

# Farmers and Ranchers,



# Protect Your Operation Before, During, and After a Disaster

David Smith\*

exas is home to more than 247,000 farms and ranches, where agriculture contributes more than \$100 billion dollars annually to the state's economy. But the state is also home to disasters such as wildfires, drought, floods, tornadoes, and hurricanes. Agricultural producers need to prepare for weather-related and other emergencies by creating a disaster plan. If you have a plan of action, you can help preserve life and property, and minimize your recovery time.

When creating a disaster plan for your farm or ranch, consider the steps to take *before, during,* and *after* a disaster. The specific steps will depend on your operation and the types of disasters that are most likely to occur locally.

All disaster plans should address three major types of potential loss:

- The safety of family members, coworkers, first responders, rescue workers, emergency personnel, pets, and livestock.
- The protection of crops, equipment, machinery, agricultural chemicals, water sources, feed sources for livestock, and other bulk materials stored on the farm.
- Personal finances, insurance, and other economic issues that result from loss of life, property, and temporary loss of income.

For information on how to protect your family, pets, and personal property, see *Texans, Get Ready! Be Prepared to Survive and Recover from a Disaster,* which is available from the Texas AgriLife Extension Bookstore at https://agrilifebookstore.org/.

# Before a disaster

Keep an updated inventory of your property, livestock, and chemicals, and assemble supplies in preparation for emergency situations. Gather disaster supplies, and keep the farm prepared to respond to disasters.

\*Extension Program Specialist–Biological and Agricultural Engineering, The Texas A&M University System

E-617 10/12







**Inventory:** Account for livestock, equipment, and potentially hazardous substances on the farm:

- Use tags or brands to identify all livestock. Keep a list of the stock that includes a description of each animal. You will need this information to be able to claim the animals that are displaced during the disaster.
- Keep an inventory of all farm machinery and equipment, including makes and models.
- List the amounts and locations of pesticides, fertilizers, fuels, medicines, and other chemicals. During a disaster, these substances can contaminate water and feed, which could harm people and animals. Give the list to the emergency personnel before they enter the disaster area.

**Disaster supplies:** Store these supplies to help protect the farm:

- Sandbags and plastic sheeting (in case of flood)
- Wire and rope to secure objects in place
- Lumber and plywood to protect windows
- Extra fuel (stored out of flood-prone areas) for tractors and other machinery
- Hand tools to help in preparation and recovery efforts
- Fire extinguishers in all barns, tractors, and other vehicles
- An adequate supply of feed for livestock
- A gas- or diesel-powered generator in case of power loss

**Farm preparation:** Take these steps to minimize the damage to livestock and property, especially in floods and wildfires:

- Establish escape routes for cows, horses, sheep, and other livestock. In a flood, they will need to move to higher ground.
- Plan how you will provide feed and water for relocated livestock.
- Turn off electrical power to machines, barns, and other structures.
- Plan how to move hay, machinery, fuels, pesticides, fertilizers, and other chemicals out of flood-prone areas.
- To protect emergency personnel, keep an updated map or sketch of your property that shows the location of farm hazards such as fuels and chemicals.

### During a disaster

Like people, animals experience significant stress during disasters. Take these steps to minimize the impact on livestock and property:

- Make sure all emergency responders know about the hazards on your farm, including liquid fuels, propane tanks, acetylene and oxygen tanks, firearms and munitions, and any chemicals that might require special personal protection equipment.
- When livestock feel threatened, they often seek shelter in barns. When it's safe to do so, drive the animals out of barns that may become flooded or succumb to wildfire. Once relocated, make sure that the livestock have a good source of food and water.
- Move hay, machinery, fuels, pesticides, fertilizers, and other chemicals out of the areas affected by the disaster.
- Secure loose items such as tools, logs, lumber, pipes, and machinery parts.
- Turn off the electrical power to machines, barns, and other structures that may become damaged or destroyed.

# After a disaster

Once the initial emergency situation has passed, you will need to tend to livestock, utilities, and inventory. You may also want to seek financial aid from nonprofit and governmental agencies.

#### Livestock

- Make sure that the livestock have plenty of water and food that are not polluted. You may need to truck in water and food or remove the livestock from a contaminated area.
- After a flood, spray the livestock with insect repellent to protect them against disease-carrying mosquitoes.
- Dispose of trash, limbs, wire, and damaged equipment that could harm the livestock. Clear and repair damaged fences.
- Check all livestock for signs of infectious disease such as pneumonia or foot rot.
- Watch out for signs of heat stress in livestock, such as increased respiration, panting, and frothing at the mouth. Cattle are particularly vulnerable to heat stress when being moved and confined in crowded pens with no way to dissipate heat. Provide shade, plenty of water, and air movement to help protect them against heat stress.
- Have a veterinarian examine all animals that die immediately after the disaster.
- Immediately dispose of the carcasses. Rendering plants will process some dead animals. Those not processed should be buried away from bodies of water at least 3 to 4 feet deep. To speed decomposition, cover them with quick-lime.

#### Utilities

- If the electric power was not disabled before the disaster, look carefully for signs of damage to the electrical components. Contact your electric utility company if you suspect damage, and ask for advice on how to determine whether your electric system is safe to turn back on.
- Never try to turn the electricity back on in areas that have been damaged before first having the system checked out.
- Have the gas company check the system for leaks before continuing service. Gas lines can also sustain significant damage in a disaster.
- If you have a water well that may have been contaminated by flooding, have the water tested before consumption.

#### Inventory

- Make a list of all livestock, fuels, chemicals, machinery, and equipment. Compare the list to the inventory that you prepared before the incident.
- Note any lost livestock, and tell emergency personnel about any hazardous materials such as fuels, pesticides, fertilizers, or other chemicals that have leaked.
- Check your machinery and equipment for damage.
- For insurance or emergency assistance purposes, photograph and document all damage.









#### Farm disaster assistance

Agriculture producers need not face a disaster alone. Farms or ranches that have suffered losses because of a disaster may be eligible for assistance under one or more of the following Farm Service Agency programs (http://www.fsa.usda.gov/FSA/):

- The Emergency Conservation Program (ECP) provides emergency funding for farmers and ranchers to rehabilitate farmland that is damaged by wind erosion, floods, or other disasters.
- The Noninsured Disaster Assistance Program (NAP) provides financial aid to eligible producers affected by natural disasters. It covers noninsurable crop losses and planting that is prevented by disasters.
- The Emergency Loan Program provides emergency loans to help producers recover from production and physical losses from drought, floods, other natural disasters, or quarantine.
- The Emergency Haying and Grazing Assistance program provides emergency haying and grazing of some Conservation Reserve Program acreage after weather-related disasters.
- The Supplemental Revenue Assistance Payments (SURE) program is available to producers who suffer crop losses in counties that are declared a disaster by the Secretary of Agriculture.
- The Livestock Indemnity Program (LIP) provides cash to producers if more livestock than normal die because of the adverse weather.

#### **Texas A&M AgriLife Extension Service**

AgriLifeExtension.tamu.edu

More Extension publications can be found at *AgriLifeBookstore.org* 

Educational programs of the Texas A&M AgriLife Extension Service are open to all people without regard to race, color, sex, disability, religion, age, or national origin.

The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating.