



Preparedness is Key!

FARM / RANCH MULTI-HAZARD EMERGENCY PLAN GUIDE



Wasco, California 2-Alarm Poultry Farm Fire July 202<mark>5</mark>

Sonia Brown, Emergency Preparedness & Response Manager

Table of Contents

Introduction	1
Overview Key Messages	
Farm Information	2
Before the Disaster	3
Identify a Disaster Planning Team	
Initial Disaster Planning Team Discussion Questions	4
Mitigation Measures	7
Natural Hazards/Risks – Examples of Mitigation Measures Earthquakes	
Floods	8
Wildfires	9
Barn Fires	10
Extreme Heat	10
General Planning and Preparedness Considerations	
Identify Potential Disasters and Risks to Your Farm	
Natural Disaster Planning Examples	
Floods Wildfires	
Barn Fires	
California Standard Statewide Evacuation Terminology Options During an Evacuation	
APPENDIX A: ICS ORGANIZATIONAL CHART	24
APPENDIX B: EXTERNAL EMERGENCY RESPONDER CONTACT DIRECTORY	Y 25
APPENDIX C: EMPLOYEES EMERGENCY INTERNAL CONTACT DIRECTORY	. 26
APPENDIX D: COMMUNICATIONS PLAN	27
APPENDIX E: HAZARDS AND RISK ANALYSIS	28
APPENDIX F: VENDOR AGREEMENTS OR CONTRACTS	29
APPENDIX G: INVENTORY LIST (value amount is for insurance claims)	30

APPENDIX H: FARM OR RANCH SITE MAP	33
APPENDIX I: SUPPLY ORDER FORM	35
APPENDIX J: SHELTER IN PLACE CHECKLIST	36
APPENDIX K: LIVESTOCK AND POULTRY RESOURCES	37
GOVERNMENT AGENCIES	37
LEGISLATIVE & REGULATORY INFORMATION	37
ORGANIZATIONS & ASSOCIATIONS	37

Acknowledgement

The California Department of Food and Agriculture California Animal Emergency Response Program (CARES) sincerely thank Anja Rudabaugh Chief Executive Officer of Western United Dairies, Bill Mattos President of the California Poultry Federation and Kevin Abernathy General Manager of the Milk Producers Council for taking their invaluable time to review this guide, which has contributed to the validity and relevance of the document.

Introduction

The purpose of this document is to provide guidance for developing a viable farm or ranch multi-hazard plan. Livestock owners need to prepare for potential disasters and emergencies to ensure the safety and well-being of employees and their animals, implement mitigation measures as well as needed obtain equipment and supplies and knowledge of the county disaster plans. This guide provides a fundamental understanding of risk-informed planning, decision making with your planning team to assess threats and hazards to the farm or ranch and the integration of planning considerations.

Overview

California is prone to a number of natural disasters such as earthquakes and landslides, floods. wildfires, extreme weather (heat/cold/drought), public safety power shutoffs (PSPS), hazardous materials release (toxic gas and grain bin entrapment emergencies), etc. Each of these incidents has the potential to affect your farm. An emergency or disaster causing an evacuation, shelter in place or relocation of animals to an alternate location on the farm, or even a power outage is essential for farmers to plan for and ensure continuity of operations. Each county Office of Emergency Management (OEM) has an emergency operations plan and/or a hazard mitigation plan that provides the hazards that you need to plan for. You may feel you're not at risk or don't need to develop a disaster plan, but a lack of planning can result in a disaster. The emergency plan is a living document and will need to be updated as you have changes on your farm such as farm growth, changes in infrastructure, additional risks, etc. Developing a plan may feel daunting or unnecessary, however, the more you plan ahead and prepare, and the more detailed your plan is, the sooner you'll be able to recover and get back in operation. The focus is to ensure animals are kept safe and minimal disruptions of farm / ranch operations. The health and safety of livestock is primarily and ultimately the responsibility of the owner.

Key Messages

- A Farm / Ranch Multi-Hazard Plan is the best way to Mitigate, Prepare for, Respond to and Recover from a natural disaster or emergency.
- Develop plans by identifying and analyzing **Threats**, **Hazards**, and **Risk Assessment** to farm / ranch operations.
- Producers are **Ultimately Responsible** for protecting their farms / ranches and livestock by planning and preparing a **Viable Plan** that **Supports** the farm / ranch from **Response** to **Recovery**.
- A well-thought-out plan includes **Continuity of Business Operations** planning that can safeguard the farm / ranch, mitigate risks, and enhance resilience. It can support the timely resumption of normal operations once the emergency has ended. This includes appropriate commercial insurance coverage and any other available financial assistance.
- Make sure to periodically Check, Review, Update and Practice the plan.
- Farmers should consider providing their plan to the agricultural commissioner's office.

Farm Information

The farm information should be placed upfront in the plan and may include the following.

Farm / Ranch Name:			Farm / Ranch I	Number¹:
Owner(s):				
Owner(s).				
Landline Number(s)	Mobile	Numbers(s)	Email(s)	
Operator if different from	Owner:			
Landline Number(s)	Mobile	Numbers(s)	Email(s)	
Physical Address:				
Farm Contact Informati	on			
Landline Number(s)	Mobile	Numbers(s)	Email(s)	
Farm Size (No. of employ	yees, buil	dings, herd size, e	tc.	
Other pertinent information	on:			
Creamery or Dairy Coo	perative	Creamery Name:		
Contact Name:	_			
Landline Number(s)	Mobile	Numbers(s)	Email(s)	
Farm Property Leased		d (important for insur	rance & recovery p	urposes)
Contact (Owner's) Name			1	
Landline Number(s)	Mobile	Numbers(s)	Email(s)	
Poultry				
Premises Identification N (PIN) ² :	umber Flock Identification Number (FIN): Group/Lot Identification Number (GIN):		Group/Lot Identification Number (GIN):	
Sheep				
Premises Identification N (PIN):	umber	Flock Identification (FIN):	n Number	Group/Lot Identification Number (GIN):

¹ Farm Number means owner can apply for FSA farm loans, disaster assistance, and crop insurance, <u>NRCS programs</u> (Environmental Quality Incentive Program) and be counted in the Agricultural Census, which means more resources to support farms. Apply at the local FSA office.

² A <u>CDFA California Premises Identification Number (PIN) or Location Identifier (LID)</u> is a unique code that is permanently assigned to a single physical location. A PIN or LID allows animal health officials to quickly and precisely identify where animals are in the event of an animal health or food safety emergency.

Goats					
Premises Identification Number	Flock Identification	n Number	Group/Lot Identification Number		
(PIN):	(FIN):		(GIN):		
Swine (Pork)					
Premises Identification Number	Flock Identification	n Number	Group/Lot Identification Number		
(PIN):	(FIN):		(GIN): if qualified		
Insurance Information					
Insurance Provider:		Policy Number:			
Data of Durahasa		Denovyal Data			
Date of Purchase:		Renewal Date:			
Agent Name:					
Contact Number:	24/7 Claims Number:				
Key Coverage / Exclusion:					
Grazing Permits					
Type of Permit (Term Grazing, Te	mporary Grazing, L	_ivestock Use):			
Grazing Allotment:	razing Allotment: Period of Use:				
Cow-Calf Operations (dependent on pasture / forage planning): ☐ Yes ☐ No					
Number, Kind, and Class of Livestock Allowed					
Number	Kind		Class		

Before the Disaster

Identify a Disaster Planning Team

The planning team is not limited to but can be made up of the employer, employees as well as neighboring farms, transportation companies (livestock haulers), county agriculture department, county office of emergency management, county farm bureau, and volunteer organizations that assist with livestock evacuation. It is essential to communicate with the county office of emergency management to know how their plans include your farm and what they can do for you in a disaster. The CARES Resources Available to Livestock Producers has sources.

Initial Disaster Planning Team Discussion Questions include but are not limited to:

	Yes	No	Comments
Do you have a written farm or ranch emergency plan			
that uses an all-hazards approach (comprehensive			
planning for response capacities and mitigation			
actions) and risks to your farm?			
(Refer to the county Hazard Mitigation Plan and/or			
use the MyHazards Mapping Tool)			
Does the plan address how to prepare for each			
hazard and disaster and emergency?			
Does the plan identify vulnerable areas or high risk			
areas within the farm/ranch?			
When was the last update?			
(Annually, or when there are changes on the farm)			
Does the plan address responding in an Incident			
Command System ³ (ICS) structure (chain of			
command) and do you have a farm ICS			
organizational chart (Appendix A)?			
Have you trained on the plan?			
(Annually, or biannual refresher training, and			
onboarding for new employees)			
Have you exercised or drilled the plan with all			
employees?			
(Annually, and following an emergency plan update			
such as when a real-time disaster occurs – lessons			
and best practices)			
Does the farm plan address and ensure employee			
safety?			
Did you include job descriptions with responsibilities?			
Delegate authority to employees who can provide			
oversight during an emergency or disaster.			
Designate responsibilities to the people in charge of			
performing specific actions for each potential			
emergency or disaster.			
Does the city or county emergency operations plan			
(EOP) include the agricultural community in the			
preparedness and response operations?			

³ The Incident Command System (ICS) is the system used to direct, control, and coordinate the efforts of the farm/ranch employees as they work towards the common goal of stabilizing the disaster or emergency in an effort to protect life (including animals), property and the environment.

		Yes	No	Comments
Do you have an agency e	mergency responder		\boxtimes	
contact directory (Append	lix B) with current day/after-			
hours telephone for agend	cies, organizations, and			
companies that can assis	t with immediate emergency			
needs?				
Example Contacts:				
Police department	Feed Supplier			
Fire/EMS department	UC Cooperative			
	<u>Extension</u>			
Local hospital(s)	County Environmental			
	Health CDFA Milk and			
	Dairy Approved to			
	inspect and permit			
Veterinarian	Carcass disposal service			
County Agricultural	CDFA dead animal			
Commissioner	haulers list			
County OEM	County landfill permitted			
	<u>waste</u>			
Animal Care and	Environmental Cleanup			
Control				
Farm Manager proxy	Transportation sources			
(preferably outside of	in case of relocation or			
the immediate area of	evacuation e.g., neighbor			
the farm who can run the farm and is given	producers, truckers/haulers,			
the authority to make	livestock/agricultural			
decisions)	associations, UC			
,	Cooperative Extension,			
	county farm bureau, etc.			
	(see CARES livestock			
County Form Burgay	producer resources)			
County Farm Bureau Do you have a family and	employee emergency			
	(Appendix C) or phone tree			
_	, .			
(automated system) for notifying and recalling employees in an emergency or disaster?				
The checklist should list people that need to be				
contacted in order of priority and include reliable				
after-hours numbers. The list can include but is not				
	m manager and/or assistant			
at all farm sights, company/farm human resource person, farm veterinarian, employees, etc.				
person, farm veterinaria	in, employees, etc.			

	Yes	No	Comments
Do you have a communications plan (Appendix D)			
with a checklist or flow chart to standardize the			
process for quickly and accurately conveying			
information or messages to and between family			
members on the farm and employees and external			
organizations in an emergency or disaster?			
Do you have emergency communication			
equipment, such as two-way radios, public address			
system for workers and first responder notification,			
smart phones and/or emergency band radios,			
landline telephones, etc.?			

Additional things to consider include:

- Have you downloaded preparedness apps that will advise you of a natural disaster
 or potential weather emergency that can lead to a natural disaster? For example,
 <u>CAL FIRE firePlanner</u>, many counties have Fire Safe apps, <u>FEMA App</u> provides
 real-time weather and emergency and can also help you find a nearby shelter if you
 need to evacuate to a safe space, and the <u>National Weather Service Severe</u>
 <u>Weather Alerts and Warnings</u> app.
- Do you have sufficient insurance?

Types of Insurance & Coverage

- Mortality insurance: death of animals due to illness, injury, or natural causes.
- •All-risks insurance: comprehensive coverage against various risks.
- Income protection insurance: loss of income resulting from the death or illness of their animals.
- Business interruption insurance: business losses from interrupted farm operations due to animal disease or other unforeseen events.
- Are all insurance policies reviewed annually, especially when significant changes are made to structures, livestock, land, equipment, liability, or following business entity changes and potential emergencies?
- Additional insurance coverage may be required for "all-hazards" disasters that may affect your farm. For example, if your farm is in a flood-prone area, consider the <u>FEMA National Flood Insurance Program</u> or if near an earthquake fault line consider the <u>California Department of Insurance</u> and <u>California Earthquake Authority</u>.
- Disaster Financial Assistance is not typically available to the private sector. A
 Presidential Declaration may trigger the U.S. Small Business Administration who
 provides low interest loans if the county is included in the declaration.
- The USDA Farm Services Agency (FSA) offers <u>Disaster Assistance Programs</u> to to help farmers and ranchers that have been hard hit by natural disaster events.

Limited Resource Farmer (LRF): USDA uses several definitions under the LRF to facilitate priority access to important USDA programs including credit and grants for conservation practices. Many LRF would also be included in the USDA definitions of limited resources, beginning, and socially disadvantaged farmers. Refer to the USDA LRF Self-Determination Tool.

- LRF refers to farmers who have limited access to the funds and other forms of capital needed to develop a financially sustainable farming operation. "Limited resources" are defined as a combination of limited cash savings, equity, and ability to access credit, as well as limited social capital, including a social network—family, friends and community—that is not able to make substantial financial contributions or create advantageous social connections such as job opportunities, market opportunities, or referrals to advisors or mentors. It is important to note that farmers may have limited resources for a variety of reasons, including deliberate discrimination, lack of generational wealth, and historical circumstances.
- Request a certificate of insurance (COI) from vendors and contractors that work on farm property to manage risk, meet contract terms, and ensure proper coverage for your business. It ensures the vendor or contractor has adequate coverage, protecting your business from unexpected liabilities.

Become a member of an Agricultural, Cattle, Dairy or Poultry Association / Organization because they are good sources of information and may be able to provide support or act as communication liaisons during a natural disaster.

Mitigation Measures

The four (4) phases of emergency management are mitigation, preparedness, response and recovery. An important step in preparation for any natural disaster is to take mitigation measures. Mitigation measures are actions taken to reduce the potential impact of natural hazards or disasters before they occur, such as securing your property, identifying risks in your area, and implementing preventative actions to minimize damage. You should:

- Find and review your county's hazard analysis or mitigation plan, which can be found on the internet or by visiting your county office of emergency management.
- Plan for outside risks from natural disasters, consider risks/threats related to your operations or from specific situations that may start inside your organization e.g., human error, poor training or maintenance, illness, death, theft, fraud, employee morale, faulty equipment or misuse, information technology risks, etc., as well as threats your farm can cause the community such as odor nuisance, runoff of hazardous materials, etc.
- Fill out the Appendix E Know Your Risks form to identify and rank the greatest threats to your farm and plan for those threats. The assumption is to determine the threats that will affect the farm and what mitigation measures you can implement to minimize your risk.

Insurance coverage is an important step in managing risk before a disaster and to help recover from a disaster. Producers should ensure that they have appropriate coverage for their assets.

Natural Hazards/Risks – Examples of Mitigation Measures

These are some examples of mitigation actions you can take to keep your farm, employees, and animals safe.

Earthquakes can damage property and cause injuries and deaths. Earthquakes can also cause landslides (soil and rock) and liquefaction. Implementing seismic mitigation measures can significantly improve barn resilience and ensure continuity of business. Adhere to California building codes and guidelines, and local government seismic ordinances for earthquake resistance to ensure your barn meets minimum safety standards.

