

# **New York State Comprehensive Emergency Management Plan**

## **Coastal Storm Annex**



**Disaster Preparedness  
Commission**

**Prepared by the New York State  
Disaster Preparedness Commission**

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# New York State Comprehensive Emergency Management Plan

## Coastal Storm Annex

### Section I: General Considerations and Planning Guidelines

#### **A. Introduction**

The State of New York experiences a wide variety of disasters that may cause loss of life, property and income, disrupt the normal functions of government, communities, and families, and cause great human suffering. A large-scale emergency or catastrophic event will likely cross jurisdictional lines while stressing or exhausting resources at all levels of government. New York State is not alone. On a national level, the frequency and magnitude of events we as a nation experience provides a constant reminder that many events can easily overwhelm capabilities, cause great hardship, and result in disaster recovery efforts that unfold over years following the event. For example, when Hurricane Katrina made landfall near the Louisiana-Mississippi border on the morning of August 29, 2005, it set in motion a series of events that exposed vast numbers of Americans to extraordinary suffering. Not only would Katrina become the most expensive natural disaster in U.S. history to that date, it would also prove to be one of the deadliest, as at least 1,100 Louisianans died as a result of Katrina<sup>1</sup>.

Hurricane Irene, Tropical Storm Lee, and Super Storm Sandy proved to be devastating to New York State. However, all of these storms were not as intense as what could potentially impact the state. The impacts of a catastrophic hurricane making landfall in New York State could be horrific, potentially dwarfing the impacts that were experienced in the Gulf due to Hurricane Katrina in 2005. In addition to the global economic and societal importance of New York State, the State of New York possesses the most densely populated coastline of any area in the country. As a result, the State must give leadership and direction to prepare for, respond to and recover from the dangers and problems arising from such situations.

New York State leadership recognizes the threat of a coastal storm on the State's population, critical infrastructure sectors, the private sector, the economy, and the way of life. Local and State planning endeavors are ongoing in identifying policies, issues, mechanisms, and responsibilities in preparing for and responding to a coastal storm. Further, both agency-specific and multi-agency planning efforts that have recently been completed will continue to build upon the foundation of an integrated county, State, and Federal response. This Annex outlines New York

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<sup>1</sup> *A Failure of Initiative*, Select Bipartisan Committee; February 15, 2006

State's strategy in preparing for, responding to, and recovering from a coastal storm in a collective, multi-agency State approach.

## **B. Purpose**

The State Comprehensive Emergency Management Plan (CEMP) has been structured into three distinct, but interconnected volumes. These are:

- Volume 1: All-Hazard Mitigation Plan
- Volume 2: Response and Short-Term Recovery
- Volume 3: Long-Term Recovery Plan

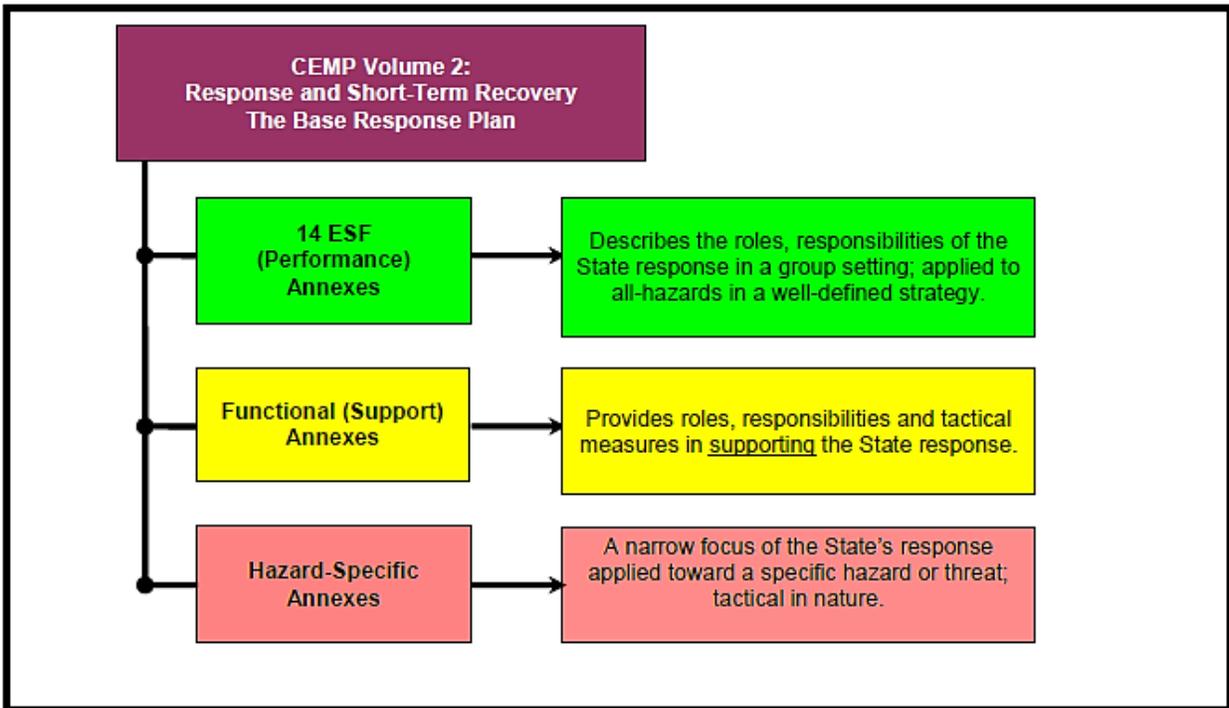
The purpose of the CEMP is to identify the State's overarching policies, authorities and response organizational structure that will be implemented in an emergency or disaster situation that warrants a State response. In addition, the CEMP identifies the lines of coordination and the centralized coordination of resources that will be utilized in directing the State's resources and capabilities in responding to and recovering from a disaster. Further, the CEMP serves as the foundational framework for the State's response levels and serves as the operational basis of which other functional and hazard-specific annexes will build upon.

The purpose of this Annex is to ensure that the strategic and broad-based nature of the State Comprehensive Emergency Management Plan is more defined to allow the State to adequately prepare for, respond to and recover from a coastal storm. This will include utilizing individual agency activities as well as the activities of the State's Emergency Support Functions (ESFs), as appropriate. Further, this Annex identifies the key mechanisms in coordinating with the local response and identifies the lines of coordination to interoperate with the Federal response via the National Response Framework (NRF).

## **C. Scope**

This Annex applies to any warm weather or cold weather coastal storm that warrants a response beyond standard agency statutory obligations to a collective State Disaster Preparedness Commission (DPC) response. This document applies to all State agencies and authorities that may be directed to respond to such an event, and builds upon the process and structure of the State Comprehensive Emergency Management Plan by addressing unique policies, situations, operating concepts, and responsibilities. Response operations to this type of event will encompass the efforts identified in this annex and utilize existing capabilities of other functional and hazard-specific annexes to the State Comprehensive Emergency Management Plan. Further, this Annex acknowledges that local and State response capabilities may be exceeded, necessitating the use of Federal agencies and resources.

Figure 1 below identifies the structural relationship between the State CEMP, its annexes, and this Coastal Storm Annex. In reviewing, note the linkage to other documents that fall under Volume 2. Additionally, several other documents exist in State Office of Emergency Management (SOEM) to manage the activities of the State Emergency Operations Center (SEOC) in response to the event.



**Figure 1: Structural Relationship of the State Comprehensive Emergency Management Plan and the NYS Coastal Storm Annex.**

**D. Situation**

New York State resides within a region of the North Atlantic Ocean which is referred to as the Atlantic tropical cyclone basin, one of six basins in the world. The official Atlantic hurricane season begins on June 1 and extends through November 30 each year. This is the timeframe when most tropical cyclones occur, however, occasional tropical cyclones can occur outside of this period. The period of peak intensity for tropical development usually runs from Mid-August through Mid-September. This period is referred to as the Cape Verde season, which includes tropical system development of systems near Cape Verde Islands off the coast of Africa. These storms typically travel across the entire Atlantic Ocean towards the east coast of the United States. Hurricanes present themselves in different strengths or categories. The Saffir-Simpson Scale on the following page outlines the categories utilized by the National Hurricane Center (NHC).

Category	Winds	Pressure	Damage
1	74 – 95 mph (64-82 knots) 119-153 km/h	to 980 millibars	No real damage to building structures. Damage primarily to unanchored mobile homes, shrubbery, and trees. Also some coastal flooding and minor pier damage.
2	96 – 110 mph (83-95 knots) 154-177 km/h	965 – 979 millibars	Some roofing material, door, and window damage. Considerable damage to vegetation, mobile homes, etc. Flooding damages piers and small craft in unprotected moorings may break their moorings.
3 (major)	111 – 129 mph (96-112 knots) 178-208 km/h	945 – 964 millibars	Some structural damage to small residences and utility buildings, with a minor amount of curtainwall failures. Mobile homes are destroyed. Flooding near the coast destroys smaller structures with larger structures damaged by floating debris.
4 (major)	130 – 156 mph (113-136 knots) 209-251 km/h	920 – 944 millibars	More extensive curtainwall failures with some complete roof structure failure on small residences. Major erosion of beach areas. Terrain may be flooded well inland.
5 (major)	157+ mph (135+ knots) 252 km/h or higher	<920 millibars	Complete roof failure on many residences and industrial buildings. Some complete building failures with small utility buildings blown over or away. Flooding causes major damage to lower floors of all structures near the shoreline. Massive evacuation of residential areas may be required.

**Table 1: Saffir-Simpson Scale**

Although the frequency of occurrences for hurricanes affecting New York State is less when compared to other States, hurricanes have directly impacted New York State. The National Hurricane Center has identified the hurricane activity from 1851 through 2004 in the United States, with specific information on both the severity/frequency of events as well as hurricanes that were considered a “direct hit.” This data is identified in Table 2 and Table 3 respectively. In general, the average is one hurricane every 9.6 years. Since 1886, 11 hurricanes have directly affected New York. Historical storm tracks are represented in Figure 2 on page I-6.

