

# DISASTER EVENT SOG'S

## HURRICANE

### PLANNING:

#### HURRICANE WARNINGS:

Warnings are issued 72 hours ahead of time. Once hurricanes travel north of Cape Hatteras they pick up speed which will reduce our preparation time.

#### Prior to hurricane, EMA Directors should:

- Closely track the storm's path and plan decisions based on estimated timing of arrival.
- Determine the need for/timing of opening EOC.
- Inform city/town officials, departments and York County EMA of town's plan.
- Coordinate with department heads.
- Plan to open shelters and communicate with volunteer groups or organizations which will staff them.
- Communicate with the public information officer (PIO) regarding public information messaging utilizing the county emergency alert system.
- Inform citizens:
  - \*Evacuation routes and how the message will get out should they need to evacuate.
  - \*House preparation- close windows, doors and hurricane shutters and/or board up windows, clearing yards, disaster kits.
  - \*The attached "Hurricane Information for General Public" lists recommendations for citizens.
- Inventory supply kits: portable radios, lights, medical supplies, drinking water, food.
- Call YCEMA at 207-324-1578 to obtain Hurricane Preparation Conference Call schedule for the coming days.
- Establish overall evacuation plan including evacuation routes.
- Coordinate with inland jurisdictions to host evacuating population.
- Contact public works to deploy detour signage.
- Ensure internal staff/volunteer preparedness: supply kits at home, fuel in cars, generators fueled, etc. to reduce worry about their own families and allow for full engagement in disaster response effort.
- Communicate with/stage special teams, volunteer organizations, etc. to staff shelters and pet shelters.

### RESPONSE:

#### During the hurricane event, EMA Directors should:

- Activate the EOC as appropriate.
- Utilizing the county emergency alert system, issue alert and warning based on procedure, as warranted.
- On order, evacuate affected areas.
- Establish traffic control and security with law enforcement.
- Establish ongoing reporting with the city/town officials, response forces and York County EMA.
- Conduct first staff briefing as soon as practical after EOC activation.
- Activate or establish rumor control through the public information officer (PIO).
- Establish a schedule for briefings.
- Brief city/town officials, response forces and York County EMA.
- Provide PIO with updated information.
- Establish 24/7 duty roster for the EOC and/or command post.

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- Activate an events log.
- List any shelters that are open and routes to get there.
- Review and follow resource procurement procedure.
- Inventory additional resources that may be used or called upon for use.
- Activate formal resource request procedure and resource tracking.
- Coordinate all resource requests being forwarded to the County.
- Activate financial tracking plan and track resource usage, personnel, financial expenditures, etc.
- Activate damage assessment and follow damage assessment procedure.
- Develop a 12 hour incident action plan outlining actions that must be accomplished in the next 12 hours.
- Keep track of areas that were evacuated and the location to which citizens were evacuated.

## RECOVERY:

### After hurricane has occurred, EMA Directors should:

- Gather damage assessment information (public, housing, business) from damage assessment teams.
- Update city/town officials and York County EMA of the situation and request any resources needed.
- Coordinate with mutual aid partners.
- Assess shelter activities: how many are open, the need to remain open or demobilize and an estimate for how long and what resources are needed for both.
- Evacuate people and animals who may be stranded in damaged areas.
- Obtain information from utilities regarding outages, length of repair, safety, etc.
- Contact water district to establish whether or not water is safe to drink.
- Assess citizen/community needs for individual assistance and or public assistance.
- Activate local unmet needs committee if appropriate.
- As appropriate gather additional information to include:
  - \*Personnel that responded and the time involved in the response.
  - \*Time sheets or time logs.
  - \*Supplies used.
  - \*Contracts issued.
  - \*Purchase orders issued.
  - \*Any other expenditures.
  - \*Damages to public buildings, equipment, utilities, etc.
  - \*Loss of life of any public servant.
  - \*Documents regarding economic impact.
- Develop or generate reports for the following, as appropriate:
  - \*City/Town Officials and York County EMA
  - \*Others requiring or requesting reports.
- Coordinate recovery organizations including private or volunteer relief organizations.
- If a Presidential declaration of disaster is made, file "Request for Public Assistance" to apply for assistance as soon as possible with the proper state or federal agency.
- Ensure public officials are made aware of the assistance application process, if applicable.
- Ensure the general public is made aware, through the public information officer, of the assistance application process, if applicable.
- Perform an incident critique as soon as possible with all possible response organizations.
- Ascertain the number of injured and deceased from medical personnel.
- Deliver post-hurricane safety tips to public:
  - \*Listen to local officials for updates and instructions.

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- \*Check-in with family and friends by texting or using social media.
  - \*Return home only when authorities indicate it is safe.
  - \*Watch out for debris and downed power lines.
  - \*Avoid walking or driving through flood waters. Just 6 inches of moving water can knock you down and fast-moving water can sweep your vehicle away.
  - \*Avoid flood water as it may be electrically charged from underground or downed power lines and may hide dangerous debris or places where the ground is washed away.
  - \*Photograph the damage to your property in order to assist in filing an insurance claim.
  - \*Do what you can to prevent further damage to your property, (e.g., putting a tarp on a damaged roof), as insurance may not cover additional damage that occurs after the storm.
- Review agency and self-performance.
  - Identify and correct any deficiencies of the plan.
  - Implement hazard mitigation or modify hazard mitigation plan accordingly.
  - Brief elected officials with updated information and disaster recovery progress.

# HURRICANE AND COASTAL STORM ANNEX

## I. Introduction

This document is the Response to Hurricanes and Coastal Storms to the Town's Emergency Operations Plan.

### A. Purpose

The purpose of this Annex is to provide for the coordination of emergency service efforts to respond to severe storms that may occur in and around the Town.

### B. Scope

The scope of this response to severe storms provides guidance to Town officials on the content for injuries, loss of power, potential building damage, and fires that may occur within areas of the Town.

### C. Authority

Refer to the Basic Plan.

### D. Nature of the Hazard

Severe summer storms are seen as major thunderstorms, tropical storms and hurricanes in York County and the Town of York. Thunderstorms are far more numerous and much less severe in effect and duration. The primary effect is in producing short-term high winds, to include micro-bursts. Tropical storms are a lot less likely than thunderstorms, but more likely than a hurricane. The ingredients for a major tropical storm or hurricane include a pre-existing weather disturbance, warm tropical oceans, moisture, and relatively light winds aloft. These storms are classified as follows:

**Tropical Depression:** An organized system of clouds and thunderstorms with a defined surface circulation and maximum sustained winds of 38 mph (33 knots) or less. Sustained winds are defined as one-minute average wind measured at about 33 ft.(10 meters) above the surface.

**Tropical Storm:** An organized system of strong thunderstorms with a defined surface circulation and maximum sustained winds of 39-73 mph (34-63 knots).

**Hurricane:** An intense tropical weather system of strong thunderstorms with a well-defined surface circulation and maximum sustained winds of 74 mph (64 knots) or higher.

## Saffir-Simpson Hurricane Scale<sup>1</sup>

Category	Sustained Wind (MPH)	Reoccurrence in Maine	Types of Damage Due to Hurricane Winds and Storm Surge
1	74 - 95	30 years	<b>Minimal:</b> Damage primarily to shrubbery, trees, foliage and unanchored mobile homes. No real damage to other structures, other than trees falling on power lines, roads and structures. Storm surge typically 4-5 ft. above normal.
2	95 - 100	100 -150 years	<b>Moderate:</b> Some trees blown down. Major damage to exposed mobile homes. Some damage to roofing materials, windows and doors. Storm surge typically 6-8 ft. above normal.
3	111 – 130	200 – 400 years	<b>Extensive:</b> Large trees blown down. Mobile homes destroyed. Some structural damage to roofing materials of buildings. Some structural damage to small buildings. Storm surge typically 9-12 ft. above normal.

Hurricanes can cause catastrophic damage to coastlines and several hundred miles inland. Winds can exceed 155 miles-per-hour. Hurricanes and tropical storms can also spawn tornadoes and micro bursts, create surge along the coast, and cause extensive damage due to inland flooding from trapped water.

A storm surge is a huge dome of water pushed on-shore by hurricane and tropical storm winds. Storm surges can reach 25 feet high and be 50-100 miles wide. Storm tide is a combination of the storm surge and the normal tide (i.e., a 15 foot storm surge combined with a 2 foot normal high tide over the mean sea level creates a 17 foot storm tide). These phenomena cause severe erosion and extensive damage to coastal areas.

### Hurricane/Tropical Storm Watch:

Hurricane and tropical storm conditions are possible in the specified area, usually within 36 hours.

## **Hurricane/Tropical Storm Warning:**

Hurricane and tropical storm conditions are expected in the specified area, usually within 24 hours. A hurricane warning can remain in effect when dangerously high water or a combination of dangerously high water and exceptionally high waves continue, even though winds may be less than hurricane force.

### **II. Situation and Assumptions**

1. Given its proximity to the coast, the entire Town is susceptible to the high winds, severe rains and flooding caused by coastal storms, tropical storms, and hurricanes. The areas immediately on the coast will experience some level of storm surge.
2. Major transportation routes such as I-95 and US 1 will experience heavy traffic due to evacuation from other cities, such as Boston and Portsmouth. Alternative routes will need to be identified.
3. With heavy traffic, fuel shortages and difficulty evacuating, people will become frustrated.
4. Residents, visitors, and tourists will often wait until the last minute to purchase emergency supplies or prepare for an evacuation.
5. Visitors and tourists will not be as familiar with emergency functions in York, potential hazards in the area, or evacuation routes.
6. Certain individuals such as mobility and sensory disabled, elderly, and low-income may not have the means or ability to prepare for a storm or possible evacuation and will require assistance.
7. After the storm, looting may occur as people may not have essential supplies such as food, water, and medicine.
8. Damage from the storms may block roads and knock down road signs. Responders from mutual aid towns may be able to find response locations without road signs.

### **III. Execution**

#### **A. Concept of Operations**

1. State Officials will activate the State of Maine Hurricane Activation Plan when the NWS forecasts a significant possibility that a hurricane will impact Maine.
2. If the storm is on track to possibly hit the area, the Town EMA Director will activate the EOC and begin storm preparations. Preparations will include equipment checks, evacuation plans, shelter plans, potential resources requests, and communications checks.

3. The Town's EMA will track the progress of the storm and notify all town officials and departments through the town EOC.
4. The response to a hurricane or coastal storm occurring prior to the onset of the storm is based upon weather reports. Functions that are critical to lifesaving, protection, and meeting basic human needs are performed.
5. If a hurricane or coastal storm warning is issued for the Town by the National Weather Service, the Emergency Management Agency, Law Enforcement and Fire Department shall be placed on increased readiness.
6. For the safety of response personnel and to prevent damage from essential vehicles and equipment, patrols should not occur during the storm if avoidable. Once the storm subsides, is when response operations should continue.
7. Once the hurricane or severe coastal storm warning is issued, place into effect the Emergency Operations Plan.
8. Advise the public of actions to be taken to safeguard their lives and property. See IV Information Management.
9. Maintain moral by informing the public of the current situation being monitored by local government to manage the emergency.
10. Notify all personnel of the general situation and to report to emergency assignments.
11. Public information releases should include information such as the following:
  - a. Evacuate coastal and low-lying areas.
  - b. Prepare for the storm with essentials, such as water, food, flashlights, batteries and medical supplies.
  - c. Seek shelter, if outdoors or in a vehicle.
  - d. Known locations where the storm has occurred.
  - e. Current weather conditions and forecasts.
  - f. Sheltering in a safe location within a residential structure.
  - g. Potential Damage (Vehicles, building, etc.)
12. Shelter locations for evacuees, feeding, and other requirements for taking care of evacuees.
13. Ensure patrols are setup in areas of greatest damage for protection of property and prevention of fires, utilizing mutual aid, as available.
14. Inform the public on hazard awareness of electrical, gas, and water during severe storms.

15. Maintain current situation reports from the field to the Town Emergency Operations Center, if activated. These reports are the basis for releases to the public when necessary to minimize public alarm and to keep the area clear. The Emergency Manger will keep the County and State Emergency Management informed of the current situation.

B. Tasks

1. Police Department

- a. Establish command post, if first on-scene.
- b. Remove bystanders and control access to area.
- c. Initiate and conduct evacuation, if ordered.
- d. Assist in rescue operations, as appropriate.
- e. Conduct other law enforcement activities, as appropriate.
- f. Maintain liaison with EOC and other officials, as appropriate.

2. Emergency Management Department

- a. Activate EOC, if appropriate.
- b. Monitor storm conditions in other municipalities and counties.
- c. Coordinate outside assistance, if needed.
- d. Keep local, state and federal government officials apprised of the situation.
- e. Coordinate preparation of news release, as appropriate.
- f. Coordinate other emergency response, as needed.
- g. Assist law enforcement with evacuation of residences, if necessary.

3. Fire Department

- a. Assume on-scene control.
- b. Perform firefighting and EMT duties as needed and as appropriate.
- c. Order evacuation, if the situation warrants.
- d. Keep EOC, if activated informed of the situation

4. Public Works

- a. Maintain emergency fuel supplies for public and private vehicles that could block roads and impede evacuation.
- b. Access Building Damage.
- c. Support Power Company operations with restoration of power to the community.



- d. Provide and/or maintain emergency generators for critical facilities.
- e. Remove debris from transportation routes and repair road signs.
- f. Closing roads that are not safe to travel on.

5. Central Maine Power

- a. Repair downed wires and pole supports.
- b. Assess damage to electrical distribution system.

6. American Red Cross

- a. Coordinate temporary shelters for evacuees, if needed.
- b. Notify Salvation Army of food and clothing needs.

#### IV. INFORMATION MANAGEMENT

A. Severe Storm Warnings

- 1. Warnings of impending storm conditions should be issued to the local media immediately when the hazard is imminent.

B. Returning After Storm

- 1. The State will make the final decision to allow residents to return to the affected areas based on information from Town and County officials. The Emergency Manager shall provide continuous updates on damage assessments to the state EOC.

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## Additional Information:

- A hurricane is an intense tropical weather system of strong thunderstorms with a well defined surface circulation and maximum sustained winds of 74 mph (64 knots) or higher.
- Hurricanes can cause catastrophic damage to coastlines and several hundred miles inland. Winds can exceed 155 miles-per-hour. Hurricanes and tropical storms can also spawn tornadoes and micro bursts, create surge along the coast, and cause extensive damage due to inland flooding from trapped water.
- A storm surge is a huge dome of water pushed on shore by hurricane and tropical storm winds. Storm surges can reach 25 feet high and be 50-100 miles wide. Storm tide is a combination of the storm surge and the normal tide (i.e., a 15 foot storm surge combined with a 2 foot normal high tide over the mean sea level creates a 17 foot storm tide). These phenomena cause severe erosion and extensive damage to coastal areas.

Saffir-Simpson Hurricane Wind Scale		
<p><i>The National Hurricane Center will no longer attribute storm surge with hurricane category. This is due to previous storms that have had storm surges well outside of the expected criteria. In the past few years, the non-tropical Nor'easter of 09' is a good example. Its wind gusts were up to 70mph, but Hampton Roads experienced flooding that was akin to a category 2 hurricane. Water rise will now be determined on a case by case situation.</i></p>		
Category	Winds (MPH)	Damage
1	74 - 95	<b>Minimal:</b> Significant damage to mobile homes. Large trees blown down. Major roof damage to homes. Typically, significant flooding. Moderate damage to home exteriors. Large area of power outages.
2	96 - 110	<b>Extensive:</b> Significant damage to mobile homes. Large trees blown down. Major roof damage to homes. Typically, significant flooding. Moderate damage to home exteriors. Large area of power outages.
3	111 - 130	<b>Devastating:</b> Now it is a major hurricane and structural damage can occur to homes and small buildings. Large buildings can also sustain damage. Mobile homes largely destroyed.
4	131 - 155	<b>Catastrophic:</b> Structural damage to numerous buildings. Roof failure on many buildings. Flooding and wind damage can extend far inland. Storm surge generally over 13 feet will lead to widespread flooding, but height can vary.
5	More than 155	<b>Catastrophic:</b> All trees blown down. Some buildings removed from their foundation. Nearly total roof failure. Flood damage to lower floors less than 15 feet above sea level. Devastating wind damage can extend far inland. Especially if system is quick moving.