Mitigation Measures may include:

- Strengthening and retrofitting non-reinforced masonry buildings and nonductile concrete facilities that are particularly vulnerable to ground shaking.
 Securely attach the barn's sill plate to the foundation using anchor bolts or straps, preventing the structure from sliding off during shaking.
- Add diagonal cross braces, typically steel, within the barn's frame to provide additional stability against lateral forces.
- o Retrofitting building veneers to prevent failure.
- Building a safe room to provide protection during an earthquake.
- Installing window film to prevent injuries from shattered glass.
- Anchoring rooftop-mounted equipment (i.e., HVAC units, satellite dishes, etc.).
- Anchor heavy machinery, storage tanks, and irrigation systems.
- Secure non-structural elements like light fixtures, suspended ceilings, and partitions to prevent collapse.
- o Identify on-site safe shelter areas away from structures that may collapse.
- Although chickens have a natural ability to sense ground movements and exhibit strange behavior before an earthquake, chicken coop sensors detect vibrations caused by tremors and instantly alert via connected devices. This novel approach enhances farm safety and preparedness in earthquake-prone regions.
- Download the <u>MyShake</u> app to get notifications about nearby earthquakes.

Floods are a partial or complete inundation of normally dry land. Floods can damage personal property, buildings, and infrastructure (roads and bridges), disruption of service, and injuries or fatalities. Eroding landscapes means land loss and can put livestock at risk for injury. Wildfire burn scars are a flood risk during heavy rains.

Mitigation Measures may include:

- Use standard tie-downs for propane tanks.
- Install backflow valves to prevent reverse-flow flood damages.
- Routinely cleaning and repairing stormwater drains.
- Clear debris from channels, culverts and trash screens.
- Apply in-ditch and downstream conservation practices e.g., water control structures like low-grade weirs can aid in slowing water flows to reduce the energy in drainage water from eroding channel bottoms and banks, and pipes

- with in-field slots or risers with boards also enable landowners to slow and control water movement.
- Construct earthen berms in advance of a flood can protect farm assets during flooding. (Consideration: flood water that is pushed away from the asset at risk or individual property may worsen the flood conditions in neighboring properties that do not have berms. On-farm strategies should align with regional management as a whole system approach.)
- Implement runoff ponds and swales are some of the oldest and most common stormwater control measures. The amount of water these elements can store or slow is dependent on their size, number, and location.
- Apply sub-surface agricultural drainage systems including surface ditches, subsurface permeable pipes, or both, to remove standing or excess water from agricultural lands.
- Move machinery, feed, chemicals, and fuel to higher ground or protected structures when flood risk is forecasted.
- If, possible, elevate poultry houses to better accommodate flood waters even 1 foot would be beneficial. At least raise the floor level above the surrounding ground.
- Sloping the floor of the coop towards the door can help prevent water accumulation.
- Put in place enough bulk water storage, either permanently designed in place (which if elevated can also provide its own pressure) or portable storage, to provide at least 24 hours of water needs when wells or municipal systems are offline or contaminated. This can provide needed time for repairs or other solutions to water needs.

Wildfires can be mitigated by creating a <u>defensible space</u> in the area between a house and an oncoming wildfire that is maintained free of weeds, shrubs, grass, etc. You may refer to the <u>CAL FIRE Self-Assessment Tool</u> to help with this.

Mitigation Measures may include:

- Create a defensible space or buffer zone cleared of combustible materials (pruning and clearing dead vegetation, cutting high grass, planting fireresistant vegetation) within five (5) feet of farm structures.
- Targeted grazing can reduce invasive weeds (e.g., yellow star thistle), fine fuels (e.g., grasses) and ladder fuels (e.g., shrubs/brush).
- Create fuel and fire breaks around farm structures and other areas to slow or stop the spread of wildfires.
- Install and maintain smoke detectors and fire extinguishers on each floor of their homes or other buildings.
- o Install fire mitigation systems e.g., interior and exterior sprinkler systems.
- Performing safe disposal of yard and household waste rather than open burning for crop management and trash removal.
- Safely using and storing necessary flammable materials, including machine fuels, hay and livestock bedding.

Barn Fires

The electrical system within the farm can be a major cause of layer barn fires and the heaters are the second most common contributor according to experts. Frequent inspection and upkeep are critical.

Mitigation Measures may include:

- An on-site reliable water source is essential. Consult with the local fire department to determine the need. Identify a nearby primary and backup water source with adequate capacity and ask what is required to have access to the water beforehand.
- Verify emergency signs are visible, accurate and properly maintained and ensure egress pathways are free from obstacles.
- o Regularly train employees on the proper use of fire extinguishers.
- Establish policies to keep combustible materials away from ignition sources. Don't store bedding, hay, or other combustible agricultural products in buildings adjacent to combustible material storage unless a cleared horizontal distance equal to the height of the pile is maintained between such storage and combustible materials and buildings per the NFPA 150.
- Create a fire break by installing two-hour fire-rated firewalls in accordance with safety standards to mitigate the spread of fire between different sections of a livestock and poultry farm, including barns, feed rooms, equipment storage areas, and electrical rooms.
- Use properly placed smoke or heat detection devices in non-barn structures and, when possible, use fire alarms in barns that do not cause panic among the hens.
- Use manure and manure belt management systems and practices are essential for mitigating fires. Use flame-retardant belts to move manure. Litter must be removed from poultry houses on a regular basis. Refer to USDA Preventing Fires in Litter Storage Structures and the University of Georgia's Poultry Environmental Quality Handbook.
- Separate manure sheds from layer barns by at least 75 feet. Consult with your insurance company regarding minimum separation distances to ensure uninterrupted insurability and minimize premiums.
- Clearly label areas where flammable materials are stored. Storage areas should be designed to prevent and mitigate fires and fire suppression systems can be used for additional protection.
- Establish breaker trip procedures and tracking.
- o Regularly monitor and control dust accumulation throughout layer barns.
- Perform a yearly inspection and cleaning of heaters.
- Establish a No Smoking Policy.

Extreme Heat is defined by the National Oceanic and Atmospheric Administration (NOAA) as a period of abnormally hot weather, often combined with high humidity, typically lasting two or more days, and can be dangerous, especially for those with underlying health conditions. An "Excessive Heat Warning" will likely be issued by the National Weather Service (NWS). Not only is employee safety a priority but during hot and especially higher relative humidity days, the natural ability of animals to dissipate heat is compromised due to the lowered ability to utilize evaporative cooling causing heat

stress. Heat stress can cause lower milk production, laying hens will produce eggs with thinner shells and broilers grow less quickly, a higher rate of diseases and may lead to increased animal mortality. This may require activation of your emergency animal mortality carcass disposal plan. The temperature-humidity index (THI) is a better measurement of the risk of heat-stress for animals such as cows, broilers and layer hens. It is a better indicator than knowing building temperature. THI can be used to monitor an animal's status and take mitigation measures.

Mitigation Measures may include:

 Implement cooling systems, such as evaporative cooling pads, misting systems, sprinklers, or fans.



Fans increase air velocity and create a cooling effect.

- Install green roofs to provide shade and remove heat from the roof surface and surrounding air.
- Provide natural or artificial shading within the barn or layer house to reduce direct sunlight exposure. Shade structures, curtains, or baffles can help protect the livestock and poultry from excessive heat.
- Using cool roofing products that reflect sunlight and heat away from a building.
- Insulation of external walls and roof.
- o Installation of mechanical ventilation and evaporative cooling system.
- o Monitor ventilation systems to ensure that they are running properly.
- Maintain grass cover on the ground surrounding the poultry house to reduce reflection of sunlight onto the house.

General Planning and Preparedness Considerations

- Have you identified a meeting location or safer spot to account for all workers, family and visitors after an evacuation?
- Designate an Emergency Response Team for your farm. Members of the team should be:
 - Thoroughly trained and physically capable of performing assigned duties
 - o Knowledgeable about the hazards found on the farm
 - Trained in decision making regarding when to take actions themselves and when to either request outside assistance or wait for help to arrive
 - Train members of your Emergency Response Team in the use of various types of fire extinguishers, first aid, and CPR (cardiopulmonary resuscitation).

Basic first-aid supplies should be available as well as emergency phone numbers posted in visible places, inside farm vehicles, and on telephones.

A maintenance program will ensure fire extinguishers are operable. See OSHA

1910.157 on portable fire extinguishers.

