

EMERGENCY FLOOD RESPONSE PLANNING FOR CONNECTICUT MUNICIPALITIES

WHY THIS MATTERS

Flooding is among the most common and costly natural hazards for Connecticut municipalities. Heavy rainfall, tropical storms, hurricanes, rapid snowmelt, and aging stormwater infrastructure can quickly overwhelm drainage systems, damage public facilities, disrupt essential services, and threaten public safety.

An Emergency Flood Response Plan provides a coordinated framework for municipal departments to prepare for, respond to, and recover from flooding events. By clearly defining roles, responsibilities, communication procedures, and operational priorities, municipalities can improve response efficiency, protect critical assets, and support a faster recovery.

UNDERSTANDING MUNICIPAL FLOOD RISK

Flooding is not limited to coastal communities or areas adjacent to major rivers. Flood losses frequently occur outside FEMA Special Flood Hazard Areas. Connecticut municipalities routinely experience localized flooding caused by intense rainfall, undersized drainage systems, blocked culverts, rapidly rising streams, ice jams, and stormwater runoff.

Understanding where flooding is most likely to occur in your community is the first step in reducing risk. Municipal departments should routinely assess flood-prone facilities, transportation routes, critical infrastructure, and essential public services to identify vulnerabilities before severe weather strikes.

OBJECTIVES

- Protect life safety
- Reduce property damage
- Maintain critical municipal operations
- Coordinate emergency response
- Support rapid recovery and reimbursement
- Document damages for CIRMA and FEMA purposes

PROTECTING CRITICAL ASSETS

One of the most effective ways to reduce flood losses is to identify critical assets before severe weather occurs.

Critical assets may include:

- Electrical switchgear
- Boilers
- HVAC controls
- Emergency generators
- Computer servers
- Communications equipment
- Fuel systems
- Municipal records
- Emergency response vehicles
- Specialized public works vehicles and equipment

Many of these systems are located in basements or below grade, making them particularly susceptible to flooding. Identifying these vulnerabilities in advance allows municipalities to implement protective measures, such as relocating equipment, installing flood barriers, or developing contingency plans, before floodwaters arrive.

Whenever practical, municipalities should evaluate opportunities to relocate vulnerable equipment above anticipated flood levels or to install permanent protective measures.

BUSINESS CONTINUITY MATTERS

Flooding affects more than buildings and land. Municipal leaders and staff should consider how essential services will continue if one or more facilities become inaccessible.

BUSINESS CONTINUITY MATTERS - *continued*

Questions to consider include:

- Are electronic records backed up?
- Can emergency services operate from alternate locations?
- Are dedicated vendors available if local contractors are overwhelmed?
- Can fuel continue to be supplied?
- Have temporary office locations been identified?

Planning for continuity helps reduce service disruptions and improve overall resilience.

RISK MANAGEMENT BEST PRACTICES

Municipalities can significantly reduce flood-related losses by integrating flood preparedness into routine operations.

Consider implementing the following best practices:

- Conduct annual inspections of flood-prone facilities.
- Maintain stormwater infrastructure throughout the year.
- Test emergency generators and backup power systems regularly.
- Identify and protect critical equipment located below grade.
- Maintain current emergency contact information.
- Establish contracts with restoration and emergency service vendors before an emergency occurs.
- Review insurance coverage and understand applicable deductibles, exclusions, and reporting requirements.
- Train employees on department-specific flood response responsibilities.
- Exercise flood response procedures through tabletop or functional exercises.
- Update flood response plans annually and after significant flood events.

Planning for continuity helps reduce service disruptions and improve overall resilience.

LESSONS LEARNED IMPROVE FUTURE PREPAREDNESS

Each flood event presents an opportunity to strengthen future resilience.

Following recovery, municipalities should evaluate:

- What worked well?
- Which facilities experienced recurring problems?
- Were communications effective?
- Were sufficient resources available?
- Did employees understand their responsibilities?
- Were emergency contractors available? If not, should new relationships be made?
- Which mitigation projects should become capital priorities?

Flooding cannot always be prevented, but thoughtful planning, routine maintenance, employee training, and coordinated response efforts can reduce many of its impacts. Municipalities that prepare before severe weather strikes are better positioned to protect employees, preserve public assets, maintain essential services, and recover more efficiently after a flood.

Integrating flood preparedness into routine municipal operations strengthens organizational resilience and helps reduce the financial and operational impacts of future flooding.

Emergency Flood Response Plan Timeline

Timeframe	Focus	Primary Actions
Year-Round Preparedness	Risk Reduction	Maintain stormwater infrastructure, inspect flood-prone facilities, test generators, review continuity plans, update emergency contacts, train employees, and conduct flood response exercises.
72 Hours Before Forecasted Flooding	Planning and Resource Readiness	Monitor weather forecasts, brief department leaders, inspect drainage systems, fuel equipment, stage barricades and pumps, verify emergency contacts, test generators, protect critical assets, and prepare public messaging. <i>(See the 72-Hour Flood Preparedness Checklist on page 4 of this bulletin.)</i>
24 Hours Before Forecasted Flooding	Protective Actions	Activate response procedures, deploy flood protection measures, relocate vehicles and equipment, secure municipal buildings, prepare emergency communications, coordinate with schools and public safety, and begin documentation of preparedness activities. <i>(See the 24-Hour Flood Preparedness Checklist on page 6 of this bulletin.)</i>
During the Flood Event	Life Safety and Incident Management	Prioritize life safety, close flooded roads, protect critical infrastructure, monitor facilities, communicate with the public, document response activities, and coordinate with emergency responders and utility providers.
Immediately After the Flood	Damage Assessment and Stabilization	Conduct initial damage assessments, photograph damages, document labor and equipment usage, remove debris, stabilize damaged facilities, restore essential services, and notify CIRMA and applicable state agencies.
Recovery and Mitigation	Repairing Damage and Continuous Improvement	Make necessary repairs, prioritize mitigation projects, review response activities, identify lessons learned, update emergency plans and incorporate improvements into future capital planning and maintenance programs.

