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## Resources for Farms Impacted by Flooding

During times of extreme weather, resources exist for agriculture producers in Michigan. This document serves as a tool to help farmers quickly identify what resources are available and where they can be found.

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### Information on the Current Situation

- [Michigan flood: Resources to assist flood-impacted areas - Recent flooding has submerged communities and neighborhoods, and left many Michigan residents with unanswered questions](#)
- [Michigan State University Extension: Rapid Response for Agriculture](#)
- [EGLE Midland Area Dam Failure Webpage](#)

### Financial Management

Farmers, homeowners, renters, and businesses of all sizes encounter financial impacts when they experience a flooding disaster. Below are resources to help those impacted work through some of the financial implications of a flood including; real estate, personal property, machinery and equipment, inventory and business assets and cropping decisions.

- [Small business disaster loans](#)
- [MSU Extension Farm Management team](#)
- [Noninsured Crop Disaster Assistance Program \(NAP\)](#)
- [Iowa State University University: Disaster Recovery](#)
- [Financial Recovery and Risk Management](#)
- [Corn and Soybean Replanting Decisions](#)
- Technical and financial assistance available through regular [Farm Bill programs](#).

### Farm Stress

Disaster situations, such as floods, are unprecedented and stressful. The health and safety of those impacted is very important. Below are resources that focus on mental health and well-being.

- [Michigan State University Extension: Managing Farm Stress](#)
- [MSU Extension Farm Stress Program partners to connect farmers with mental health services: Farmers can now access counseling with licensed therapists via teletherapy](#)
- [Iowa Concern](#)

**To contact an expert in your area, visit [msue.anr.msu.edu/experts](http://msue.anr.msu.edu/experts) or call 888-MSUE4MI (888-678-3464)**

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## Emergency Relief for Livestock

When livestock farms are impacted by flooding, there are many variables to consider. Understanding the issues that surround adequate feed supplies, managing wet feed and grain, accessing quality pastures, animal health impacts and others is important when responding to a disaster situation. Below are resources that will help farmers with livestock make management decisions.

### Feed

- If feed has been spoiled and can no longer be utilized, farms not permitted through ELGE should consider the [the Nutrient Utilization Generally Accepted Agricultural Management Practices \(GAAMPs\)](#) for proper handling and application of the material
- [Feeding Cows After the Flood](#)
- [Salvaging Stored Wet Feed & Grain](#)
- [Dealing with flooded hay and grain](#)
- [Managing flooded grain bins](#)

### Health

- [Disaster Relief: Flood-Related Diseases in Poultry and Livestock](#)
- [Post-Flood Neurologic Disorders in Horses](#)
- [Flood Injury to Horses](#)
- [Equine Pythiosis](#)
- [Protecting Livestock During a Disaster](#)

### Housing/Fencing/Other

- [Caring for Livestock During Disaster](#)
- [Cattle Checklist After a Flood: Issues to Consider](#)

## Crop Production

Crop production acres will be impacted by flooding and will likely require field renovation, replanting and additional application of nutrients. To determine the impact and best solutions, below are resources that will help farmers through the decision making process.

- [How does flooding affect soybean germination](#)
- [Repairing your flood-damaged fields: Management options for restoring productivity in flood-damaged areas](#)
- [Evaluating flood-damaged crops - Part 2: Remove debris and drain water, then wait to evaluate](#)
- [Managing corn and soybean fields submerged by recent heavy rains](#)
- [Recovering Flooded Forages](#)
- [Weed Management After a Flood](#)
- [Wheat flooding and waterlogging](#)

## Farm Safety and Infrastructure Management

### Spills

If a spill or release of pesticides, fertilizers, manure, or fuel occurs call the MDARD agriculture spill 24-hour hotline 1-800-405-0101 or EGLE's Pollution Emergency Alerting System (PEAS) at 800-292-4706. Staff provides direction to the responsible party to contain the spill. Once any immediate environmental concerns

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are abated, the responsible party is provided with advice on how to clean-up the spilled material.

### **Pesticides and Herbicides**

These chemicals and their storage areas may be contaminated after flooding. Look out for signs of illness after handling pesticides or pesticide wastes. Symptoms could include headache, nausea, diarrhea, vision problems, excessive salivation or sweating, difficulty in breathing, weakness, tremors, or convulsions. See a doctor immediately or your local poison control center if symptoms appear.