- Identify local resources that may be willing and capable of assisting during emergencies.
 - Have you made contact them to create a memorandum of agreement (MOA) or memorandum of understanding (MOU) with them? (Example of local

resources include boarding facilities, veterinary clinics, transport companies and partners, etc.)

- Identify shelter in place or relocation areas on the farm (e.g., higher elevation, relocation/evacuation) to move your assets, if needed.
 - Assets may include livestock and horses, equipment, feed, grain, hay, water, agrochemicals (pesticides, herbicides, etc.)
- Pre-identify several evacuation locations, where possible, such as fairgrounds, other producers/ "buddy farms"⁴, host dairies, other poultry producers, vacant facilities, sales yards, stockyards, barns, feedlots, private stables, racetracks, equestrian centers, agricultural colleges, and humane societies and ask about their policies and abilities to take livestock temporarily in an emergency.

Collaboration with other poultry producers to provide evacuation space will help free up the usual public facilities for housing rescued animals or other uses.

Consider the potential for higher elevation areas on the property to become evacuation sites.

- Identify several evacuation routes to your destination because of roadblocks or infrastructure damage.
- Make a plan to move or transport the animals and agreements or contracts depicted in Appendix F to ensure that the move is seamless in case you need to evacuate.
 - Examples include neighboring producers, livestock markets, local professional livestock haulers and <u>CDFA sale yard directory</u>, milk transporters, heavy equipment for hire, livestock trucking firms, etc.
- Make a list of suppliers or businesses providing services to your farm and ask about reliability of ad hoc emergency assistance e.g., livestock or milk transport, feed delivery, fuel delivery, etc.
- Make a list and/or photograph your farm inventory with the aid of <u>Appendix G</u> Inventory List, include:
 - Livestock (species, number of animals)
 - o Machinery and equipment (make/model, VIN, identification or serial number)
 - Hazardous materials (e.g., pesticides, fertilizers, fuels, medicines, other chemicals)
 - Tools/Supplies (feed, forage, fuel, etc.)
- Proof of ownership

.

⁴ A buddy farm is one that has agreed to receive and care for animals from the threatened property.

- Make sure livestock has some form of identification (microchip, ear/leg tag, leg band, tattoo etc.). Temporary identification may include tags on halters, livestock markers, paint and duct tape with permanent writing including your name and telephone number. Poultry identification includes numbered leg bands, clip-on leg bands, or wing bands.
- Make a business continuity plan that includes continuity of care for animals and employees, and for specific onsite operations such as alternatives for sourcing feed, packing arrangements, processing, etc. as well as continuity of business operations at the relocation site if evacuating.
- Make alternate plans if you're a small farm and you are not home at the time of the disaster. Plans could include designated neighboring producer(s) or farm manager proxy who can tend to your livestock knows where to find emergency resources.
- Develop relationship with the county office of emergency management
 - It is important to have a relationship with the office of emergency management to ensure that they understand your plan and what you may need in case of a disaster. They cannot be prepared to help you if they do not know what you may need.
- Develop a relationship with the local police department and obtain contact numbers.
 - This is a valuable resource for you. They should tour your facility and know where and how the animals are housed to ensure they can support you in an emergency i.e., relocation/evacuations.
- Develop a relationship with the local fire department.
 - They should tour your facility and understand the farm layout and floor plan(s). This will allow them to understand how they can support you in a fire incident and provide you with tips on how to mitigate any fire risks.
- For both law and fire, create a map and post it at the main entrance.
- with satellite imagery and 3D buildings and terrain and overlay your information) or draw freehand a map with the contents of each building listed (use Appendix H to upload your map, and refer to the Division of Agriculture and Natural Resources (ANR) publication 8062 as a guide). The map should include:
 - Buildings and structures e.g., livestock barns or poultry houses, homes, shops, outbuildings, silos (upright or bunker), grain bins, manure storage/pits, refrigeration compressors.
 - Access routes (e.g., roads, crossroads, driveways, lanes)
 - Barriers (fences, gates)
 - Water features (e.g., wells, municipal water supply, hydrants, streams, rivers, ponds, lakes, wetlands; septic tanks, wastewater system, culverts, surface drains, cisterns, drainage ditches, etc.)

Use the Acronym
Finder to find abbreviated symbols to label items on your map.

- Locations of livestock
- Locations of all hazardous materials (e.g., fuel storage, chemicals, fertilizer, etc.)
- Shut-off locations for electricity, water, and other utilities.

In addition to a map, take photos of your overall property and animals.
 Property

 Aerial or wide shots of your entire property, including the layout of pastures, buildings, and infrastructure. Farm buildings (barns, sheds, storage facilities)

Why Photos?
You can't file a
claim if you
can't prove
that you had it
to begin with.

from multiple angles, showing their condition and any distinguishing features. Fencing and gates, highlighting their condition and security measures. Machinery, equipment, tools, and vehicles used on the farm, including serial numbers where applicable. For poultry, take photos of both the inside and outside of the poultry houses. This will document feeding and drinking systems, fans, brooders, and other inside equipment. Include outside equipment such as de-caking machines, litter handling equipment (such as blades, windrowing

equipment, and pulverizing machines). Areas prone to natural disasters or environmental hazards, highlighting the preparedness and protective measures.

Animals

- Individual photos of each animal, especially those with unique markings or high value, to help identify when lost or rescued and taken to an emergency animal shelter. Group photos of herds or flocks, providing a visual record of their overall health and number as well as any identification tags, brands, or animal markings.
- Plan on being self-sufficient for extended periods of time (at least two weeks) during a disaster. Start a stockpile of supplies needed and location identified to protect the farm. (See <u>Appendix I Supply Order Form</u>)

Examples:

- Sandbags and plastic sheeting, in case of flood
- Wire and rope to secure objects
- Extra fuel for tractors and farm vehicles and continuity of farm operations
- Hand tools for preparation and recovery
- Fire extinguishers in all barns and all vehicles
- A safe supply of feed, hay, and water and alternate sources as well as a maintained list of inventory / supplies on hand:
 - minimum of three days to a maximum of 30 days of feed and water on hand; suggest storing feed supplies in various locations on the farm to minimize the effects of the emergency or disaster
 - water that does not rely on automatic watering systems
- A well maintained gas powered generator to maintain critical operations for an extended period of time, especially during power outages or lack of fuel availability.
 - Consider having two generators, one to operate the milking parlor and the second to perform other tasks such as pumping water, running augers and manure systems, etc.

Create an inventory of what you have on hand or have on a standing order, and how much you purchase monthly or weekly. Contact your vendors ahead of time to create an account that can be used to be paid at a later date if have an emergency and can't pay right away.

- When more than four commercial poultry houses are on the property, consider more than one backup generator, each with its own separate fuel tank and automatic transfer switch
- The generator should be ready for use on short notice.
- Ensure having enough fuel storage for at least two weeks of full operation and perform load tests.
- Have a written record including the test date, who performed it, time of day, equipment used, and repairs or maintenance needed.
- When in use, make sure all support systems are connected to the backup power.
- Plan for emergency animal mortality carcass disposal and make sure it is consistent with <u>local enforcement</u> agency and state regulations and the <u>Emergency</u> Animal Disposal Guidance.

Emergencies can often impact livestock directly and may result in a need to deal with higher than normal mortality, so include your best options for dealing with catastrophic animal losses.

Identify Potential Disasters and Risks to Your Farm

Plan for natural disasters that could cause an evacuation, relocation or shelter in place and a major disruption to farm operations. Contact your county office of emergency management to review the county hazard analysis or hazard mitigation plan and identify the natural disasters that could affect your farm.

Questions to consider may include:

- What are your greatest hazards, threats and vulnerabilities? Rank in order of severity. Use the <u>MyHazards</u> tool to identify hazards in your area and CAL FIRE's <u>Fire Hazard Severity Zone Finder</u> or LRA <u>Fire Hazard Severity Zone Maps</u>.
- Which ones are most likely to disrupt your operation?
- Which ones could affect your business most severely? Which ones can continue?
- What are the most critical functions and how will they be performed if there's a disruption?
- What are the consequences of your operation being disrupted?
- Are there any specific functions your operation can do without if necessary?
- How will you continue to operate?
- How long can your operations be disrupted before you lose revenue or equity erodes?
- What controls can you put in place to minimize your risk?

Natural Disaster Planning Examples

These are a few examples of natural disaster planning scenarios to guide you in your planning.

Floods

The 2023 Winter Storms floods had a major impact on Central Valley dairy farmers. According to one dairy farmer. "you kind of get overwhelming sense of doom in a way...how do you stop this? Farmers used massive piles of dirt to reinforce and add onto a nearly 15-mile-long levee designed to hold back the rising tide. There is nowhere safe enough, or large enough, to move the barn of cows. We're a family farm that has been doing this for generations, and I'd



Floodwaters in Monterey County, California

hate to be the one at the wheel, and we lose it all." Another farmer stated, "Over 72 hours, dozens of neighbors and livestock haulers who arrived with trucks and trailers frantically herded some 2,400 cows and heifers into trailers in the dark. Even with weeks of planning, moving a few hundred head would have been difficult; moving this many in flood waters was a nightmare. The cows went to six area dairies that were on safer ground." One industry official estimated \$20 billion in dairy losses, which is California's number one agricultural industry, generating \$7 billion in revenue statewide.

Planning Considerations include but are not limited to the following:

- If evacuation is not possible, allow livestock access to higher ground, especially in areas prone to flooding.
- If necessary, tie interior gates open to give cattle access to more drinking water and to provide them with a better chance of moving to safer/higher ground.
- If you can't evacuate all animals, prioritize them based on value, age, breeding status, and other factors. Record animal identification of those left behind.
- Make sure cattle are uniquely and permanently identified in case they get displaced, lost, or even stolen.
- In an emergency, cattle and calves can be temporarily identified using spray paint or paint sticks. Paint should not take place of permanent animal identification, but it may provide a quick, visible method of identification after a storm. Photos or video of animals and equipment is useful for identification and insurance purposes.
- Store essential operation records and images in a waterproof safe or at an off-site location as well as back up electronic files using cloud storage services.
- The primary driveway into the farm should have adequate drainage to prevent flooding. The road should be well packed with a solid base that will hold up to heavy equipment and trucks during extreme conditions.
- Take plenty of water, feed, hay, and veterinary supplies to the evacuation site.

- Know the possible evacuation routes and any emergency traffic patterns by going to Caltrans <u>QuickMap</u> or the county emergency management website.
- Know livestock movement requirements if you evacuate out of state and have health papers ready in advance.
- Livestock have a natural instinct to move away from flash flood waters and will generally seek higher ground if they can. Livestock will initially panic during flash floods and will fight fences if they are impeding their movement away from floodwaters. Be sure your pasture is fenced in a way that maximizes access to high ground to minimize injury and death.
- In the event of livestock fatalities (not from a contagious disease) and when there is No Declared Emergency or Quarantine Notice issued by the California State Veterinarian, carcasses must be sent to rendering or other permitted alternative; disposal of dairy mortalities on-site will be considered by Regional Board to be a violation of the California Water Code, and by CDFA to be a violation of FAC 19348 (a).
 - Local government, typically public health or environmental health has oversight of livestock mortalities due to a natural disaster.
- It is essential for livestock operators with animal waste management systems to regularly check on structures in order to prevent a manure storage spill during flooding and snowmelt.
- Dry houses out as soon as possible if they were flooded. Watch out for rising ammonia levels and other gases in your houses, which can reach toxic levels.
- Always take someone with you in houses that have flooded and are still flooded and/or have dead birds, for safety.
- Check feed for mold. If it was flooded, order more if trucks are able to access your farm.
- Chick and feed deliveries and live haul scheduling is done by the poultry company. If the company is damaged, this will impact your operation and could threaten the life of the flock. Stay in constant contact with our poultry company as decisions must be made by the company and relayed to you.
- Watch for insects, such as fire ants, as well as displaced wildlife. Rodents can cause a problem in your poultry houses, feed, feed lines, etc. and will be more prevalent after a hurricane and flooding.

Wildfires

Wildfires are increasing in frequency and severity due to climate issues. Wildfires may not affect a farm directly in terms of evacuation, but it can cause injuries such as burns, inhalation of smoke and particulate matter, underlying conditions are aggravated and adverse effects to dairy cattle and their milk production. It is important to keep your animals safe from harm as well as your employees.



Oak Fire, Mariposa, California, July 23, 2022

Planning Considerations include but are not limited to the following: **Livestock**

- Create defensible space around barns and pastures like you do for your home.
- Develop an evacuation plan, so that you know where to take animals in an
 emergency. Contact local fairgrounds, stockyards, buddy farms, host dairies, vacant
 facilities, sales yards, stockyards, barns, feedlots, private stables, racetracks,
 equestrian centers, other poultry producers, and humane societies for temporary
 shelter. It is important to communicate with the county office of emergency
 management to understand the situation and request assistance, if needed.
- In an active wildfire, you may be unable to enter evacuation areas to rescue your livestock especially if your county doesn't have a Livestock Agricultural Pass Program. If a wildfire is imminent such as during an evacuation warning, cattle grazing land may be moved to a safe location away from the immediate danger zone. Cattle can temporarily be relocated to other pastures, holding facilities or other ranches or facilities to ensure their safety.

Butte County rancher Dave Daley lost over 85% of his uninsured herd...reported losing more than 300-head of grazing cattle (out of 400-head) and a "legacy" that has been in his family for six generations.

North Complex Fire, Aug-Sept 2020: full story

- Make transportation arrangements and if you don't have a trailer, arrange transportation with companies or neighbors in advance.
- Keep essential documents like animals' medical records, registration papers, and photos, along with your disaster kit.
- Store essential operation records and images in a fire-resistant filing cabinet or fireproof safe or at an off-site location as well as back up electronic files using cloud storage services.
- Leave them in a cleared area with enough hay for 48-72 hours if you must leave animals behind. Don't rely on automatic watering systems.
- Livestock are often injured or killed by fleeing from a wildfire into fences and barriers.
- Report location, identification and disposition of your livestock to the authorities responding to the fire, especially if your animals are aggressive.
- Check surviving livestock for signs of injury. Health disorders such as burned eyes, burned areas and lung inflammation and edema from smoke inhalation are common after livestock experience wildfire. Have your livestock inspected by a vet as soon as possible. It can take a while for symptoms to appear, so monitor your cattle for several weeks after the fire.
- Provide plenty of water to clear the airways.
- Limit exercise for about 4-6 weeks during unhealthy air quality.
- Limit dust exposure by feeding low-dust or dust-free feeds and sprinkle or mist water on livestock holding areas.

- In the event of livestock fatalities (not from a contagious disease) and when there is No Declared Emergency or Quarantine Notice issued by the California State Veterinarian, carcasses must be sent to rendering or other permitted alternative; disposal of dairy mortalities on-site will be considered by Regional Board to be a violation of the California Water Code, and by CDFA to be a violation of FAC 19348 (a).
 - Local government, typically public health or environmental health has oversight of livestock mortalities due to a natural disaster.

Employees – Farmworkers

- Farmworkers will be affected by particulates in the air, but a farm owner can check air quality information by going to the following sites and sign-up to receive information by telephone, email, text, etc.:
 - o U.S. EPA AirNow
 - o U.S. Forest Service
 - o Interagency Wildland Fire Air Quality Response Program
 - o California Air Resources Board
 - o Local air pollution control and air quality management districts
- Provide proper respiratory protection equipment, such as disposable filtering facepiece respirators (dust masks), other half facepiece respirators, or full facepiece respirators.
 - o N95 Mask Commonly Asked Questions
 - o "Using Disposable Respirators" (in English and Spanish)
- Training employees according to <u>section 5141.1 Appendix B</u> of the Department of Industrial Relations.
- Develop a system for communicating wildfire smoke hazards in a language and manner readily understandable by all employees and encourage employees to inform the employer of wildfire smoke hazards without fear of reprisal.