Area	Category Number					All (1 – 5)	Major (3 – 5)
	1	2	3	4	5		
U.S. (Texas to Maine)	113	75	75	18	3	284	96
Texas	27	18	12	7	0	64	19
Louisiana	21	16	16	3	1	57	20
Mississippi	4	6	8	0	1	19	9

Area	Category Number					All (1 – 5)	Major (3 – 5)
	1	2	3	4	5		
Alabama	17	5	5	0	0	27	5
Florida	43	34	29	6	2	114	37
Georgia	15	5	2	1	0	23	3
South Carolina	17	7	4	2	0	30	6
North Carolina	25	14	11	1	0	51	12
Virginia	7	2	1	0	0	10	1
Maryland	1	1	0	0	0	2	0
Delaware	2	0	0	0	0	2	0
New Jersey	2	0	0	0	0	2	0
Pennsylvania	1	0	0	0	0	1	0
New York	6	1	5	0	0	12	5
Connecticut	5	3	3	0	0	11	3
Rhode Island	3	2	4	0	0	9	4
Massachusetts	6	2	3	0	0	11	3
New Hampshire	1	1	0	0	0	2	0
Maine	5	1	0	0	0	6	0

Table 2: Frequency/severity of coastal storms from 1851-2010: Courtesy – National Hurricane Center

Major Hurricane Direct Hits On the Mainland U.S. Coastline 1851-2004						
Area	Jun	Jul	Aug	Sep	Oct	All
U.S. (Texas to Maine)	2	4	30	44	16	96
Texas	1	1	10	7	0	19
Louisiana	2	0	7	8	3	20
Mississippi	0	1	4	4	0	9
Alabama	0	0	1	4	0	5
Florida	0	2	6	19	10	37
Georgia	0	0	1	1	1	3
South Carolina	0	0	2	2	2	6
North Carolina	0	0	4	8	1	13
Virginia	0	0	0	1	0	1
Maryland	0	0	0	0	0	0
Delaware	0	0	0	0	0	0
New Jersey	0	0	0	0	0	0
Pennsylvania	0	0	0	0	0	0
New York	0	0	1	4	0	5
Connecticut	0	0	1	2	0	3

Major Hurricane Direct Hits On the Mainland U.S. Coastline 1851-2004						
Rhode Island	0	0	1	3	0	4
Massachusetts	0	0	0	3	0	3
New Hampshire	0	0	0	0	0	0
Maine	0	0	0	0	0	0

**Table 3: Major hurricane direct hits on the mainland U.S. coastline 1851-2010: Courtesy – National Hurricane Center**



**Figure 2: Hurricanes experienced in New York State from 1851-2003. Courtesy - NYC OEM**

## 1. The Risk Assessment Process

The areas of New York State that are most susceptible to hurricanes consist of approximately 135 miles of Atlantic Coastline and 575 miles of Sound, bay and riverine shorelines predominately located in New York City, Westchester, Nassau, and Suffolk Counties. Yet, while the New York Metropolitan/Long Island Region is of prime concern, the remainder of the State may be impacted as well. These impacts are supported by several modeling techniques typically employed in coastal storm preparedness efforts.

A comprehensive and continual study has been undertaken by New York local, State, and Federal governments to identify the risk areas associated with hurricanes. In 2014, New York State completed a Hurricane Evacuation Study which consisted of hazard and vulnerability

analyses for hurricanes. The Sea Lake Overland Surge from Hurricanes (SLOSH) application is the primary tool that is utilized by New York State to determine the anticipated extent of flooding from storm surge using a worst-case scenario for storm categories 1-4. A regional map depicting this surge inundation has been prepared including the areas of Suffolk, Nassau, New York City, and Westchester Counties and can be found in Attachment 6. Additionally, various products and tools provided by the National Hurricane Center are also used to identify those areas in the State which may be subject to high winds, based upon inland wind-decay models. It should be noted that while an extensive amount of risk assessment activities have already been undertaken, much more work is needed to ensure that the maximum risk is identified to allow the State and local governments to adequately mitigate and prepare for a coastal storm.

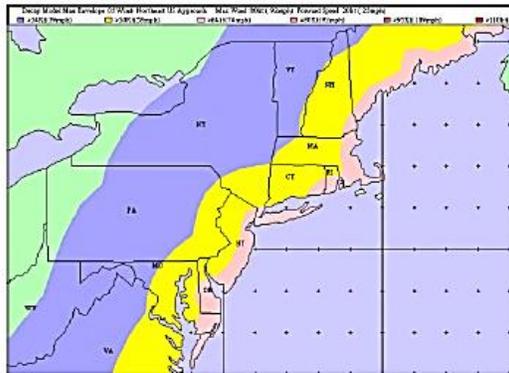
#### **a. Storm Surge**

Storm Surge is the abnormal rise in sea level accompanying a hurricane or other intense storm, such as a nor'easter. New York State is especially susceptible to extremely high surge values and these values are maximized in the New York City Metropolitan area where the coastline from New Jersey to New York forms a right angle. The shape and orientation of Long Island Sound makes it a natural funnel for northeast winds to blow into and pile up water in the western Sound during major storm events. Such set ups then propagate into New York Harbor through the East River. Northeast winds over the coastal Atlantic Ocean also raise sea level against the south coast of Long Island due to the Ekman effect, further driving storm waters into New York Harbor. Hurricane Evacuation Studies conducted jointly by NYSOEM, coastal counties, the Federal Emergency Management Agency (FEMA), and the U.S. Army Corps of Engineers (USACE) have identified this risk and communities that would be vulnerable to storm surge utilizing the SLOSH Model. In 1995, a Metro New York Transportation Analysis was conducted and identified that a category three hurricane on a worst-case track could create a surge of up to 25 feet at JFK Airport, 21 feet at the Lincoln Tunnel entrance, 24 feet at the Battery, and 16 feet at LaGuardia Airport. These figures do not take into account the wave action on top of the storm surge.

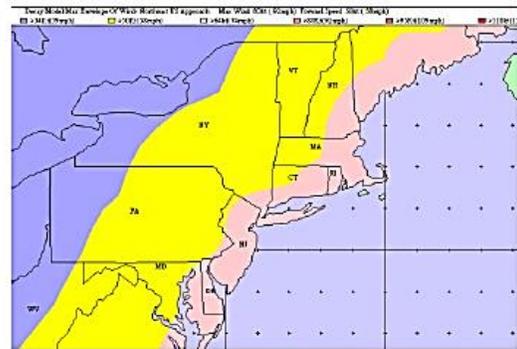
#### **b. High Winds and HURREVAC Wind Decay Modeling**

HURREVAC is a computer-based program and decision-making tool for hurricane preparedness utilized by Federal, State, and local officials. The HURREVAC application provides some generalized wind decay information as a coastal storm moves from the coastal areas inland. Figure 3 on the following page shows the traditional wind decay models for Category 1 and Category 3 Hurricanes and are based upon the Maximum Envelope of Winds or the MEOW model. The MEOW model identifies the decay of the hurricane wind field at landfall to estimate the maximum sustained surface wind as a storm moves inland. This model can be used for operational forecasting of the maximum wind of land falling tropical cyclones. It can also be used to estimate the maximum inland penetration of winds for a given initial storm intensity and forward storm motion.

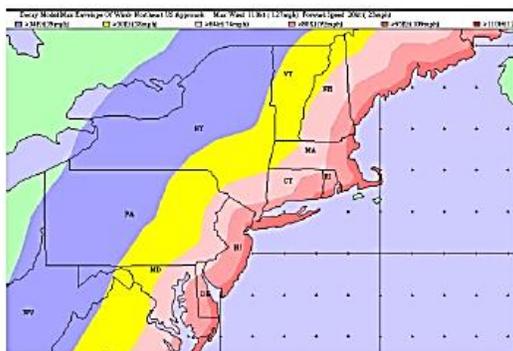
The graphic provides valuable information into some of the anticipated coastal and inland wind impacts that can potentially be expected based upon a variety of storm scenarios with varying winds and forward speeds. As illustrated by the graphics, the faster the forward movement of the tropical system, the farther inland the winds will penetrate. Hurricane-force winds can easily destroy poorly constructed buildings and mobile homes. Wind speeds usually decrease significantly within 12 hours after landfall. Nonetheless, winds can stay above hurricane strength well inland. Debris such as signs, roofing material, and small items left outside become flying projectiles in hurricanes. Extensive damage to trees, towers, water, and underground utility lines (from uprooted trees), and fallen poles cause considerable disruption. High-rise buildings are also susceptible to hurricane-force winds, particularly at the higher levels since wind speed tends to increase with height. With increasing intensity of the hurricane, it will be expected that high winds will be felt well inland. As an example, a 75 mph fast moving system will likely produce winds in excess of 58 mph throughout the southeastern portion of New York State and the Lower Hudson Valley. For the same storm with an intensity of 95 mph, it can be expected that the wind field of 58 mph winds will be expanded throughout the Southern Tier region and throughout the Catskills and Adirondacks, the lower Hudson Valley, New York City,



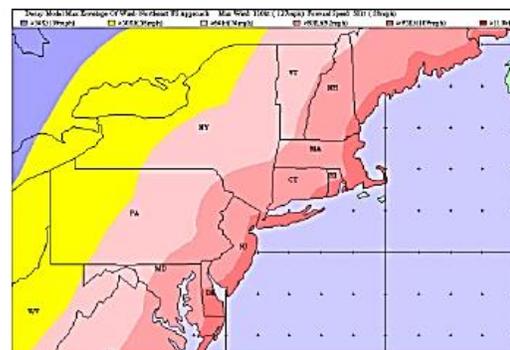
**Cat 1 Storm - Slow Moving**



**Cat 1 Storm - Fast Moving**



**Cat 3 Storm - Slow Moving**



**Cat 3 Storm - Fast Moving**

>34Kt(39mph)    
  >50Kt(58mph)    
  >64kt(74mph)    
  >80Kt(92mph)    
  >95Kt(109mph)

**Figure 3: HURREVAC wind decay modeling: Source – NYSOEM**

and Long Island will experience winds in excess of 74 mph. A category 2 hurricane with 109 mph winds will generally yield at least 58 mph winds throughout the State with winds of 74 mph extending throughout the Hudson Valley and 92 mph winds can be expected in New York City and Long Island.