Any water pumped from these agrichemical handling facilities must be captured, land applied, and treated as rinsate.

- [Pesticide Storage Concerns During a Flood](#)
- [Flooded Pesticides](#)

### **Fertilizer**

Any water pumped from these agrichemical handling facilities must be captured, land applied, and treated as rinsate.

- [Interim Guidance for Protecting Workers from Livestock and Poultry Wastewater and Sludge During and After Floods](#)

### **Manure and Manure Storage**

Check berms along the edges of in-ground manure storages for washouts. Add backfill and recompact to retain the integrity of the structure. Stockpiles should be moved to higher ground when it is safe to do so or applied to fields/pastures that can handle the nutrients and have dried considerably. Make sure manure application coincides with the best management practices recommended in the Michigan Right to Farm [Manure Management and Utilization GAAMPs](#). If you are a permitted farm through EGLE, follow your Comprehensive Nutrient Management Plan for appropriate nutrient application of manure.

### **Fuel Storage**

- If a concern exists of water penetrating a fuel storage, the installer of the tank or a repair company can be paid to come check the tank with a color changing dipstick indicative of water infiltration
- If it is thought or known that a fuel storage tank has leaked, first call EGLE's [Pollution Emergency Alerting System](#) at 1-800-292-4706 regardless if you have an aboveground or underground storage tank
- Additionally, for underground storage tanks, notify the [Bureau of Fire Services](#) (additional documentation: [Underground Storage Tank Flood Guide](#))
- [Cleanup of Oil and Fuel Spills in Agricultural Buildings Associated with Flooding](#)
- [Flooded Farm Vehicles and Equipment](#)

### **Drains and Waterways**

The USDA-Natural Resources Conservation Service has an [Emergency Watershed Program](#) (EWP). The program is a recovery effort aimed at relieving imminent hazards to life and property caused by natural disasters. Work with local sponsors such as a city or county, to provide technical and financial assistance. Farmers and other individuals can get assistance but they must work through a local sponsor.

## **Contamination Considerations with Potential Human Health Impacts**

After flooding occurs, water and food for direct consumption can be contaminated. Resources to address these concerns can be found below.

- [Protecting a private well in an emergency](#)
- [Frequently Asked Questions \(FAQ\): Septic Systems and Flooding Events](#)
- [Septic Systems: Hurricanes and Flooding](#)
- [Onsite Wastewater](#)
- [Well Water Construction](#)
- [Guidance for Industry - Evaluating the Safety of Flood-affected Food Crops for Human Consumption](#)



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### Rodent Control

Flooded areas may see an influx of rodents and vermin. Implementing a comprehensive rodent control program is key to mitigating the issues brought on by infestation. When addressing rodent infestation, care should be taken to follow guidelines for food safety and programs that your farm participates in.

- [Introduction to pest management](#)
- Understanding rodent types and signs of infestation
- Rodent control methods
- [Pest control records and monitoring](#)

### Public Relations

If you need help telling your farm story please reach out to your local county Farm Bureau, commodity group or organization representative.

### Governmental Agency Information

Learn about federal and state assistance programs.

- USDA-NRCS
  - [Emergency Farm Loans](#)
  - [Reference Guide - USDA Disaster Resources for Farmers, Ranchers and Communities](#)
  - [USDA Service Center Locator \(Upper Peninsula\)](#)
  - [USDA Service Center Locator \(Lower Peninsula\)](#)
  - [Livestock Indemnity Program Factsheet](#)
  - [Emergency Conservation Program](#)
  - [Emergency Assistance for Livestock, Honey Bees and Farm-raised Fish \(ELAP\)](#)
    - [ELAP Factsheet](#)

### Other Helpful Resources

- [Flood Recovery Checklists for Farmsteads](#)
- [Michigan Department of Transportation GIS Unit Interactive road closure map related to flooding](#)
- [EGLE Floodplain Management/National Flood Insurance](#)
- [Extension Disaster Education Network \(EDEN\) - Flood](#)
- [Disaster planning for farms and agribusinesses](#)
- [Ag Community Relief](#)
  - Email: [agcommunityrelief.com](mailto:agcommunityrelief.com)
  - Phone: 810-614-0968
  - Address: 10434 N. Oak Rd, Otisville, MI 48463
- [All Hazards: resources to help rural communities prepare for disasters and other hazards](#)

### Questions?

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