcasses is feasible on the affected premises if fuel is easily obtainable. Permits and clearance to proceed must be obtained to avoid violating environmental laws.

a. Selection of burn site. Select the burn site with care. It should be a flat area away from public view, and readily accessible to heavy vehicles hauling materials. The fire should be built well away from buildings. hay, straw, or feed stacks, as well as from any overhead electric and telephone cables, and shallow underground pipes or gas mains. The prevailing wind direction should be considered to prevent unnecessary quantities of smoke and objectionable odors from blowing toward farm buildings or across public roads. The fire will burn better if constructed at a right angle to the prevailing wind.

b. Burning procedures. A burning operation consists of elevating the carcasses on a platform constructed of incendiary materials (e.g. wood, coal, straw, old tires, etc.). It will often be difficult to obtain sufficient quantities of suitable incendiary materials. The individual in charge of building the fire must use ingenuity in acquiring materials and putting them to optimum use. Until carcasses are destroyed, the fire should be guarded to avoid dissemination of infected material by predatory animals or birds. The fire will have to be tended and rearranged periodically as it progresses. A small bulldozer or a tractor with a scoop is useful for this purpose. The straw bale platform method of carcass disposal by burning is described.

c. Fuel requirements.

Straw or hay: Allow 3 bales per cattle carcass. Contaminated straw or hay can be used in fire preparation. Additional quantities can be purchased from the farmer or local suppliers.

Heavy timber: Allow 3 pieces (approximately 8 feet long by 1 square foot in cross section) per cattle carcass. Railroad ties or bridge timbers make ideal material. If smaller dimension materials such as fence posts or cord wood are used, proportionately more pieces will be needed.

Old tires: Allow 4 or 5 tires per cattle carcass.

Kindling wood: Allow 50 pounds per cattle carcass. This material may be obtained from wrecking companies, farm wood piles, saw mill slab piles, etc.

Coal: This should be of good quality and in large lumps (6 inches to 8 inches diameter preferable; avoid fine coal). Allow 500 pounds of coal per adult cattle carcass. Proportionately less is required for young stock. When goats, sheep, or swine are burned with cattle, they may be placed on top of the cattle carcasses at the rate of two animals for each cattle carcass without additional fuel. Over this rate, or when goats, sheep, or swine are burned alone, allow 100 pounds of coal per animal.

Liquid fuel. Waste oil, furnace oil, or diesel fuel should be obtained in sufficient quantity to thoroughly soak the other materials before the fire is lighted. A minimum of 1 gallon per cattle carcass (C) is required. A reserve supply of fuel oil should be held in case difficulty in burning is encountered. Caution. DO NOT USE GASOLINE.

Estimation of animals: (Bovine Equivalents)

1 adult cow or bull	= 1 C
5 adult swine	= 1 C
5 adult sheep	= 1 C

Reduce all animals to number of C's

Length of fire: One yard per C (2 pigs, 2 goats, or 2 sheep can be layered on top of each C).

Amount of material per C:

Straw	= 3 bales per C
Heavy timbers (8 ft. long x 1 ft. sq.)	= 3 per C
Kindling wood	= 50 lb. per C
Tires	= 4 per C
Coal	= 500 lb. per C
Fuel oil	= 1 gal. per C

Example:

500 cattle	= 500 C
1,000 swine	= 200 C
700 sheep	= 140 C
Total	840 C

Reduce 840 C by 200 C since 2 swine or 2 sheep carcasses may be added for each cattle carcass without additional fuel. 840 C-200 C = 640 C. Stake out fire line 640 yards long. Line can be divided into 2 or 3 separate lines.

Straw - 3 bales per C	= 1,920 bales
Heavy timber - 3 per C (increase if small timbers are used)	= 1,920 timbers
Kindling wood - 50 lb. per C	= 16 tons
Tires - 4 per C	= 2,560 tons
Coal - 500 lb. per C	= 160 tons
Liquid fuel - 1 gal. per C	= 640 gallons

d. Fire Preparation - (See: Figure 4 - Disposal of Carcasses by Burning) Select a site and stake out the area of the firebed, allowing 3 feet of length for each adult cattle carcass. Lay three rows of straw or hay bales lengthwise along the line of the firebed. Allowing 3 feet run per adult bovine carcass, lay the rows approximately 12 inches apart with 12 inches between each bale in a row. Push loose straw into the space between the bales. Place the large timbers lengthwise on top of each row of straw. Distribute the remaining large and medium-sized timbers across the firebed with 6 to 12 inches of space between timbers. Next, place the old tires and small kindling wood on the firebed. Spread loose straw over the wood and tires. Spread the coal evenly (at the rate of 500 lb. per yard) over the wood and tires to make a level bed. A front-end loader is useful for spreading the coal. Place carcasses on the firebed. Position them on their backs with feet in the air alternately, head to tail. This can best be done with mechanical lifting equipment (front-end loaders, draglines, trenchers) and chains. Place loose straw over the carcasses and stuff into all the spaces between carcasses. Pour or spray liquid fuel (Caution: do not use gasoline) over the pyre with buckets or sprinkling cans. If a pump is available, spray the fuel on. Start the fire along the entire length of the pyre. A torch that will burn for several minutes is recommended for starting the fire.

If weather conditions are favorable, the bulk of the carcasses should burn within 48 hours. It will be necessary to tend the fire, stirring it occasionally, and replacing carcass pieces that drop off. Additional fuel may need to be added. When all the carcasses have been completely burned and the fire has died out, the ashes should be buried and the area cleaned up, graded or plowed, and prepared for seeding.

7.7.3 Rendering - The most economical method of disposing of carcasses is rendering. However, satisfactory rendering plants are not always available. The movement of carcasses to the rendering plant poses some additional risk of spreading the agent.

a. Transport. The collection and transport of carcasses for rendering should be carried out in closed leak-proof vehicles which can be easily cleaned and disinfected. The vehicle should be built in such a way that leakage and aerosol dispersal during transport is prevented. The handling of the carcasses should be kept to a minimum. Following are some guidelines for consideration:

(1) During killing and handling avoid mutilating the carcasses to keep leakage to a minimum.

(2) All trucks hauling carcasses to rendering should be leak proof and covered.

(3) All infected animals and carcasses should be under 24 hr/day security until the pathogens are destroyed. For example, an official should accompany each truck load of carcasses

DISPOSAL OF CARCASSES BY BURNING

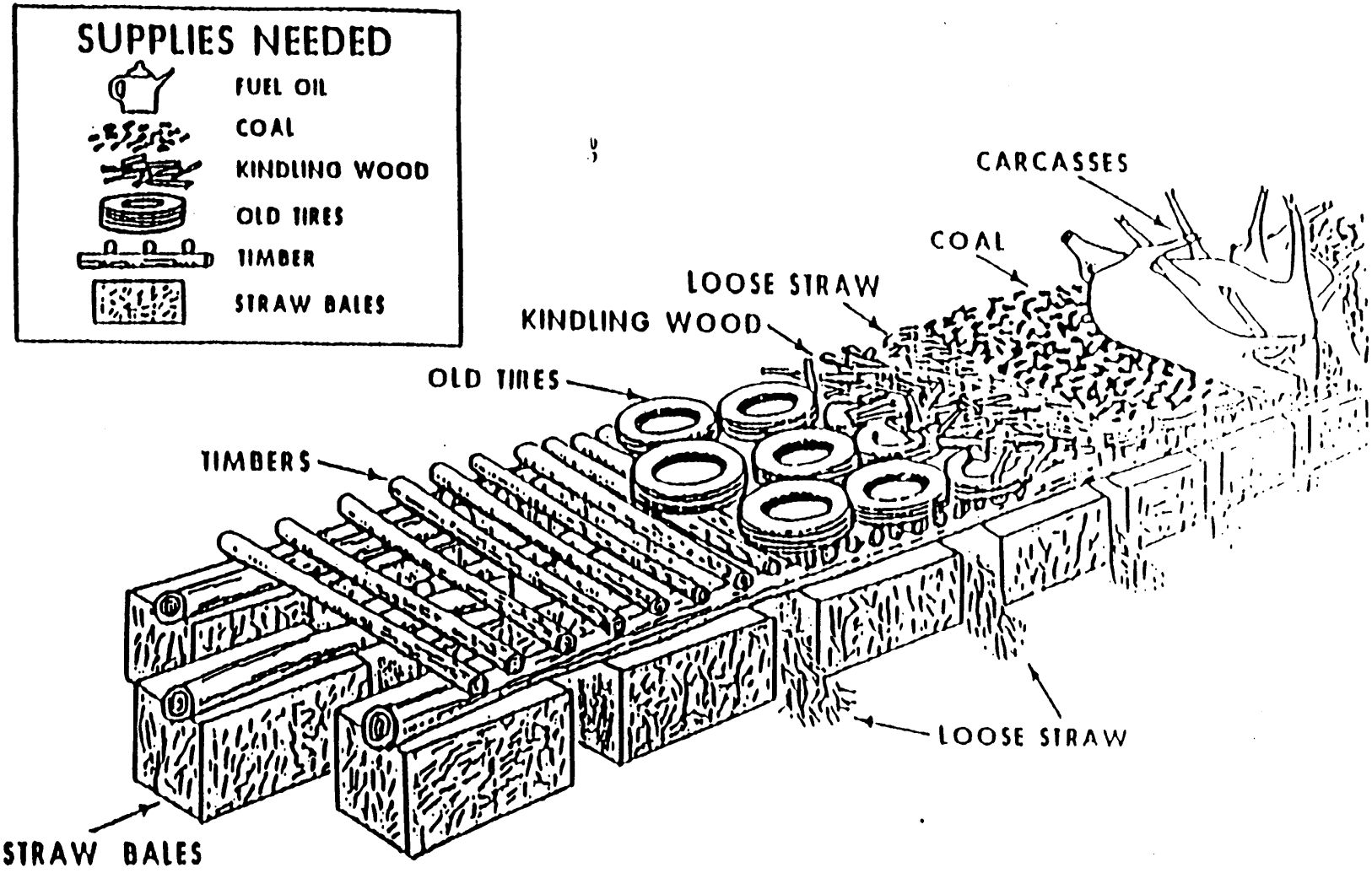

FIGURE 4 - A Diagram for Disposal of Carcasses by Burning

to the renderer and someone should be on duty at the rendering plant as long as any viable pathogens are present. C&D equipment should be available at the rendering plant and all vehicles and equipment should be thoroughly cleaned and disinfected following exposure to infected carcasses.

(4) The rendering plant should be inspected and approved for disposal of the infected and exposed carcasses prior to sending any carcasses to the plant.

(5) The rendering plant should be reasonably accessible and have a larger capacity than would be considered necessary under normal operating conditions to handle the large number of carcasses that would be expected during an emergency.

(6) Care should be taken not to overload the rendering plant and damage the equipment.

(7) The implementation of biosecurity measures to avoid product recontamination should be strictly and uniformly applied. Complete separation between clean and dirty areas must be maintained, and regulatory controls will need to be implemented to monitor the microbiological quality of the rendered product.

7.7.4 Other Selected Methods - Other selected methods of disposal may be recommended by the AVIC, VS, the State Animal Health official, or READEO Director. These methods should be directed to the Deputy Administrator, VS for approval (CFR, Title 9, Part 53.4). An example of an alternative method of disposal would be the use of an incinerator such as at a State Veterinary Diagnostic laboratory, or a diagnostic laboratory at a College of Veterinary Medicine at a University. These methods are apprpriate when the facilities are near the affected premises and the capacity is sufficient for the number of animals involved. Manure, feed, hay and bedding may be composted as an alternative to burying and burning. This method should be done in an area that is not accessible to equine or other susceptible animals.

7.8 Cleaning and Disinfection (C&D) -

7.8.1. Personnel - Personnel requirements will vary depending upon the number of buildings, size of the area, and sanitary conditions of the field. One or more cleaning and disinfection teams of about 10 men each is recommended for disinfecting large farms and stockyards or salebarns. Each team will be supervised by a person known as the "C&D team Chief." The team chief is responsible for securing the necessary equipment and supplies, for scheduling work, and for certifying work accomplished on the affected premises. When more than one team is assigned to a premises, only one team chief should be assigned.

7.8.2 Equipment and Supplies - The C&D chief and team members who will be applying disinfectants will be supplied with protective rubber outfits, including boots, coat, pants, hat, and

April 6, 2004

To: RCRA Division Directors (Regions I-X)
Superfund Division Directors (Regions I-X)
OSWER Office Directors

From: Robert Springer, Director /s/
Office of Solid Waste

Subject: Recommended Interim Practices for Disposal of Potentially Contaminated Chronic Wasting Disease Carcasses and Wastes

We recognize that several States and Regions have had to deal with the disposal of potentially contaminated chronic wasting disease (CWD) carcasses and wastes and that there are several options available for the disposal of these materials, one being disposal in a municipal solid waste landfill. The purpose of this memorandum is to provide States and municipal solid waste landfill facility managers with interim practices for consideration when a determination is made that the wastes are to be disposed of in a municipal solid waste landfill. As a prudent measure, we believe it is appropriate and reasonable for EPA to encourage that the land disposal of this material take place in a manner that minimizes any possibility of releases. I am providing these interim practices now recognizing that many of you must deal with these issues today. However, we will continue to work with you and the States to refine and revise these interim practices.

Several states (CO, KS, MT, MN, NE, NM, OK, SD, UT, WI, WY) and EPA Regions (5, 6, 7, 8) have dealt with the disposal of elk and deer contaminated with CWD. Some States have used high-temperature incineration or alkaline hydrolysis tissue digestion to dispose of contaminated carcasses and other contaminated wastes as these methods are thought to destroy prions, the disease-causing agent. Other States with large numbers of carcasses and heads that need to be handled and a lack of available disposal options (such as alkaline digestion and high-temperature incineration) have used municipal solid waste landfills to dispose of potentially contaminated CWD waste derived from deer or elk herds in areas where CWD is known to occur. Since CWD is transmitted horizontally among deer and elk, it is thought that containing the infectious agent in municipal solid waste landfills would help reduce the spread of the disease. While disposal of potentially contaminated carcasses in municipal solid waste landfills may not be our preferred option, we recognize that exigencies of a particular situation may show this to be the most reasonable option. However, we believe it is prudent to manage the material in a manner that minimizes the potential for releases to the environment. Therefore, the Office of Solid Waste, with input from EPA's Regional Offices, Office of Research and Development and ten States, has developed the attached interim practices that a State or landfill facility manager may consider when disposing of these contaminated wastes in municipal solid waste landfills.

These interim practices capture issues such as: segregation of carcasses, management of leachate, daily cover considerations, and compliance with Part 258. Note that these interim practices do not apply to waste materials that do not contain CWD. The interim practices provide recommendations and do not impose any legally binding requirements nor do they change or substitute for any State, federal, or local statutory or regulatory provision.

Should you have any questions on these interim practices, please contact Thea McManus, Acting Director of the Municipal and Industrial Solid Waste Division at (703) 308-8738, or have your staff contact Paul Cassidy at (703) 308-7281 or Dave Bartenfelder at (703) 308-8629. Thank you for your assistance in promoting the prudent management of these materials.

Attachment

cc: Robbie Roberts
Tom Dunne
Matt Straus
Judy Nelson
Elaine Brenner (OW)
Tom Kennedy (ASTSWMO)
Bethany Grohs (ERT)

Recommended Interim Practices for Disposal of Potentially Contaminated Chronic Wasting Disease Carcasses and Wastes

(1) The municipal solid waste landfill should be 40 CFR Part 258 compliant and have no uncontrolled release from the receiving landfill disposal cell. A composite liner system and leachate collection system is preferable as it will allow for potential future leachate monitoring for prions when appropriate tests are developed. Leachate should be recirculated, where practical, within the animal carcass/contaminated waste disposal cell to remove potential issues associated with discharges to POTWs/Wastewater Treatment Facilities (WWTFs).

(2) A 20-foot base of municipal solid waste should be overlain by 12 inches of absorbent material. The absorbent material should be placed immediately prior to the disposal of the animal carcasses or other contaminated wastes.

(3) Carcasses should be splayed and placed on top of the absorbent material, not to exceed a two carcass-layer thickness. After placement of the carcasses or other contaminated wastes, lime, cement kiln dust, or other similar pH caustic should be added to fill the voids and to minimize fermentation. Immediately following placement of a carcass layer(s)/contaminated wastes, a minimum of 3 feet of municipal solid waste should be applied. At the end of the operating day, a minimum of 12 inches of earthen material should be applied for vector control. No alternative daily cover materials should be allowed.

(3a) As an alternative to (3), carcasses might be splayed and placed in a macro-vault. The macro-vault sequencing should begin close to the final waste elevation to minimize failures due to waste overburden forces. A macro-vault may be created by placement of a geomembrane material in a roll-off box. The geomembrane covers the bottom and sides of the roll-off box. Carcasses or other contaminated wastes are placed within the box. Lime, cement kiln dust, or other similar pH caustic material should be added to the box to fill the voids and to minimize fermentation. The top of the roll-off box should be sealed, to prevent releases, by placement of a geomembrane cover material over the box. The macro-vault is then placed in the municipal solid waste landfill. At the end of the operating day, daily cover or alternative daily cover should be applied. Multiple macro-vault layers (where used) should be aligned perpendicular to the underlying layer and the number of layers should be based on the supportive strength of the macro-vault.

(3b) As an alternative to (3) or (3a), carcasses might be splayed and disposed of in a geomembrane-lined trench within the municipal solid waste landfill. These carcasses and other contaminated wastes should be placed in the trench not to exceed a two carcass-layer thickness. After placement of the carcasses or other contaminated wastes, lime, cement kiln dust, or other similar pH caustic material should be added to fill the voids and to minimize fermentation. After filling the voids, the sides of the geomembrane should be overlapped a minimum of three feet to create a secure trench. After sealing the geomembrane or at the end of the operating day, daily cover or alternative daily cover should be applied.

In addition, the state/local regulatory agency and the owner/operator should consider:

- Taking into account potential settlement and future surface water ponding when determining the number of carcass layers.

- Segregating animal carcass/other contaminated waste disposal areas to the extent possible and identifying the boundaries of the disposal area using GPS or other methods.

- Advancing special notification when carcasses or other contaminated wastes are being brought to the landfill to allow landfill mobilization and preparation time.

- Any disposable materials derived from disposal operations should be concurrently disposed with animal carcasses/other contaminated wastes.

- Recording a notation on the deed to the facility property that provides official notification of animal carcass/other contaminated wastes acceptance in order to avoid future improper/illegal exhumation of these wastes.

SEPTEMBER 2019

ATTACHMENT 2 | ANIMAL EMERGENCY PLANNING GUIDE FOR OPERATIONAL AREAS

CARES

California Animal Response Emergency System

ANIMAL EMERGENCY PLANNING GUIDE FOR OPERATIONAL AREAS

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I. Introduction

Local governments must be prepared to respond to emergencies that may occur within their jurisdictional areas. They must also be able to assess whether their capabilities are sufficient to respond effectively.

This plan template provides a collaborative framework for prevention, protection, preparedness, response and recovery efforts related to management of all animals during emergency events. In accordance with the State Emergency Services Act, it describes methods for carrying out emergency operations using the Standardized Emergency Management System (SEMS.)

This template was developed in accordance with the California Animal Response Emergency System (CARES.) The California Emergency Services Act 8585(e) designates The California Emergency Management Agency as being responsible for the state's emergency and disaster response services for natural, technological, or manmade disasters and emergencies, including responsibility for activities necessary to prevent, respond to, recover from, and mitigate the effects of emergencies and disasters to people and property. The California Department of Food and Agriculture has statutory authority related to animal health and the supervision of branded livestock identification, movement and ownership issues.
Under the joint supervision of these state agencies, CARES is being integrated into the standardized emergency management system established pursuant to subdivision (a) of Section 8607.

a.) Planning Principles

Applying the following principles to the planning process is key to developing an all-hazards plan for protecting lives, property, and the environment:

> ***Community-based planning*** is the concept that planning must not only be representative of the actual population within the community, but also must involve the whole community in the planning process. The process for engaging the whole community in community-based planning is discussed in Chapter 4.

Planning must be community-based, representing the whole population and its needs. Understanding the composition of the population—such as accounting for people with disabilities, others with access and functional needs, and for the needs of children—must occur from the outset of the planning effort. For example, the demographics of the population, including its resources and needs, have a profound effect on evacuation, shelter operations, and family reunification.4 Another key consideration is the integration of household pets and service animals into the planning process. Many individuals may make decisions on whether to comply with protective action measures based on the jurisdiction's ability to address the concerns about their household pets and service animals. Establishing a profile of the community will also let planners know if courses of action are feasible. For example, if the majority of the actual resident population do not own cars, then planning efforts must account for greater transportation resource requirements than if the population was predominately composed of car-owning households. The businesses that comprise your jurisdiction must also be a part of your demographics—your jurisdiction

may house the only business providing a critical resource to your area or the Nation. By fully understanding the composition and requirements of the actual population (including all segments

of the community), community-based plans will lead to improved response and recovery activities and, ultimately, overall preparedness.

Planning must include participation from all stakeholders in the community. Effective planning ensures that the whole community is represented and involved in the planning process. The most realistic and complete plans are prepared by a diverse planning team, including representatives from the jurisdiction's departments and agencies, civic leaders, businesses, and organizations (e.g., civic, social, faith-based, humanitarian, educational, advocacy, professional) who are able to contribute critical perspectives and/or have a role in executing the plan. The demographics of the community will aid in determining who to involve as the planning team is constructed. Including community leaders representative of the entire community in planning reinforces the expectation that the community members have a shared responsibility and strengthens the public motivation to conduct planning for themselves, their families, and their organizations. For example, it is essential to incorporate individuals with disabilities or specific access and functional needs and individuals with limited English proficiency, as well as the groups and organizations that support these individuals, in all aspects of the planning process. When the plan considers and incorporates the views of the individuals and organizations assigned tasks within it, they are more likely to accept and use the plan.

Planning uses a logical and analytical problem-solving process to help address the complexity and uncertainty inherent in potential hazards and threats. By following a set of logical steps that includes gathering and analyzing information, determining operational objectives, and developing alternative ways to achieve the objectives, planning allows a jurisdiction or regional response structure to work through complex situations. Planning helps a jurisdiction identify the resources at its disposal to perform critical tasks and achieve desired outcomes/target levels of performance. Rather than concentrating on every detail of how to achieve the objective, an effective plan structures thinking and supports insight, creativity, and initiative in the face of an uncertain and fluid environment. While using a prescribed planning process cannot guarantee success, inadequate plans and insufficient planning are proven contributors to failure.

Planning considers all hazards and threats. While the causes of emergencies can vary greatly, many of the effects do not. Planners can address common operational functions in their basic plans instead of having unique plans for every type of hazard or threat. For example, floods, wildfires, HAZMAT releases, and radiological dispersal devices may lead a jurisdiction to issue an evacuation order and open shelters. Even though each hazard's characteristics (e.g., speed of onset, size of the affected area) are different, the general tasks for conducting an evacuation and shelter operations are the same. Planning for all threats and hazards ensures that, when addressing emergency functions, planners identify common tasks and those responsible for accomplishing the tasks.

Planning should be flexible enough to address both traditional and catastrophic incidents. Scalable planning solutions are the most likely to be understood and executed properly by the operational personnel who have practice in applying them. Planners can test whether critical plan elements are sufficiently flexible by exercising them against scenarios of varying type and magnitude. In some cases, planners may determine that exceptional policies and approaches are necessary for responding to and recovering from catastrophic incidents. These exceptional planning solutions should be documented within plans, along with clear descriptions of the triggers that indicate they are necessary.

Plans must clearly identify the mission and supporting goals (with desired results). More than any other plan element, the clear definition of the mission and supporting goals (which specify desired results/end-states) enables unity of effort and consistency of purpose among the multiple groups and
activities involved in executing the plan. Every other plan element should be designed and evaluated according to its contributions to accomplishing the mission and achieving the goals and desired results.

Planning depicts the anticipated environment for action. This anticipation promotes early understanding and agreement on planning assumptions and risks, as well as the context for interaction. In situations where a specific hazard has not been experienced, planning provides the opportunity to anticipate conditions and systematically identify potential problems and workable solutions. Planners should review existing EOPs to ensure current assumptions are still necessary and valid. After-action reports (AAR) of recent emergency operations and exercises in the jurisdiction will help planners develop a list of lessons learned to address when updating plans.

Planning does not need to start from scratch. Planners should take advantage of the experience of other planners, as well as plans generated by other jurisdictions. Further, many states publish their own standards and guidance for emergency planning, conduct workshops and training courses, and assign their planners to work with local planners. FEMA offers resident, locally presented, and independent study emergency planning courses. FEMA also publishes guidance related to planning for specific functions and risks. By participating in this training and reviewing existing emergency or contingency plans, planners can:

> Key infrastructure sectors, often owned and operated by the private sector, are frequently well prepared to maintain their business continuity and protect their employees. Their planning often follows recognized industry standards or established regulatory requirements. Use key infrastructure planning to complement State and local planning.

- Identify applicable authorities and statutes
- Gain insight into community risk perceptions
- Identify organizational arrangements used in the past
- Identify mutual aid agreements (MAA) with other jurisdictions
- Identify private sector planning that can complement and focus public sector planning
- Learn how historical planning issues were resolved
- Identify preparedness gaps.

Planning identifies tasks, allocates resources to accomplish those tasks, and establishes accountability. Decision makers must ensure that they provide planners with clearly established priorities and adequate resources; additionally, planners and plan participants should be held accountable for effective planning and execution.

Planning includes senior officials throughout the process to ensure both understanding and approval. Potential planning team members have many day-to-day concerns but must be reminded that emergency planning is a high priority. Senior official buy-in helps the planning process meet requirements of time, planning horizons, simplicity, and level of detail. The more involved decision makers are in planning, the better the planning product will be.

The emergency or homeland security planner, hereafter referred to simply as "planner," must reaffirm the senior official's understanding that planning is an iterative, dynamic process that ultimately facilitates his or her job in a crisis situation by:

- ✓ Identifying and sharing the hazard, risk, and threat analyses for the jurisdiction
- ✓ Discussing readiness and capability assessments, as well as exercise critiques
- ✓ Describing what the government body and the senior official will have to do prior to, during, and after an incident to either prevent or minimize the incident's impact.

Senior officials play a critical role in determining when and which plans should be developed or revised. Additionally, they customarily have the authority to approve the final product in coordination with key stakeholders. By participating throughout the planning process, senior officials will better understand how to implement the plan during an incident.

Time, uncertainty, risk, and experience influence planning. These factors define the starting point where planners apply appropriate concepts and methods to create solutions to particular problems. Planning is, therefore, often considered to be both an art and a science in that successful planners are able to draw from both operational experience and an understanding of emergency management principles, but also are intuitive, creative, and have the ability to anticipate the unexpected. While the science and fundamental principles of planning can be learned through training and experience, the art of planning requires an understanding of the dynamic relationships among stakeholders, of special political considerations, and of the complexity imposed by the situation. Because this activity involves judgment and the balancing of competing demands, plans should not be overly detailed—to be followed by the letter—or so general that they provide insufficient direction. Mastering the balance of art and science is the most challenging aspect of becoming a successful planner.

Effective plans tell those with operational responsibilities what to do and why to do it, and they instruct those outside the jurisdiction in how to provide support and what to expect. Plans must clearly communicate to operational personnel and support providers what their roles and responsibilities are and how those complement the activities of others. There should be no ambiguity regarding who is responsible for major tasks. This enables personnel to operate as a productive team more effectively, reducing duplication of effort and enhancing the benefits of collaboration.

Planning is fundamentally a process to manage risk. Risk management is a process by which context is defined, risks are identified and assessed, and courses of action for managing those risks are analyzed, decided upon, and implemented, monitored, and evaluated. As part of the process, planning is a tool that allows for systematic risk management to reduce or eliminate risks in the future. Figure 1-1: The Preparedness Cycle

Planning is one of the key components of the preparedness cycle. The preparedness cycle (Figure 1.1) illustrates the way that plans are continuously evaluated and improved through a cycle of planning, organizing, training, equipping, exercising, evaluating, and taking corrective action.

b.) Why Plan for Animal Issues During a Disaster?

Throughout the past two decades, there have been at least two dozen major disasters in the State of California, including floods, fires, winter storms, earthquakes, tsunamis, oil spills and other man-made disasters.[1] In disasters, the first priority is to the protection of life, property, and the environment.[2] Unfortunately, in the past, this has not included a coordinated response for the evacuation, care, and sheltering of animals. Almost twenty million California households own pets.[3] 32.8%of California households own dogs, with an estimated household dog population of 4,260,000 statewide. The total dog population in California is estimated to be 6,687,000. 28.3% of California households own cats, equaling approximately 3,687,000 cats. The total California cat population is estimated to be 7,118,000.[3]

Although the protection of human life is the highest priority in emergency response, recent disasters and follow-up research have shown that proper preparation and effective coordination of animal issues enhances the ability of emergency personnel to protect both human and animal health and safety. It is much more efficient, effective, and inexpensive to develop plans to address animal issues prior to an incident than during one. The following issues highlight why animal preparedness is necessary:

A. Refusal to Evacuate and Early Return to Unsafe Areas

Since human evacuation shelters do not allow pets in facilities, pet owners requiring sheltering must choose between deserting their animals, refusing to evacuate, or evacuating their animals to a pre-determined site. Without advanced planning, this can be a difficult decision. Farmers and ranchers who depend upon animals for their livelihood are often unwilling to leave their animals unsupervised in the event of a disaster. Some key facts to consider are:

- Up to 25% of pet owners will fail to evacuate because of their animals; this represents 5-10% of the total population directed to evacuate.[4]
- 30-50% of pet owners will leave pets behind, even with advance notice of evacuation.[4]
- Approximately 50-70% of people leaving animals behind will attempt to reenter a secure site to rescue their animals; this represents 5-15% of the total population directed to evacuate. [4]

The 10-25% of individuals who refuse to evacuate, or attempt to return to the evacuated areas because of their animals, risk injury, exposure to hazardous materials, and their own lives, as well as those of emergency response personnel who must rescue them. The most effective and efficient way to minimize human and animal health and safety risks is for individuals and responding agencies to be properly prepared to address animal issues well in advance of a disaster.

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[1] California Emergency Management Agency

[2] Cal EMA Planning Section: State of California Emergency Plan. Sacramento, CA , July, 2009

[3] American Veterinary Medical Association. U.S. Pet Ownership and Demographics Sourcebook, Center for Information Management. Schamburg, IL. 2012.

State of California, Department of Finance, Historical City/County Population Estimates 1991-1998, with 1990 Census Counts. Sacramento, CA, May 1998.

[4] Numbers quoted are from personal communication with Sebastian Health, DVM; Purdue University. These numbers reflect studies of three incidents: Oakland, CA firestorm (1991, 1273 pets), Weyauwega, WI train derailment (1996, 241 surveys), and Marysville, CA floods (1997, 397 surveys).

B. Public Health and Safety Risks Caused by Animals at Large

Animals that are not cared for by their owners during a disaster may become a public health and safety risk. Loose and displaced animals are possible carriers of disease (such as rabies and plague) and can become a nuisance or danger to people. Animals "at large" are the responsibility of local animal control officials.

C. Public Health and Safety Risks Caused by Animal Carcasses

Another public health and safety risk is the presence of animal carcasses. Decaying carcasses can contaminate water sources or lead to outbreaks of diseases such as cholera or anthrax. Timely carcass removal is critical. The methods for environmentally acceptable disposal of animal carcasses are limited, and become particularly difficult and expensive when there are many large animal carcasses.

D. Economic Considerations

California has the largest agricultural economy of any state in the nation, valued at $43.5 billion in 2011[6]. Some of the state's largest agricultural products are of animal origin. California's total livestock and livestock product's cash receipts for 2011 totaled $12.4 billion[6]. Dairy products are the top agricultural commodity in the state valued, at $7.7 billion in 2011; cattle and calves are the fourth largest, valued at $2.8 billion in 2011[6]. The loss of production animals due to a disaster can result in major economic loss to individual farmers and ranchers as well as local and state economies. For specific information about animal based agricultural production in your county, talk to your County Agricultural Commissioner, or see the California Department of Food and Agriculture's (CDFA) California Agricultural Resource Directory. Copies can be ordered through the CDFA website at *www.cdfa.ca.gov*.

E. Public Relations Considerations

Society views animals as dependent upon human care and support. Many pets are considered integral parts of families. Animals and animal issues attract media attention. This is particularly true during a disaster. The failure to deal with animal issues in disasters not only results in utilizing more resources and placing additional human lives at risk, but can result in significant public outcry and negative media coverage.

F. Control of Self-Responders and Misuse of Donations

Experience has shown that when animals are impacted by disasters, a large number of self-responders will arrive to address the situation. These well-meaning, but untrained and emotionally driven individuals, can be very disruptive and create many law enforcement challenges. Additionally, these situations may encourage the arrival of "rescue groups." Some of these groups are well-trained and helpful, and some are not. Effective control of self-responding individuals and rescue groups is critical. This can occur only when a well-coordinated official response is in place. A county animal plan allows for appropriate identification and utilization of all available resources within the structure of the county animal response plan. This will minimize the intrusion of untrained and unsolicited volunteers in a crisis situation.

A. The Standardized Emergency Management System (SEMS)

Title 19, Section 2400 establishes the Standardized Emergency Management System (SEMS) based upon the Incident Command System (ICS).

SEMS is intended to standardize response to emergencies involving multiple jurisdictions or multiple agencies. SEMS is intended to be flexible and adaptable to the needs of all emergency responders in California. SEMS requires emergency response agencies use basic principles and components of emergency management including ICS, multi-agency or inter-agency coordination, the operational area concept, and established mutual aid systems. State agencies must use SEMS. Local government must use SEMS by December 1, 1996 in order to be eligible for state funding of response-related personnel costs pursuant to activities identified in California Code of Regulations, Title 19, §2920, §2925, and §2930. Individual agencies' roles and responsibilities contained in existing laws or the state emergency plan are not superseded by these regulations.

The Standardized Emergency Management System (SEMS) is the cornerstone of California's emergency response system and the fundamental structure for the response phase of emergency management. SEMS is required by the California Emergency Services Act (ESA) 11 for managing multiagency and multijurisdictional responses to emergencies in California. The system unifies all elements of California's emergency management community into a single integrated system and standardizes key elements. SEMS incorporates the use of the Incident Command System (ICS), California Disaster and Civil Defense Master Mutual Aid Agreement (MMAA), the Operational Area (OA) concept and multiagency or inter-agency coordination. State agencies are required to use SEMS and local government entities must use SEMS in order to be eligible for any reimbursement of response-related costs under the state's disaster assistance programs.

SEMS ORGANIZATION LEVELS

There are five SEMS organization levels, as illustrated in Exhibit SEMS Organization Levels.

SEMS Organization Levels

- *Field* -The Field Level is where emergency response personnel and resources, under the command of responsible officials, carry out tactical decisions and activities in direct response to an incident or threat.

- *Local Government* -The Local Government level includes cities, counties and special districts. Local governments manage and coordinate the overall emergency response and recovery activities within their jurisdiction. Local governments are required to use SEMS when their Emergency Operations Center (EOC) is activated or a local emergency is declared or proclaimed in order to be eligible for state reimbursement of response-related costs.

- *Operational Area* (OA)-An OA is the intermediate level of the state's emergency management organization which encompasses a county's boundaries and all political subdivisions located within that county, including special districts. The OA facilitates and/or coordinates information, resources and decisions regarding priorities among local governments within the OA. The OA serves as the coordination and communication link between the Local Government Level and Regional Level. State,

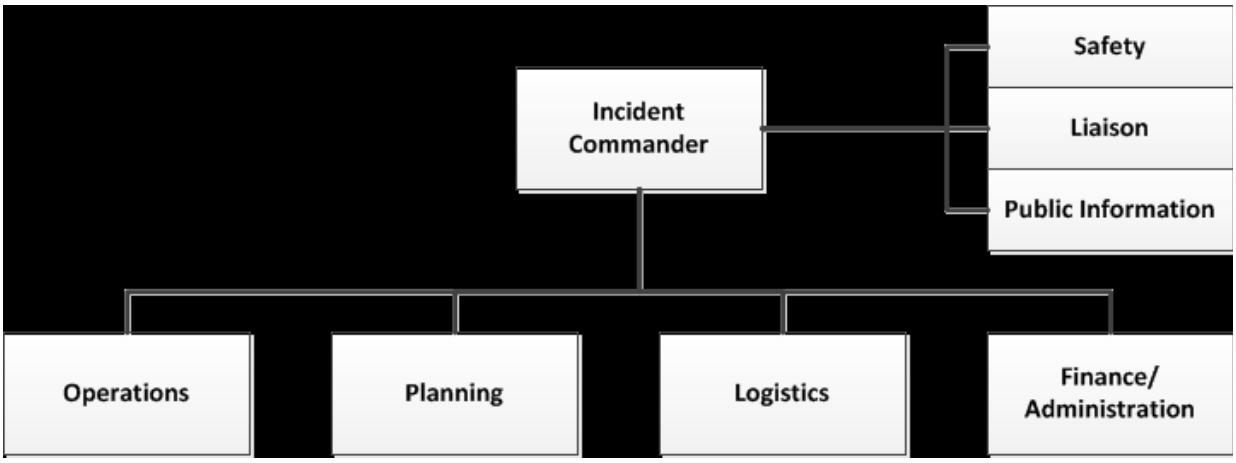
federal and tribal jurisdictions in the OA may have statutory authorities for response similar to that at the local level.

- *Region* - The Regional Level manages and coordinates information and resources among OAs within the mutual aid region and also between the OA and the state leveL The Regional Level also coordinates overall state agency support for emergency response activities within the region. California is divided into three California Emergency Management Agency (Ca1EMA) Administrative Regions-Inland, Coastal and Southern- which are further divided into six mutual aid regions. The Regional Level operates out of the Regional Emergency Operations Center (REOC).

- *State* - The state level of SEMS prioritizes tasks and coordinates state resources in response to the requests from the Regional level and coordinates mutual aid among the mutual aid regions and between the Regional Level and State LeveL The state level also serves as the coordination and communication link between the state and the federal emergency response system. The state level requests assistance from other state governments through the Emergency Management Assistance Compact (EMAC) and similar interstate compacts/agreements and coordinates with the Federal Emergency Management Agency (FEMA) when federal assistance is requested. The state level operates out of the State Operations Center (SOC).

SEMS FUNCTIONS

SEMS requires that every emergency response involving multiple jurisdictions or multiple agencies include the five functions identified below in SEMS Functions. These functions must be applied at each level of the SEMS organization.



• Command/Management: Command is responsible for the directing, ordering, and/or controlling of resources at the field response level. Management is responsible for overall emergency policy and coordination at the SEMS EOC levels. Command and Management are further discussed below:

o Command: A key concept in all emergency planning is to establish command and tactical control at the lowest level that can perform that role effectively in the organization. In the Incident Command System (ICS), the Incident Commander (IC), with appropriate policy direction and authority from the responding agency, sets the objectives to be accomplished and approves the strategy and tactics to be used to meet those objectives. The IC must

respond to higher authority. Depending upon the incident's size and scope, the higher authority could be the next ranking level in the organization up to the agency or department executive. This relationship provides an operational link with policy executives who customarily reside in the Department Operations Center (DOC) or EOC, when activated.

o Management: The EOC serves as a central location from which multiple agencies or organizations coordinate information collection and evaluation, priority setting and resource management. Within the EOC, the Management function:

Facilitates multiagency coordination and executive decision making in support of the incident response,
Implements the policies established by the governing bodies, or Facilitate the activities of the Multiagency (MAC) Group

• Operations: Responsible for coordinating and supporting all jurisdictional operations in support of the response to the emergency through implementation of the organizational level's Action Plans (AP). At the Field Level, the Operations Section is responsible for the coordinated tactical response directly applicable to, or in support of the objectives in accordance with the Incident Action Plan (lAP). In the EOC, the Operations Section Coordinator manages functional coordinators who share information and decisions about discipline-specific operations.

• Logistics: Responsible for providing facilities, services, personnel, equipment and materials in support of the emergency. Unified ordering takes place through the Logistics Section Ordering Managers to ensure controls and accountability over resource requests. As needed, Unit Coordinators are appointed to address the needs for communications, food, medical, supplies, facilities and ground support.

• Planning/Intelligence: Responsible for the collection, evaluation and dissemination of operational information related to the incident for the preparation and documentation of the lAP at the Field Level or the AP at an EOC. Planning/Intelligence also maintains information on the current and forecasted situation and on the status of resources assigned to the emergency or the EOC. As needed, Unit Coordinators are appointed to collect and analyze data, prepare situation reports, develop action plans, set Geographic Information Systems (GIS) priorities, compile and maintain documentation, conduct advance planning, manage technical specialists and coordinate demobilization.

• Finance/Administration: Responsible for all financial and cost analysis aspects of the emergency and for any administrative aspects not handled by the other functions. As needed, Unit Leaders are appointed to record time for incident or EOC personnel and hired equipment, coordinate procurement activities, process claims and track costs.

The field and EOC functions are further illustrated in Comparison of Field and EOC SEMS Functions. More on the SEMS Regulations and SEMS Guidelines can be found on the Cal OES Website.

Comparison of Field and EOC SEMS Functions

PRIMARY SEMS FUNCTION	FIELD RESPONSE LEVEL	EOCS AT OTHER SEMS LEVELS
Command/ Management	Command is responsible for the directing, ordering, and/or controlling of resources.	Management is responsible for facilitation of overall policy, coordination and support of the incident.
Operations	The coordinated tactical response of all field operations in accordance with the Incident Action Plan.	The coordination of all jurisdictional operations in support of the response to the emergency in accordance with the EOC Action Plan.
Planning/ Intelligence	The collection, evaluation, documentation and use of intelligence related to the incident.	Collecting, evaluating and disseminating information and maintaining documentation relative to all jurisdiction activities.
Logistics	Providing facilities, services, personnel, equipment and materials in support of the incident.	Providing facilities, services, personnel, equipment and materials in support of all jurisdiction activities as required.
Finance/ Administration	Financial and cost analysis and administrative aspects not handled by the other functions.	Responsible for coordinating and supporting administrative and fiscal consideration surrounding an emergency incident

EOC ACTIVATION CRITERIA, SEMS LEVELS AND STAFFING

Emergency Operations Centers (EOCs) should be activated in accordance to the Standardized Emergency Management System and organized according to the five functions of the system which are Management, Operations, Planning/Intelligence, Logistics and Finance/Administration. The activation guidelines are illustrated in SEMS EOC Activation Requirements.