### **c. Excessive Rainfall/Flooding**

Flooding is one of the most serious and often overlooked hazards that accompany hurricanes. Over the past 30 years, inland flooding has been responsible for nearly 50% of the deaths associated with hurricanes. Excessive rainfall and flooding from tropical systems in New York is a relatively common occurrence. Historically, notable tropical cyclone-related flooding incidents in the State include Hurricanes Connie and Diane in 1955, Hurricane Agnes in 1972, Tropical Storm Floyd in 1999, Tropical Depression Ivan in 2004, and lastly, Hurricane Irene and Tropical Storm Lee in 2011. For future events, it is highly likely that a strong coastal storm will cause significant flooding from storm surge and rainfall to coastal areas, but will also significantly impact the remainder of the State. The excessive rainfall amounts anticipated with a coastal storm will likely be felt Statewide, causing riverine flooding in many of the State's waterways. New York State is no stranger to flooding and is among the Nation's leaders in experiencing Federally-declared flood disasters. These disasters include one of the most recent flooding events in June of 2006, which devastated the Southern Tier and portions of central New York, resulting in damages in excess of 300 million dollars.

### **d. Tornadoes**

Tornadoes are most likely to occur in the right-front quadrant of the hurricane, which is typically where the strongest winds are generally located. However, they are also often found elsewhere embedded in the rain bands, well away from the center of the hurricane. Studies have shown that more than half of the land-falling hurricanes produce at least one tornado. The tornadoes associated with hurricanes are typically less intense than those that occur in the Great Plains, however, the effects of tornadoes, added to the larger area of hurricane-force winds, can produce substantial damage.

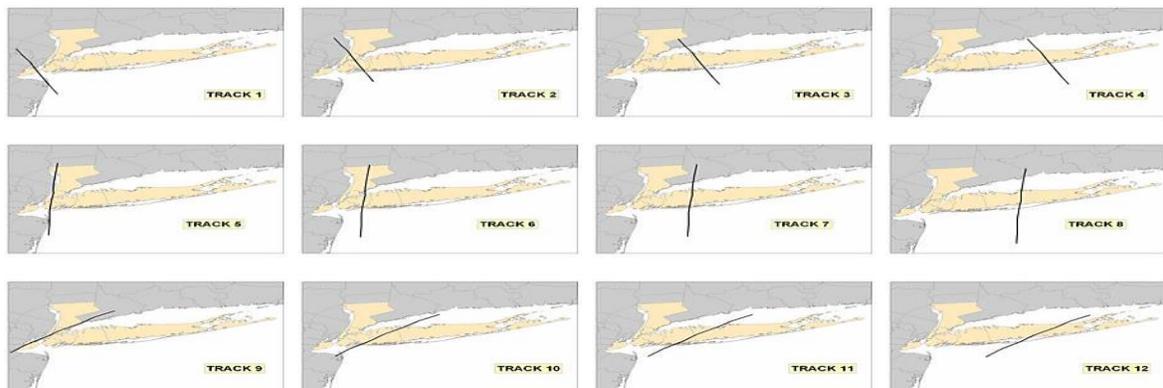
### **e. Secondary Hazards**

Like many other hazards, hurricanes are typically accompanied by a series of secondary hazards or cascade effects that become evident in the wake of the storm. In addition to the hazards listed above, other hazards that may be associated with hurricanes include electric power outages, water supply contamination, flooding of sewage treatment facilities, hazardous materials spills/releases, landslides, and even the potential failures of dam structures.

## f. HAZUS-MH Data

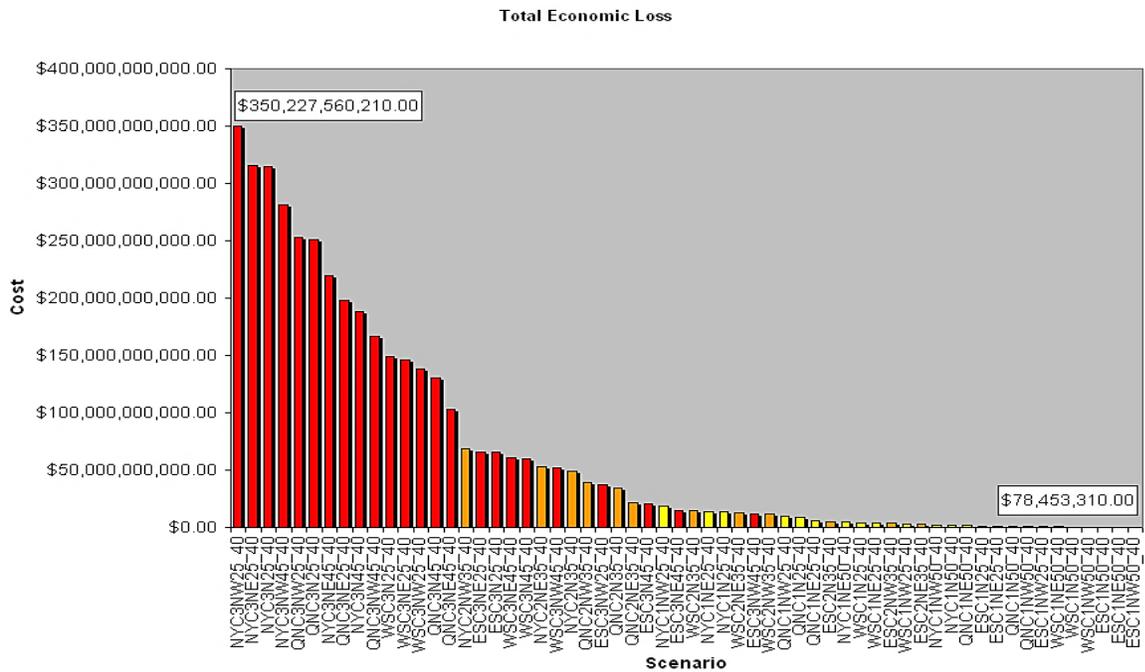
Figure 4 illustrates hurricane tracks that were developed for State modeling purposes using the Federal Emergency Management Agency's (FEMA) HAZUS-MH.

HAZUS-MH is an electronic risk assessment tool that provides planners with valuable information for assessing the potential effects and outcomes of a coastal storm. By nature, model runs for storm tracks with varying landfall locations and approach direction will have different levels consequences, such as the amounts of debris generated, sheltering and housing needs and total cost of the disaster. In using HAZUS-MH, the State used several scenarios and storm tracks for its modeling purposes: Northwest, North, and Northeast tracks.



**Figure 4: HAZUS Model Scenario Tracks: Source – NYSOEM**

After running several storm scenarios, it was determined that as the storm tracks were shifted towards the west (closer to New York City), and increased in intensity, the total cost from wind damages significantly increased. The following graphic, figure 5, represents the Total Economic Losses generated from the hurricane scenarios modeled. Based upon the model runs, total economic losses ranged from 78.45 million dollars for a Category 1 storm impacting primarily the east end of Long Island to 350.228 billion dollars for a Category 3 Hurricane impacting the greater metropolitan area of New York City.



**Figure 5: Projected Total Economic Losses for Hurricane Scenario: Source - NYSEOM**

Figure 6 below represents the largest debris generation data produced for the scenarios that were modeled. The total debris figures account for three classifications of debris; brick and wood, concrete and steel, and tree debris. The bars are color-coded based upon the intensity of the hurricane. Category 3 storms are reflected by red bars, Category 2 storms by orange bars, and Category 1 storms are represented by yellow bars. Depending on the landfall location, approach direction and forward speeds, the debris generation for Category 3 storms ranged from 5,505,758 to 40,995,766 tons, Category 2 storms ranged from 3,987,558 to 13,781,197 tons, and Category 1 hurricanes ranging from 857,037 to 7,216,826 tons of debris.



powerful storm directly impact the New York City Metropolitan area. Most storm scenarios produced monetary damages exceeding \$75,000,000.00, not inclusive of infrastructure.

4. Population growth and densities have occurred in many coastal communities without adequate expansions of the transportation infrastructure. Coupled together, this could be potentially disastrous in regard to the damage incurred and for coastal residents seeking refuge away from storm surge areas.
5. The magnitude and scope of a coastal storm may require the opening of numerous emergency facilities (i.e., Disaster Assistance Centers/ Service Centers) over a large geographic area, which will require participation from numerous State and local agencies and non-governmental organizations.
6. The environmental impacts are likely to be extensive, possibly taking years for the environment to fully recover.
7. A low occurrence of coastal storms has created a behavioral attitude of complacency, which could lead to increased loss of life for individuals failing to heed evacuation orders, or with the inability to evacuate.
8. Response capability and capacities will likely be exceeded in most jurisdictions and at all levels of government.
9. All 16 critical infrastructure/key resource sectors may potentially suffer severe damage.
10. The public transit system in the New York Metropolitan area will go through a phased shut down prior to storm arrival. This may result in a large number of daily commuters that are in need of transportation out of the identified risk areas to their home of record.
11. Debris management will likely be a major issue requiring regulatory waivers, expediency in permitting, specialized hauling, disposal issues, and will require extraordinary coordination amongst stakeholders in clearing roadways for resource and material support.
12. Evacuations in coastal communities will predominantly be conducted for residents evacuating storm surge areas to seek protection on higher ground within the county. This does not indicate a full evacuation of a county to neighboring counties or States.
13. The evacuation of health-care facilities such as hospitals, nursing homes and assisted living facilities will require significant interagency and intergovernmental coordination, logistical support and early warning. It is unlikely that all such facilities will be able to be fully evacuated prior to landfall. In some cases, the risk of evacuating patients may be too

great versus trying to shelter them in place. In such instances, government needs to remain aware of the status of the facilities and its occupants, and be in position to act quickly in support of the facility immediately following the storm. These actions may include supporting those who remained in place while services to the facility are restored or, if the occupants can be safely relocated, supporting their movement to an alternate location.

14. Post-landfall, the transportation infrastructure, including roads, bridges and tunnels, may be unusable pending inspection or out of service for a period of time. This may impact the ability for the State to deploy supplies, equipment and personnel to response agencies as well as emergency relief supplies to coastal community inhabitants.
15. If enough warning of an approaching coastal storm is provided, the State will have a narrow window of opportunity to pre-deploy State resources, relief supplies and materials to the at-risk areas prior to the storm making landfall. If this is not possible or feasible, then those resources will need to be withheld until the storm's passing.
16. Response actions need to be swift and decisive, necessitating the use of a variety of State and Federal statutes and authorities to effectively respond to and recover from a strong coastal storm.
17. Law enforcement support and security will be a significant concern. As witnessed in Hurricane Irene, law enforcement resources will likely be requested to augment local capabilities in support of evacuation, securing evacuated areas, shelter security, and to support the repatriation process.
18. Multiple States may be impacted by one large coastal storm making landfall on the East Coast. As a result, resource availability through EMAC partners or the Federal government may be delayed, in limited supply, or simply unavailable.
19. The Governor may request a Federal pre-landfall disaster declaration from the President.
20. Through activation of the National Response Framework (NRF), the Federal government may implement a proactive staging of Federal assets before landfall. The State and local jurisdictions need to be in a position to accept and effectively utilize those resources as they become available.
21. State agencies supporting this Annex may determine that their regional offices are located in areas that may be potentially affected by the approaching storm or that the continued operation of their agency's mission from that location may place their personnel in harm's way. Therefore, agencies may need to operate from an alternate facility as identified in their agency-specific continuity of operations plan.

## **F. Concept of Operations**

1. Initial notification of a Hurricane or Tropical Storm will be identified through continuous monitoring of meteorological conditions potentially impacting the State. Monitoring activities are performed by the National Weather Service and Local Weather Field Offices, New York State Office of Emergency Management, New York State Department of Environmental Conservation and local Emergency Management Offices.
2. Upon initial notification of an active Atlantic Tropical Cyclone, the State OEM Planning and Operations Sections will initiate monitoring activities of the system, paying specific attention to location and proximity to New York State, system intensity, projected paths, and expected intensification. Similar monitoring activities and meteorological support functions will be performed by the New York State Department of Environmental Conservation.
3. As the threat to New York State increases, NYSOEM will conduct additional outreach to the National Weather Service Area Offices and NYSOEM regional offices. Additional conference calls will include preliminary (Tier 1) discussions with members of the Regional Emergency Liaison Team (RELT). A full description and assignment of conference calls can be found in Attachment 2.
4. SOEM will facilitate additional outreach and coordination to State agencies to advise agencies and State ESF coordinators of the situation. Discussions will include agency-specific preparations for individual agency preparedness, as well as multi-agency preparedness efforts in preparing for an activation of the State Emergency Operations Center (SEOC).
5. If conditions warrant the activation of the SEOC, NYSOEM will notify other appropriate Disaster Preparedness Commission (DPC) agencies representative and will include the activation of all of the State's ESFs. In addition, SOEM will notify the county emergency manager(s), and others as deemed necessary. It is at this point that agencies may begin staffing or activating their agency operations centers (AOCs), as appropriate.
6. NYSOEM will coordinate response activities in support of a State-established MAC Group, being cognizant of response operations at the local level. In doing so, the State may deploy personnel to establish a field coordination element to leverage, prioritize and direct incoming State and Federal resources in support of local government. Such response operations will be coordinated through NYSOEM staff assigned to local/regional Emergency Operation Centers (EOCs).
7. The Governor could exercise his authority in declaring a State Disaster Emergency. Upon the declaration of a State Disaster Emergency, the Governor may direct any and all State

agencies, including non-DPC agencies, to provide assistance under the coordination of the Disaster Preparedness Commission.

8. State assistance will be supplemental to local efforts. Support may include, but not be limited to providing security, evacuation support, public health and emergency medical support, providing human needs support, public information, emergency services support, environmental remediation, and search and rescue.
9. NYSOEM will coordinate with the Department of Homeland Security (DHS)/Federal Emergency Management Agency (FEMA) and other Federal agencies as needed, and will coordinate with multiple Federal Emergency Support Functions.

## **G. Legal Authorities**

This authority to develop this Annex and implement specific response actions to effectively respond to a coastal storm can be found in a variety of New York State Laws, regulations and Federal authorities, including:

### **1. State Authorities**

- New York State Constitution
- New York State Executive Law, Article 2-B (4/1/79), as amended
- New York State Defense Emergency Act (4/12/51), as amended
- Executive Order # 26.1 of 2006, as amended (NYS Adoption of the Incident Command System)

### **2. Federal Authorities**

- National Oil and Hazardous Substance Pollution Contingency Plan
- Flood Control Act of 1960 (US Army Corps of Engineers): Laws authorizing the allocation of resources for planning activities related to Hurricane Preparedness.
- Federal Robert T. Stafford Disaster Assistance and Relief Act.
- Homeland Security Presidential Directive 5: Enhance the ability of the United States to manage domestic incidents by establishing a single, comprehensive national incident management system.
- Homeland Security Presidential Directive 7: Requires Federal departments and agencies to develop methods and technologies to protect all critical infrastructures and key resources of the government and economic sector. A secondary goal is to foster the development of methods and technologies that can minimize the impact if an adverse event actually occurs. Federal departments and agencies have been instructed to work with State and local governments, and with the private sector, to accomplish the objectives laid out in this directive.

- Presidential Policy Directive 8 (3/2011): Established the National Preparedness System, focusing on resilience, preparedness, mitigation and security.
- National Windstorm Impact Reduction Act of 2004: Laws pertaining to windstorms to consist of three primary mitigation components: improved understanding of windstorms, windstorm impact assessment, and windstorm impact reduction. The components shall be implemented through activities such as data collection and analysis, risk assessment, outreach, technology transfer, and research and development.

#### **H. Annex Maintenance, Distribution, and Revision Process**

The NYS OEM Planning Section has the responsibility for the development, review, and maintenance of all multi-agency response plans under the New York State CEMP. As required under New York State Executive Law Article 2-B, each ESF annex shall undergo an annual review and update on or before February 15<sup>th</sup> of each year and be posted online (if applicable) no later than March 31<sup>st</sup> of each year.

During the annual review by the Planning Section for its material, this plan is examined for both content and format. For updates that do not impact operational mechanisms or processes, the appropriate edits are initiated within the Planning Section and do not warrant external involvement. Plan updates will also be conducted based upon experiences and lessons learned from exercises or real-world events, or through administrative changes in government. Planning Section updates and/or edits affecting operational capabilities, responsibilities, or otherwise impacting operations will engage stakeholders in a variety of ways, such as verbally, by document review, meetings, webinars, or any combination thereof. Final drafts will be socialized to all appropriate agencies/personnel upon completion.

# **New York State Comprehensive Emergency Management Plan**

## **Coastal Storm Annex**

### **Section II: Risk Reduction**

#### **A. Preparedness**

A variety of risk reduction measures have taken place at all levels of government, many of which have been implemented by local government or through consolidated efforts of local, State and Federal-level partnerships. These efforts range from structural improvements, hazard mitigation planning efforts, training and exercising, response planning efforts, and a host of studies and initiatives to support coastal emergency preparedness. In addition, several new planning efforts are on the horizon which should have a profound positive impact in increasing the level of preparedness in many communities of the State.

##### **1. Coastal Program Studies, Analyses, and Initiatives**

In 1993, New York State completed an initial Hurricane Evacuation Study (HES) of the Greater New York Metropolitan area (Westchester County, New York City, Nassau and Suffolk counties). The study was performed in conjunction with the State's Federal counterparts at the U.S. Army Corps of Engineers, the Department of Homeland Security / Federal Emergency Management Agency and was designed to assist the State and local jurisdictions with planning for and responding to a hurricane.

The Hurricane Evacuation Study consists of several analyses including a Hazards Analysis, Vulnerability Analysis, Behavioral Analysis, Transportation and Shelter Analyses. These products are used to identify the areas at risk, vulnerable population and structures within these areas, the expected behavioral patterns of residents within the study area, demands that will be placed on the transportation infrastructure, the time required to evacuate, and the expected shelter demand. The Hurricane Evacuation Study was expanded upon in 1995 with the production of the Metro New York Transportation Study, which took an in depth look at the transportation support facilities (rail, bridges, etc.) and their vulnerability to winds and surge from hurricanes of varying intensities.

In 2000, 2005 and 2008, the partnership continued to update the 1993 study and incorporate new advances in mapping and technology, behavioral, demographic and population changes, the update of planning assumptions and recalculation of clearance times. The HES was recently completed in 2017 for New York City and Nassau, Suffolk, and Westchester Counties.

In 2005, New York State had initiated a process utilizing the HAZUS-MH application for wind to model several sample hurricanes. This report is an interim product of the findings that have

been compiled from this process to date, and have been used to better understand and plan for the impacts associated with these scenarios. Compiled together, all of this study information serves, in part, as a technical basis for State and local planning efforts.

In 2014, a limited number of coastal counties developed pre-scripted resource and/or mission requests. These requests will be provided to the State as a coastal storm unfolds. Some of the requests will require the State's attention and will need to be satisfied by State and/or Federal resources. Upon completion, the use of pre-scripted requests will serve as another means of the State and local governments being able to prepare and posture themselves for a coastal storm. These requests will be catalogued in this Annex when finalized by the counties and provided to the State as final products.

## **2. Local Coastal Planning Efforts**

Many coastal communities are undergoing a variety of planning efforts in preparation for a major coastal storm. These planning activities have culminated over several years and include county-level emergency management plans to prepare for, respond to, and recover from a coastal storm. Mechanisms of these plans include crucial elements such as mass care and housing, evacuation methodologies, security, public warning, and emergency information, and direction and control. Further, the jurisdictional plans that have been developed in New York City and Nassau, Suffolk, and Westchester Counties have been done in unison, each recognizing the human and economic concerns, transportation issues, geopolitical concerns, and regional impacts that serve as common denominators to that region of the State. Efforts included developing and implementing a synchronization matrix, which ties the evacuation decisions and timelines across all the coastal jurisdictions to ensure coordination in evacuating at-risk communities. Additional efforts include conducting a Gap Analysis, flood initiatives, and several public outreach events designed to educate and inform the public about coastal storm preparedness. Also, as referenced earlier, some jurisdictions have developed pre-scripted mission requests in an effort to expedite the request process. Attachment 6 includes maps and supportive data that outline some of the activities listed above. In reviewing, note that the differences in storm surge inundation associated with each category of a hurricane, the evacuation zones, shelter data, and the points of distribution (PODs) that coastal counties have identified to distribute relief supplies.

Coastal counties have an immense challenge in adequately preparing for a coastal storm. Yet, while the preparedness efforts of each coastal community are noteworthy, there is little in the way of hurricane/coastal storm preparedness efforts outside of the counties that are mentioned above.

### **3. Local Hazard Mitigation Planning Efforts**

Similarly, mitigation planning efforts are under way or complete for many jurisdictions in the State, including the New York Metropolitan region. Pursuant to the Disaster Mitigation Act of 2000 (DMA 2000), local multi-hazard mitigation plans are required to focus on natural hazards that are likely to cause a substantial impact on that jurisdiction. These efforts include identifying risks and vulnerabilities, inventorying assets, estimating losses, and ways to prevent or mitigate the impact of those hazards. Coastal storms are recognized as one of those hazards. These efforts are ongoing and include short-term and long-term programs and capital improvement projects that will help make communities disaster resistant or resilient. Additionally, the data collected in the assessment process keys planners into identifying contingencies in response to those risks. Further, the pre-event data collection provides an easy access point for county, State and Federal officials to use in conducting preliminary damage assessments and justifying a Federal disaster declaration.

### **4. State Hazard Mitigation Planning Efforts**

Volume 1 of the State Comprehensive Emergency Management Plan is the *State Multi-Hazard Mitigation Plan*. Pursuant to the requirements of 44 CFR 201.4, the State Multi-Hazard Mitigation Plan is required to focus on natural hazards that are likely to cause a substantial impact on the State. This focus includes addressing coastal storms that may impact the State. The mitigation plan outlines the State's overall strategic hazard and risk policies for natural hazards mitigation and provides a support basis for local governments to use in their individual and collective mitigation planning efforts. The development of the mitigation plan incorporated input from many State agencies, with the most recent iteration approved by FEMA in 2018.

### **5. State Response and Recovery Planning Efforts**

While the value of the mitigation planning effort is recognized, planning requirements mandate that mitigation plans profile natural hazards only. To address this, the State has also developed numerous hazard-specific annexes that take an in-depth look at some of the State's highest rated hazards.

Volume 3 of the State Comprehensive Emergency Management Plan is the Long-Term State Recovery Plan. This volume includes the mechanisms for utilizing long-term recovery components, including mitigation, provided for under the Federal Robert T. Stafford Disaster Relief and Emergency Assistance Act and a variety of Federal-State programs. The activation of the recovery plan will necessitate the activation of State Recovery Support Functions (RSFs) to mirror the Federal response. RSFs are intended to facilitate the coordination and delivery of Federal assistance to supplement the recovery efforts of local and State governments and are designed to operate within a timeframe of months to years. Volume 3 also recognizes the primacy of local governments in the implementation of long-term recovery plans and, depending

on the nature and impact of the disaster, new programs might be necessary to effectuate full recovery.

## **6. Continuity of Operations Planning**

Individually, many New York State agencies have been actively involved in their own agency-specific planning and Continuity of Operations Planning (COOP). Many State agencies have completed their COOP efforts, while others are in varying points of the planning process. The development and implementation of these types of planning efforts further support the State's ability to provide essential services in response to a coastal storm. In 2019, the State received its accreditation under EMAP; included in the accreditation is a Continuity Plan requirement for the DPC agencies. All DPC agencies have completed their COOPs as of 2019.

## **7. Training and Exercising**

The State of New York sponsors and conducts a variety of training to improve response capability. This includes varying levels of training in the Incident Command System and the Professional Development Series (PDS) curriculum. The State also participates in a wide variety of specialized training, including training to meet Federal program and grant requirements. Further, many State agencies identify training requirements within their own organization to meet the needs of the agency for that specific discipline.

State, county and local planning representatives have attended a variety of training in support of their coastal preparedness efforts. This includes attending training at the National Hurricane Center, as well as several deliveries in the State of the HURREVAC program. Both of these highly acclaimed training forums provide planners with the tools use in modeling scenarios, which in turn support local plan development and decision making during an actual event.

The State has had real-world experience in responding to coastal storms. In addition to the typical nor'easters that occur nearly every year, the State supported response and recovery efforts during Hurricane Katrina in activating the Human Services Branch and deploying numerous State personnel to the affected area in response to requests fielded by NYSOEM from the Emergency Management Assistance Compact (EMAC).

In addition to real-world responses, the State also conducts a variety of exercises to assess and improve upon its response capabilities. In most cases, the State utilizes an exercise component as part of the planning process to test the effectiveness of an emergency management plan. These exercises provide viable input into plan development and help to ensure that the plan is effective in its scope and application. Since 1999, the State has conducted eight major coastal storm exercises, one which was held as recent as July of 2014. There was also a Coastal Storm Workshop with all State agencies that took place in 2019.

The improvements that are recognized through real-world events or through a formal exercise process have led to the development of this Annex. As part of a comprehensive planning,

training and exercise program, NYSOEM will endeavor to conduct training sessions, seminars and briefings on this Annex with the appropriate stakeholders. The formal training and outreach process will be concurrent with each plan revision cycle.

## **8. Changes in Federal Policy**

Hurricane Katrina in 2005 pointed out the necessity of being able to provide adequate State and Federal resources in advance of a potential land-falling hurricane. The policy provides for pre-landfall **emergency** declarations with Federal assistance limited to Category B (Emergency Protective Measures) of the FEMA Public Assistance Program. This includes Direct Federal Assistance, which provides for the mission assignment of Federal resources to lessen the burden on State responders.

Under the new interim policy, certain criteria must be met in order for a pre-landfall emergency declaration to be considered. Such criteria include the following:

- The State's emergency plan has been initiated.
- A projection by the National Weather Service that the State, or portion of it, will be threatened by a major hurricane.
- Other criteria to be met include **either**:
  - The State, or jurisdiction(s) thereof, has issued **mandatory** evacuation orders for three or more counties / parishes, or any geographical area with a combined population of more than 100,000 residents; **or**
  - The declaration is necessary to provide operational Federal support (e.g., teams, equipment, supplies) to meet critical pre-positioning and readiness requirements which would overwhelm the capability or capacity of State resources.
  - At the time of the request, the State must be under a hurricane watch or warning.
  - The request must be made while the storm is at a category 3, 4, or 5.
- Under the interim policy, the standard policy for requesting a declaration remains the same, whereby the governor must declare a State of emergency and make request of the President that a Federal emergency declaration be issued. The President will consider the request and act in accordance of the law.
- Only the President can decide to make Emergency and Major Disaster declarations. By making a pre-landfall emergency disaster declaration, the President is in no way obligated to either approve or disapprove any declaration request.
- The Federal share for assistance for a pre-landfall emergency declaration won't be less than 75 percent of the eligible costs, and funding will be recommended at a 75 percent Federal/25 percent non-Federal cost-share.
- The pre-landfall declaration only covers one category of work, emergency protective measures.

# **New York State Comprehensive Emergency Management Plan**

## **Coastal Storm Annex**

### **Section III: Response**

#### **A. Overview**

NYS Executive Law, Article 2-B identifies that local chief elected officials have the primary responsibility to respond to emergencies within their jurisdiction. This primacy exists at all levels of government in the State, with the State serving in support of local government. Requests for State assistance are generally submitted to the State via each county, with State assistance being supplemental to local response efforts. Further, the State also serves as the conduit for EMAC support and in requesting and receiving Federal resource support.

It is worth noting that this request process and structure is in place to ensure that there is a centralized coordination of resources and direction of requests for assistance. This coordination is not just important for the purposes of functionality but is also founded in State Executive Law and is an operational component for NIMS compliance. In smaller, more localized events, these lines of coordination may appear easier to manage in satisfying local resource requests when State, EMAC and Federal resources are in abundant supply. However, in a catastrophic event that impacts multiple counties and multiple States, some resources may be scarce, potentially resulting in jurisdictions having to compete for those very same resources. As such, the State response must put itself in a position to leverage what resources are available and have the ability to prioritize local resource requests as they are received.

State response activities may be agency-specific to meet statutory obligations or be performed under a multi-agency setting to meet common operating goals or objectives. The fourteen Emergency Support Functions (ESF) annexes to the State CEMP identify multi-agency activities in coordinating a collective State response in support of a specific function or activity. Each ESF is comprised of various agencies that are assembled to coordinate the activities of their own agency in support of the ESF activities. Agency-specific support of ESF supplies an individual focus of that agency from the agency representative. Typically, the agency representative will not coordinate agency-specific activities outside the parameters or mission of the ESF. Thus, if an agency is needed to support multiple ESFs, and multiple ESFs are activated, each agency may send multiple representatives to support the various ESFs.

#### **B. Alert, Notification and Activation**

The State's alert, notification, and activation scheme is linked to local, county and Federal-level operating plans. This taxonomy allows for the State's posture to be aggressively forward-leaning in anticipation of response activities and requests for assistance. Graphics to support the taxonomy can be found in Attachment 1.

During Steady-State operations, the State Emergency Operations Center (SEOC) maintains a readiness posture, while conducting normal day-to-day operations, and conducts surveillance and monitoring of any potential emergency. Monitoring of any tropical events is ongoing through numerous sources including the State Watch Center (SWC), the National Weather Service (NWS), the National Hurricane Center (NHC), and other notable tropical storm tracking websites.

During routine monitoring, should the National Hurricane Center issue a forecast that identifies the potential for a tropical storm or hurricane to directly impact New York State, the SWC will provide an initial notice to State agencies and counties of the potential of a coastal storm.

The following timeline is to be used as a guide. Past experiences and history have shown New York State that the track and timing of a coastal storm varies. As a result, all coastal storm timelines and predictions for landfall should not be treated equally.

