

# STATE OF CONNECTICUT DEPT. OF EMERGENCY SERVICES & PUBLIC PROTECTION DIVISION OF EMERGENCY MANAGEMENT & HOMELAND SECURITY



TO:

Municipal Chief Executive Officers, Service Chiefs, and Emergency

**Management Directors** 

FROM:

William P. Shea, Deputy Commissioner

DATE:

June 27, 2012

RE:

Statewide Hurricane Exercise Update # 2 – Exercise Scenario

This memorandum is the second in a series of memorandums and messages containing information and tools to help you prepare for the upcoming Statewide Hurricane Exercise as well as for the next inevitable emergency.

Attached you will find a document describing the scenario that we will be using for the Statewide Hurricane Exercise. It is a category 3 hurricane scenario (simulated) that makes landfall and impacts Connecticut. This scenario is similar to that of the Great New England Hurricane that impacted Connecticut on September 21<sup>st</sup>,1938.

This memorandum and the attachment will also be posted on the DESPP/DEMHS website at <a href="https://www.ct.gov/demhs">www.ct.gov/demhs</a>.

If you have any questions or if you require any additional information regarding the Statewide Hurricane Exercise, please contact us at DEMHS via e-mail at <a href="mailto:demhs.eppi.questions@ct.gov">demhs.eppi.questions@ct.gov</a>.

Sincerely,

William P. Shea

**Deputy Commissioner** 

Department of Emergency Services & Public Protection Division of Emergency Management & Homeland Security

## Statewide Hurricane Exercise July 28-31, 2012

Department of Emergency Services & Public Protection
Division of Emergency Management & Homeland Security

#### **Event Overview**

A simulated category 3 hurricane (the Hurricane of 1938) will make landfall in Connecticut. This will provide an opportunity to test command staff, supporting leaders, and other staff in municipalities, private sector business, non-governmental organizations, and state agencies in successfully planning, coordinating, and synchronizing efforts during an emergency.

#### 2012 Hurricane Season Forecast

- First extended-range forecast for 2012 season predicts a well above-average season
- 13-16 named storms, 8-10 hurricanes, 4-6 major hurricanes [categories 3-4-5 on the Saffir-Simpson scale]

### Storm path





#### Initial Briefing to include complete scenario and Preplanning injects.

A storm was spotted south of the Cape Verde Islands on July 17.

#### 48 hours pre-landfall

Over the next week, the storm steadily gathered strength and slowly tracked to the west-northwest.

#### 24 hours pre-landfall

By July 27, while centered east of the Bahamas, the hurricane is estimated to have reached Category 5 intensity. In response to a deep trough over Appalachia, the hurricane veered northward, sparing the Bahamas, Florida, the Carolinas, and the Mid-Atlantic. At the same time, a high pressure system was centered north of Bermuda, preventing the hurricane from making an eastward turn out to sea. Thus, the hurricane was effectively squeezed to the north between the two weather systems.

Late on July 27, this set-up caused the storm's forward speed to increase substantially. The forward speed of the hurricane is predicted to reach 70 mph. This extreme forward motion, being in the same general direction as the winds on the eastern side of the storm as it proceeds north, will cause the perceived wind speed in areas east of the eye to be far higher than will be the case with a hurricane of more typical forward speed. (Winds rotate counter-clockwise around all low pressure systems in the Northern hemisphere, thus winds on the right side of a hurricane--"right" being relative to the direction of motion of the storm itself—are moving in the same general direction as the hurricane. Therefore, the forward motion increases the observed wind speed for points to the right of the eye of the hurricane and decreases the observed wind speed for points to the left of the eye, but in a complex way that defies crude addition or subtraction of the forward motion from the "intrinsic" wind speed of the hurricane.)

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#### 12 hour pre-landfall to landfall

During the early hours of July 28, the storm, centered several hundred miles to the southeast of Cape Hatteras, weakened slightly. By 8:30 am EST, the hurricane is centered approximately 100 miles due east of Cape Hatteras, and its forward speed has increased to well over 50 m.p.h. This rapid movement has not given the hurricane a sufficient amount of time to weaken over the cooler waters before it reaches Long Island. At 9:00 am EST the hurricane will speed through the Virginia tidewater. Between 12:00 pm and 2:00 pm EST, the New Jersey coastline and New York City will catch the western edge of the hurricane. At the same time, weather conditions will deteriorate rapidly on Long Island as well as along the southern New England coast.

#### Landfall

The full force of the hurricane will reach Long Island after 2:30 pm EST, and the eye will make landfall at Bayport in Suffolk County shortly after 3:00 pm EST. By 4:00 pm EST, the eye will cross Long Island Sound and will make a second landfall just east of New Haven, Connecticut.

The hurricane is at Category 3 intensity at both landfalls and place the maximum sustained winds in the 120–125 m.p.h. range. After crossing Long Island Sound, the hurricane will speed inland.

#### Post-Landfall

By 5:00 pm EST, the eye will move into western Massachusetts, and by 6:00 pm EST, the hurricane will reach Vermont.

Eastern Connecticut is on the eastern side of the hurricane. Long Island is acting as a buffer against large ocean surges, but the waters of Long Island Sound <u>are rising to unimaginable heights</u>. Small shoreline towns to the east of New Haven have suffered near complete destruction from the water and winds.

In the beach towns along the coast, buildings will be found as wreckage across coastal roads. In coastal towns, beach cottages are flattened or swept away. Along the shorefront, buildings are swept off their foundations and found two miles (3 km) inland. Rescuers are searching for survivors in Windsor Locks where a F4 tornado touched down.

Coastal towns in eastern Connecticut are the first to be swept by the winds and storm surge; at least one waterfront business district catches fire and burns out of control for 10 hours. Stately homes along the beach front are leveled by the storm surge.

Interior sections of the state are experiencing widespread flooding as the hurricane's torrential rains fall on soil already saturated from previous storms. The Connecticut River is forced out of its banks, inundating cities and towns from Hartford to Middletown.