Barn Fires

Wildfires may not be the only risk to your farm. A farm structure like a barn can go up quickly and burn fast. The <u>Animal Welfare Institute's (AWI) 2022 Report</u> on Barn Fires can serve as guidance to barn fires. Consider inviting your local fire department to tour your farm and barns to become aware of the location of hazards and water sources. By familiarizing your fire department with your farm, they know what to expect and will develop some basic guidelines. They will be able to effectively respond to a barn fire in a safer manner.



LNU Lightening Complex Fire, Napa, Solano, Lake, Sonoma. Yolo August 2020

Planning Assumptions include but are not limited to the following:

 At no time will a firefighter put their own personal safety in jeopardy to save an animal from a barn or fenced area.

- Firefighters focus on controlling wildfires and may not evacuate livestock. They might cut fences or open gates for trapped animals.
- Familiarize yourself with NFPA 150 Fire and Life Safety In Animal Housing Facilities Code that establishes life and safety requirements for both animal handlers and animal in all types of animal housing facilities where animals are kept for any purpose, including barns, stables, kennels, animal shelters, veterinary facilities, zoos, laboratories, and racetracks. This code is intended to prevent the loss of animal life, human life, and property from fire or other emergencies by providing the minimum requirements for the design, construction, operation, and maintenance of facilities where animals are housed, including, but not limited to, rest, feed, work, exercise, and production areas.
- If the barn is not fully involved and the roof is not on fire, evacuation of some animals may be possible.
- If there is a series of connected barns or other barns in close proximity, it may be more effective and safer to evacuate the animals in those barns versus the barn that is on fire.
- Approach all animals with extreme caution as they are frightened and can be very dangerous.
- Evacuating animals from a barn can be extremely challenging, and actually
 impossible in some cases. As an example, for horses, it will take an experienced
 person approximately 1 minute to halter and lead that horse 100 feet, if they
 cooperate.
- Use exterior stall doors whenever possible for evacuating animals instead of going inside the barn.
- Maintain a minimum of two feet of gravel, cement, or other non-combustible material around combustible structures.
- Additional recommendations can be found on page 13 of the <u>Animal Welfare</u> <u>Institute Annual Report</u>.

California Standard Statewide Evacuation Terminology

It's always difficult to predict how much or how little time you might have to decide what you will do with your livestock and have to gather equipment, supplies, and transportation. That's why it is so important to prepare in advance. It is imperative to get familiar with evacuation warnings and orders not only to prepare for the onerous task to evacuate your livestock as well as yourself, your family and employees.

- ⇒ Evacuation Order: Immediate threat to life. This is a lawful order to leave now! The area is lawfully closed to public access. It's critical to follow all directions from public officials ensure evacuating safely.
- ⇒ Evacuation Warning: Potential threat to life and/or property. Those who require additional time to evacuate, and those with pets and livestock should leave now.
- ⇒ Shelter in Place: Go indoors. Shut and lock doors and windows. Prepare to self-sustain until further notice and/or contacted by emergency personnel for additional direction. Make sure to move your livestock to a protected barn or other designated shelter.

Options During an Evacuation

Different animals may require unique response actions, depending on the disaster, to achieve the lowest overall risk. Some natural disasters such as wildfires, hazardous materials spill in the area, extreme weather or simply the inability to evacuate because of infrastructure damage.

Options

Shelter in Place: Depending on the natural disaster and when safe to do so, staying inside a designated safe area on the farm is the best option to protect people and animals from immediate danger, rather than attempting to evacuate due to the severity of the situation. This option requires the least amount of time and effort.

Planning Considerations:

- Ensure all livestock is safely secured in one or more barns and other designated shelters on the farm with ample living space (enough space roughly four times its body size) and they are protected by sprinklers.
- Water pumps for the sprinkler system have backup power. Don't rely on automatic watering systems.
- If time allows create a fire break for further protection.
- In an area prone to wildfires, you should create a defensible space or buffer zone cleared of combustible materials.
- Ensure the shelter is sturdy and can withstand high winds and heavy rains.
- Provide shade and enough water for animals during excessive heat. Provide warm, dry bedding for animals during extreme cold or heavy rain.
- Provide training on the shelter in place plan, evacuation plan, communication procedures, shutdown procedures, and potential emergencies and disasters that can warrant a shelter in place situation.
- Ensure availability of emergency supplies such as stockpiled food, clean water, first aid kits, and necessary medications for both humans and animals as well as backup power (generator) and fuel, and all support systems are connected to backup power.
- Stay informed about the situation through weather reports, county office of emergency management website, county alert system, to know when it is safe to leave the shelter.
- Relocate: Move livestock to an outdoor on-site or alternate location on or nearby the farm.

Planning Considerations:

- You have sufficient time, personnel, and equipment to allow you to round up and move the livestock to a pasture that is safely away from danger (i.e., large field with food and water).
- During floods, ensure there is access to higher ground/elevation.
- When moving animals to a pasture, ensure it is at least one (1) acre and does not have any hazards such as barbed wire fencing.
- A safe outdoor location is a safe open space that is overgrazed, recently irrigated, has constructed fire breaks, and is fenced.
- □ | **Evacuate**: Depending on the disaster and the stability of the shelter you have for your livestock, you may need to evacuate them.

First, determine where you will go. Do you have friends or relatives who are capable of housing livestock during the disaster? You can also consider fairgrounds or other livestock evacuation locations. Another thing you will need to do ahead of time is arrange how livestock will be transported.

Animals should be in good health and vaccinated. Otherwise, the animals could spread disease among themselves, or to shelter workers from bites for example. Ensuring the good health of animals before a disaster occurs should be a priority for animal owners.

Planning Considerations:

- Know where to take animals in an emergency for temporary shelter.
- If you don't have a trailer, arrange transport with companies or neighbors in advance.
- Keep animals' essential documents like medical records, registration papers, and photos, along with your disaster kit.
- Proof of Ownership is a must. Ensure livestock has some form of identification to have a better chance of reuniting with them. Forms of Identification may include any of the following as proof of ownership.
 - Ear/leg tag
 - Body brand
 - Collaring
 - Microchip
 - Animal body marking crayons or sprays that are weatherproof for marking dry or wet animals.
 - Leg band or bracelet
 - o Clipping information into the livestock's fur by shaving it
 - Hoof brand
 - o Tattoo body or lip
- If you are not home when a disaster happens, have a designated neighbor who can tend to your livestock, knows your evacuation procedure, knows where your emergency kit is and has your emergency contact information available.
- ☐ Free Livestock: In fast-moving wildfires and floods, livestock owners may be forced to simply turn their livestock loose. You may need to open gates and/or cut fences to free the animals "when safe to do so".

Planning Considerations:

- Livestock cannot be moved to a safer area.
- There is no danger to people or vehicular traffic from freeing the animals. Public safety takes precedence. It is possible to open fences in a way that directs animals away from roadways and populated areas.
- You have sufficient time and personnel to open gates and/or cut fences to allow the animals to avoid the wildfire without placing you and your employees in danger.
- Notify the county public safety officials of the decision to free livestock.
- See Proof of Ownership under Evacuation.

You may choose not to evacuate to protect your property and livelihoods, or if you do evacuate, you may not wait until the evacuation order is lifted and risk reentry. Both choices are a safety risk. The Livestock Agricultural Pass Program saves lives.

Keep In Mind!

You may not be present when an event occurs on your farm or ranch. It's essential to include all pertinent information about your farm/ranch property, family members, farm workers, and animals in your plan and place it in an easily accessible location so that everyone can be prepared to respond to a natural disaster.

The program allows commercial farmers and ranchers limited access to their properties located in restricted areas to conduct essential commercial agricultural activities such as tending to their crops or livestock during or following a natural disaster and only when safe to do so and at the discretion of the public officials. Search online for active programs in your county or programs in development.