SEMS EOC Activation Requirements

The following matrix highlights the flow of SEMS activation requirements. Activation of an Operational Area EOC triggers activation of the Regional EOC which, in tum, triggers activation of the State level EOC.

The EOC is usually activated, but in some circumstances, such as agricultural emergencies or drought, a local emergency may be proclaimed without the need for EOC activation.

•• Does not apply to requests for resources used in normal day-to-day operations which are obtained through existing mutual aid agreements providing for the exchange or furnishing of certain types of facilities and services as provided for under the California Disaster and Civil Defense Master Mutual Aid Agreement (MMAA).

§ Indicates sections in the California Code of Regulations (CCR), Title 19, Division 2, Chapter I (SEMS).

Situations identified in SEMS Regulations ↓	SEMS LEVELS				
	Field Response	**Local Government**	**Operational Area**	**Region**	**State**
Emergency involving two or more emergency response agencies §2407(a)(1)	Use ICS				
Local Emergency proclaimed* §2407(a)(2)	Use ICS	Use SEMS			
Local government EOC activated §2407(a)(1)	Use ICS	Use SEMS			
Local government activates EOC and requests Operational Area EOC activation §2407(a)(1)	Use ICS	Use SEMS	Activate OA EOC	Activate REOC	Activate SOC
Two or more cities within an Operational Area proclaim a local emergency. §2409(f)(2)	Use ICS	Use SEMS	Activate OAEOC	Activate REOC	Activate SOC
County and one or more cities proclaim a local emergency §2409(f)(3)	Use ICS	Use SEMS	Activate OAEOC	Activate REOC	Activate SOC
City, city and county, or county requests governor's State of Emergency proclamation §2409(f)(4)	Use ICS	Use SEMS	Activate OA EOC	Activate REOC	Activate SOC
Governor proclaims a State of Emergency for county or two or more cities §2409(f)(5)	Use ICS	Use SEMS	Activate OA EOC	Activate REOC	Activate SOC
Operational area requests resources from outside its boundaries** §2409(f)(6)	Use ICS	Use SEMS	Activate OAEOC	Activate REOC	Activate SOC
Operational area receives resource requests from outside its boundaries** §2409(f)(7)	Use ICS	Use SEMS	Activate OA EOC	Activate REOC	Activate SOC
An Operational Area EOC is activated. §2411(a)	Use ICS	Use SEMS	Activate OA EOC	Activate REOC	Activate SOC
A Regional EOC is activated §2413(a)(1)	Use ICS	Use SEMS	Activate OAEOC	Activate REOC	Activate SOC
Governor proclaims a State of Emergency §2413(a)(2)	Use ICS	Use SEMS	Activate OAEOC	Activate REOC	Activate SOC
Governor proclaims an earthquake or volcanic prediction §2413(a)(3)	Use ICS	Use SEMS	Activate OAEOC	Activate REOC	Activate SOC

B. NATIONAL INCIDENT MANAGEMENT SYSTEM (NIMS) INTEGRATION

In addition to the Standardized Emergency Management System (SEMS), the state and its political subdivisions are responsible for compliance with the requirements of the National Incident Management System (NIMS) as defined in the Homeland Security Presidential Directives. The state promotes and encourages NIMS adoption by associations, utilities, Non-Governmental Organizations (NGO), private sector emergency management and incident response organizations to enhance emergency management effectiveness. SEMS and NIMS are designed to be compatible and are based on similar organizational principles.

Cal OES is designated as the principal coordinator for NIMS implementation statewide. Annually, Cal OES administers the process to communicate, monitor and implement NIMS requirements in cooperation with affected state agencies and departments, local governments and other critical stakeholders. Cal OES utilizes the National Incident Management System Compliance Assistance Support Tool (NIMSCAST) for measuring progress and facilitating reporting.

C. THE NATIONAL RESPONSE FRAMEWORK

The NRF is a guide to how the Nation conducts all-hazards incident response. The NRF states that each Federal department or agency must also plan for its role in incident response. Virtually every Federal department and agency possesses resources that a jurisdiction may need when responding to an incident. Some Federal departments and agencies have primary responsibility for specific aspects of incident response, such as HAZMAT remediation. Others may have supporting roles in providing different types of resources, such as communications personnel and equipment. Regardless of their roles, all Federal departments and agencies must develop policies, plans, and procedures governing how they will effectively locate resources and provide them as part of a coordinated Federal response. The planning considerations described for response can also guide prevention and protection planning.

II. How to Use this Guide

Preparation, planning, and practice are the keys to successful disaster response. California's diverse landscape and population (human and animal) presents unique challenges to emergency management. No single plan is adequate statewide. This is particularly true of animal issues. This planning guide is intended to provide county agencies involved in disaster planning for animals with a comprehensive outline for addressing animal issues during disasters.

The CDFA developed this guide after reviewing animal disaster planning resources from other states, counties, and volunteer organizations. Efforts have been made to incorporate information into a format consistent with California's Standardized Emergency Management System (SEMS). This guide outlines organizations and individuals who should be involved in the planning process, local factors that should be considered, and planning issues at each emergency management phase (preparation, response, recovery, and mitigation). After evaluating needs and resources, each county can decide which sections of this guide will be needed to develop an individual county plan appropriate to their area.

The appendix includes sample surveys and forms to be used for identifying and organizing county resources. These forms can be copied and used directly or tailored to fit your specific needs.

III. The County's Role

A. Integrating an Animal Plan into Your Operational Area (OA) Emergency Response Plan

Animal issues, like all other disaster response activities, must be a part of your Operational Area (OA) Emergency Response Plan. For a county to be eligible for State disaster aid, they must use (SEMS) to respond; this is the same for animal issues. An organized plan will allow your county to effectively prevent and respond to animal issues during a disaster, organize local resources, facilitate mutual aid activities relating to animal issues, and utilize broader regional and state resources. Ultimately, the county animal response plan should be adopted as an annex to the OA Emergency Response Plan. A "single point of contact," the County Animal Coordinator, will be part of the County Emergency Operations Center (EOC). Once developed, a county's Standard Operating Procedures (SOPs) will outline preparation, response, and recovery activities for animal issues.

B. The Role of the Counties in the California Animal Response in Emergency System (CARES)

California Animal Response in Emergency System (CARES) organizes state resources, in support of local government responding to animal issues, during a state level emergency in accordance with SEMS. During a disaster, if local resources are insufficient to meet existing needs, local government may request state assistance. When this assistance is requested; the Governor's Office of Emergency Services (OES) will activate CARES, with CDFA as the lead agency. The ability to respond effectively at the state level largely depends upon planning accomplished within each OA prior to a disaster. Since the majority of volunteers, resources, and organization during a disaster originate in the local area, it is essential that counties and local agencies have animal response plans in place in order for CARES to function effectively. The CARES Plan is intended to facilitate mutual aid between counties.

V. Definition of "Animal"

For the purposes of responding to animal issues during disasters, the CARES Committee defines "animals" as, "affected commercial livestock, companion animals, exhibition animals, captive wildlife, and exotic pets."[5] This definition excludes non-captive wildlife. This is the definition that will be used for state level response activities. It is suggested that you use a similar definition in your county animal plan in order to eliminate confusion as to the types of animals rescue efforts will be directed towards.

VI. Getting Started: Forming a Planning Committee

To develop a comprehensive and effective plan in your OA, it is important that as many stakeholders as possible be included in the process. Including a wide range of groups

[5] CARES Draft Plan,, 2010.

concerned about animal issues in the planning process will foster cooperation, understanding, and commitment to work within the plan in your OA. The following is a list of possible stakeholders; specific groups will vary by county:

A. Government Agencies

Local

- County Emergency Services
- County Agricultural Commissioner
- County Health Department
- County and City Animal Control
- County and City Law Enforcement
- County and City Fire/Rescue
- County and City Parks and Recreation
- County and City Public Works
- City and County Social Services
- Solid Waste Management

State

- California Emergency Management Agency
- California Emergency Medical Services Authority
- California Department of Food and Agriculture
- California Department of Social Services
- California Volunteers
- California Department of Fish and Game

Federal

- Federal Emergency Management Agency
- United States Department of Agriculture (APHIS)
- United States Department of Homeland Security

B. Volunteer Organizations

- California Veterinary Medical Association (CVMA)
- Humane Societies
- Society for the Prevention of Cruelty to Animals (SPCA)
- Animal Welfare Groups
- School groups (4-H, FFA, Animal Science Clubs, etc.)
- Wildlife Rehabilitation Groups
- Local Food Banks
- Animal enthusiast clubs (horse, dog, cat, etc.)
- American Red Cross
- State Humane Association of California
    - California Emergency Services Association
    - California Animal Control Directors Association
    - California State Sheriff's Association

C. Industry Groups

- Cattlemen, Dairy, or Equestrian Associations
- Farriers

- Animal Transporters
- Pet Food and Supply Businesses
- Commercial Animal Industries (breeders, stables, kennels, beef, dairy, and poultry producers, etc.)
- Horse Track Representatives
- Home Owner Associations for Rural Communities
- Utilities
- Local Zoos or Animal Parks
- Local Fair Organizations

VII. Local Issues to Consider in Developing Your Plan

A. Types of Disasters Likely in Your Area

Performing a threat assessment in your area of jurisdiction can be greatly beneficial should you ever be confronted with an actual disaster or emergency. In general, disasters are classified as *Natural*, *Technological*, or *Adversarial / Human-caused*.

- Natural Disasters are those occurring in nature, they cannot be avoided or controlled and often times are interrelated. Examples include:
    - Earthquake
    - Fire
    - Land/ Mudslide
    - Avalanche
    - Flood
    - Tsunami
    - Drought
    - Severe storm
    - Hurricane
    - Freeze
    - Tornado
    - Lightening strike
    - Volcanic eruption
    - Epidemic/ Pandemic

- Technological disasters are ones that involve materials created by man and that pose a unique hazard to the general public. Examples include:

    - Communication collapse
    - Utility failure (water, sewer, electricity, gas)
    - Commodities lapse (gasoline, coal, food, water)
    - Infrastructure breakdown
    - Dam/ levee break
    - Building/ structure collapse
    - HAZMAT incident
    - Nuclear accident

- Oil spill

- Adversarial / Man-Made disasters are ones that are created by man either intentionally or by accident. They include:

  - Civil unrest/ disturbance
  - War/ invasion
  - Acts of terrorism

B. Calculating the Animal Population in Your Area

Knowing the population of animals in your area will help in planning the scope and type of disaster response planning needed in your OA. There are several ways to estimate the animal population in your area.

Please refer to the CARES Standard Operating Procedure for Calculating Animal Populations at:
http://animalsindisasters.files.wordpress.com/2013/08/calculating-animalpopulations.pdf

2. Production Animal Estimate

The number of production animals, such as dairy and beef cattle, poultry, pigs, and sheep by county, can be found by contacting your County Agricultural Commissioner, or in the California Agricultural Resource Directory published by CDFA.

3. Survey Local Sources

The following is a list of possible sources that could be surveyed to make an estimate of the number of animals in your county to verify populations calculated in the CARES Standard Operating Procedure listed above.

- Dog and cat licenses
- Veterinary records
- Major producers (livestock, poultry)
- Industry groups
- Pet and feed store sales records
- Restricted species licenses from the California Department of Fish and Game (CDFG)

C. Locations of Animal Populations in Your Area

It is important to identify where the majority of the animal population in your county is located. If your county is largely urban or suburban, this is probably the same area where most people live. If your county is largely rural, this is probably the location of large producers. Other sites such as kennels, racetracks, and zoos may also need special attention during a disaster. Because large animal transportation requires more equipment, effort, and time than small animal transport, special attention should be paid to these areas. Once you have located the highest concentrations of animals in your county, you should compare them to the areas most likely to be affected by specific disasters. If available,

Geographical Information System (GIS) mapping techniques are particularly helpful in pinpointing potential trouble spots.

D. Location of Animal Resources in Your Area

It is important to pinpoint the location of resources needed for animal survival during a disaster. Resources include things such as: food, water, shelter and confinement areas, transportation, and volunteers. If any of the resources you identify are likely to be cut off during a disaster, consider an alternate resource base. Also, look at how disasters may affect access to these resources by volunteers and evacuees.

E. Liability Issues

When developing a county animal plan, there are several potential liability issues that may arise. Consult with your county council and county OES office regarding exposure to risk and statutes that cover emergency activities, animal issues, and lost or abandoned property.

1. Releases

You may consider the use of release statements on some of the recommended documents in the Appendices of this Guide. A sample release developed by the Humane Society of the United States (HSUS) is included in Appendix A.

2. Volunteer Workers

All volunteers involved in your county animal disaster response should be Registered Disaster Service Workers. For additional information on volunteer workers, see Section VII, Part B.6 of this guide.

VIII. Preparation

A. Identifying a County Animal Coordinator

The County Animal Coordinator is the individual who will act as the single point of contact on animal issues in the OA. This person will staff the EOC for the OA during a disaster. This individual should be trained in SEMS and the Response Information Management System (RIMS) and should be knowledgeable in local animal issues and in the local animal response plan. This person may be a local animal control official, County Agricultural Commissioner, or other county designee. In order to select the best individual for this position, consider:

- What are the responsibilities of this position?
- Will the local emergency service agency have current and reliable contact information for this person?
- Who is the alternate County Animal Coordinator?
- What training do these individuals need?

B. Identification of Resources

The preparation stage of disaster response allows local groups to plan response activities before a disaster occurs. The most important part of this is identifying

local resources available. Following are lists of resources that should be identified prior to a disaster:

1. *Animal Confinement and Shelter Facilities*

   a. Small Animal
      Kennels/boarding facilities
      Animal Control facilities
      Wildlife rehabilitation centers
      SPCA/Humane organizations
      Local fairgrounds
      Veterinary clinics

   b. Large Animal
      Local fairgrounds
      Stables or racetracks
      Local FFA or 4-H groups
      Saleyards or auctions
      Railroad holding areas
      Rodeo arenas
      Local educational institutions
      Producers/ranchers/private individuals

2. *Animal Food Sources*

   a. Small Animal
      Pet stores
      Food banks
      Grocery stores
      Kennels
      Breeders

   b. Large Animal
      Feed stores
      Hay brokers
      Local boarding and breeding facilities
      Ranchers/private individuals

3. *Animal Water Sources*
   The availability of safe and accessible water will largely depend upon the location of the sheltering facilities in your area. When identifying shelters you should check on the water sources at the facility. If you are concerned about water quality or contaminated water at a particular site, check with the County Department of Health. In an emergency, water may need to be treated with chlorine or other chemicals before use.

4. Supplies

Supply lists are valuable not only because they help to have supplies predetermined prior to a disaster, but also because they provide emergency managers and volunteers with common terminology when communicating about supply needs and availability. In general, supply lists may be grouped into the following categories:

a. Search, Rescue and Evacuation supplies
   - Animal identification
   - Handling and restraint
   - Personal protective equipment
   - Search and rescue equipment

b. Transportation supplies
   - Vehicles
   - Trailers
   - Animal handling and restraint
   - Safety equipment for animals
   - Personal protective gear for volunteers

c. Sheltering supplies
   - Housing (cages/kennels/ portable fencing)
   - Food/ water
   - Cleaning/ sanitation
   - Records
   - Animal identification
   - Animal handling and restraint
   - Personal protective equipment

d. Veterinary supplies
   - Medications
   - Bandaging/ wraps
   - Equipment/ instruments
   - Veterinary supplies

*A complete list of resources can be accessed at the CARES website: http://www.cal-cares.com

5. Transportation

The following are possible sources of animal transportation resources. Most of the local groups listed should be included in the planning committee.

a. <u>Small Animal</u>
   Animal control vehicles
   Mobile veterinary clinics
   Mobile dog kennels

Local kennel clubs/cat fanciers
Local humane organizations
Private vans, trucks, and trailers

b. Large Animal
Local horsemen's associations/riding clubs
Private horse trailers
Horse transport companies (commercial haulers)
Local cattlemen's association
Rancher livestock transport
Dairy livestock transport
Feedlot transport
Animal control vehicles and horse trailers
University, state, and community college animal transport

6. Volunteer Resources

Volunteers are the people who make a response plan work. When animals are in danger, you will find many willing volunteers. It is important that volunteers understand the response system, are trained, and are registered disaster service workers. To become a registered Disaster Service Worker, volunteers must register with the local Emergency Services Disaster Council prior to a disaster. Being a registered disaster service worker will allow volunteers to receive workers compensation should they be injured while volunteering. It will also ensure that volunteers are trained in SEMS and are aware of relief operations. The following is a list of groups that could supply volunteers and help gather other needed resources. Most of these groups should be included in the planning committee:

Local animal control
County Agricultural Commissioner
California Veterinary Medical Association (CVMA)
Local humane societies
Local SPCA
College or school groups (4-H, FFA, etc.)
Local Cat Fanciers Associations
Local kennel clubs
Cal Volunteers
California Emergency Medical Services Authority
Local philanthropy groups (Elks, Moose, Lions, Rotary)
National Medical Reserve Corps

7. Confirmation of Resource Availability

In addition to the identification of local resources, it is important that the availability of resources be periodically confirmed with the owners or suppliers of these resources. In some cases, it may be necessary for the OA to enter into a Memorandum of Understanding (MOU) with resource providers to ensure resource availability in the event of a disaster. It is important that plans be made for gathering needed resources during a

disaster. Multiple routes to shelters and areas where resources are kept should be planned.

C. Memorandums of Understanding and Mutual Aid Agreements

For any agreements made with organizations that provide resources, a written and signed MOU should be implemented and routinely confirmed. If a jurisdiction makes agreements with neighboring cities or counties to share resources, a Mutual Aid Agreement stating the terms of the arrangement should be implemented and routinely confirmed

Sample MOUS and Mutual Aid Agreements can be viewed on the CARES website at: http://cal-cares.com/emergency-managers/emergency-managers-resources/sample-forms/

D. Organization of Response Activities

Emergency response and management is addressed at all levels of SEMS planning using the Incident Command System (ICS) as described in the Introduction.

As a reference, the following positions should be filled with qualified personnel who possess FEMA ICS training or other emergency management training specific to the tasks associated with each position:

1. Management

Management is responsible for overall emergency policy and coordination through the joint efforts of governmental agencies and private organizations. Management duties include:

a. Liaison

The liaison communicates with staff from other agencies in the EOC. This should be the job of the County Animal Coordinator.

b. Public Information Officer

The Public Information Officer develops and releases information about emergency operations to the news media, personnel involved in the response operations, and other appropriate agencies and organizations.

2. Planning and Intelligence

Planning and Intelligence is responsible for collecting, evaluating, and disseminating information during response and recovery activities. Much of this may be done through the statewide RIMS (through OES). Planning and Intelligence duties include:

a. Situation and Status Analysis

Situation and Status Analysis may be assigned to provide information on situation status of animal rescue, care, and sheltering operations.

b. Documentation
Documentation compiles records and data pertaining to the response effort.

c. Mobilization/Demobilization
Mobilization/Demobilization works with Operations and Logistics to help plan the mobilization of personnel, equipment/supplies, and facilities. It also prepares the demobilization plan and monitors its execution.

3. *Operations*
Operations coordinates all jurisdictional operations in support of the emergency through the implementation of the OA action plan. The animal issues may be assigned to deal with:

a. Care and Sheltering
Care and Sheltering assists in the coordination of animal care and sheltering with human care and sheltering operations.

b. Disease Control
Disease control activities may include:
- Disposal of dead animals
- Separation of sick and healthy animals
- Rabies control
- Capture or euthanasia of animals "at large"

c. Animal Identification System
A system must be developed for identifying animals brought to shelters so that they can be returned to their proper owners. Records must also be kept for dead and unclaimed animals. Those operating the animal identification system may work with Operations to assist in reuniting animals with their owners.

4. *Logistics*
Logistics is responsible for providing facilities, services, personnel, equipment, and materials. The following is a list of logistical activities needed for responding to animal issues:

a. Communications
Communications staff maintains communications with all sites and personnel responding to animal issues during a disaster. Helps facilitate cooperation between responders.

b. Transportation
Transportation coordinates the movement of transportation resources to where they are needed.

c. Facilities Coordination

Facilities Coordination develops plans for mobilization centers, staging areas, shelters, and regional evacuation points. It oversees the distribution and installation of supplies to these areas.

d. Resource Tracking
Resource Tracking is responsible for tracking the status of resources at the various response sites.

5. Finance
Finance is responsible for tracking financial activities. The following is a list of activities that need to be tracked for costs incurred by the OA in case of future reimbursement.

a. Employee Time Reporting
b. Procurement of Supplies
c. Workers' Compensation and Claims
d. Cost Accounting for Response Activities
e. Damage Survey Report (DSR) Record Keeping

E. Practice Your Response Plan

Once you have planned your response, it is important that it be practiced periodically. Practicing the response plan will help pinpoint possible problem areas and allow personnel to become comfortable with their roles. Both table top and actual drills are useful.

F. Volunteer Training

Dealing with animals, particularly in stressful or chaotic situations such as disasters, requires special skill. Volunteers who handle animals need to have experience or training in this area. Several national, state, and local groups offer training programs.

- *SEMS/ ICS Training*
  Volunteers should be familiar with SEMS and ICS structure. Self-guided online courses are available at: http://training.fema.gov/IS/crslist.aspx
  Basic courses include: IS-100.b, IS-10.a, IS-11.a, IS-700.a, and IS-111.a; but several others may also be useful.
- *Position Specific Training*
  Volunteers assigned tasks within ICS structure may require position-specific training. A list of training courses that may be useful can be found at: http://cal-cares.com/training/
- *Just in Time Training*
  This style of training provides information when it is needed. This may take place shortly before deployment to an emergency, or at/ during the emergency. County plans should assess threats and develop training outlines to address potential threats and hazards in each individual jurisdiction. If specific positions are named in the plan, just-in-time training outlines and training resources may be developed for each position.

IX. Response

An emergency response will put the plan to work. To ensure a smooth response, some things to consider are:

- Develop Standard Operating Procedures (SOPs) that specifically outline the response duties of personnel and organizations. SOPs that may be useful can be found at: http://cal-cares.com/standard-operating-procedures/
- Use the template forms to make a binder of forms needed at each shelter facility and Emergency Operations Center (EOC.) Sample forms that may be useful can be found at: http://cal-cares.com/emergency-managers/emergency-managers-resources/sample-forms/
- Develop a notification system to be activated in the event of a disaster.
- Flexibility is key to an effective response; be prepared to activate alternate plans if needed.
- Update your resource lists, plan, and SOPs often.

Response components to consider include:

A. Search and Rescue

For guidance on animal search and rescue, please refer to the CARES endorsed best practices from the National Alliance of State Animal Agriculture Emergency Programs (NASAAP) available at: http://www.learn.cfsph.iastate.edu/dr/node/150

B. Evacuation

For guidance on animal evacuation, please refer to the CARES endorsed guidelines published by the National Alliance of State Animal Agriculture Emergency Programs (NASAAEP) available at: http://www.learn.cfsph.iastate.edu/dr/wg.docs/evactrans-whtpaper6-23-12.pdf

C. Animal Sheltering

For guidance on animal sheltering, please refer to the CARES Standard Operating Procedure on Animal Sheltering: http://animalsindisasters.files.wordpress.com/2013/08/sheltering-guidelines.pdf

D. Veterinary Care

For assistance in planning veterinary care services during emergencies, please refer to the following resources:

- *Animal Decontamination* (NASAAEP Best Practices): http://www.learn.cfsph.iastate.edu/dr/wg.docs/decon-whitepaper6-23-12.pdf
- Animal Feeding: http://animalsindisasters.files.wordpress.com/2013/08/animal-feeding-guidelines.pdf
- Animal Water Requirements: http://animalsindisasters.files.wordpress.com/2013/08/animal-water-requirements.pdf

X. Recovery

During the recovery stage of a disaster, the following activities must be coordinated:

A. Shelter Closures and Redistribution of Supplies

It is important that guidelines be developed to decide when closure is appropriate and how it will be done. This is often coordinated with the closure of human shelters. Animal shelters can usually be closed 48 hours following the closure of human shelters. Owners who need to make special arrangements can do so on a case-by-case basis. Guidelines on distribution of remaining supplies should be agreed upon by all responding groups. Also, a plan for the release of volunteers should be developed.

B. Removal and Disposal of Animal Carcasses

Guidelines should be developed for disposal of animal carcasses in a safe and timely manner. Some disposal methods have negative environmental impacts. You should check with the County Department of Environmental Health for specific restrictions. It may be helpful to develop a MOU with a local rendering company or crematoria to ensure their services following a disaster.

C. Unclaimed Animal Adoption or Euthanasia Procedures

Procedures for the adoption or euthanasia of unclaimed animals following a disaster should be developed and agreed upon. These should be consistent with local laws and the current procedures of sheltering groups involved.

D. Data Collection

In the recovery stage, data should be collected on the response activities. This data should include financial information about the response effort as well as damage assessment information. Records of animals being transported to and/or from shelters, fostered, adopted, vaccinated, etc. should all be kept in detailed order. Information regarding supplies, personnel (resources) used and to what extent will be vital for financial reasons. For more information, read about the PETS Act at:
https://www.avma.org/KB/Resources/Reference/disaster/Pages/PETS-Act-FAQ.aspx
and at: http://www.fema.gov/pdf/government/grant/pa/9523_19.pdf
and https://www.rkb.us/search.cfm?query=animal

XI. Mitigation

Mitigation activities should include an assessment of the response activities and possibly a revision of the response plans and procedures. The goal of mitigation should be to improve future response. Mitigation and preparedness activities should continue until the next disaster response.

XII. Other Planning Resources

The following is a list of disaster planning and information resources available from other government agencies and non-profit organizations.

A. Government Agencies

Federal Emergency Management Agency (FEMA)

- *www.fema.gov*
  Provides general information about FEMA and emergency management activities
- *www.fema.gov/fema/anemer.htm*
  Provides information specifically on preparedness and planning for animals in emergencies and links to other related sites.

- *www.fema.gov/EMI/is10.htm* and *www.fema.gov/EMI/is11.htm*
  Provides information and course materials for the independent study *Animals in Disasters Training Courses*. There are two modules of this course; 1.) Awareness and Preparedness; and, 2.) Community Planning. Course materials can be downloaded and a final exam may be completed online.

National Weather Service (NWS)

- *www.nws.noaa.gov*
  Provides weather information and warnings for the United States.

State of California-- Governor's Office of Emergency Services (OES)

- *www.oes.ca.gov*
  Provides information about OES activities, state disaster planning, and types of emergencies. Includes links to mapping resources, related agencies, and weather reports. The California Specialized Training Institute (CSTI) can also be accessed through this site. CSTI provides training in SEMS and other emergency response activities.

California Department of Food and Agriculture (CDFA)

- *www.cdfa.ca.gov*
  Provides information about CDFA programs, the Animal Health and Food Safety Services, disaster preparedness materials for animal owners, and includes a directory of the County Agricultural Commissioners. This guide and appendices can also be downloaded from this site.

California Department of Fish and Game (CDFG)

- *www.dfg.ca.gov*
  Provides information on CDFG programs. Includes information about oil spill response activities.

University of California, Davis (UC Davis)

- *www.vetmed.ucdavis.edu/vetext/home.html*

Provides information on the Veterinary Medicine Cooperative Extension program through UCD. All or part of the *DANR Guide to Disaster Preparedness Resources* can be downloaded from this site.

- *www.ucdavis.edu*
  Provides access to all UCD websites and resources.

Florida Animal Disaster Planning Advisory Committee (ADPAC)

- *www.unr.net/~lbevan/adpac*
  Provides information on Florida's animal disaster response program, and disaster planning and preparedness guidelines. Includes links to other sites and order forms for disaster planning information. Most of the sources used to develop this guide can be ordered from this site.

Florida State Department of Agriculture and Consumer Services, Division of Animal Industry

- *http//:doacs.state.fl.us/~ai/ai.html*
  Provides information on ESF-17, Florida's animal disaster response plan. Includes information on disaster preparedness for animals.

Indiana State Board of Animal Health (BOAH)

- *www.state.in.us/boah/index.html*

Provides information on the Indiana State Annex for Veterinary Emergencies (SAVE) and disaster preparedness guidelines for various types of animals.

B. Non-profit Organizations

American Humane Association

- *www.americanhumane.org*
  Provides information on disaster relief and preparedness.

American Red Cross

- *www.redcross.org*
  Provides general information about disaster relief efforts worldwide.
- *www.redcross.org/disaster/safety/pets.html*
  Provides information on disaster preparedness for pets.
- *www.redcross.org/disaster/safety/index.html*
  Provides general information on disaster safety, including a list of California Preparedness Materials. These include a barnyard animal rescue plan, information for owners of service animals, and first aid for animals.

American Veterinary Medical Association (AVMA)

- *www.avma.org*
  Provides information about veterinary activities throughout the United States. Includes links to state Veterinary Medical Associations.
- *www.avma.org/avmf/Drmain.htm*
  Provides information about the American Veterinary Medical Foundation's (AVMF) disaster relief activities. Includes an order form for the AVMA Disaster Planning Guide.

California Veterinary Medical Association (CVMA)/ California Veterinary Medical Reserve Corps (CAVMRC)

- *www.cvma.org*
  Provides information on the CVMA disaster response programs. Includes a directory of CVMA member veterinarians. The CAVMRC is a registered Medical Reserve Corps with volunteer veterinary professionals available to assist in proclaimed or declared states of emergency by providing veterinary care and shelter staffing.

Cat Fanciers Association

- www.cfainc.org/disasters.html
  Provides information on the disaster relief efforts of the Cat Fanciers Association and disaster preparedness.

Disaster Relief

- *www.disasterrelief.org*
  Provides information on disasters worldwide. Includes disaster preparedness information for pets.

Humane Society of the United States (HSUS)

- *www.hsus.org*
  Includes a section on animal disaster relief.

The Horse Review

- *www.horsereview.com*
  Provides links to disaster preparedness sites and information for horse and pet owners.

International Fund for Animals

- *www.ifaw.org*
  Includes information on their Emergency Relief Team.

Red Rover

- www.redrover.org
  Provides information on the Emergency Animal Rescue Service (EARS).

XIII. Quality Assurance

When assessing the overall level of preparedness for your plan, consider the following questions:

- Preparedness
  - Does the plan describe the partnership between the jurisdiction's emergency management agency, the animal control authority, the mass care provider(s), and the owner of each proposed congregate household pet sheltering facility?
  - Does the plan have or refer to an MOA/MOU or MAA that defines the roles and responsibilities of each organization involved in household pet and service animal response?
  - Do organizations with agreed upon responsibilities in the plan have operating procedures that govern their mobilization and actions?
  - Does the plan recommend just-in-time training for spontaneous volunteers and out-of-state responders
  - Does the plan encourage household pet owners and service animal owners to make arrangements for private accommodations for themselves and their household pets and service animals prior to a disaster or emergency situation?
- Evacuation Support
  - Does the plan address the evacuation and transportation of household pets from their homes or by their owners or those household pets rescued by responders to congregate household pet shelters?
  - Does the plan address how owners will be informed where congregate household pet shelters are located and which shelter to use? Does the plan provide for the conveyance of household pets or service animals whose owners are dependent on public transportation?
  - Does the plan address how household pets that are provided with evacuation assistance are registered, documented, tracked, and reunited with their owners if they are separated during assisted evacuations?
  - Does the plan address the responsibility of transportation providers to transport service animals with their owners?
- Shelter Operations
  - Does the plan identify the agency responsible for coordinating shelter operations?
  - Does the plan provide guidance to human shelter operators on the admission and treatment of service animals?
  - Does the plan identify an agency in the jurisdiction that regulates nonemergency, licensed animal facilities (e.g., animal control shelters, nonprofit household pet rescue shelters, private breeding facilities, kennels)?
  - Does the plan establish criteria that can be used to expeditiously identify congregate household pet shelters and alternate facilities?
  - Does the plan provide guidance about utility provisions, such as running water, adequate lighting, proper ventilation, electricity, and backup power, at congregate household pet shelters?

  - Does the plan include mechanisms or processes to reduce/eliminate the risk of injury by an aggressive or frightened animal, the possibility of disease transmission, and other health risks for responders and volunteers staffing the congregate household pet shelter?
  - Does the plan recommend a pre-disaster inspection and development of agreements for each congregate household pet facility?
  - Does the plan provide for the care and maintenance of each facility while in use as a shelter?
  - Does the plan identify equipment and supplies that may be needed to operate each congregate household pet shelter, as well as supplies that household pet owners may bring with them to the congregate shelter?
  - Does the plan provide for the physical security of each congregate household pet facility, including perimeter controls and security personnel?
  - Does the plan provide for acceptance of donated resources (e.g., food, bedding, containers)?
  - Does the plan provide for the acquisition, storage, and security of food and water supplies? Does the plan provide for the diverse dietary needs of household pets?

- Registration and Animal Intake
  - Does the plan establish provisions for the sheltering of unclaimed animals that cannot be immediately transferred to an animal control shelter?
  - Does the plan provide for segregation or seizure of household pets showing signs of abuse?
  - Does the plan provide for household pet registration? Does the plan provide for installation and reading of microchip technology for rapid and accurate identification of household pets?
  - Does the plan provide for technical consultation/supervision by a veterinarian or veterinary technician as official responders?
  - Does the plan identify the need for all animals to have a current rabies vaccination?
  - Does the plan provide for the case when non-eligible animals are brought to the shelter?
- Animal Care
  - Does the plan provide for the housing of a variety of household pet species (e.g., size of crate/cage, temperature control, appropriate lighting)?
  - Does the plan provide for separation of household pets based on appropriate criteria and requirements?
  - Does the plan provide for the consultation of a veterinarian or animal care expert with household pet sheltering experience regarding facility setup and maintenance?
  - Does the plan provide for the setup and maintenance of household pet confinement areas (e.g., crates, cages, pens) for safety, cleanliness, and control of noise level?
  - Does the plan recommend the setup of a household pet first aid area inside each shelter?
  - Does the plan provide for the control of fleas, ticks, and other pests at each congregate household pet shelter?
  - Does the plan provide criteria for designating and safely segregating aggressive animals?
  - Does the plan provide for the segregation or quarantine of household pets to prevent the transmission of disease?
  - Does the plan recommend the relocation of a household pet to an alternate facility (e.g., veterinary clinic, animal control shelter) due to illness, injury, or aggression?
  - Does the plan recommend providing controlled areas (indoor or outdoor) for exercising

dogs?

- Does the plan provide for household pet waste and dead animal disposal?
- Does the plan provide for the reunion of rescued animals with their owners?
- Does the plan include mechanisms or processes to address the long-term care, permanent relocation, or disposal of unclaimed household pets?

- Public Information and Outreach
  - Does the plan provide mechanisms for continually updating public statements on shelter capacity and availability as people/animals are coming to shelters?
  - Does the plan provide for a public education program?
  - Does the plan provide for the coordination of household pet evacuation and sheltering information with the jurisdiction's public information officer or Joint Information Center?
  - Does the plan provide for communication of public information regarding shelter-in-place accommodation of household pets, if available?
- Record Keeping
  - Does the plan define the methods of pre- and post-declaration funding for the jurisdiction's household pet and service animal preparedness and emergency response program?
  - Does the plan describe how to capture eligible costs for reimbursement by the Public Assistance Program as defined in Disaster Assistance Policy (DAP) 9523.19, Eligible Costs Related to Pet Evacuations and Sheltering?
  - Does the plan describe how to capture eligible donations for volunteer labor and resources as defined in DAP 9525.2, Donated Resources?
  - Does the plan describe how to capture eligible donations for mutual aid resources as defined in DAP 9523.6, Mutual Aid Agreements for Public Assistance and Fire Management Assistance?

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XV. Acronyms

ACRONYM	DEFINITION
AJ	Agency having Jurisdiction. In the Incident Command System (ICS), an agency is a division of government with a specific function, or a nongovernmental organization that offers a particular kind of assistance. Agencies are defined as jurisdictional (having statutory responsibility for incident mitigation) or assisting and/or cooperating (providing resources and/or assistance).
Animal	Commercial livestock, companion animals, exotic pets, and restricted species
AP	Assembly Point
ARC	American Red Cross
Avian / Reptile	Domestic birds and reptiles.
CACDA	California Animal Control Directors Association
Cal EMA	California Emergency Management Agency
Cal EMSA	California Emergency Medical Services Authority
Cal-Volunteers	California Volunteers
Captive wildlife	Any non-domestic animals in captivity as a pet, exhibition animal, or production animal Emergency - See State of California Emergency Plan, June 2009)
CARES	California Animal Response Emergency System
CART	Community / County Animal Response Team
CAVMRC	California Veterinary Medical Reserve Corps
CDC	Centers for Disease Control
CDFA	California Department of Food and Agriculture
CDFG	California Department of Fish and Game
CESA	California Emergency Services Association
CFBF	California Farm Bureau Federation
Companion animal	Any household animal including, but not limited to, cats, dogs, or other carnivores whether or not for public exhibition (FAC § 19211)
CVMA	California Veterinary Medical Association
Decon	Decontamination Area

DEM	Department of Emergency Management (will sometimes have the state initials in front of it). The state entity that is responsible for disaster planning and response. Each state's DEM is typically the state's liaison with federal and local agencies on emergencies of all kinds.
Demob	Demobilization. The process of concluding the response to a disaster event, including the orderly withdrawal of resources.
Dept. of Ag	Department of Agriculture
DFO	Disaster Field Office. Temporary, local headquarters for FEMA staff and operations during a disaster.
DHS	Department of Homeland Security. Established in 2002, DHS is the unifying core for the national network of organizations and institutions involved in the response to threats and hazards in the United States.
DoD	Department of Defense
DRC	Disaster Recovery Center. A facility or mobile office where applicants may go for information about FEMA or other disaster assistance programs.
DRS	Disaster Reduction System. Elements that together minimize vulnerabilities and disaster risks, to avoid (prevention) or to limit (mitigation and preparedness) the adverse impacts of hazards.
EARS	Emergency Animal Response Services. Emergency sheltering and disaster relief services for animals coordinated and managed by United Animal Nations (UAN)
EF	Emergency Function (State Emergency Function): Also See ESF
EHS	Environmental Health & Safety OR extremely hazardous substance
EICC	Emergency Information & Coordination Center. The location where Public Information Officers from each organization with a role in an incident response coordinate the messages that are distributed to the public about the incident.
EMI	Emergency Management Institute. Organization within the Federal Emergency Management Agency (FEMA) that offers courses designed for people who have emergency management responsibilities. Courses include those that meet the requirements specified in the National Incident Management System (NIMS).
EMS	Emergency Management System. First response services such as fire, law enforcement, paramedics, etc.
EOC	Emergency Operations Center. The physical location at which the coordination of information and resources to support incident management activities takes place. An EOC may be a temporary facility or may be located in a more central or permanently established facility.

EOP	Emergency Operations Plan. The plan that each jurisdiction has and maintains for responding to appropriate hazards.
EPA	Environmental Protection Agency
EPCRA	Emergency Planning & Community Right to Know Act of 1986. EPCRA establishes requirements for federal, state and local governments, Indian tribes, and industry regarding emergency planning and community right-to-know reporting on hazardous and toxic chemicals.
Equine	Domestic horses, mules, donkeys, zebra.
ERT	Emergency Response Team
ESF	Emergency Support Function (part of the National Response Framework and/or community plans). The five major emergency-support functions in ICS are command, operations, planning, logistics, and finance/administration.
ESRI	Environmental Systems Research Institute. ESRI designs and develops geographic information system (GIS) technology.
Exotic/ Zoo	Wild animals, including captive wildlife (Please see definition of captive wildlife.)
FAA	Federal Aviation Administration
FAC	California Food and Agriculture Code
FCO	Federal Coordinating Officer. An FCO is the senior official who manages and coordinates federal resource support activities related to disasters and emergencies.
FECC	Federal Emergency Communications Coordinator. The position that coordinates with federal officials during an incident response.
FEMA	Federal Emergency Management Agency. The US government agency whose primary mission is to reduce the loss of life and property and protect the nation from all hazards. In 2003, FEMA became a division of the Department of Homeland Security (DHS).
FEMA	Federal Emergency Management Agency
FERC	Federal Emergency Response Capability. FERC defines what federal resources are capable of delivering and when.
GIS	Geographic Information Systems
HAZMAT	Hazardous Material
HAZOP	Hazard & Operability Study. This report lets responders know what the hazards are for a particular response.
HMAC	Hazardous Materials Advisory Council. Also known as the Dangerous Goods Advisory

	Council (DGAC), HMAC is an international, nonprofit, educational organization that promotes safety in domestic and international transportation of dangerous goods.
IAP	Incident Action Plan. A written plan that defines the response to a specific incident, including objectives, strategy, and resources.
IAWATI	International Animal Welfare and Training Institute
IC	Incident Commander. The individual responsible for all incident activities, including the development of strategies and tactics and the ordering and the release of resources. The IC has overall authority and responsibility for conducting incident operations and is responsible for the management of all incident operations at the incident site.
ICS / IMS	Incident Command System / Incident Management System. A standardized on-scene emergency management organization — the combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure — designed to aid in the management of resources during incidents. It is used for all kinds of emergencies and is applicable to small as well as large and complex incidents. ICS is used by various jurisdictions and functional agencies, both public and private, to organize field-level incident management operations.
IDLH	Immediately Dangerous to Life or Health
Incident	An occurrence or event, natural or human-caused, that requires an emergency response to protect life or property.
IS	Independent Study
JIC	Joint Information Center. A facility established to coordinate all incident-related public information activities. It is the central point of contact for all news media at the scene of the incident.
Jurisdiction	A range or sphere of authority. Jurisdictional authority at an incident can be political or geographical (e.g., city, county, tribal, state, or federal boundary lines) or functional (e.g., law enforcement, public health).
LEPC	Local Emergency Planning Committee
Livestock	Any cattle, sheep, swine, goat, or any horse mule or other equine whether live or dead (FAC § 18663) including *LLAMAS/ ALPACAS/ CAMELS.*
LOC	Level of Concern
MAA	Mutual Aid Agreement. A agreement between organizations that generally defines the roles the organizations will play during a disaster.
MACS	Multi-Agency Coordination System. MACS provide the architecture to support coordination for incident prioritization, critical resource allocation, communications systems integration, and information coordination.