72-Hour Flood Preparedness Checklist

Objectives: Prepare municipal personnel, facilities, equipment, and resources before significant rainfall or flooding is expected.

Weather and Situational Awareness

- ☐ Monitor weather forecasts and National Weather Service alerts.
- ☐ Review projected rainfall amounts, river levels, and flood forecasts.
- ☐ Determine the potential impacts on municipal operations.
- ☐ Brief department heads on anticipated weather conditions.
- ☐ Begin documenting preparedness activities.

Emergency Planning and Coordination

- ☐ Review the Flood Response Plan with department leadership.
- ☐ Verify emergency contact lists are current.
- ☐ Confirm employee call-back procedures.
- ☐ Review staffing plans and identify personnel available for extended operations.
- ☐ Coordinate with regional emergency management partners, if appropriate.

Public Works

- ☐ Inspect and clear catch basins, storm drains, and culverts in known flood-prone areas.
- ☐ Remove debris from drainage ditches and waterways where feasible.
- ☐ Inspect pump stations and backup power systems.
- ☐ Fuel all emergency vehicles and equipment.
- ☐ Inspect chainsaws, pumps, generators, light towers, and portable radios.
- ☐ Stage barricades, cones, and road closure signs at strategic locations.
- ☐ Verify availability of sandbags and other flood protection materials.

Municipal Facilities

- ☐ Inspect roofs, gutters, and roof drains.
- ☐ Ensure floor drains are unobstructed.
- ☐ Test emergency generators under load.
- ☐ Verify fuel levels for generators.
- ☐ Inspect sump pumps and backup systems.
- ☐ Review emergency shutoff procedures for utilities.
- ☐ Identify critical equipment located below grade.

Schools and Public Buildings

- ☐ Notify facility managers of the forecast.
- ☐ Inspect drainage around school buildings.

72-Hour Flood Preparedness Checklist - *continued*

- ☐ Secure outdoor furniture, athletic equipment, and playground items.
- ☐ Verify emergency communications procedures.

Information Technology

- ☐ Confirm data backups have been completed.
- ☐ Verify off-site or cloud backups are functioning.
- ☐ Review continuity procedures for critical software and municipal systems.
- ☐ Identify servers or communications equipment located in flood-prone areas.

Fleet and Equipment

- ☐ Relocate seldom-used vehicles from low-lying areas.
- ☐ Top off fuel supplies.
- ☐ Inspect emergency response vehicles.
- ☐ Verify GPS and communications equipment are operational

Public Communication

- ☐ Prepare public messaging regarding potential flooding.
- ☐ Review social media and website notification procedures.
- ☐ Coordinate messaging with emergency management officials.

24-Hour Flood Preparedness Checklist

Objectives: Complete protective actions immediately prior to the arrival of severe weather.

Incident Coordination

- ☐ Confirm operational status of all departments.
- ☐ Conduct final weather briefing.
- ☐ Determine if Emergency Operations Center activation is warranted.
- ☐ Assign incident responsibilities.

Public Works

- ☐ Deploy barricades to known flood-prone locations.
- ☐ Pre-stage pumps and generators.
- ☐ Position heavy equipment where it will remain accessible.
- ☐ Verify road closure supplies are ready.
- ☐ Inspect flood-prone bridges and culverts.
- ☐ Complete final storm drain inspections where safe.

Municipal Buildings

- ☐ Move critical records to upper floors or waterproof storage.
- ☐ Relocate portable electronics from basements.
- ☐ Install flood barriers or sandbags where appropriate.
- ☐ Secure chemicals and hazardous materials.
- ☐ Move maintenance equipment from flood-prone storage areas.
- ☐ Verify emergency lighting is operational.

Utilities

- ☐ Confirm generator readiness.
- ☐ Charge portable radios and battery-powered equipment.
- ☐ Ensure backup batteries are available.
- ☐ Verify fuel deliveries if extended operations are anticipated.

Vehicles and Equipment

- ☐ Relocate emergency vehicles to higher ground if necessary.
- ☐ Position snowplows, loaders, excavators, and dump trucks for rapid deployment.
- ☐ Secure fuel storage areas.
- ☐ Stage portable pumps.

24-Hour Flood Preparedness Checklist - *continued*

Parks and Recreation

- ☐ Close athletic fields if necessary.
- ☐ Secure park equipment and facilities.
- ☐ Remove trash containers and loose materials.
- ☐ Close flood-prone recreational areas.

Schools

- ☐ Coordinate with school administration regarding closures or delayed openings.
- ☐ Protect critical educational equipment located in basements.
- ☐ Secure school buses located in flood-prone areas.

Communications

- ☐ Issue public preparedness messages if warranted.
- ☐ Notify residents in historically flood-prone areas.
- ☐ Confirm emergency notification systems are operational.

Documentation

- ☐ Photograph municipal facilities prior to the storm (where practical).
- ☐ Record equipment locations.
- ☐ Begin tracking labor and equipment hours.
- ☐ Establish incident documentation procedures for potential insurance claims and disaster reimbursement.



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