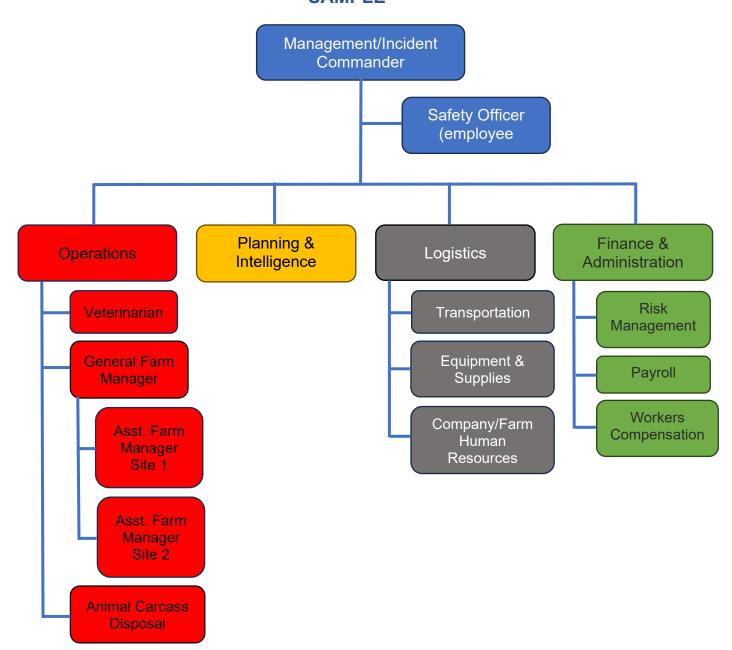
PREPAREDNESS IS AN ONGOING PROCESS.

Be Prepared!

APPENDIX A: ICS ORGANIZATIONAL CHART

(Add positions according to your level of response and employee skills.)

--SAMPLE--



APPENDIX B: EXTERNAL EMERGENCY RESPONDER CONTACT DIRECTORY

(e.g., veterinarian(s), county emergency management, agricultural commissioner, California Department of Food and Agriculture, <u>UC Cooperative Extension</u>, <u>CDFA districts</u>, <u>California Farm Bureau Federation</u>, <u>Western Untied Diaries</u>, businesses that supply services to the farm, milk processor, feed and fuel delivery, <u>dead animal haulers</u>, transportation companies, your insurance agent, etc.)

Agency	Name of Primary Contact	Landline and/or Cellular No.	After-hours No.

APPENDIX C: EMPLOYEES EMERGENCY INTERNAL CONTACT DIRECTORY

(Employees potentially used during an emergency or disaster.)

Name	Title/Job	Cellular No.	Alternate No.

APPENDIX D: COMMUNICATIONS PLAN

STEP 1	KEEP IT SIMPLE Be sure your plan is clear and easy to execute. The process should be as streamlined as possible, with each person clear on the chain of authority and that chain should be as short as possible. Remember that people can get stressed in an emergency, so providing simple tools like checklists can be a big help.
STEP 2	ROLEPLAY AND PRACTICE Roleplay scenarios for every conceivable emergency on a regular basis to keep everyone alert, prepared, and ready to react. Be sure to test the overall system. Identifying and correcting weak spots is an important step in perfecting your emergency alert process.
STEP 3	BE FAST – BE SMART How fast you communicate during an emergency can save lives or prevent injuries, but if you don't give enough information or you give the wrong information, it can make things a lot worse. The first minutes are crucial, so protocols and timelines should be established in advance. Be specific instead of just listing what needs to happen, set specific goals like "Notify employees within minutes."
STEP4	COVER ALL YOUR BASES Make sure you think through everywhere people might be during an emergency and detail how you'll reach them. Don't make people go outside your plan for contact lists or other resources include it in your plan. In addition to people on site, include families, the community and the media. Prepare your press releases and statements for each situation in advance so that only the specifics need to be added when the time comes.
STEP 5	CONSIDER COMMUNICATION METHODS There are so many ways to alert people during an emergency e.g., two-way radios, public address system for workers and first responder notification, smart phones and/or emergency band radios, landline telephones, group chat or social media text messaging, sirens, alarms, digital signage, websites, SMS, etc. Don't rely on just one way to reach people but figure out what works best for your farm or ranch. Don't forget to build in contingencies in case your computer network or phones or power fail. Also, never underestimate word-of-mouth to get people informed and mobilized. Make sure to train your staff and practice through drills and safety evacuations.
STEP 6	THINK ABOUT THE FUTURE Be sure to include recovery tactics in your plan. Getting up and running as soon as possible after an emergency is critical as well as communicating with the customers, service providers, media, etc. Showing progress toward normality after an emergency is essential to restoring trust, so they continue to do business with your farm or ranch.

APPENDIX E: HAZARDS AND RISK ANALYSIS

THREATS	PROBABILITY	SEVERITY	TOTAL
	(0-5)	(0-5)	(0-25)
Determine which threats could affect your business functions and processes. Add additional threats not listed in the bottom rows under "Other."		Assign each threat with a number 0 to 5 to indicate the amount of damage it could cause your business. (Consider duration, magnitude, and extent of reach—e.g., one floor, the entire building, a neighborhood, the entire region, etc.)	Multiply Probability with Severity and enter the Total. Plan for the highest-ranking threats (17–25) as soon as possible. Assume these threats will strike your business and determine what controls you have in place or could implement to minimize your risk.

THREATS	PROBABILITY (0-5)	SEVERITY (0-5)	TOTAL (0-25)
Natural Disasters			
Earthquake			
High Wind / Convective Storms / Hail			
Hurricane			
Severe Winter Weather			
Tornado			
Wildfire			
Loss Of Power			
Communications			
Critical Equipment			
Power (electricity, gas, steam)			
Premises			

APPENDIX F: VENDOR AGREEMENTS OR CONTRACTS

It's essential to develop agreements and contracts ahead of a disaster to ensure the vendor, organization, or other entity (i.e., neighboring producer) will provide uninterrupted service. Review and update the contract or agreement annually.

Resource	Vendor, Organization or other Entity	Contract or Agreement Term
Transportation (e.g., neighboring producers, private companies (professional livestock haulers/milk transporters, animal haulers), dead animal haulers, livestock trailers, experienced handlers and drivers, trade groups, processors, etc.)		
Veterinary Services (i.e., medical services and medicines)		
Animal Mortality (i.e., rendering, landfill)		
Shelter (e.g., host dairies, vacant facilities, fairgrounds, sales yards, stockyards, barns, feedlots, etc.)		
Equipment Rentals & Owned (e.g., heavy equipment, trailers, generator, fencing, water buffalo trailer, portable water pump, portable livestock panels, etc.)		
Supplies (e.g., hay, grain, feed, forage, water, fuel, biosecurity disinfectants, etc.)		
Neighboring Producers (e.g., livestock trailer, truck(s), drivers, buddy farm, etc.)		
Resource Type		
Resource Type		
Resource Type		
Cattle Organizations		
Resource Type		
Resource Type		
Resource Type		

APPENDIX G: INVENTORY LIST (value amount is for insurance claims)

ANIMALS					
Livestock Type	Quantity (unit)	Value per Unit	Location (evacuated or animal mortality)		
Beef Cattle					
Beef Bulls					
Steers					
Beef Heifers					
Replacement Beef Heifers					
Replacement Beef Heifers on Pasture					
Beef Cows					
Stock Cows					
Stock Calves					
Feedlot Cattle					
Feeder Cattle					
Slaughter Cattle					
Dairy Cattle					
Lactating Dairy Cows					
Dry Dairy Cows					
Replacement Dairy Heifers					
Replacement Dairy Heifers on Pasture					
Dairy Bulls					
Dairy Calves					
Veal Calves					
Poultry					
Breeder					
Broiler/Fryer					
Table Egg (Layer Hens)					
Hatchery (Pullets)					
Turkeys					
Ducks/Geese					
Other Fowl					
Swine					
Boars					
Sows					
Gilts					
Piglets					
Barrows					
Feeder Pigs					
Grower Hogs					
Market Hogs					