Mitigation	The activities designed to reduce or eliminate risks to persons or property or to lessen the actual or potential effects or consequences of an incident. Mitigation measures may be implemented before, during, or after an incident.
MOU	Memorandum of Understanding. A disaster-related MOU is an agreement between organizations that very specifically defines the roles the organizations may play during a disaster.
MSDS	Material Safety Data Sheet. A form that provides workers and emergency personnel with procedures for handling or working with a particular substance in a safe manner.
NARSC	National Animal Rescue and Sheltering Coalition Members are: (American Humane Association American Red Cross, American Society for the Prevention of Cruelty to Animals, American Veterinary Medical Association, Best Friends Animal Society, Code 3 Associates, International Fund for Animal Welfare, National Alliance of State Animal and Agricultural Emergency Programs, National Animal Control Association, PetFinder.com Foundation, Society of Animal Welfare Administrators, United Animal Nations
NASAAEP	National Alliance of State Animal and Agriculture Emergency Programs
NEIS	National Earthquake Information Service
NEMA	National Emergency Management Association. NEMA is the professional association for state emergency management directors.
NFPA	National Fire Protection Association. The NFPA mission is to reduce the worldwide burden of fire and other hazards on the quality of life by developing and advocating consensus codes and standards, research, training, and education.
NGO	Non-Governmental Organization
NIMS	National Incident Management System, the federally-mandated management structure used for disasters
NOAA	National Oceanic & Atmospheric Administration
NPL	National Priority List. The NPL is the list of national priorities among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States and its territories.
NRC	National Response Center. The NRC is the sole federal point of contact for reporting oil and chemical spills.
NRP / NRF	National Response Plan / National Response Framework. The NRP establishes a comprehensive all-hazards approach to manage domestic incidents. The plan incorporates best practices and procedures from incident management disciplines and

	integrates them into a unified structure. It forms the basis of how the federal government coordinates with state, local, and tribal governments and the private sector during disasters and other emergencies.
NRT	National Response Team
NWS	National Weather Service
OA	Operational Area
OEM	Office of Emergency Management. The local or state department that is responsible for the response plan for a locality or state.
OSHA	Occupational Safety & Health Administration
PETS Act	Pets Evacuation and Transportation Standards Act of 2006. Read more [page_DR_pets_act.doc] about the provisions in this legislation.
PIO	Public Information Officer. A member of the Incident Command staff responsible for communicating with the public and media or with other agencies with incident-related information requirements.
POA	Point of Arrival
POD	Point of Departure OR Probability of Detection
REOC	Regional Emergency Operations Center
Resources	Personnel, major items of equipment, supplies, and facilities available for assignment to incident operations and for which status is maintained. Resources are described by kind and type: • Kind: Describes what the resource is (e.g., medic, firefighter, Planning Section Chief, helicopters, ambulances, combustible gas indicators, bulldozers) • Type: Organizes resources by capability. Type 1 is generally considered to be more capable than Types 2, 3, or 4, respectively, because of size, power, capacity, or, in the case of incident management teams, experience and qualifications
Restricted species	Any animal requiring a license or permit from the Department of Fish and Game (See California Department of Fish and Game Manual 671 for listing).
RIMS	Response Information Management System
ROC	Regional Operations Center. When a disaster crosses jurisdictional lines, a regional command center is set up to help response efforts across jurisdictional lines be as efficient and effective as possible.
SAR/ S&R	Search and Rescue
SART	State Animal Response Team

SEMS	Standardized Emergency Management System – the system used in all California emergency incidents during multi-jurisdictional or multi-agency response
SEP	State Emergency Plan - The State of California Emergency Plan, as approved by the Governor, which serves as the basis for statewide emergency planning and response (dated June 23, 2009)
Service animals	Animals specially trained to guide, signal, or assist people with disabilities or special needs.
SHAC	State Humane Association of California
SITREP	Situation Report. A report summarizing the status of the incident and its response.
SITSTAT	Situation Status Report. Same as a Situation Report.
SOC	State Operations Center
UC Davis/ UCD	University of California at Davis
Unified Command	A team of individual representatives of multiple organizations who together have authority and responsibility for incident operations and management. In the ICS, an incident response may be led by a single Incident Commander or by a Unified Command of multiple people.
USDA- APHIS	United States Department of Food and Agriculture- Animal and Plant Health Inspection Service
USGS	United States Geological Service
VMAT	Veterinary Medical Assistance Team; VMATs assist the local veterinary community with the care of animals and provide veterinary oversight and advice on animal related issues and public health during a disaster. The VMATs were established by the American Veterinary Medical Association (AVMA) and are sponsored by the American Veterinary Medical Foundation (AVMF).
Voluntary Agency	Any chartered or otherwise duly recognized tax-exempt local, state, or national organization or group providing services for coping with an emergency or a major disaster.
WU	Western University School of Health Sciences
Zoonotic diseases	Infectious diseases that can be transmitted between animals and humans or that may infect both humans and animals

SEPTEMBER 2019

3

ATTACHMENT 3 | ANIMAL CARE AND SHELTER PLANNING TOOLKIT

Animal Care and Shelter Planning Toolkit

Version 1.0, December 6, 2018

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Toolkit Overview:

This **Animal Care and Shelter Planning Toolkit** provides Bay Area planners, shelter operators, and animal care partners with guidance and considerations to plan for the care and sheltering of animals in an emergency.

This toolkit has been developed with funding and support from the Bay Area Urban Areas Security Initiative (UASI), input and guidance from the Bay Area UASI Care and Shelter Subcommittee, and Nusura, Inc. It is an update to and summary of the 2013 CARES *Animal Emergency Planning Guide for Operational Areas*[1] and incorporates planning guidance from additional resources.[2]

In this document, users will find a comprehensive set of topics for local governments to consider addressing in their animal care and shelter plans. These are presented with examples from local Bay Area jurisdiction animal care and shelter plans and templates for adaptation.

Why Plan for Animal Care and Sheltering in an Emergency?

- Owners often refuse to evacuate unsafe areas or return before it is safe in effort to protect their animals.
- Animals not cared for by owners may become a public health and safety risk.
- Animal carcasses pose public health and safety risks.
- California's animal-based agricultural industry is worth billions in annual revenue.
- Animals and animal issues attract media attention and can result in significant public outcry and negative media coverage during a disaster.
- When animals are impacted by disasters, untrained self-responders may arrive to address the situation.

A Plan Evaluation Checklist is provided as Appendix A for local jurisdictions to perform a self-assessment of their current plans. Such an assessment will help focus efforts for updating and/or developing appropriate plans to care and shelter animals in an emergency.

This Animal Care and Shelter Planning Toolkit may be accessed online at http://www.bayareauasi.org/careshelter.

[1] California Animal Response Emergency System (CARES). *Animal Emergency Planning Guide for Operational Areas* (2013): https://animalsindisasters.files.wordpress.com/2013/01/cares-planning-guide.pdf. This toolkit and the CARES guidance are intended to be used together.

[2] See the Other Planning Resources (p. 30) and Sources (p. 35) of CARES Planning Guide referenced in the above footnote. This toolkit also integrates planning guidance from the Federal Emergency Management Agency (FEMA) course, *All Hazards Planning for Animal, Agricultural, and Food Related Disasters* (MGT 448).

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I. Introduction

"California's diverse landscape and populations (human and animal) present unique challenges to emergency management. No single plan is adequate statewide. This is particularly true of animal issues."[3]

Although the protection of human life is the highest priority in an emergency, recent disasters and follow-up research have shown that proper preparation and effective coordination of animal issues enhance the ability of emergency personnel to protect both human and animal health and safety. Often community members make decisions on whether to comply with recommended protective action measures based on the jurisdiction's ability to address the concerns about their household pets and service animals. Animal concerns also include indigenous birds, agriculture animals, and other species.

After Hurricane Katrina, Congress passed the Pets Evacuation and Transportation Standards (PETS) Act and the Post-Katrina Emergency Management Reform Act (PKEMRA) in response to public outcry about the safety and well-being of animals during disasters.

CARES and Coordination

The CARES system is a statewide framework enabling governments and private and non-governmental sectors to work together to mitigate, prepare for, respond to, and recover from the impacts emergencies have on animal populations. During a disaster, if local resources are insufficient to meet existing needs, a local government may request state assistance. When this assistance is requested, the California Governor's Office of Emergency Services (Cal OES) with the California Department of Food and Agriculture (CDFA) as the lead agency, coordinates resource support. Cal OES and CDFA rely on Operational Areas and local jurisdictions to develop and refine their individual emergency plans.

In 2008, the National Response Framework (NRF) redefined Emergency Support Functions (ESFs) and added responsibilities for pets. The U.S. Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) and other federal agencies assist with emergency planning and response. While federal statutes mandate that the Federal Emergency Management Agency (FEMA) has overall authority to support pet issues, additional federal agencies, including APHIS, have supporting roles defined under the NRF.

Local governments are responsible for preparing to respond to emergencies, as well as assessing whether their capabilities are sufficient to respond effectively. FEMA and APHIS look to animal control agencies to provide local expertise in the management of pets in disasters. However, jurisdictions should not rely solely upon animal control agencies for animal care and sheltering in an emergency. Animal control agencies differ in their jurisdictional authority and may have limited capabilities for large-scale animal-related response.

In California, state, federal, non-governmental, and private sector partners' abilities to respond effectively largely depends upon planning efforts within each jurisdiction prior to a disaster. Since the majority of staffing and resources during disasters originate locally, it is essential that local jurisdictions have animal care and shelter plans, like the California Animal Response Emergency System (CARES), in place for systems to function effectively.[4]

[3] California Animal Response Emergency System (CARES). *Animal Emergency Planning Guide for Operational Areas* (2013): https://animalsindisasters.files.wordpress.com/2013/01/cares-planning-guide.pdf.

[4] CARES is a program that supports preparedness activities and a system that supports coordination and resource sharing related to the care and sheltering of animals in emergencies. California Emergency Services Act Section 8608 establishes CARES:

II. Animal Care and Shelter Planning Steps

Bay Area jurisdictions developing or updating their animal care and shelter plans may consider integrating one or more of the following steps into their planning processes.

#	Activity	Description
1	**Form a Committee**	Refer to the CARES Planning Guide for a list of potential partners to consider including in a diverse planning committee.[5]
2	**Identify a County Animal Coordinator and/or Coordinating Agency**	The Coordinator acts as the point of contact on animal issues in the jurisdiction. In an emergency, the Coordinating Agency is the primary agency (or individual) responsible for implementing Emergency Support Function (ESF)-11 (Animal Care/Agriculture). The Coordinator also identify agencies with responsibilities to support animal care and sheltering in an emergency.
3	**Cite Authorities for Planning**	Authorities for animal care and sheltering may include Pets Evacuation and Transportation Standards Act of 2006, H.R. 3858.[6]
4	**Review Local and Regional Threat Assessments**	Assessments might include local hazard mitigation plans and the Bay Area Threat and Hazard Identification and Risk Assessment. Consider how different hazards might require common and unique demands for animal care and sheltering.
5	**Calculate the Jurisdiction's Animal Population**	Use the CARES worksheet.[7] This resource guides planning assumptions, helps jurisdictions identify partners and determine potential resource needs.
6	**Identify Locations for the Majority of the Animal Populations**	Compare concentrations of animal populations to the areas that are most likely to be affected by different types of disasters. Use this information to guide planning assumptions, identify partners, and determine potential resource needs.
7	**Identify Resources**	This is one of the most valuable steps in the planning process and should include care and shelter resources for both small and large animals. Resources may include animal confinement and shelter facilities, animal food sources, animal water sources, and supplies (e.g., search, rescue, and evacuation supplies; transportation supplies; sheltering supplies; and veterinary supplies).[8]
8	**Identify Locations for the Animal Resources**	In addition, identify whether any of the resources are likely to be cut off during a disaster.

https://www.caloes.ca.gov/LegalAffairsSite/Documents/Cal%20OES%20Yellow%20Book.pdf. Refer to https://cal-cares.com/about/ for additional information about CARES.

[5] *Ibid*, p. 18.

[6] This statute requires that local and state emergency preparedness authorities include plans for pets and service animals in their disaster plans to qualify for grants from the Federal Emergency Management Agency (FEMA). It grants FEMA the authority to assist states and local communities in developing disaster plans to accommodate people with pets and service animals. It also authorizes federal funds to help create pet-friendly emergency shelter facilities, and allows FEMA to help with individuals with pets and service animals, and their animals following a major disaster.

[7] CARES Standard Operating Procedures for Calculating Animal Populations: https://animalsindisasters.files.wordpress.com/2013/08/calculating-animal-populations.pdf

[8] A complete list of resources can be accessed at the CARES website: http://www.cal-cares.com.

#	Activity	Description
9	**Confirm Resource Availability**	Jurisdictions should confirm the availability of identified resources with the resource owners or suppliers. It may be helpful to execute a Memorandum of Understanding (MOU) or mutual aid agreements with resource providers.[9] Planners should consider including any agreements in the plan's appendices. Update plans with processes and roles for gathering needed resources. Identify multiple routes to shelters and areas where resources are kept.
10	**Identify Volunteer Resources and Processes**	Due to the complexity of local governments' authorities, structures, and processes for animal care, some jurisdictions have an organized community or disaster animal response team (CART/DART).[10] Credentialed and trained community members can assist and offset resource needs and enhance quicker animal response and recovery.
11	**Determine Liability Issues**	Potential liability issues may arise, for example, around volunteers involved in response activities. Consult with the appropriate authorities in the jurisdiction on exposure to risk and statutes that cover emergency activities, animal issues, and lost or abandoned property. Any and all community animal response teams must be identified and affiliated with the local jurisdictional authority. Groups are obligated to be "sworn in" by the local authority in order to assure accountability and liability coverage as Disaster Service Workers (DSW). All groups must receive an official "mission request" for response and participation in the disaster event.
12	**Organize Response Activities**	Jurisdictions should identify emergency response and recovery roles that will perform animal care and shelter functions in an emergency.[11] This may include staff that focus primarily on animal care responsibilities (e.g., an Animal Care Liaison position performed by the County Animal Care Coordinator) and staff who focus on animal care in addition to their other responsibilities (e.g., a Public Information Officer who develops messaging about protective actions for animals).[12] Develop processes for coordinating response activities across the different ESFs that have animal care and sheltering responsibilities, including ESF-11 (Animal Care/Agriculture), ESF-6 (Mass Care), and ESF-8 (Public Health/Medical Services).
13	**Describe Coordination between Local and State Agencies**	The involvement of state or federal agencies depends on the type of disaster, effects on different types of animal species, and the number of animals affected. For example, any suspected terrorism or infectious disease emergencies will trigger state and federal coordination. If state agency support and communication will be needed, the jurisdictions' Emergency Operations Center (EOC) will contact the State Operations Center (SOC) to request coordination with the State Veterinarian and State ESF-11 Coordinator.

[9] Sample MOUs and agreements may be found on the CARES website: http://cal-cares.com/emergency-managers/emergency-managers-resources/sample-forms/

[10] CARTs and DARTs are county and or community emergency animal response teams. For more information, refer to http://thenarsc.org/?page_id=33 or https://www.fema.gov/media-library/assets/documents/27983.

[11] In June 2018, FEMA released new National Incident Management System (NIMS) Job Titles/Position Qualifications and Resource Typing definitions (https://rtlt.preptoolkit.fema.gov/Public/Combined?s=&a=&q=animal). For animal care-related positions, search for "animal". Operational Areas may adapt the position titles, job responsibilities, required credentials in their plans.

[12] Refer to the 2013 CARES *Animal Emergency Planning Guide* (p. 25), https://animalsindisasters.files.wordpress.com/2013/01/cares-planning-guide.pdf, for descriptions of potential positions and functions to include in a jurisdiction's organizational structure and assignment of responsibilities.

#	Activity	Description
14	**Develop a Notification System**	Design a process for notifying and activating jurisdictions' Operational Area staff and partners to support animal care and sheltering operations in an emergency.
15	**Identify Recovery Activities**	Recovery activities may include shelter closures and redistribution of supplies, removal and disposal of animal carcasses, unclaimed animal adoption efforts, and data collection, among other care and shelter functions.[13]
16	**Identify and Develop Processes and Tools**	Identify what is needed to implement the structure and functions necessary to care for and shelter animals in an emergency.[14] The following section in this toolkit contains suggested topics to address in planning processes. Item C (Plan Examples and Templates) in each topic, includes examples of how Bay Area jurisdictions have addressed these topics in their plans.
17	**Train on and Exercise the Plan**	Once a jurisdiction develops or updates its animal care and shelter plan, all stakeholders and partners should train on and practice implementing the plan and tools. Practicing the plan and tools will help pinpoint possible problem areas and allow personnel to become comfortable with their roles and responsibilities.[15]

[13] Refer to the 2013 CARES *Animal Emergency Planning Guide* (p. 29), https://animalsindisasters.files.wordpress.com/2013/01/cares-planning-guide.pdf, for a list of topics.
[14] The CARES website includes sample Standard Operating Procedures for functions of animal care and sheltering: https://cal-cares.com/standard-operating-procedures/. CARES also provides a sample list of shelter forms: https://cal-cares.com/emergency-managers/emergency-managers-resources/sample-forms/. The CARES website also includes multiple examples of animal care and shelter plans from urban and rural Operational Areas: https://cal-cares.com/emergency-managers/sample-county-disaster-plans/.
[15] Refer to the CARES website for trainings opportunities and resources: https://cal-cares.com/training.

III. Animal Care and Shelter Planning Topics

This section includes a series of topics that Bay Area jurisdictions may want to consider addressing in their animal care and sheltering plans. Within each topic, priority plan information and general plan information are listed for consideration. Priority plan information refers to critical information that must be accounted for. General plan information lists additional areas to make plans more comprehensive.

Additionally, examples and templates are provided for use and modified adaptation as appropriate within local jurisdiction plans. Copy or delete sections/language of the template, as appropriate, based on local policies, priorities, and plans. Customize any text in **blue** and update all language to reflect the purpose of the local agency or partner's specific needs, roles, etc.

General Planning Reminders	
Guidance	• Plans must be compliant with California's State Emergency Management System (SEMS). • Planning should always be community-based, representing the whole population and its needs. • Planning should consider all types of hazards and threats. Plans should also be flexible enough to address both traditional and catastrophic incidents. • Plans must clearly identify the mission and supporting goals (with desired results) of caring for and sheltering animals. • Plans should identify tasks, allocate resources to accomplish those tasks, and establish roles and accountability. • Often, the more involved decision makers are in planning, the better the planning product will be. • Effective plans tell those with operational responsibilities ***what to do*** and ***why to do it***, and they instruct those outside the jurisdiction in how to provide support and ***what to expect***.

1. Preparedness and Partnerships

A. Priority Plan Information

Most importantly, planners should ensure an all hazards, all species approach in their plans, and include the following to address preparedness and partnerships:

- Lead and support agencies for animal care
- EOC positions with animal care and shelter responsibilities
- Various species within the jurisdiction to consider. Species may include:
  - Domestic Pets
  - Livestock / Equine
  - Wildlife
  - Zoos
  - Aquariums
  - Laboratory Animals
  - Apiaries (Bees)
  - Exotics
- Definitions of animal species/types
- Volunteer animal rescue groups within the jurisdiction and how their abilities to assist during disasters.
- MOUs and similar agreements or contracts with facilities and partners (often referenced in the plan and included in plan attachments). *The Bay Area Care and Shelter subcommittee has developed a **Mass Care Agreements Toolkit** which is available for download at* http://www.bayareauasi.org/careshelter.
- Authorities for animal care and sheltering (including individual authorities by position and agency authorities)

The following definitions are examples jurisdictions may consider customizing for their plans.

Animal Definitions	
Guidance	**Household Pet**[16] **-** A domesticated animal, such as a dog, bird, rabbit, rodent, or turtle that is traditionally kept in the home for pleasure rather than for commercial purposes, can travel in commercial carriers and be housed in temporary facilities. Household pets ***do not*** include reptiles (except turtles), amphibians, fish, insects/arachnids, farm animals (including horses), and animals kept for racing purposes.
	Service Animal[17] **–** Service animals are defined as dogs that are individually trained to do work or perform tasks for people with disabilities. Examples of such work or tasks include guiding people who are blind, alerting people who are deaf, pulling a wheelchair, alerting and protecting a person who is having a seizure, reminding a person with mental illness to take prescribed medications, calming a person with Post Traumatic Stress Disorder (PTSD) during an anxiety attack, or performing other duties. Service animals are working animals, not pets. The work or task a dog has been trained to provide must be directly related to the person's disability. Dogs whose sole function is to provide comfort or emotional support do not qualify as service animals under the ADA. This definition does not affect or limit the broader definition of "assistance animal" under the Fair Housing Act or the broader definition of "service animal" under the Air Carrier Access Act. Some State and local laws also define service animal more broadly than the ADA does. Information about such laws can be obtained from the State attorney general's office.
	Miniature Horse Allowance: A public entity or private business must allow a person with a disability to bring a miniature horse on the premises as long as it has been individually trained to do work or perform tasks for the benefit of the individual with a disability. However, an organization can consider whether the facility can accommodate the miniature based on the horse's type, size, and weight. The rules that apply to service dogs also apply to miniature horses.

