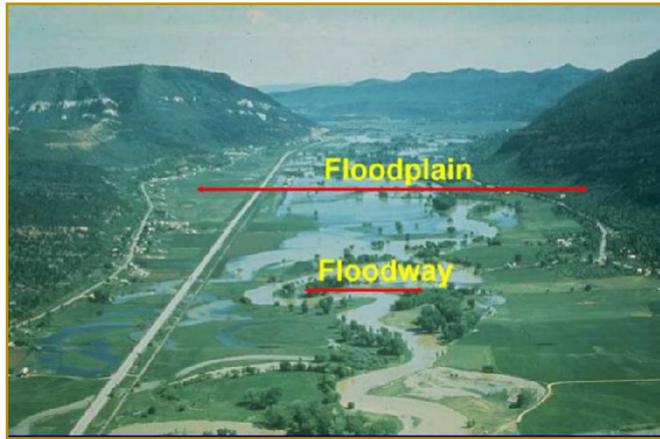


# Tennessee Flood Preparedness Quick Guide

## Tennessee Flooding Facts

- Flooding can occur almost anywhere. The speed and duration of flooding can vary significantly
- Tennessee experiences– flash floods, stormwater, backwater, and riverine flooding
- Saturated conditions prior to rain events may exacerbate flooding
- Flooding may cause fatalities or injuries, disrupt or destroy infrastructure (roads, bridges,



*A floodplain is the area adjacent to streams, creeks, and rivers that provide floodwater storage*

culverts, water, wastewater, gas, electric), disrupt drinking water supplies, and cause erosion and landslides

- Due to a varied topography and nearly 26,974,096 acres of rivers and streams, flooding is Tennessee's most costly natural hazard

## Substantial Damage

FEMA defines Substantial Damages as "...damage of any origin sustained by a structure whereby the cost of restoring the structure to before-damaged conditions would equal or exceed fifty (50) percent of the market value of the structure before the damage occurred." This means that if the cost of fixing a damaged structure is 50% or more of the buildings value, then the whole building needs to be protected from future flood damages by bringing it into compliance with the floodplain regulations.

## When do I need a Permit?

A floodplain permit is required by the local floodplain administrator. Various other permits may be needed during the recovery process. The local flood damage prevention regulations outlines the requirements for floodplain development.

**"Development"** means any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavating, drilling operations, or storage of equipment or materials.

The permitting process is vital to disaster recovery and required for damage reimbursements. State and federal agencies work together closely during disasters to expedite the permitting process.

## Know Your Flood Risk

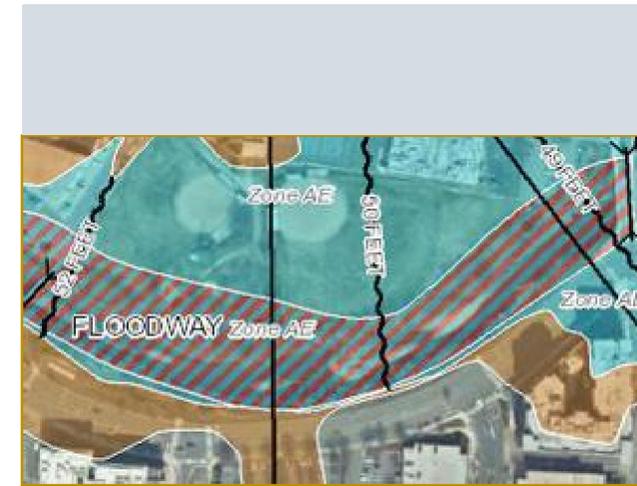
- Understand the difference between weather <https://www.weather.gov/safety/flood-watch-warning>
- Understand the financial and health impacts of floodwater or wastewater
- Check your flood risk on the TN Property Viewer <https://tnmap.tn.gov/assessment/>
- Link to flood risk and information resources
  - [USGS WaterWatch](#)
  - [USGS Flood Inundation Mapping](#) program
  - [FEMA Flood Map Service Center](#)
  - River predictions: [NWS Advanced Hydrologic Prediction Service \(AHPS\)](#) - select your local NWS office servicing your area (Morristown, Nashville, Memphis) to see the river predictions for that area

## Mitigation Pays

- Mitigation has a 6:1 return on investment ratio; mitigation is key to recovery
- Link to Mitigation Grant Programs <https://www.tn.gov/tema/emergency-community/mitigation/mitigation-grant-programs.html>
- Restores damaged public facilities if cost-effective mitigation measures are applied

## Increased Cost of Compliance (ICC)

ICC coverage is part of every flood insurance property and provides up to \$30,000 to help cover the cost of mitigation activities that will reduce the risk of future flood damage to a building. The building must be substantially or repetitively damaged, and ICC will help pay to bring the building into compliance with



**TN Silver Jackets** is a collaboration effort across agencies and levels of government. The TN Silver Jackets leverage resources: talent, data, funding to accomplish flood risk reduction goals.