Sheep			
Stock-Sheep Production			
Lamb Feeding Operations			
Goats			
Dairy Goats			
Meat Goats			
Fiber Goats			
Dual-Purpose Goats			

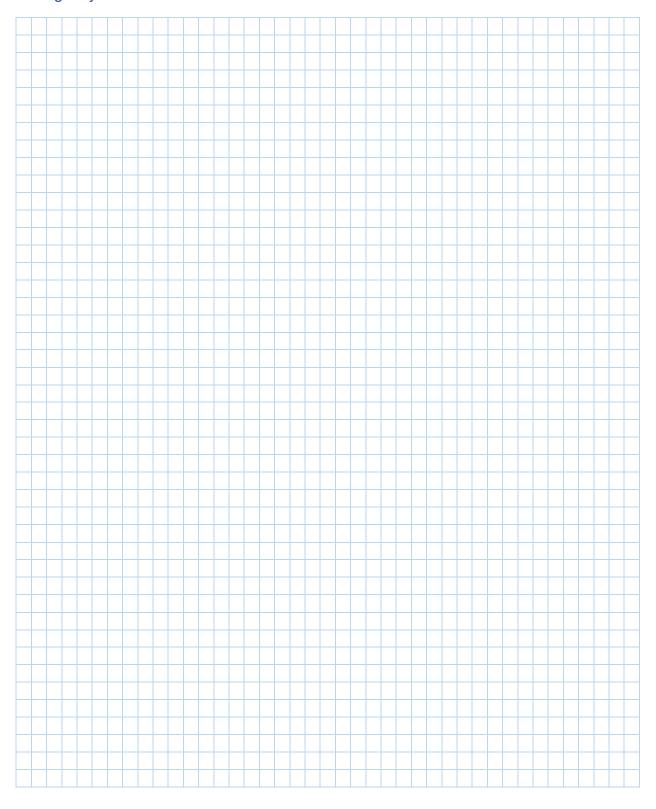
TRANSPORTATION		
Vehicles (Make/Model/Year)	VIN # (17 digit no.)	Value
Livestock/Utility Trailers	VIN#	Value
Livestock/Ottlity Trailers	VIN#	value
Tractors (Make / Model / Year/Type)	Serial #	Value
Agricultural Machinery (Make / Model / Year)	ID / Serial / Model / Engine #	Value
Tools / Supplies	ID#	Value
10013 / συρμπεσ	10 π	Value

Miscellaneous	ID#	Value

HAZARDOUS	MATERIALS			
Agrochemicals (pesticides, herbicides, insecticides, fertilizer, veterinary chemicals; and fuel, solvents, biosecurity disinfectants, etc.)	Location	Quantity	Expiration or Recommend Date	
Medications New (N) / Used (U) / Partially Used (PU) (dips, wormers, dry cow and mastitis tubes, needles, syringes, etc.)	Location	Quantity on hand	Order Date	Receipt Date
Waste (organic, non-organic, used oil/fuel)	Location	Quantity	Recycle or Da	
Othor Matariala				
Other Materials (asbestos materiel, creosote, grease guns/containers, used silicone guns, batteries, etc.)	Location	Quantity	Recycle or Disposal Date	

APPENDIX H: FARM OR RANCH SITE MAP Overview or Detailed map including outlying property and designated disposal areas. Make sure to number each building and species housed within, utility shutoffs/panel, fences/gates, critical items (hazardous materials, tanks, water well, etc.). Number Click on the picture tab below or do a right click and select change picture to insert a map or use the **grid** on the next page.

Draw freehand and label map on this grid or prepare on a computer and add to the Emergency Plan.



APPENDIX I: SUPPLY ORDER FORM

Supply Order Form

(hay, grain, feed, forage, water, bedding, fire equipment, first aid kit, evacuation kit, personal protective equipment [N95 masks, nitrile powder-free gloves, safety goggles, face shields, disposable booties, bouffant caps], biosecurity disinfectants, etc.)

Inventory Date	ltem	Quantity in Storage	Quantity Needed to Evacuate	Storage Location	Vendor	Unit Cost	Total Cost

APPENDIX J: SHELTER IN PLACE CHECKLIST

When an emergency happens at your facility, the first decision to make is whether to evacuate or shelter in place. If ordered to shelter in place, it is important to have sufficient supplies and equipment on hand to support the needs of employees and visitors for periods ranging from several hours to several days. Use this checklist to determine if you have the necessary items readily available.

Communication Equipment

Communication devices/smartphones capable
of receiving NOAA and local news updates
Cell phones and/or satellite telephones have
been tested, and their limitations noted
Emergency or portable generators with vented
exhaust systems that can safely supply power to
the facility during an emergency
Public address system(s)
Cache of office supplies (e.g., paper, notepads,
staplers, tape, whiteboards, markers, etc.)
Landline telephone

Emergency Equipment

At least one current copy of the Evacuation Plan
is stored in the facility
Battery-powered or hand-cranked flashlights, or
glow sticks
Fire extinguishers
Blankets
Pry-bars (for opening doors that may have been
damaged or blocked by debris)
Stretchers
Automated External Defibrillator(s)
Trash receptacles, trash can liners, and ties
Supply of commonly used tools
Portable heaters safe for indoor use
Plastic sheeting (preferably pre-cut to size to
reinforce windows & doors)
Duct tape for sealing cracks around doors and
windows
Plywood sheets to reinforce windows and doors

First-Aid and Other Safety Supplies

	Adhesive tape and bandages in assorted sizes Safety pins in assorted sizes Medical gloves in assorted sizes Scissors and tweezers Antiseptic solutions and antibiotic ointments Supply of moistened towelettes Supply of non-prescription drugs (e.g., aspirin and non-aspirin pain relievers, anti-diarrhea medications, antacids, syrup of ipecac, laxatives) Petroleum jelly Eye drops Wooden splints Thermometers Cotton towels Fold-up cots First aid handbook
	Adequate amounts of food and water for personnel and animals sheltered in the facility for the duration of the expected event(s)
Sanitar	y Supplies
	Toilet Paper Paper towels Personal hygiene items Disinfectants Chlorine bleach Plastic bags Portable chemical toilets when flush toilets are not available

APPENDIX K: LIVESTOCK AND POULTRY RESOURCES

GOVERNMENT AGENCIES

- California Department of Food & Agriculture (CDFA)
 - Animal Health Branch
 - Bureau of Livestock Identification
 - Milk & Dairy Food Safety Branch
 - Meat, Poultry & Food Safety
- <u>California Department of Industrial</u> <u>Relations</u>
- County Agricultural Commissioners
- Food & Drug Administration
- Local County Health Departments
- U.S. Centers for Disease Control (CDC)
 & Prevention-Agricultural Worker Safety
 & Health
- <u>U.S Department of Food & Agriculture</u> (USDA)
 - NVAP Reference Guide Sheep/Goat ID
- <u>U.S. Occupational Safety & Health</u> Administration

LEGISLATIVE & REGULATORY INFORMATION

- California Legislature
- <u>California Legislative Information</u> (Bill Search)
- California Food & Agricultural Code
- U.S. California House of Representatives
- U.S. Senators

ORGANIZATIONS & ASSOCIATIONS

- Agricultural Council of California
- California Beef Council
- California Cattle Council

- California Cattlemen's Association
- California CattleWomen
- California Dairy Campaign
- California Dairy Institute
- California Dairy Quality Assurance <u>Program</u>
- California Farm Bureau Federation
 - o County Farm Bureau
- <u>California Grocers Association</u> (Local Advocacy)
- California Milk Advisory Board
- California Milk Processor Board
- California Pork Producers Association
- California Poultry Federation
- California Sheep Commission
- California Woolgrowers Association
- Cattlemen's Foundation
- Dairy Cares
- Dairy Council of California
- Dairy Farmers of America
- Livestock Marketing Association
- North Valley Dairy Goat Association
- Pacific Egg & Poultry Association
- Redwood Empire Dairy Goat Association
- Western United Dairies
- Pork Checkoff
 - o Pork Quality Assurance Assessment Guide
- Southern California Dairy Goat Association