[16] Emergency Planning for Household Pets and Service Animals, FEMA presentation, 2010. https://www.fema.gov/pdf/conferences/iaconference/2010/wednesday_830am_household_pets_intro_1.pdf
[17] https://www.ada.gov/service_animals_2010.htm

B. General Plan Information

General information on preparedness and partnerships to consider including in local animal care and shelter plans includes:

- Roles and responsibilities of lead and support agencies
- Contact information for partners (including local and neighboring government agencies, non-governmental organizations, and private sector organizations)
- Description of partnerships with mass care service providers and facilities (e.g., MOUs)
- Operating procedures for animal care service providers
- EOC positions with animal care and shelter responsibilities
- Just-in-time training resource links for volunteers
- Description of how the jurisdiction will integrate Disaster Service Workers (DSWs) during emergencies
- Advance background check requirements for Community Animal Response Team (CART) members to assure members have no felony charges, including pedophile, domestic, or animal abuse
- Requirements for Spontaneous Untrained Volunteers are to register with a local Voluntary Organizations Active in Disasters (VOAD) and or be attached to an identified organization. For accountability and liability purposes, jurisdictions often require that all volunteers register prior to supporting response efforts and follow check-out procedures at the conclusion of their duties. If background checks are not completed in advance, an updated ID card may be necessary to participate. Jurisdictions may provide just-in-time training for activities that may not involve direct animal care, such as food prep, cleaning of kennels, donations, etc.

C. Plan Templates and Examples

Template (Description of Agency Responsibilities): *The following language is from the City of Oakland and is provided as a template for modification, as appropriate, and use in a local jurisdiction's emergency animal care and shelter plan.*

The following **Insert Jurisdiction's Agencies** have been identified as primary and supporting agencies that will be responsible for carrying out the functions of Emergency Support Function (ESF)-11: Food, Agriculture, and Animal Services.

The primary agencies have significant authorities, roles, and resources to accomplish the scope of the ESF and have ongoing coordinating responsibilities throughout the preparedness, response, and recovery phases of incident management. Supporting agencies are those entities with specific capabilities or resources that support the primary agency in executing the mission of the ESF.

The **Insert Lead Agency** is the lead agency for the care and sheltering of animals during and after an incident and is responsible for providing basic animal services such as **Insert Responsibilities (e.g., food, shelter, and medical care)** to animals affected by the incident. Pets that have been temporarily relinquished by their owners and animals that become stray or lost as a result of an incident are included.

Template (Tables): *The following tables were adapted from the City of Oakland and are provided as templates for modification, as appropriate, and use in a local jurisdiction's emergency animal care and shelter plan.*

Table #: Roles and Responsibilities

Agency/Department	Roles and Responsibilities
Insert Primary or Support Agency	☐ Incident response role ☐ EOC or DOC role ☐ Coordination roles ☐ Responsibilities for 24 hours, 48 hours, 96 hours, and prolonged activations ☐ Note staff or resource responsibilities ☐ Note any MOUs relevant to agency and attach to plan

Table #: Agency List

Role	Name of Agency	Agency Contact
Primary Agencies	**Insert responsible agency**	*Name and number*
Supporting Agencies and Departments		
	Insert all support agencies	*Name and number*

Examples from the City of Oakland:

Agency/Department	Roles and Responsibilities
Human Services Department	☐ Provide written procedures to implement the responsibilities to support ESF #11 – Food, Agriculture, and Animal Services and the City of Oakland Emergency Operations Plan (EOP). ☐ Respond to the activation of ESF #11 – Food, Agriculture, and Animal Services by the EOC Director or Emergency Manager. ☐ Assess the needs of the affected population in terms of number of people, their location, disability and functional needs status, and the availability of usable food preparation facilities for congregate feeding in coordination with American Red Cross, the Salvation Army, and other agencies and organizations.

Role	Name of Agency	Agency Contact
Primary Agencies	Human Services Department (HSD)	**xxx-xxx-xxxx**
	Oakland Animal Services Department (OAS)	**xxx-xxx-xxxx**
Supporting City Agencies and Departments	Emergency Management Services Division (EMSD) • Communities of Oakland Respond to Emergencies (CORE) • Oakland Medical Reserve Corps (MRC)	**xxx-xxx-xxxx**
	Oakland Public Works Department (OPW)	**xxx-xxx-xxxx**
	Oakland Department of Transportation (OakDOT)	**xxx-xxx-xxxx**
	Oakland Police Department (OPD)	**xxx-xxx-xxxx**
	Oakland Museum	**xxx-xxx-xxxx**
	Oakland Unified School District (OUSD)	**xxx-xxx-xxxx**

All Species Language Template:

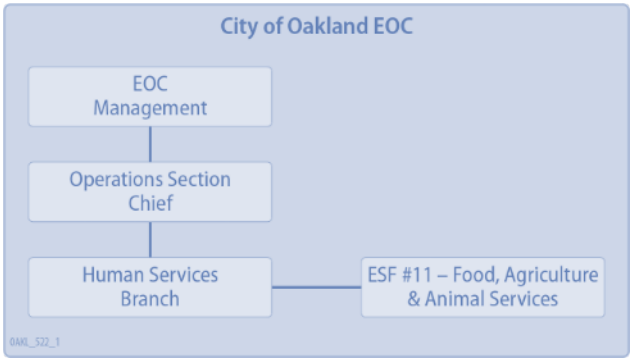
The types of animals that would be affected and the species that shelters would accept during an incident are identified as,

Insert species that will be able to receive services [e.g., dogs, cats, rabbits, birds, reptiles, horses, livestock, exotic pets, captive wildlife (from zoos or museums), and wildlife should be considered.]

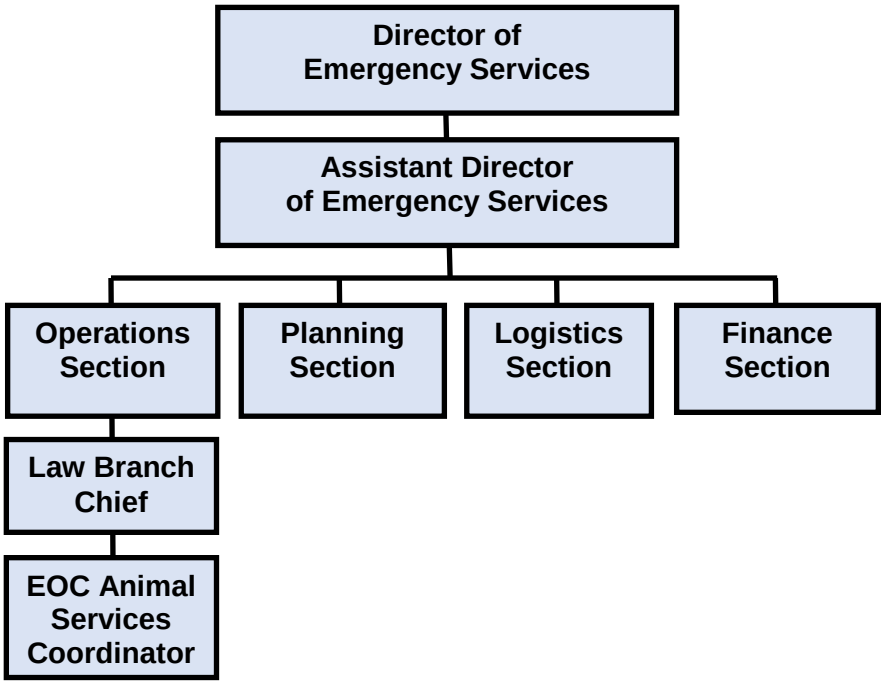
Service animals are exempt from restrictions regarding facility and transportation access. The Americans with Disabilities Act (ADA) defines a service animal as guide dogs, signal dogs, and other animals trained to aid individuals with access and functional needs.

ESF 11 and EOC Organization Structure Examples:

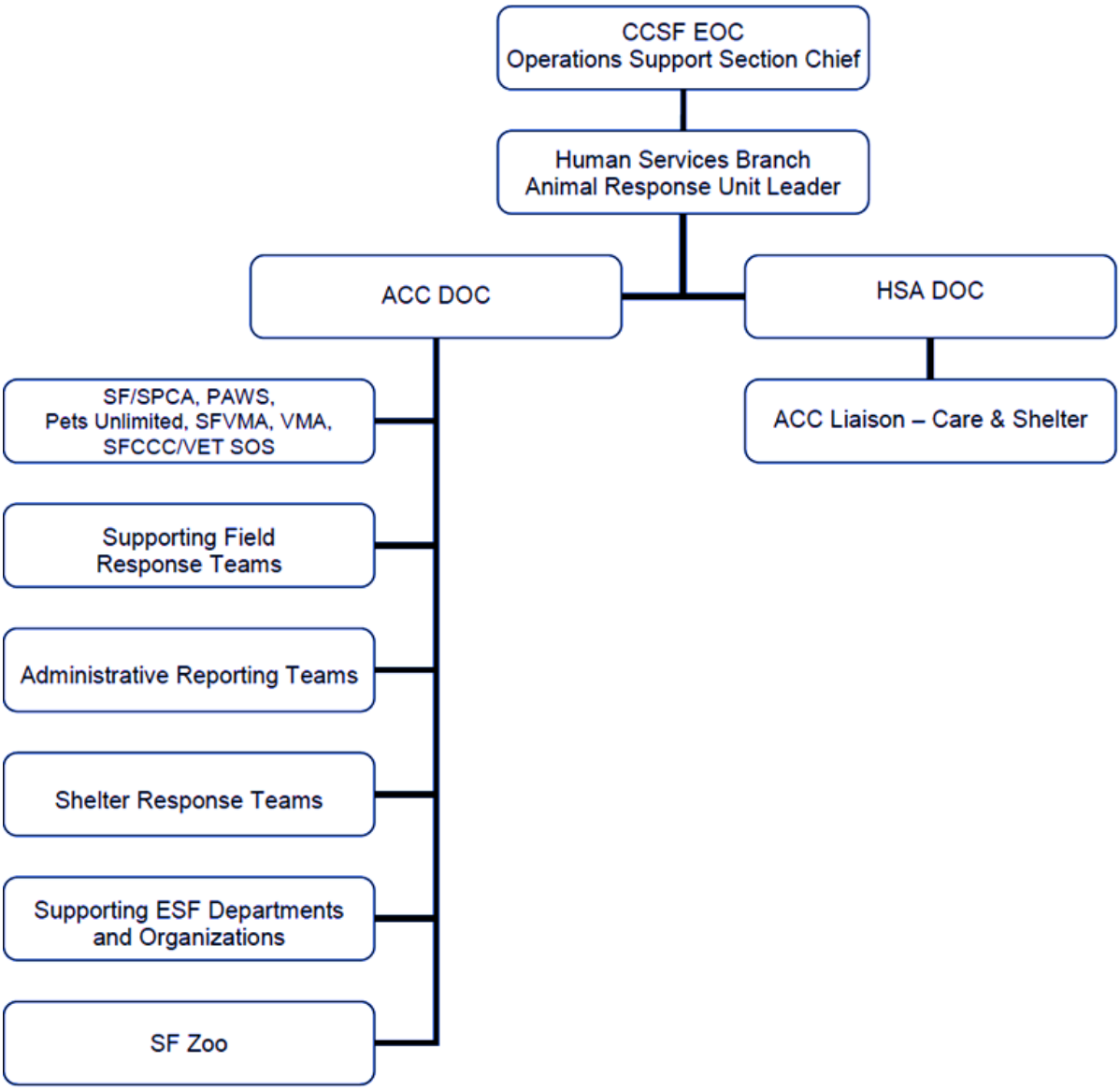
From the City of Oakland:



From Alameda County:



From the City and County of San Francisco:



2. Activation

A. Priority Plan Information

Most importantly, planners should ensure that their plans include responsibilities for management of the activation process.

B. General Plan Information

General information related to activation to consider including in local animal care and shelter plans:

- Activation processes for animal services staff and volunteers
- Guidance on how to initiate the mission requests necessary to activate and coordinate response support from recognized volunteer groups
- Processes and tools to support documentation during the activation process
- Processes and tolls to identify and establish a staging location for animal response teams and volunteers who will assist with animal evacuation

C. Plan Templates and Examples

Template (Overview of Activation Processes): *The following language is from the City and County of San Francisco and is provided as a template for modification, as appropriate, and use in a local jurisdiction's emergency animal care and shelter plan.*

ESF-11 may be activated by the **INSERT AUTHORITY** when an event affecting the **INSERT JURISDICTION** animal population is anticipated or has occurred. The level of activation will be determined according to the requirements of the event.

If the determination is made to activate the **INSERT PRIMARY AGENCY**, notification to the following departments, non-governmental organizations (NGOs), and community partners may be necessary **(LIST DEPARTMENT).**

This section also describes a scalable activation process. **(DISCUSS ACTIVATION PROCESS).**

Template (Table): *The following table was adapted from the City and County of San Francisco and is provided as a template for modification, as appropriate, and use in a local jurisdiction's emergency animal care and shelter plan.*

Table #: Activation Processes

Situation	Examples	Coordinating Department	Placement of ESF-11 Staff
Planned Event (Simple)	Notification of a potential impact to **JURISDICTION** animal population	**INSERT AGENCY**	**FIELD, DOC, OR EOC**
Planned Event (Complex)	Notification of a potential large-scale event requiring **PRIMARY AGENCY** resources and personnel, involving support agencies and EOC activation	**INSERT AGENCY**	**FIELD, DOC, OR EOC**
Unplanned Event (Simple)	Notification of an event requiring **DEPARTMENT** coordination	**INSERT AGENCY**	**FIELD, DOC, OR EOC**
Unplanned Event (Complex)	Notification of a large-scale event requiring **PRIMARY /SUPPORTING AGENCIES** resources and personnel, involving support agencies and EOC activation	**INSERT AGENCY**	**FIELD, DOC, OR EOC**

3. Evacuation

A. Priority Plan Information

Most importantly, planners should ensure that their plans address the following topics related to evacuation:

- Authorities, responsibilities, and processes for the evacuation and transportation of animals from their properties or by their owners and animals rescued by responders to animal shelters
- Messaging advising animal owners to make arrangements, if time allows, to take their animals with them, including vaccination records and identification for each animal
- Messaging advising animal owners who need to leave animals behind to leave ample food and water supplies for 3-5 days and do not tether their animals. Messaging should recommend that owners, upon arrival to a human shelter, advise authorities of types of animals and locations where animals were left for search and rescue teams.
- Messaging advising animal owners to contain animals or put them on a leash or lead when evacuating
- The plan may acknowledge that separate transportation may be considered for animal owners and animals
- List of agencies/partnering organizations and their specific responsibilities for coordinating the transport of animals
- Description of public transportation resources that may be available to support transport
- Processes and forms for registration, documentation, tracking, and reunification of animals and their owners
- Integration of local evacuation plans with ESF-11 and/or animal care and shelter plans
- List of pre-identified and inspected locations for shelter operations (including alternate facilities) with facility agreements completed in advance
- If a facility use agreement, consider including a section that identifies limitations and use of facilities for different species.
- Release of liability forms for use of facilities and replacement costs for expendable items

B. General Plan Information

General information related to evacuation to consider including in local animal care and shelter plans:

- Identification of different animal populations and locations of populations in the community
- Processes and messaging for informing owners of the locations of animal shelters
- Descriptions of the roles and responsibilities of transportation providers

C. Plan Templates and Examples

Template (Evacuation Coordination and Checklist): *The following language is from Solano County and is provided as a template for modification, as appropriate, and use in a local jurisdiction's emergency animal care and shelter plan.*

Animal owners are primarily responsible for the evacuation and sheltering of their animals. Many owners will be able to care for their animals without the assistance of **INSERT JURISDICTION**. The **INSERT JURISDICTION** EOC will work to coordinate animal evacuation assistance, if needed, by planning the mobilization of personnel, equipment/supplies, and facilities.

Although the **INSERT JURISDICTION** will make the effort to plan for animal considerations during emergency evacuations, ultimately the owners are responsible for the evacuation and care of their animals.

Evacuation of an affected area is a large task that will require a significant amount of coordination with all entities involved. The planning for animals and their owners during an evacuation will increase the cooperation of the public, ensuring that more people are out of harm's way. For specific actions and operations regarding evacuation, refer to **INSERT LINK to EVACUATION PLAN.**

Template (Table): *The following table was adapted from the City of Oakland and is provided as a template for modification, as appropriate, and use in a local jurisdiction's emergency animal care and shelter plan.*

Table #: Animal Services Evacuation Checklist

Animal Services Evacuation Checklist	
☐	Refer to the ***INSERT JURISDICTION PLAN*** for information regarding companion animals, service animals, and pets.
☐	Assist in determining external resources needed to assess the damage and impact to wildlife, and contact the California Department of Fish and Wildlife for response actions.
☐	Respond to marine life emergencies by coordinating with the California Department of Fish and Wildlife.
☐	Assist the California Department of Fish and Wildlife with the coordination of specialized personnel and equipment, and assessment of oil-soaked birds or other marine life in response to injured or dead wildlife. Report oiled animals to the Oiled Wildlife Care Network.
☐	Assess overall animal response needs.
☐	Assist with livestock relocation requests and efforts with animal owners. The type of emergency and other factors will determine the type of location appropriate. Owners should provide adequate water for their animals and apply at least one form of identification on each animal. If evacuation of livestock becomes necessary, owners are responsible for arranging transportation to an animal care facility that will be identified. If the owner is unable to provide transportation, ESF #11 – Food, Agriculture, and Animal Services should coordinate with ESF #1 – Transportation to assist the owner(s).
☐	Identify animal care facilities in the case of evacuation.
☐	Assess the safety of deploying units to rescue domestic animals.

Animal Services Evacuation Checklist	
☐	Deploy resources to rescue domestic animals from affected, evacuated, and/or otherwise unsafe areas.
☐	Set up staging areas, field/mobile incident command, emergency animal shelters, and support units to rescue, evacuate, and shelter domestic animals.
☐	Determine resource needs and submit resource requests, as appropriate.
☐	Coordinate screening and triage for animals affected by the disaster.
☐	Provide and/or coordinate basic emergency medical care for injured animals (non-oiled wildlife). Speak with local wildlife rehabilitation clinic on what to do with any wildlife brought to a shelter. Injured wildlife can decompensate quickly. Skilled and permitted rehabilitation facilities, from California, can be found at https://www.wildlife.ca.gov/Conservation/Laboratories/Wildlife-Investigations/Rehab/Facilities.
☐	Coordinate transportation to an appropriate facility for domestic animals needing advanced medical care, sheltering, and boarding.
☐	Assist with containment and surveillance efforts.

Example Evacuation and Transportation Form from Monterey County:

The SPCA *for* Monterey County
1002 Monterey-Salinas Highway
P.O. Box 3058
Monterey, California 93942
(831)373-2631 or 422-4721

Date: _____
Pick-Up Time: _____
Destination Arrival Time: _____

ANIMAL EVACUATION AND TRANSPORT

Animal Location

_____
Address City

_____
Driving Directions / Gate Codes

_____

Reported Animals to be Evacuated: *(Indicate number of each)*

_____	Dog	_____	Rabbit
_____	Cat	_____	Rooster/Chicken
_____	Bird	_____	Fish
_____	Horse		
_____	Burro	_____	Reptile (*Describe*: _____)
_____	Llama	_____	Rodent (*Describe*: _____)
_____	Cow		
_____	Pig	_____	Wildlife (*Describe*: _____)
_____	Sheep	_____	Other (*Describe*: _____)
_____	Goat		

If actual animals evacuated differs from reported animals, please explain: _____

_____

Transport Destination

_____
Facility / Land Owner

_____
Address City

_____
Driving Directions

Contact Information:

Field Operations Director	cell phone	work phone	home phone
Animal Owner	cell phone	work phone	home phone
Destination Contact	cell phone	work phone	home phone
Transporter	cell phone	work phone	home phone

****Call Field Operations Director when animals are unloaded at destination****

Distribution: Original – Animal Transporter Copy -- Field Operations Director

4. Shelter Operations

A. Priority Plan Information

Most importantly, planners should ensure that their plans address the following topics related to shelter operations:

- List of agencies/partners and their specific responsibilities for coordinating shelter operations
- Pre-identified and inspected locations for animal shelter operations (including alternate facilities)
- Responsibilities and processes that describe coordination between ESFs 6, 8, and 11. Mass Care & Sheltering, Public Health and the animal, agriculture, and food industries coordinate efforts to assure both human and animal issues are addressed. Many resources to include personnel, facilities, and equipment can be shared and or dual utilized during disasters.
- Considerations related to the various models available for animal sheltering including:
  - Co-located shelters where human shelters and animal shelters are within close proximity of one another
  - Cohabitation shelters where animals can be sheltered "with" the owners and owners take care of their own pets
  - Shelter in place options when there is no time or options for animals and humans to relocate
  - Stand-alone animal shelters with designated visitation hours for owners

B. General Plan Information

General information related to shelter operations to consider including in local animal care and shelter plans:

- Processes, authorities, and tools for demobilization
- Guidance to human shelter operators for allowing service animals in shelters
- Guidance to human shelter operators for allowing pets in shelters
- Processes and forms for managing abused or diseased animals in shelters
- Required utility provisions for shelters that support animal care, such as running water, adequate lighting, proper ventilation, electricity, and backup power
- Processes and forms for managing/preventing disease transmission and other health risks
- List of equipment and supplies that may be needed to operate animal shelters
- Processes and forms for managing animal care donations, including donations storage and security

C. Plan Templates and Examples

Template (Description of Shelter Responsibilities): *The following language is from City and County of San Francisco and is provided as a template for modification, as appropriate, and use in a local jurisdiction's emergency animal care and shelter plan.*

INSERT FIELD STAFF POSITION will work with the **INSERT EOC POSITION** in the EOC to coordinate the sheltering of animals.