- 1. Level 4:** This level should be initiated **at approximately 144 hours (6 days out)** prior to the forecast arrival of substantial tropical storm force winds. State OEM staff will begin to assess and analyze the anticipated storm path and timing using various systems and open-source information. The combined efforts will provide the Director of OEM with a synopsis for informed Executive decision making. Based on the synopsis and other participating factors, the Director may decide to activate the State EOC to a Level 3 at no later than 120 hours (within the next 24 hours).

Goal: Conduct joint assessment and decision-making, initial Multi-Agency Coordination (MAC) Group call, begin measures to increase state posture, and notify agencies of staffing requirements for upcoming operational period(s).

At this level, the following actions may be taken:

- At the discretion of the State OEM Director, an initial MAC Group call may be convened to discuss the implications of the synopsis. Ideally, the MAC Group call should represent the entire DPC.
- 2. Level 3:** This level is initiated based on an assessment that there is an increased probability of a tropical storm or hurricane striking New York State. This level should be initiated **at approximately 120 - 96 hours (5 days out)** prior to the forecast arrival of tropical storm force winds.

Goal: To provide a continued assessment of storm information, make projections on potential consequences, assess local preparations, conduct initial briefings/analyses with agencies, and make preparations to increase the State response posture.

Level 3 will consist of Emergency Support Function (ESF) Coordinators only.

Initially, day-time staffing of the State EOC may be sufficient as the initial operational period(s) for this level of activation may coincide with normal working hours before proceeding to an extended and/or continuous operational period cycle as an event becomes imminent.

At this level, the following actions may be taken:

- If warranted, the State EOC will **begin to implement 8 or 12-hour staffing patterns** to support day operations.
- State OEM will activate ESF #5 to provide a continued technical analysis of the storm. Using varying modeling techniques and open-source data, the Situation Unit will assess storm track, interpret the forecasting data, and provide an ongoing assessment of state and local actions being planned or implemented.
- After reviewing the storm synopsis, the Director of State OEM will determine the need to increase or decrease the State's response posture. If it is determined to increase, the need for mobilization and pre-deployment of State resources/staff will be assessed.
- At this time, the level of preparedness for all DHSES-based assets will be assessed to ensure a state of readiness. This includes:
  - Logistical facilities, emergency stockpiles, supplies and equipment.
  - Emergency communications equipment, support equipment and vehicles.
  - Identifying staffing patterns, operational periods, shift rotations, and potential field deployments.
  - Initial notification to State IMT personnel of potential deployment.
- State ESF Coordinators will be notified by the State Watch Center (SWC) for their required presence. The State ESF Coordinators\* are as follows:
  - ESF #1 Department of Transportation
  - ESF #2 Office of Interoperable and Emergency Communications
  - ESF #3 Department of Environmental Conservation
  - ESF #4 Office of Fire Prevention and Control
  - ESF #6 DHSES Individual Assistance
  - ESF #8 Department of Health
  - ESF #9 Office of Fire Prevention and Control
  - ESF #10 Department of Environmental Conservation
  - ESF #11 Department of Agriculture and Natural Resources
  - ESF #12 Department of Public Service
  - ESF #13 Division of State Police
  - ESF #15 DHSES Public Information Office

\*ESF #5 and #7 are coordinated by the State OEM

- State OEM and the ESF Coordinators will jointly identify which agencies of each ESF may be required to support the activation level for the current response level. If the ESF Coordinator determines that additional agencies are needed, those agencies will be notified to staff the State EOC via the State Watch Center.
  - At the discretion of the State OEM Director, a MAC Group call may be convened to provide an update of the implications of the weather forecast. As the response moves forward, the State OEM Director will conduct a MAC Group call each time there is a potential increase or decrease in State EOC activation level.
  - State Emergency Support Function Coordinators: ESF Coordinators will be asked to begin dialogue and address preparatory measures with the member agencies of their respective ESF. Agency and ESF discussion will include aggressive development of staffing plans and that each agency/ESF begin to:
    - Asset protection: assess the agency's level of vulnerability to the impending event, and mitigate as appropriate.
    - Review the level of agency-specific preparedness to implement continuity measures.
    - Review the level of preparedness to support a collective, state response as identified in each ESF annex and this Coastal Storm Annex.
    - Establish priorities in preparing for the event - such as identifying available resources, future resources requirements and internal staffing patterns.
    - Address any sector-specific coordination or customer-based concerns or outreach, as appropriate.
    - Identify and raise any specific needs, issues or gaps that require support or coordination from State OEM.
  - Other agencies may be brought into the discussion, as appropriate. At this point, the importance of individual and family preparedness should be reiterated to all staff and agencies.
- 3. Level 2:** This level is initiated when the State receives notification from multiple weather sources that there is a high likelihood of a tropical storm or hurricane striking New York State. This level should **be initiated no later than approximately 96-72 hours out (4 days out / at least 48 hours in advance of a Tropical Storm Watch)**, prior to the forecast arrival of sustained tropical storm force winds.

Goal: In addition to those identified in Level 3, assess local response posture and activities, continue briefings/analyses with ESFs, increase in preparations in implementing the state

response posture, make preparations for initial requests for assistance, and make provisions to rapidly assess damages.

In addition to those agencies identified in Level 3, State OEM will request **all** ESF Member Agencies to send a representative to the State EOC.

**At this point, the State EOC will be maintained at a 12-hour (Day) staffing operations.**

At this level, the following actions may be taken:

- Initial Executive discussions should be considered for a Governor’s declaration of a State Disaster Emergency.
- State OEM will facilitate a Regional Emergency Liaison Team (RELT) conference call with the at-risk communities. Discussion points will include:
  - Storm-related specifics, questions, or concerns.
  - Anticipated local response actions.
  - Upcoming protective actions (and timing).
  - Identifying any potential resource requests or shortfalls.
- Initial consideration will be given to establishing a Joint Information Center (JIC) through ESF #15 to begin developing and disseminating critical public messaging and advisories.
- ESF Coordinators will be provided updated storm data and will be tasked with identifying potential actions, developing staffing patterns, begin preparations to implement response activities, and identify any resource support issues as the State moves forward in the response.
- State OEM will contact FEMA Region II to determine Federal posturing and preparedness and what resources, if any, may be pre-positioned or proactively deployed to the State or region.
- State OEM will engage in dialogue with other at-risk States in the region to determine operating timelines and potential protective actions that will directly or indirectly impact the State. Discussions may include resolving any potential State-to-State communications issues, overlap and operational concerns, and set the parameters to maintain an open dialogue between the States.
- State OEM will coordinate with local, State, and Federal partners to ascertain status and availability of potential field locations to be used as staging areas, mobilization sites, and distribution centers. This outreach will serve as a primer for the State’s ability to access these locations in the event that they are needed.

- ESF #5 will continue to provide an ongoing assessment of storm information (track, intensity, timing), and an assessment of state and local response activities being planned or implemented.

**At approximately 72 hours (3 days out) prior to the forecast arrival of sustained tropical storm force winds, the State EOC will be maintained at 24-hour staffing operations.** It is at this point that the State can expect to begin to receive requests for assistance and local situational/operational information.

**Note:** This is an opportune time for a follow-up Executive-level discussion regarding the decision for the Governor to declare a State Disaster Emergency. This action enables the use of EMAC resources and can be followed by a formal request for a Federal Presidential Emergency Declaration (informally known as a Pre-Landfall Emergency Declaration).

At this time, along with all previous actions, the following actions may be taken:

- State OEM will facilitate a follow-up RELT conference call with the at-risk communities. Discussion points will include:
  - Storm-related specifics, questions, or concerns.
  - Anticipated local response actions.
  - Upcoming protective actions (and timing).
  - Identify potential resource requests, gaps, and needed support.

From this point forward, State OEM will continue to facilitate this call at regular intervals. It is anticipated that at this point, local emergency operation centers will begin to activate and the State will begin to receive requests for State assistance from the at-risk communities. Local actions warranting potential State support can be found in Attachment 5 – *County Protective Action Decision Timeline*.

- State OEM may work to assemble and coordinate multi-agency teams to local or regional EOCs, as needed.
- All command and general staff positions will be filled. Section status will increase to accommodate the needs of the incident as it progresses.
- The State OEM Director will hold a MAC Group meeting, with representation as identified up to this point, and other agencies as needed. Discussion points will include ESFs identifying potential actions, staffing and resource support issues and the following:
  - An assessment of any potential requests for assistance.
  - The protective actions being implemented at agency facilities within the at-risk area.

- Any potential challenges, policy issues, or circumstances prohibiting operational capabilities or functions.
  - Any potential Continuity of Operations issues.
  - An assessment of readiness to integrate with the incoming Federal response.
  - Advising agencies to consider taking protective actions for all State facilities located within potentially impacted areas.
  - The need to activate Agency Operations Center (AOC) to support the level of response.
  - Advising that logistical arrangements should be made internally by each agency and immediately upon the authorization to deploy to the field (e.g. county EOCs).
- Begin pre-positioning of relief supplies, equipment, materials and personnel to support feeding, sheltering, and short-term recovery efforts. The resources will be coordinated through the State EOC operating structure to ensure coordination with ESF #7 and any activated staging site, points of dispensing, or distribution center. Examples may include:
    - Food, water, bedding, and durable medical equipment: This is accomplished by member agencies of ESF #6 and #8 to address local shelter shortfalls and functional medical needs.
    - Generators, fuel, tarps, portable pumps – accomplished by ESF #7.
    - Debris clearing equipment, chippers, chain saws – accomplished by several agencies that support ESF #1 and #3.
    - Personnel and equipment to support security, access and egress – accomplished by member agencies of ESF #13.
    - Environmental monitoring equipment, supplies and personnel – accomplished by member agencies that support ESF #8.
    - Personnel to support damage assessment activities – facilitated by State DHSES.
    - Deployment of sandbags, sandbagging equipment – coordinated through ESF #7.
    - Establish contact with the Hurricane Liaison Team (if deployed) at the National Hurricane Center to prepare for on-going communications and videoconference capabilities – ESF #5.
    - Status of the CI/KR sectors, and efforts to support the restoration of the energy sector – accomplished by member agencies of ESF #12.
    - Support Health Care evacuations coordinated with NYS Department of Health Healthcare Facility Evacuation Center (ESF #8).
    - Prepare Urban Search and Rescue Teams (USAR Teams) Swift Water Rescue Teams (ESF #9).