## Property Owners

### Before a Flood

- Develop [emergency plans](#) and make an [emergency kit](#)
- Develop evacuation plans with primary and alternate routes
- Prepare with the Five Ps of Evacuation: People, Prescriptions, Papers, Personal Needs, Priceless Items
- Document/photograph belongings, assets, and other important information (deeds, insurance, etc.)
- Clear debris from gutters, downspouts, and drainage systems
- Be familiar with your communities' flood damage prevention ordinance so you can work with local officials to rebuild safely

### During a Flood

- Monitor and share flooding impacts to social media (Facebook and Twitter)
- Evacuate if needed and heed advice of local and state emergency officials
- Never drive through flooded roadways – “Turn Around Don’t Drown” - <http://www.nws.noaa.gov/os/water/tadd/>
- Moving water has tremendous power. Six inches of moving water could knock you off your feet, and a foot of water can sweep a vehicle—even a large SUV—off the road.
- Stay out of flood waters! Flood waters can contain rocks, mud, other debris, oil, gasoline, and sewage. Be especially cautious at night when it is harder to recognize flood dangers
- Stay out of any building surrounded by floodwaters

### After a Flood

- If your home was flooded, you may only be able to enter when officials say it is safe to do so.
- Use extreme caution when entering flooded buildings. There may be hidden damage, particularly in foundations. Check for loose boards and slippery floors.
- For safety considerations protect yourself from electric shock, mold contamination, asbestos, and lead paint.
- Turn off electricity at main breaker or fuse box. Do not touch electrical equipment if it is wet or you are standing in water.
- Use flashlights, not lanterns, torches, or matches, to examine buildings. Flammable gases may be inside the structure and open flames may cause a fire or explosion.
- Document all damage before doing any work to the structure. Create a list of damage, record model numbers, take pictures or videos, etc.
- Protect your home by opening doors and windows, covering any exterior damage, removing any mud or debris, draining the basement, and by checking for broken or leaking pipes
- Contact local officials for guidance on damage assessments and flood insurance claims
- Ensure authorizations and permits are secured prior to rebuilding. Federal, state and local officials work together to ensure a speedy permit review process.
- Assess and implement mitigation strategies and actions for recovery
- Find out if debris will be picked up curbside or if it must be taken to a designated location.
- Contact the [American Red Cross for disaster recovery](#) info

## Local Officials

### Before a Flood

- Use local social and news media to communicate risk & safety procedures to the public
- Make a list of areas where transportation, water or wastewater infrastructure may be flooded
- Add safety signage to routes or flood prone areas, when possible
- Build relationships with your community, state, regional, and federal agencies
- Coordinate emergency management activities to ensure resource knowledge and availability (Fire, Police, EMS, Hospitals, etc.)
- Understand your communities' flood damage prevention ordinance so you can work with property owners to rebuild safely and promote mitigation

### During a Flood

- Monitor and share flooding impacts to social media (Facebook and Twitter)
- Document all action measures taken, personnel time, and in-kind service

### After a Flood

- The local floodplain administrator is part of the recovery and will conduct Substantial Damage assessments on the affected structures. Perform and document damage assessments
- FEMA Public Assistance (PA) Section 406 Mitigation allows for cost effective mitigation activities to public facilities and infrastructure
- Photograph damage BEFORE repairs begin
- Maintain detailed records such as volunteer efforts, injuries and deaths, sheltering/feeding activities, and transportation detours (length, duration, # of impacted citizens)
- TEMA verifies all data before submitted to FEMA for a Joint Preliminary Damage Assessment
- Examine every damaged facility site for mitigation opportunities
- Work with federal and state officials to document High Water Marks and create impact maps
- Encourage state and federal partners to assist in collecting event-related data and information
- Document outreach, mitigation, and safety successes to use in the future
- Debris Removal Planning Tool: [https://www.tn.gov/content/dam/tn/environment/solid-waste/documents/solid-waste/sw\\_debris-planning-tool-2017.pdf](https://www.tn.gov/content/dam/tn/environment/solid-waste/documents/solid-waste/sw_debris-planning-tool-2017.pdf)

### Did you know?

- FEMA generally doesn't reimburse debris removal unless the debris is threatening infrastructure
- TDOT bridge inspections may be needed to be eligible for FEMA funding
- FEMA may help stabilize landslides if there is a threat to life, health, safety, or infrastructure
- FEMA may repair landslides permanently; a geotechnical investigation may be required