The **INSERT ESF-6 LEADS** are responsible for human shelter operations during a disaster event and, in many cases, animals are **ALLOWED/NOT ALLOWED** in these established shelters.

Domestic animals in need of sheltering will be accepted at and/or transported to **INSERT LOCATION**.

Depending on the severity of the imminent or actual event, it may be necessary to prepare for and operate additional animal shelters at **INSERT LOCATIONS.**

During an event requiring EOC activation, ESF-11 responsibilities will be enacted by the **INSERT EOC ESF-11 LEAD** through the **INSERT EOC COMMAND POSITION**. The **INSERT ANIMAL CARE LEAD EOC POSITION** will maintain communication and coordination with all departments and ESFs relevant to the situation and will be the primary conduit of information between the **INSERT DOC POSITION** and the EOC. Within the EOC, the **INSERT ANIMAL CARE LEAD EOC POSITION** will ensure that any activities potentially impacting domestic animals, such as human evacuation and sheltering, are taken into consideration and properly coordinated. ESFs that the **INSERT ANIMAL CARE LEAD EOC POSITION** will coordinate with:

- ESF-1 Transportation
- ESF-6: Mass Care, Housing, and Human Services
- ESF-7 Logistics
- ESF-8: Public Health and Medical Services
- ESF-9: Urban Search and Rescue
- ESF-13: Law Enforcement
- ESF-14: Recovery and Mitigation
- ESF-15 Public Information
- Volunteer and Donations Management

It is particularly imperative that channels of communication exist among fire, law enforcement, and **INSERT ANIMAL CARE LEAD EOC POSITION** under ESF-9 involving search, rescue, and evacuation of domestic animals, including livestock.

5. Registration and Animal Intake

A. Priority Plan Information

Most importantly, planners should ensure that their plans address the following topics related to registration and animal intake:

- Processes and forms for animal intake and registration at shelters, including documenting and photographing animals for record keeping and case management
  - The early stages of animal shelter activation and operation can be chaotic. Consider using paper forms to capture information from animal owners and later transferring this information into an electronic system.
  - Leaving an animal at a shelter can be a stressful experience for animal owners which may make it difficult for them to fill out intake forms completely or accurately. Consider taking a picture of the animal and its owner together as part of the intake process and include this picture in the animal's file. This photo documentation can make reunification easier and also help prevent individuals from claiming animals that don't belong to them.
- Processes and forms to ensure proper physical descriptions of animals and that all owner emergency contact information is received

B. General Plan Information

General registration and animal intake information to consider including in local animal care and shelter plans:

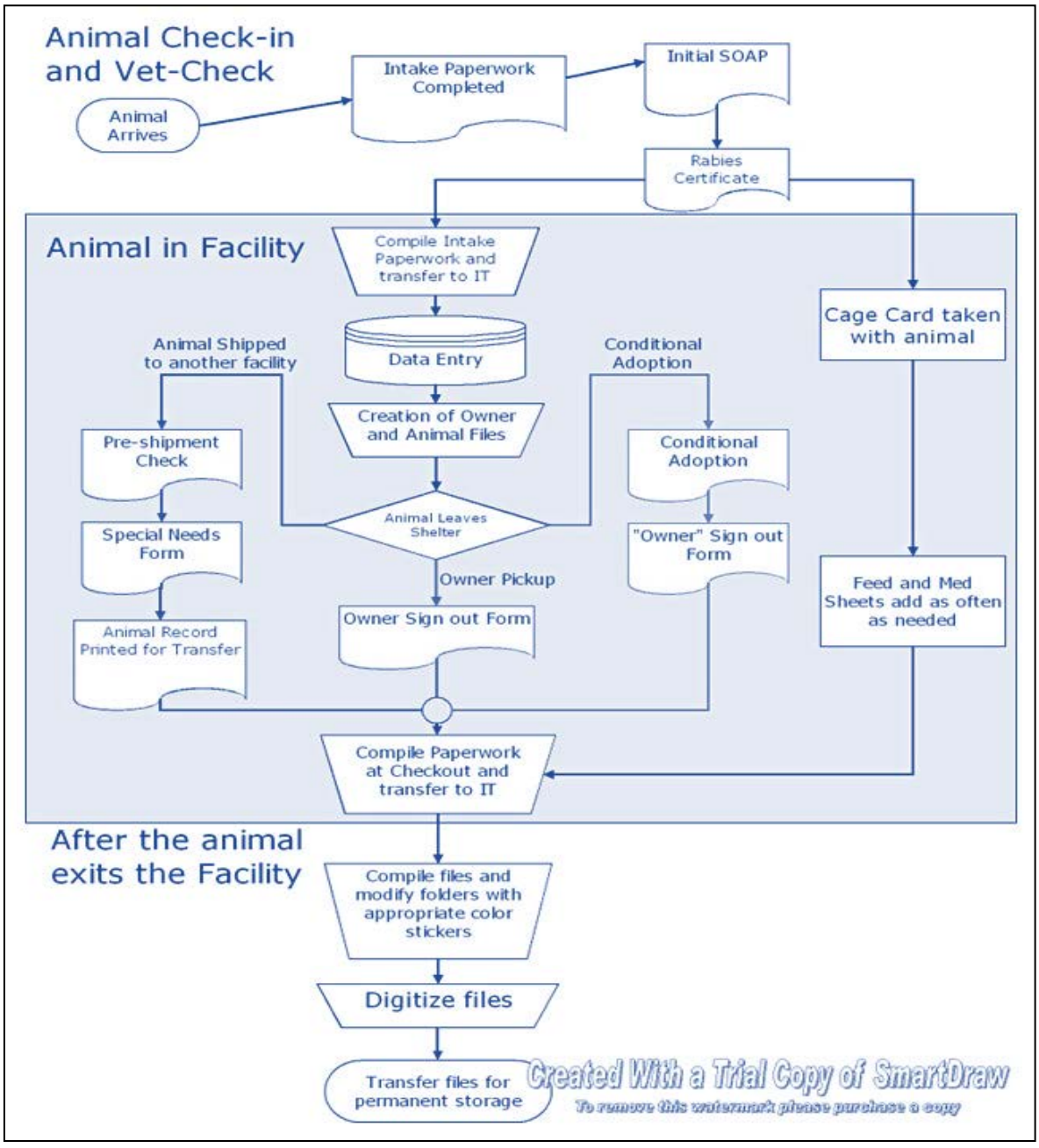
- Processes and resource needs for using microchip technology to identify animals
- Processes and authorities for vaccination, disease recognition, and animal triage

C. Plan Templates and Examples

Template (Description of Registration and Intake Process): *The following language is from Sonoma County and is provided as a template for modification, as appropriate, and use in a local jurisdiction's emergency animal care and shelter plan.*

The intake process initiates the registration and care of animals. Animals may be brought in by the owner, in person; by a third party; or by an unknown owner. Intake documentation should include a full description of the animal including its species and breed, gender, color and other identifying information. This description along with any available identification should be recorded and kept in the animal's file. Types of identification can include collars, tags, licenses, microchips or tattoos on ears or bellies. Each animal should be photographed upon intake (minimum of 2 photos to include a face and profile shot). Cats and dogs without a microchip should be implanted with one during intake.

Example Animal Intake Flow from Sonoma County:



Example Intake Form from Sonoma County:

PHS/SPCA FIELD SHELTER INTAKE FORM

Animal # A123456 Date In ____/____/____

Location found_____ In Residence? ☐ Yes ☐ No

Identification (collar/tags)? ☐ Yes ☐ No _____

Microchip upon intake? ☐ Yes ☐ No (if no, implant chip)

Breed _____ Age _____ Name _____

Description _____

☐ Female ☐ Male ☐ Spayed/Neutered

☐ Stray ☐ Owner Surrender ☐ Temporary Custody ☐ Other _____

FIRST HEALTH CHECK	Date / /	Initial
Eyes/Nose		
Ears		
Mouth		
Skin		
Body		
Misc		
Spay Scar		
Weight		

VACCINATIONS/TESTS	Date	Initial
☐ BORD	/ /	
☐ 1st DHPP/FVRCP	/ /	
☐ 2nd DHPP/FVRCP	/ /	
☐ 3rd DHPP/FVRCP	/ /	
☐ Rabies	/ /	
☐ 1st Deworming	/ /	
☐ 2nd Deworming	/ /	
☐ ADV/Other	/ /	
☐ FELV saliva + / -	/ /	
☐ FELV + / - FIV + / -	/ /	

Date	Initial	EXAM AND TREATMENT SUMMARY
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Example Intake Form from Monterey County:

The SPCA for Monterey County
1002 Monterey-Salinas Highway
P.O. Box 3058
Monterey, California 93942
(831) 373-2631 or 422-4721

Date of Intake: _____

Time of Intake: _____

SPCA Staff: _____

ANIMAL HOUSING INTAKE FORM
(PET OWNERS EVACUATED TO RED CROSS SHELTERS)

The animal housing provided by The SPCA for Monterey County at this Red Cross Shelter is intended only as a temporary measure. We strongly encourage you to locate friends, family members, or temporary pet-friendly housing outside of the disaster area, where your pets can reside until you can return them to your own housing. SPCA staff can provide a listing of pet-friendly hotels and motels.

CONTACT INFORMATION

Name: _____

Phone Numbers: (cell) _____

(work) _____ (home) _____

Address: _____

City: _____ **Zip:** _____

Driver's License #: _____

Other/emergency phone numbers: _____

_____

Attach Photo Here

ANIMAL NEEDING SHELTER

Name: _____ **Breed:** _____

Age: _____ **Sex:** ___ **Male** ___ **Female** ___ **Neutered** ___ **Spayed**

Description: _____

License #: _____ **City Licensed:** _____

Microchip #: _____ **Tattoo or Other ID:** _____

Current Vaccinations (type and approx. date): _____

Special Medical Needs (medications, diet, etc.) _____

What Veterinarian do you use: _____

Have you left pets behind?: _____

ANIMAL RETURN INFORMATION

I certify under penalty of perjury that, as the owner and/or legal agent, all information is true and correct to the best of my knowledge and that the animal described on this form which I am redeeming from The SPCA for Monterey County is my property. I hereby accept possession of this animal and release and waive any right against The SPCA for Monterey County which may have now or in the future for any damages to persons and/or property caused by my animal.

Date of Release: _____ Time of Release: _____ Location of Release: _____

Signature of Owner: _____ Signature of SPCA: _____

Owner's Name (print): _____ SPCA Staff (print): _____

Distribution: Original – The SPCA for Monterey County Pink Copy – Owner (must be presented to redeem animal)
Yellow Copy – Post on Cage

6. *Animal Care*

A. Priority Plan Information

Most importantly, planners should ensure that their plans address the following animal care topics:

- Processes and policies for housing a variety of animal species in shelters
- Processes and forms for allowing owners and staff access to animals in shelters
- Processes and forms (including tracking) for transfer of animals to an alternate facility
- Processes and forms for the construction and maintenance of animal confinement areas

B. General Plan Information

General animal care information to consider including in local animal care and shelter plans:

- List of services, authorities, and required credentials for veterinary care services
- List of services, authorities, and required credentials for animal care services
- Identified sources and locations for veterinary resources (e.g., staffing and equipment)
- Policies and responsibilities related to separation and reunification of animals
- Processes and forms for first aid/animal triage
- Description of veterinarians' authority to administer care
- Processes for the control of fleas, ticks, and other pests at each animal shelter
- Processes and policies for segregating aggressive and un-socialized animals
- Processes and policies for quarantining animals to prevent the transmission of disease
- Identification of controlled areas (indoor or outdoor) for exercising animals
- Processes, policies, and authorities for animal waste and carcass disposal
- Processes and forms for the reunion of rescued animals with their owners
- Processes, policies, and forms for long-term care or permanent relocation
- Processes for coordination with and use of local Animal Emergency Response Teams (e.g., DART or CART)
- Processes and forms for decontamination and biosecurity
- Disaster specific educational materials such as precautionary measures related to smoke inhalation, fire retardation, decontamination from flood waters, etc.
- Process for extending lost pet holding periods
- Process for ensuring animal areas have sufficient security at all times

C. Plan Templates and Examples

Template (Description of Animal Care Process): *The following language is from Sonoma County and is provided as a template for modification, as appropriate, and use in a local jurisdiction's emergency animal care and shelter plan.*

The **INSERT SHELTER MANAGER** of a temporary or established shelter should determine who may have access to the animals.

Although it may not be possible to physically lock every cage or kennel, an identification system and process should be implemented to govern the process by which designated volunteers may

remove animals from holding areas.

All animals should be housed with their identification documentation and an Animal Care Log, which is used to record feedings, cleaning, and socialization.

The **INSERT SHELTER ANIMAL CARE POSITION** should create protocols for determining which animals can be taken out of their cages or kennels, how much time they may be out, which activities are allowed, and the labeling system on the cage or kennel that is used to indicate that an animal is out. The **INSERT SHELTER ANIMAL CARE POSITION** will create a system to track and monitor all animal movement, as well as a system to track all animal visits by their owners.

The **INSERT SHELTER ANIMAL CARE POSITION** should physically count the animals on the premises at least twice a day and document the count in the log. Counting can quickly identify animals that may be improperly housed or missing. Although a temporary shelter is a 24-hour operation, animals need periods of darkness and quiet. Periods of darkness and quiet should be scheduled throughout the day. Night activity should be limited to veterinary issues.

Template (Description of Animal Care and Reunification): *The following language is from the City and County of San Francisco and is provided as a template for modification, as appropriate, and use in a local jurisdiction's emergency animal care and shelter plan.*

An identification and tracking process will be used during the animal's stay in the emergency shelter. **IDENTIFY SYSTEM USED**

When the animal has been treated or no longer has sheltering needs, owners will be contacted for reunification with their pets. **IDENTIFY CONTACT METHODS AND POC.**

Upon arrival at the facility, owners/guardians will be required to present proper personal identification and affirmatively identify their animal by providing an accurate description of their pet, viewing and identifying their pet in photos, or by being escorted through existing shelter areas to identify their pet.

If an owner is unable to provide the primary identification needed to claim his or her pet, a secondary means of identification—such as vet records, photos of owners with the pet, microchip information, or a letter from a veterinarian with a description of the animal—is acceptable.

If the owner is unable to find his or her pet, a lost animal report will be filed with **INSERT SHELTER ANIMAL CARE POSITION OR AGENCY** detailing the description of the animal, its last known location, and the owner's current contact information.

7. Public Information and Outreach

A. Priority Plan Information

Most importantly, planners should ensure that their plans address the following topics related to public information and outreach:

- Coordination processes between ESF-11, shelter management, and the Public Information Officer (or Joint Information Center) for continually updating public statements on shelter capacity, availability, and needed resources

B. General Plan Information

General information related to public information and outreach to consider including in local animal care and shelter plans:

- List of agency subject matter experts with the animal care expertise to inform public messaging and/or serve as a spokesperson on local animal care operations
- Description of public education programs and preparedness messages related to animal care that may inform emergency public information activities
- Sample public information messages regarding accommodation of animals[18]
- Messaging translated into multiple languages

C. Plan Templates and Examples

*The Bay Area Joint Information System has developed a **Toolkit to Support Public Information at Disaster Shelters,** providing Shelter Public Information Officers, their support staff, and local Joint Information Center staff with the tools, templates, planning considerations, and sample messaging necessary to perform their roles. The toolkit is available for download at* http://www.bayareauasi.org/careshelter*.*

***Template (Description of Public Information Responsibilities):** The following language is from San Mateo County and is provided as a template for modification, as appropriate, and use in a local jurisdiction's emergency animal care and shelter plan.*

Ultimately, increased readiness among individual pet owners is the single most important measure to decrease the number of pets impacted by a disaster. The Peninsula Humane Society & Society for the Prevention of Cruelty to Animals (PHS/SPCA) will continue to urge residents to create their own personal disaster plans, as this will impact the number of animals requiring assistance and/or temporary shelter. PHS/SPCA will speak to this topic at public events, hold periodic disaster planning events/workshops at the shelter, distribute disaster preparation materials and maintain pertinent information on the organization's website.

***Template (Description of Public Information Responsibilities):** The following language is from the City and County of San Francisco and is provided as a template for modification, as appropriate, and use in a local jurisdiction's emergency animal care and shelter plan.*

Public Information is an essential response component during any type of an incident in which domestic animals may be impacted. **INSERT SHELTER ANIMAL CARE POSITION OR EOC POSITION** will coordinate with its Public Information Officer (PIO) and/or Joint Information Center (if activated) to provide public information. During an ESF-11 activation, the **INSERT**

[18] For shelter-related emergency public information planning resources, see *The Bay Area Joint Information System (JIS): A Toolkit to Support Public Information at Disaster Shelters. The most current copy of this document, including Part IV (additional resources) and any changes, is available on the Bay Area JIS shared document repository. Email bayareajis@gmail.com for access.*

PRIMARY AGENCY will coordinate with its Public Information Officer (PIO) and/or Joint Information Center (if activated) to provide public information. There will be an ongoing need to provide the public with updated information as the incident progresses. For further details about public information dissemination, refer to the **INSERT PLAN**.

Template (Description of Public Information Responsibilities): *The following language is from the City and County of San Francisco and is provided as a template for modification, as appropriate, and use in a local jurisdiction's emergency animal care and shelter plan.*

The Department of Animal Care and Control (ACC) will coordinate with its Public Information Officer (PIO) and/or ESF #15: Joint Information Section (if activated) to provide public information.

This section describes Public Information as providing the following: 1) coordination of animal evacuation and sheltering information with the jurisdiction's Public Information Officer (PIO) or CCSF EOC Joint Information Section, 2) mechanisms for continually updating public statements on shelter capacity and availability as people/animals are coming to shelters, and 3) providing for communication of public information regarding shelter-in-place accommodation of animals.

Public information is an essential response component during any type of an incident in which domestic animals may be impacted. During an ESF #11 activation, the ACC will coordinate with its PIO and/or ESF #15: Joint Information Section (if activated) to provide public information regarding the following: **INSERT CRITERIA**

There will be an ongoing need to provide the public with updated information as the incident progresses. For further details about public information dissemination, refer to the *ESF #15: Joint Information Section Annex*.

8. Record Keeping

A. Priority Plan Information

Most importantly, planners should ensure that their plans address the following topics related to record keeping:

- Processes for gathering, organizing, and sending documentation and records to the EOC Finance and Administration Section
- Processes for conducting after-action reports and implementing corrective plans
- Description of coordination processes between ESF-11 and the EOC Finance and Administration Section

B. General Plan Information

General record keeping information to consider including in local animal care and shelter plans:[19]

- Processes and forms for tracking volunteer and animal care staff hours
- Form to inventory donated items and funds provided
- Processes and forms for Damage Survey Report (DSR) record keeping
- Responsibilities and processes pre- and post-declaration funding
- Examples of eligible costs for reimbursement

C. Plan Templates and Examples

Template (Description of Record Keeping Processes): *The following language is from Sonoma County and is provided as a template for modification, as appropriate, and use in a local jurisdiction's emergency animal care and shelter plan.*

Any remaining data, reports, or documents should be collected to ensure that a complete record of logs, transactions, analyses, and other information is in one place. Information management for the following:

- ☐ Animal movement tracking
- ☐ Records retention
- ☐ Health certificates for interstate movement of animals
- ☐ Detailed written records for eligible expenses
- ☐ Public information

After all animals have been returned to owners, transferred to a shelter, or transported, and all emergency areas have been closed, it is important for key staff, volunteers, and personnel from other EOC departments to meet for a debriefing on the incident response. The following may be discussed:

- ☐ What was achieved?
- ☐ What went well?
- ☐ What could be improved?
- ☐ Were any innovations implemented?
- ☐ What changes need to be made to the plans?
- ☐ Were supplies sufficient?
- ☐ What job descriptions need to be updated?
- ☐ Where there any needs for psychological debriefing for the handling of injured and deceased animals?

This information is critical for future mitigation planning from lessons learned.

[19] Each of these forms and processes are often coordinated with and/or provided by the Finance and Administration Section in the EOC. The animal care and shelter plan may reference related emergency plans and forms.

9. Recovery

A. Priority Plan Information

Most importantly, planners should ensure that their plans address the following recovery-related topics:

- Demobilization, including the following:
  - Processes for closing shelters and redistributing supplies
  - Processes for removing and disposing of animal carcasses and waste
  - Policies and procedures for adoption and euthanasia
  - Policies for unclaimed animals
  - Plan for donations storage

B. Plan Templates and Examples

Template (Description of Recovery Processes): *The following language has been adapted from Sonoma County and is provided as a template for modification, as appropriate, and use in a local jurisdiction's emergency animal care and shelter plan.*

When the EOC has notified the Incident Commander that a temporary animal shelter should be deactivated, a number of key activities are required and are described below.

Planning for closing the shelter should begin almost as soon as the shelter is set up. Recognizing that the need for the emergency shelter will wane as the community begins to move from the response to the recovery phase, it is best to begin to think about the "arc" of your operations and consider how and when you will demobilize as part of your initial planning. Help your community to understand that this shelter is a temporary resource.