- The identification and deployment schedule of field-level operational components should be considered at this point.
  - Staff deploying to at-risk areas should begin their deployment within the next 24 hours. This will allow staff to be in position to begin to perform their respective functions with more than 36-48 hours prior to the arrival of tropical storm winds.
  - The lines of communications and coordination between the State EOC and deployed staff will be tested and remedied, as appropriate.
  - In addition to managing staffing assignments, field personnel will begin providing situational reports and information to the State EOC on a regular, cyclical basis (i.e., once per operational period).
  
- State OEM will reinitiate contact with FEMA Region II to determine Federal posturing and preparedness and determine what resources, if any, are being pre-positioned or proactively deployed to the State or region. This outreach may include a request for a Federal IMAT.
  
- At this point, State OEM may conduct outreach through EMAC to determine the status of EMAC resources and any potential mission requests from other states/regions.
  
- If not activated at the previous time frame (96 - 72 hours) the State should begin to establish a Joint Information Center (JIC) through ESF #15 to develop and disseminate critical public messaging and advisories based on the situation.
  
- State OEM will ensure that each agency involved with incident management or incident support activities (if any) is providing the appropriate situational awareness and resource status information to State and local governments.
  
- At this point, incident support facilities that were identified in level 3 (i.e., staging areas, mobilization sites) should be established and begin the process of becoming functional.
  
- As the event continues to move forward, State DHSES will begin to identify preliminary damage assessment teams, potential site visits, and deployment timelines.
  
- If not already done, agencies may activate their Agency Operations Center (AOC) to support the level of response.

4. **Level 1:** This level will be activated **no later than approximately 36 - 24 hours (1 day out)** prior to the forecast arrival of sustained tropical storm force winds impacting New York State.

Goal: In addition to those previously listed: ensure the appropriate level of functionality to effectively respond to requests for assistance, storm-related impacts, make final state-level preparations, and be capable to fully integrate with an incoming Federal response organization.

**Note:** Once the State experiences the arrival of tropical storm force winds (39 mph), most local, county and State external operations in the at-risk areas will cease until the passing of the storm.

At this level, the following actions may be taken:

- This level is triggered by the activation of the National Response Framework, the Regional Response Coordination Center (RRCC) and the National Response Coordination Center (NRCC), bringing Federal Emergency Support Functions (ESFs) on line. This level marks the point where a Federal IMAT and appropriate Federal ESF leadership begin to arrive at the State EOC. This presence will warrant the integration of the Federal system into the State's response organizational structure in place in the State EOC. This includes integration into:
  - Federal IMAT arrival in the State EOC.
  - MAC Group meetings, conference calls and briefings.
  - The Planning Section (ESF #5), operational planning meetings, and Command and General Staff meetings.
  - Logistics and Operations sections.
  - State and Federal ESFs.
  - Preliminary discussions regarding a joint field office (JFO).
- State OEM will facilitate a final pre-landfall conference call with the at-risk communities. Discussion points will include:
  - Update on storm-related specifics, questions, or concerns.
  - Update on the state's response posture and structure.
  - Status of local response actions and protective actions.
  - Identify any outstanding resource requests and anticipated needs and gaps.
- State and Federal disaster declarations may be in process, pending or complete at this point. As such, State OEM will determine Federal posturing and preparedness and what resources, if any, are being pre-positioned or proactively deployed to the State or region.

- Federal resources implementing State and/or Federal missions in the field will be coordinated through the State EOC via the State ESFs to the organizational structure in the field.
- State field deployments should begin arriving at forward locations with last minute deployments being factored. This is the last opportunity to make the decision and quickly deploy state resources and personnel to the at-risk areas. Deployments must be completed and in place within **24 hours** (prior to the onset of tropical storm winds). All resources deployed to the field should be preparing for sheltering throughout the arrival and passing of the storm.
- The State OEM Director, with input from ESF #12, will assess the need for the implementation of the FUEL NY Plan.
- The State will designate a State Coordinating Officer (SCO) to work in unison with the Federal Coordinating Officer (FCO), as identified. The SCO and FCO will be in position at the SEOC until a joint field office (JFO) is established.
- State OEM will begin assembling and pushing out EMAC requests as warranted.
- Follow-up MAC Group meetings will continue. State Agencies in the State EOC will be advised of storm-related data to disseminate to their home agency staff for internal distribution. At this point, State agencies in the at-risk areas may be advised to cease all operations and implement continuity measures.
- ESF Coordinators will continue to be provided updated storm data and will be tasked with identifying potential actions, developing staffing patterns, beginning preparations to implement response activities, and identifying any resource support issues as the State moves forward in the response.
- After the storm has passed, the State response level will remain a level 1 until conditions warrant a change in response level.

### **C. Response Organization**

The State of New York endorses the use of one response organizational structure that will include all responding agencies: local, State and Federal. State agencies will be organized under the framework of the National Incident Management System (NIMS) Incident Command System (ICS), as required by Executive Order 26.1 of 2006, and the National Incident Management System (NIMS), as required by Homeland Security Presidential Directive (HSPD) #5. ICS will be incorporated at the local and Federal levels as well. The over-arching structure of State command

and control will be organized as Stated in the Volume 2 of the State Comprehensive Emergency Management Plan, *Response and Short-Term Recovery*. Specific to coastal storm, the State will utilize a Unified Command structure to coordinate the overall State response and will utilize all of the NIMS components deemed necessary, including a State MACC Group and other coordinative elements at field locations. NYS will also be represented at the Joint Field Office, when established, to assist in the local/State/Federal coordination of Federal assets.

The State may utilize and deploy the State's Incident Management Team (IMT) to the area of impact. The IMT will serve to support county EOC interagency coordination between responding disciplines, local governments and the State EOC. The IMT possesses the ability to fall back and operate as a field-level operational component if needed, as appropriate.

In addition to the State Emergency Operations Center a multi-agency Regional Operations Center (ROC) in the New York City metropolitan area has been developed and is fully capable of operating during a coastal storm response.

In a strong coastal storm, especially one that causes extensive Statewide flooding, the conditions may warrant that more than one State-level field coordinating element be established in the State. This may include geographically dividing the State into multiple divisions, with several field coordinating points in place operating within assigned regions of the State. This structure will require additional oversight from the SEOC and the JFO in determining which region has higher response priorities, needs, and could most benefit from resources being requested from that region of the State.

Information management and situational awareness is critical in responding to a large-scale emergency or disaster. Command structures at all levels need an accurate, articulate, and continuous operating picture of the event. This operating picture, combined with ongoing situational awareness, can provide local and State leadership with the specifics to make informed and accurate decisions. Further, timely, accurate and verified information allows leaders at all levels to somewhat predict or prepare for response issues in advance, allowing them to contingency plan and correct before executing operational plans. The activation of a Situation Room or Multi-Agency Situation Unit (MASU) in the SEOC will be the key resource in assessing the overall impact of a coastal storm, the likely response and recovery issues that will need to be addressed, and the status of the State's response. These elements will provide the ability to ascertain, process and verify information received from agency-specific lines, Federal-State-local coordinative lines, and from counterparts in the field, such as representative in county EOCs or a field coordinating element. The Situation Room or MASU will be situated in the Planning Section at the SEOC and will be the lead in assembling the State's operating picture, and will support the development of materials to brief the State MACC Group.

## **1. Joint Information Center/Public Information**

The State recognizes the need to consistently disseminate critical public information. To meet this challenge, the State will establish a Joint Information Center (JIC) at or near the disaster site. The JIC will serve as the sole source of official information regarding all incident activities and will provide a forum for the coordinated release of all information. The representation will include local government officials, State officials (as the lead), and will include representation from Federal Emergency Support Function 15 - External Affairs. JIC operations will be coordinated as stated in the Emergency Public Information Annex to the State Comprehensive Emergency Management Plan (CEMP). The release of information may include public service advisories regarding:

- Dissemination of event facts, data and hazards.
- Locations of food, shelters, supplies, commodities.
- Locations of disaster recovery centers.
- Fraudulent practices, price gouging, buyer-beware concerns.
- Locations of waste sites, household hazardous waste issues.
- Public health concerns, epidemic information, food storage, mold.
- Safety messages for traveling, fire safety, public inquiry numbers.

## **D. Response Agency Roles/Responsibilities**

This section reviews existing roles, responsibilities, and capabilities State agencies, ESFs and provides an overview of the local and Federal response.

### **1. Local Government**

Local government will be actively involved in the response, and should be utilized to the fullest extent possible. Each county, and many local governments, has a comprehensive emergency management plan (CEMP) which provides the framework for the jurisdiction's response to emergencies and disasters. As previously identified, many coastal communities have in-depth coastal plans to address evacuations, sheltering, debris management, and public information.

Each locally-developed plan will differ in its implementation, including in response capabilities, surge capacities and in the ability to exercise authorities. Therefore, it is prudent for the State to conduct timely situational reporting to identify any gaps in the protective measures or response activities that are generated either at the local, State or Federal levels of the response.

### **2. State Emergency Support Functions and Federal Integration**

The state response includes many components and capabilities, both SEOC-based and field-level. Under the State CEMP, the State possesses 14 Emergency Support Functions (ESFs) that provide the utility for a host of capability, and full integration with each of the

Federal ESFs. State ESF missions and capability-based assignments follow. Included are additional operational areas that warrant special attention, with ESF-based activities found in Attachment 3.

### **3. Waiver of Restricting Codes**

The response and recovery to a coastal storm may require the Governor to temporarily suspend specific provisions of statutes, local laws, orders, rules or regulations to facilitate the response or recovery efforts. This authority exists in State Executive Law, Article 2-B, § 29-a. These waivers would ensure that emergency response operations are not unnecessarily hindered or restricted. The authority to suspend State laws, rules, or regulations rests solely with the Governor. The need for waivers will be dependent upon the situation; however, some examples include, but are not limited to:

- Department of Health:
  - May work with the Governor's counsel to waive provisions of the State Education Law related to the licensure of health care professionals;
  - The Office of Health Systems Management may put in place an expedited permitting process related to the certification of additional beds; and
  - May waive Medicaid requirements in order to provide medical care for those who have been negatively impacted by the disaster.