Utilize the checklist located in the attachments to complete shelter closure activities. The actual demobilization date will, in all likelihood, change from this original plan – but you will have thought through, and begun to prepare for, the closing of the shelter and the myriad of concerns that go with that operation. Among these are:

- ☐ Coordinate efforts to reunify pets with owners
- ☐ Reunify all animals with owners
- ☐ Arrange to transfer any unclaimed pets to animal shelters, or match them with foster groups or humanitarian
- ☐ Break down cages and kennels
- ☐ Remove paper and tarps from walls and floors
- ☐ Sweep and mop floors
- ☐ Clean and properly sanitize all surfaces
- ☐ Remove signage
- ☐ Create a list of any items that may need to be repaired and or replaced
- ☐ Conduct a final walk through of the facility with the facility owner, or their designee, to ensure clean-up is acceptable
- ☐ Inventory remaining supplies and either return them to their owner, or properly disposed of them. This activity is important for reimbursement.

Removal and Disposal

Removal and disposal of animal carcasses must comply with all local, state, tribal and federal regulations. Local, state, territorial and tribal governments are encouraged to prepare for

carcass removal and disposal by developing an “Animal Carcass Removal Plan” addendum or annex to the organizations’ Debris Management Plans if animal carcass removal plans do not already exist.

Proper storage and handling of animal carcasses is necessary to avoid public health issues. If a refrigerated truck or large walk-in freezer is available, smaller animals may be double bagged with heavy plastic and tagged. Tags should include the species, cause of death and location found if possible.

If no refrigeration option is available, designated containers for animal remains will need to be coordinated. Containers may include trash cans, dumpsters or trailers. Carcasses are to be placed at a designated, secured location away from the sheltering locations. Arrangements will be needed for proper disposal by the legally designated processing industry in the jurisdiction.[20]

Unclaimed Animals

Every shelter should create procedures for unclaimed animals. An animal may be adopted, transferred, or euthanized, but the procedures must be consistent with local laws. The procedures must be communicated to local rescue groups and the public.

[20] https://calepa.ca.gov, http://tahc.state.tx.us/Emergency/FemaPublicAssistanceAnimalCarcassRemovalDisposal

10. Resources

A. Priority Plan Information

Most importantly, planners should ensure that their plans address the following topics related to resources:

- List of local animal care and shelter-related resources (including locations, providers/owners, and agreements)
- Processes and tools to manage a health or zoonotic disease outbreak
- Description of local mutual aid systems, structures, and process for putting forth, managing, and/or receiving mission requests

B. General Plan Information

General resource-related information to consider including in local animal care and shelter plans:

- Description of agroterrorism threats
- Processes related to reporting the illegal use/abuse of animals

C. Plan Templates and Examples

Template (Description of Resource Processes): *The following language is from Alameda County is provided as a template for modification, as appropriate, and use in a local jurisdiction's emergency animal care and shelter plan.*

Due to the limited number of resources that exist within any single department, partners, and the community there may be a need to obtain additional resources, supplies and/or personnel, from other agencies outside **INSERT JURISDICTION** through the execution of mutual aid agreements, and/or resource requests to City, County, and/or State channels. **INSERT REFERENCE TO AGREEMENTS**

INSERT EOC SECTION (e.g. Operations) is in charge of reporting on the status of all field response activities, as well as all the responding agencies associated with field response activities. **INSERT EOC SECTION** will also coordinate mutual aid for Law, Fire, and Health/Medical resources for the Coastal Region.

The **INSERT EOC SECTION (e.g. Planning)** gathers situational analysis of the incident(s) occurring around the operational area/jurisdiction.

INSERT EOC SECTION (e.g. Logistics) is in charge of ordering and tracking manpower, equipment, and special services resources, as well as managing volunteers and donations for the EOC.

INSERT EOC SECTION (e.g. Finance) tracks and allocates funds for all resource requests, assists with damage assessment values for initial damage estimates, tracks timekeeping, costs, compensation, claims, and is in charge of the recovery plan and policy.

Appendix A. Local Animal Care and Shelter Plan Evaluation Checklist

Jurisdictions may use the checklist on the following pages to develop or evaluate and track the progress on updates to their animal care and sheltering plans.[21]

Instructions for Use

Planners may follow these steps:

1. Obtain copies of the jurisdiction's animal care and sheltering plans, policies, and/or procedures. Some local governments have a standalone plan, while others address animal care and sheltering as a component of their mass care or other emergency operations plans.
2. Use the evaluation criteria below to cross-reference sections in the plan(s), completing the table with:
    a. *Status:* either describe the status or use a color-coded system to note status. For example, shading the box green indicates that the plan addresses the criteria, while red indicates that additional work is needed to address the criteria in local plan(s).
    b. *Reference:* if the plan(s) addresses the criteria in whole or in part, include a page or section number (also include the plan name if reviewing multiple plans).
    c. *Improvement Recommendations:* Summarize whether additional planning is necessary and recommend actions for accomplishing that planning.
3. Refer to the *Animal Care and Shelter Planning Toolkit* for more information on the planning criteria.

[21] The criteria in the checklist is an updated version of the Section XIII. Quality Assurance checklist in the CARES Planning Guide: https://animalsindisasters.files.wordpress.com/2013/01/cares-planning-guide.pdf (pp. 33-35). UASI funded subject matter experts modified the CARES checklist to develop this customized plan evaluation tool for the Bay Area based on current polices, recent lessons learned, and generally accepted practices.

Jurisdiction:
Plans Reviewed:
Reviewer(s):
Date:

#	Planning Criteria	Status	Plan Reference	Improvement Recommendations
Preparedness and Partnerships				
1	Does the plan include (or reference another resource with) emergency contact information for agencies and organizations with animal care and sheltering responsibilities?			
2	Do partner agencies and organizations involved in the development of the plan represent a wide range of animal species?			
3	Does the plan describe the partnership between the jurisdiction's emergency management agency, the animal control authority, the mass care provider(s), and the owner of each proposed animal sheltering facility?			
4	Does the plan have or refer to a MOA/MOU that defines the roles and responsibilities of each organization involved in animal response?			
5	Do organizations with agreed upon responsibilities in the plan have operating procedures that govern their mobilization and actions?			
6	Does the plan describe a position in the local Emergency Operations Center that provides subject matter expertise on field response involving animals?			
7	Does the plan recommend just-in-time training for spontaneous volunteers and out-of-state responders?			
8	Does the plan recommend just-in-time training for spontaneous volunteers and out-of-state responders?			
9	Does the plan provide suggested training topics for volunteers?			
10	Does the plan address the California Disaster Service Worker Program?			
11	Does the plan address how Animal Disaster Service Worker Volunteers may become credentialed and endorsed by the lead animal care agency?			
12	Does the plan encourage animal owners and service animal owners to make arrangements for private accommodations for themselves and their animals prior to a disaster?			
Activation Process				
13	Does the plan address who will be responsible for and managing the activation process?			
14	Does the plan identify the activation process for both animal services staff and volunteers?			
15	Does the plan include the documentation and record keeping for the activation process?			

#	Planning Criteria	Status	Plan Reference	Improvement Recommendations
16	Does the plan include or reference the necessary forms to be utilized during an activated period?			
17	Does the plan explain the mutual aid process for putting forth and/or receiving mission requests?			
	Evacuation Support			
18	Does the plan identify or include a process for identifying animal populations within the county?			
19	Does the plan address the evacuation and transportation of a) animals from their properties or by their owners, or b) animals rescued by responders to animal shelters?			
20	Does the plan identify the agency responsible for coordinating the transport of animals (for all species types, including companion animals and large animals)?			
21	Does the plan address who may be considered as partnering agencies or organizations for animal evacuation and transport?			
22	Does the plan address how owners will be informed where animal shelters are located, and which shelter to use?			
23	Does the plan provide for the conveyance of animals whose owners are dependent on public transportation?			
24	Does the plan address how animals provided with evacuation assistance are registered, documented, tracked, and reunited with their owners if they are separated during assisted evacuations?			
25	Does the plan address the responsibility of transportation providers to transport service animals with their owners?			
26	Does the plan address how animals are tracked and documented when evacuated from their original location to a temporary shelter or other holding area? Does the plan identify the location for pick up and drop off?			
	Shelter Operations			
27	Does the plan identify the agency responsible for coordinating shelter operations?			
28	Does the plan describe the process for the demobilization of shelter operations?			
29	Does the plan suggest pre-identifying inspected locations that may be used for animal sheltering?			
30	Does the plan recommend a pre-disaster inspection and development of agreements for each animal facility? Does the plan recommend pre-disaster inspections and completion of agreements for large animal facilities?			
31	Does the plan establish criteria that can be used to expeditiously identify animal shelters and alternate facilities when pre-identified locations are inadequate?			
32	Does the plan provide guidance to human shelter operators on the admission and treatment of service animals?			
33	Does the plan identify an agency(is) that regulates nonemergency, licensed animal facilities (e.g., animal control shelters, nonprofit household pet rescue shelters, private breeding facilities, and kennels)?			

#	Planning Criteria	Status	Plan Reference	Improvement Recommendations
34	Does the plan address who handles incoming animals that may need further investigation such as potentially abused or diseased animals?			
35	Does the plan provide for segregation or seizure of animals showing signs of abuse?			
36	Does the plan identify veterinary care options for the animals?			
37	Does the plan provide guidance about utility provisions, such as running water, adequate lighting, proper ventilation, electricity, and backup power, at animal shelters?			
38	Does the plan include mechanisms or processes to reduce/eliminate the risk of injury by an aggressive or frightened animal, the possibility of disease transmission, and other health risks for responders and volunteers staffing the animal shelter?			
39	Does the plan provide for the care and maintenance of each facility while in use as a shelter?			
40	Does the plan identify equipment and supplies that may be needed to operate each animal shelter, as well as supplies that animal owners may bring with them to the shelter?			
41	Does the plan provide for the physical security of each small and large animal facility, including perimeter controls and security personnel?			
42	Does the plan provide for acceptance of donated resources (e.g., food, bedding, containers)?			
43	Does the plan provide for the acquisition, storage, and security of food and water supplies? Does the plan provide for the diverse dietary needs of household pets, large animals, exotics, and other animal species?			
Registration and Animal Intake				
44	Does the plan provide for animal registration?			
45	Does the plan provide for installation and reading of microchip technology for rapid and accurate identification of animals?			
46	Does the plan provide for technical consultation/supervision by a veterinarian or veterinary technician?			
47	Does the plan identify the need for household pets (e.g., dogs, cats) to have a current rabies vaccination?			
48	Does the plan address measures for mass vaccinations?			
Animal Care				
49	Does the plan provide for the housing of a variety of animal species (e.g., size of crate/cage, temperature control, appropriate lighting)?			
50	Does the plan provide for separation of animals based on appropriate criteria and requirements?			
51	Does the plan provide for the consultation of a veterinarian or animal care expert with animal sheltering experience regarding facility setup and maintenance?			
52	Does the plan provide for the setup and maintenance of animal confinement areas (e.g., crates, cages, pens) for safety, cleanliness, and control of noise level?			
53	Does the plan recommend the setup of a first aid/animal triage area inside each shelter?			

#	Planning Criteria	Status	Plan Reference	Improvement Recommendations
54	Does the plan describe veterinarians' authority to administer care?			
55	Does the plan provide for the control of fleas, ticks, and other pests at each animal shelter?			
56	Does the plan provide criteria for designating and safely segregating aggressive animals?			
57	Does the plan provide for the segregation or quarantine of animals to prevent the transmission of disease?			
58	Does the plan recommend the relocation of an animal to an alternate facility (e.g., veterinary clinic, animal control shelter) due to illness, injury, or aggression?			
59	Does the plan recommend providing controlled areas (indoor or outdoor) for exercising animals?			
60	Does the plan provide for animal waste and animal carcass disposal?			
61	Does the plan provide for the reunion of rescued animals with their owners?			
62	Does the plan include mechanisms or processes to address the long-term care, permanent relocation, or disposal of unclaimed animals?			
63	Does the plan address Animal Emergency Response Teams and or Response Equipment options within the jurisdiction?			
64	Does the plan include specialized resources for all-hazards, including decontamination and biosecurity?			
Public Information and Outreach				
65	Does the plan provide mechanisms for continually updating public statements on shelter capacity and availability as people/animals are coming to shelters?			
66	Does the plan provide for a public education program?			
67	Does the plan provide for the coordination of animal evacuation and sheltering information with the jurisdiction's Public Information Officer or Joint Information Center?			
68	Does the plan provide for communication of public information regarding shelter-in-place accommodation of animals, if available?			
69	Does the plan provide ways to integrate social media to provide public information on shelter operations and animal care?			
Record Keeping				
70	Does the plan address tracking mechanisms for volunteer and animal care hours?			
71	Does the plan address inventory of donated items and funds provided during the declared disaster time?			
72	Does the plan address worker's compensation and claims?			
73	Does the plan address Damage Survey Report (DSR) record keeping?			
74	Does the plan define the methods of pre- and post-declaration funding for the jurisdiction's animal preparedness and emergency response program?			
75	Does the plan describe how to capture eligible costs for reimbursement by the Public Assistance Program as defined			

#	Planning Criteria	Status	Plan Reference	Improvement Recommendations
	in Disaster Assistance Policy (DAP) 9523.19, Eligible Costs Related to Pet Evacuations and Sheltering?			
76	Does the plan describe how to capture eligible donations for volunteer labor and resources as defined in DAP 9525.2, Donated Resources?			
77	Does the plan describe how to capture eligible donations for mutual aid resources as defined in DAP 9523.6, Mutual Aid Agreements for Public Assistance and Fire Management Assistance?			
78	Does the plan address an after-action process to discuss strengths, revise plans, and identify and implement areas for improvement?			
Recovery				
79	Does the plan address shelter closures and redistribution of supplies?			
80	Does the plan address the removal and disposal of animal carcasses and waste?			
81	Does the plan address adoption and euthanasia procedures?			
Resources				
82	Does the plan identify animal care and shelter-related related resources, such as just-in-time training, for field and EOC staff?			
83	Does the plan refer to resources for identifying penal codes and authorities that handle violation of penal codes?			
84	Does the plan identify who to contact in the event of a zoonotic disease outbreak?			
85	Does the plan identify who to contact in the event of a suspected agroterrorism threat or illegal use/abuse of animals?			

Appendix B. Bay Area Animal Care Partner Organizations

National Organizations	
National Alliance of State Animal and Agricultural Emergency Programs (NASAAEP)	http://www.cfsph.iastate.edu/Emergency-Response/bpwg.php
American Veterinary Medical Association (AVMA)	https://www.avma.org/Pages/home.aspx
Veterinary Medical Assistance Teams (VMAT)	https://www.avmf.org/whatwedo/veterinary-medical-assistance-teams/
American Veterinary Medical Foundation (AVMF)	https://avmf.org/
National Animal Rescue and Sheltering Coalition (NARSC)	http://thenarsc.org/
PETCO Foundation	https://www.petcofoundation.org/
Red Rover	https://redrover.org/
Code 3 Associates	http://code3associates.org/
ASPCA	https://aspca.org/
American Humane Association	https://americanhumane.org/
American Red Cross	https://www.redcross.org/
Petfinder.com Foundation	https://petfinderfoundation.com/
American Kennel Club	https://www.akc.org/
PetSmart Charities	https://www.petsmartcharities.org/
National Voluntary Organizations Active in Disasters (NVOAD)	https://www.nvoad.org/
Society of Animal Welfare Administrators	https://theaawa.org/
National Animal Control Directors Association	https://www.calanimals.org/

Bay Area Animal Care Organizations			
Friends of the Alameda Animal Shelter	http://www.alamedaanimalshelter.org/	Alameda, CA	PH: 510-337-8565
Berkeley Animal Care Services	https://www.cityofberkeley.info/animalservices/	Berkeley, CA	PH: 510-981-6600
Berkeley Humane	https://berkeleyhumane.org/	Berkeley, CA	PH: 510-845-7735
East County Animal Shelter	https://www.alamedacountysheriff.org/cws_animal.php	Dublin, CA	PH: 925-803-7040
Hayward Animal Services	http://www.haywardanimals.org/	Hayward, CA	PH: 510-293-7200
Hopalong Animal Rescue	https://www.hopalong.org/	Oakland, CA	PH: 510-267-1915
ICRA: Island Cat Resource & Adoptions	http://icraeastbay.org/	Alameda, CA	PH: 510-869-2584
Oakland Animal Services	http://www.oaklandanimalservices.org/	Oakland, CA	PH: 510-535-5602
Tri-City Animal Shelter – Fremont	https://www.fremontpolice.org/index.aspx?NID=329	Fremont, CA	PH: 510-790-6640
TVAR: Tri-Valley Animal Rescue	http://tvar.org/	Pleasanton, CA	PH: 925- 803-7043

Bay Area Animal Care Organizations (continued)			
Valley Humane Society	https://valleyhumane.org/	Pleasanton, CA	PH: 925-426-8656
Antioch Animal Services	https://www.antiochca.gov/police/animal-services/	Antioch, CA.	PH: 925-779-6989
Contra Costa Animal Services – Martinez	http://www.co.contra-costa.ca.us/59/Animal-Services	Martinez, CA.	PH: 925-335-8300
Contra Costa Animal Services – Pinole	http://www.co.contra-costa.ca.us/59/Animal-Services	Pinole, CA.	PH: 510-374-3966
Humane Society of Silicon Valley	http://www.hssv.org/	Milpitas, CA.	PH: 408-261-2133
Marin Humane Society	https://www.marinhumane.org/	Novato, CA.	PH: 415-883-4621
Peninsula Humane Society	https://phs-spca.org/	San Mateo, CA.	PH: 650-340-7022
Pets Unlimited	http://www.petsunlimited.org/	San Francisco, CA.	PH: 415-563-6700
San Francisco Animal Care & Control	https://www.sfanimalcare.org/	San Francisco, CA.	PH: 415-554-6364
San Francisco SPCA	http://www.sfspca.org/	San Francisco, CA.	PH: 415-554-3000
Santa Clara County Animal Services	https://www.sccgov.org/sites/asc/Pages/home.aspx	Santa Clara County, CA	PH: 408-686-3900
Silicon Valley Animal Control Authority (SVAVA)	http://svaca.com/	Santa Clara, CA	PH: 408-764-0344
Humane Society Silicon Valley	http://www.hssv.org/what-we-do/pet-care-services/other-resources/area-shelters.html	Milpitas, CA	PH: 408-262-2133
San Jose Animal Care Center	http://www.sanjoseanimals.com	San Jose, CA	PH: 408-794-7297
SPCA for Monterey County (POC Rosanna Leighton)	www.spcamc.org	Monterey, CA	PH: 831-373-2631
Bay Area Response Teams			
Sonoma County Animal Services – Animal Disaster Service Worker Program & Credentialing	https://sonomacounty.ca.gov/Health/Animal-Services/		
Napa County CART (County Animal Response Team)	http://napacart.org/		
Solano County Animal Services	http://www.solanocounty.com/depts/sheriff/animalcare/gi.asp		
Marin County Animal Services / Large Animal Response Team | Marin County Search & Rescue Team	https://www.marinhumane.org/get-help/marin-animal-services/		
San Francisco NERT Neighborhood Emergency Response Team	https://sf-fire.org/neighborhood-emergency-response-team-nert		
Contra Costa County Animal Services – PEP Pet Emergency Preparedness Program	http://www.co.contra-costa.ca.us/59/Animal-Services		
Tri Valley Animal Rescue	https://www.tvar.org/		
State Partners			
Cal OES	http://www.caloes.ca.gov		
Cal EPA	https://calepa.ca.gov		
CDFA	https://www.cdfa.ca.gov		

Appendix C. Acronym List

Acronym	Term
AAF	Animal, Agriculture, Food
ACO	Animal Control Officer
AER	Animal Emergency Response
APHIS	Animal and Plant Health Inspection Services
AVMA	American Veterinary Medical Association
CART	Community / County Animal Response Team
CERT	Community Emergency Response Team
CMAS	Commercial Mobile Alert System
CVMA	California Veterinary Medical Association
CAVMRC	California Veterinary Medical Reserve Corps
De-Con	Decontamination
DHS	Department of Homeland Security
DSW	Disaster Service Worker
DSWVP	Disaster Service Worker Volunteer Program
EAS	Emergency Alert System
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
EPA	Environmental Protection Agency
EF	Emergency Function
ESF	Emergency Support Function
FAD	Food Animal Disease
FEMA	Federal Emergency Management Agency
FEMA RTL	FEMA Resource Typing Library
FSA	Farm Service Agency
ICS	Incident Command System
ICP	Incident Command Post
IS	Independent Study
ILT	Instructor Led Training
MRC	Medical Reserve Corps
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
NAHLN	National Animal Health Laboratory Network
NIMS	National Incident Management System
NRCS	Natural Resources Conservation Service
NWCG	National Wildfire Coordinating Group
OA	Operational Area
OES	Office of Emergency Services
PETS Act	Pets Evacuation and Transportation Standards
PIO	Public Information Officer
PPE	Personal Protective Equipment
RDPC	Rural Domestic Preparedness Consortium
RIMS	Response Information Management System
ROSS	Resource Ordering and Status System
SART	State Animal Response Team

Acronym	Term
SEMS	Standardized Emergency Management System
SUV	Spontaneous Untrained Volunteer
UASI	Urban Area Security Initiative
USDA	United States Department of Agriculture
VERT	Veterinary Emergency Response Team
VMAT	Veterinary Medical Assessment Team