In addition, the Federal government may waive provisions of Federal statutes and regulations in order to assist the State in its response and recovery efforts. In these cases, the appropriate State agency may take part in the Federal waiver process. Some examples of this include, but are not limited to:

- Department of Labor: Implements special assistance programs such as Disaster Unemployment Assistance for those who may not be eligible for regular Unemployment Insurance benefits as authorized by the President pursuant to 42 U.S.C. § 5177.
- Department of Transportation (DOT): Works with the Federal Department of Transportation to develop and implement waivers for:
  - Overweight vehicles and oversize equipment limits on the NYSDOT system due to structural considerations on bridges and pavement. This capability can also be utilized by the Thruway Authority and the State Bridge Authority.
  - DOT grants permits for overweight vehicles and oversize equipment limits on the NYSDOT system due to structural considerations on bridges and pavement.
  - Approval for extended hours of labor by personnel that drive large commercial motor vehicles and are involved in emergency restoration of electric, gas

and/or communications utility services or in the emergency distribution of petroleum.

In some cases, agencies may not need a gubernatorial waiver in order to participate in response and recovery efforts, but the declaration of an emergency may be the trigger which leads to increased participation or a ramped-up response by the agency. In some cases, the declaration may actually trigger authority specified in the agency's enabling statutes. Some examples include:

- Agriculture and Markets: May increase efforts to inspect and test food to ensure safety. It may also increase the use of its embargo authority.
- NYS Energy Research and Development Authority: May assist the State Department of Transportation in applying for waivers of Federal transportation restrictions for fuel delivery.
- Office of Temporary and Disability Assistance (OTDA): OTDA takes necessary actions to expedite the provision of financial and social services assistance to victims of disaster.
- Department of Environmental Conservation (DEC): May, in an emergency, make emergency orders with respect to petroleum fuels and natural gas without notice or a hearing for the owner of the resource. In addition, during an emergency the Department may waive procedural permitting requirements and issue emergency authorizations. See Environmental Conservation Law §§ 23-0305 & 70-0116.

#### **4. Intrastate and Interstate Coordination**

As with many types of disasters, a coastal storm will not stop at borders. In addition, evacuations, road closures and other protective actions implemented in New York State may have a resonating effect on the State's neighboring jurisdictions. As part of the response process, the actions taken in New York will be documented in situational assessments, reports and public information statements. Ongoing pre-landfall discussions should unveil what at-risk States will be doing in response to the event. Post-landfall, interstate coordination may require facilitative support to ensure that essential supplies, goods and services can shipped/deployed to the State around restricted or impacted areas. Further, missions that are ongoing on one side of a jurisdictional boundary may be mirrored on the other. Information sharing will be key in addressing these issues. The sharing of this information will occur through traditional State-to-State statutory lines, which are often agency-specific, and through the SEOC multi-agency response structure. Resources and movements will be coordinated through local government, as appropriate, as well as with the neighboring State(s). The coordination with the local level in New York State will be managed through local government in the State via the command structure in place in New

York State. Interstate coordination will be managed through the State EOC to the State EOC of the State(s) involved. Federal assistance with the RRCC and ESF #15 may be needed as well.

# **New York State Comprehensive Emergency Management Plan**

## **Coastal Storm Annex**

### **Section IV: Recovery**

#### **A. Overview**

Dependent on the type of destruction and damage caused to the communities and individuals along the storm track, the response to such an event may be short-lived or could extend for a prolonged period of time, perhaps even years. Emergency response activities may include control measures that have been rapidly employed and may result in a slow demobilization of response agencies and activities.

A variety of forces may influence the direction of the recovery process. Considerations that have to be analyzed for an effective response and prompt recovery include the safety of responders, repair and re-opening of critical transportation routes, remoteness of areas, and the needs and requirements for the restoration of utility systems.

Regardless of the extent of damage, the State of New York will strive to assist local governments, businesses, and citizens in recovering from the impacts of any emergency. Where possible, hazard mitigation measures will be incorporated into recovery activities in order to lessen the impact of reoccurrence or eliminate it entirely.

#### **B. Demobilization of the State Response**

Following any disaster, the response organization must at some point transition from a short-term recovery to a long-term recovery. In some cases, the stimulus to transition is very clear, while in other cases it is not. In the case of a coastal storm, the demobilization of the State's response will be initiated when the State Unified Command determines that adequate progress has been made in restoring essential services and functionality to the affected areas. This will likely occur when it is recognized that the infrastructure in those areas is able to support reentry, maintain safety and security provide self-sustaining economic viability, and when some sense of normalcy is evident.

When a centralized State coordination presence is no longer required in the affected area, the SEOC will develop and implement a demobilization plan to transfer responsibilities and suspend unnecessary field and agency operations. SEOC and field-level Planning Sections will respectively develop a scalable demobilization plan for the release of appropriate components. As the need for full-time interagency coordination at the SEOC ceases, plans for selective release of State resources, demobilization, deactivation, and closeout are developed. The SEOC may remain operational at reduced staffing to ensure

longer term missions are completed and to maintain situational awareness to support additional response operations.

When the State response effort is deactivated, specific procedures for deactivation will be followed to ensure proper record keeping and handling of contracts as well as recovery of deployed equipment and materials. Demobilization and deactivation activities are planned, coordinated and executed to ensure that all level of government, tribal, and private sector response and recovery personnel are maintained at a state of readiness commensurate to operational field response and recovery operations. Actions may include:

- Relaxing traffic and access control points.
- Follow-up water supply analyses, remediation of hazardous materials and monitoring hazardous waste sites.
- Conducting ongoing debris removal and environmental remediation activities.
- Additional food safety messages, handling practices, inspections and monitoring.
- Assessing resources and authorities that may be needed for subsequent coastal storms.
- Estimating the overall impact on the State, including mortality, financial impacts and the disaster recovery mechanisms that can support the general public.
- Continue risk communications for mental health support, recovery programs, individual and family preparedness and safety messages regarding mold.
- Communicating with local government, healthcare providers, the media, and the public about any subsequent coastal storms.

### **C. The Recovery Process**

As the SEOC activation ceases, and the JFO activates, the Federal government will transition out the Emergency Support Functions (ESFs) and implement the RSFs. Although the RSF structure builds upon the ESF structure, RSFs are different from ESFs in that they have a different set of mission objectives, time spans and skill sets. Recovery Support Functions bring together the core recovery capabilities of State and Federal departments and agencies to focus on community recovery needs. The objective of the RSF is to facilitate coordination and delivery of Federal assistance needed to supplement recovery efforts. RSFs are designed to operate within a timeframe of months to years.

The State has recently updated Volume 3 of the State Comprehensive Emergency Management Plan, *Long-Term Recovery*. Volume 3 outlines the State RSF construct and lays the foundation for the implementation of the State RSF Annexes. The State RSFs match the Federal RSFs as identified in the National Disaster Recovery Framework (NDRF) and are organized in six manageable, multi-agency components:

- **Community Planning and Capacity Building:** The core recovery capability for community planning is the ability to effectively plan and implement disaster recovery activities, engaging the whole community to achieve their objectives and increase resilience.
- **Economic:** The core recovery capability for economic recovery is the ability to return economic and business activities (including agricultural) to a state of health and develop new economic opportunities that result in a sustainable and economically viable community.
- **Health and Social Services:** The core recovery capability for health and social services is the ability to restore and improve health and social service networks to promote the resilience, health, independence and well-being of the whole community.
- **Housing:** The core recovery capability for housing is the ability to implement housing solutions that effectively support the needs of the whole community and contribute to its sustainability and resilience. Like infrastructure and safety services, housing is a critical and often challenging component of disaster recovery.
- **Infrastructure Systems:** The core recovery capability for infrastructure systems is the ability to efficiently restore the infrastructure systems and services to support a viable, sustainable community and improve resilience to and protection from future hazards. The Infrastructure Systems RSF promotes a holistic approach to disaster recovery coordination, support, planning and implementation for infrastructure systems that serve the community.
- **Natural and Cultural Resources:** The core recovery capability for natural and cultural resources is the ability to protect natural and cultural resources and historic properties through appropriate response and recovery actions to preserve, conserve, rehabilitate, and restore them consistent with post-disaster community priorities and in compliance with appropriate environmental and cultural resources laws.

Each ESF Annex includes the RSF assignments and mission areas for each of the agencies listed in the ESFs. Attachment 7 identifies the State RSF construct.

## **1. Funding and Compensation**

Whenever the Governor finds that a disaster has occurred or may be imminent and local capabilities may be exceeded, the Governor may declare a State Disaster Emergency. Whenever the Governor finds that the event is of such severity and magnitude that the State will be overwhelmed, the Governor can request Federal assistance.

The State Comprehensive Emergency Management Plan outlines the disaster relief funding and programs that would be applicable for an incident of this type. Included are provisions for Public Assistance (PA) and Individual Assistance (IA), which would aid in supporting government response operations and provide some recovery assistance for individuals and their families, businesses and sectors identified in the preceding pages. The implementation of the recovery process is identified in Volume 2 of the State CEMP – *Response and Short-Term Recovery*. Short-term recovery processes include:

- Coordinating assistance programs to help individuals, households, and businesses meet basic needs and return to self-sufficiency. Such programs include housing assistance, other needs assistance, crisis counseling services, disaster legal services, and unemployment or reemployment programs.
  
- Establishing Disaster Recovery Centers: With Federal, State, tribal, local, voluntary, and nongovernmental organizations represented, staff provide recovery and mitigation program information, advice, counseling, and related technical assistance. Some of these programs include:
  - **Farm Service Agency:** May Provide agricultural loans up to \$500,000 to farmers, ranchers and landowners to cover production, property losses, and physical structures part of farming operations.
  - **U.S. Department of Agriculture:** May extend food stamp benefits to households to replace food that was spoiled due to power loss. May provide households with emergency food stamp benefits.
  - **Internal Revenue Service:** Allows certain casualty losses to be deducted on Federal income tax returns for the year of the loss or through an immediate amendment to the previous year's return.
  - **Bureau of Alcohol, Tobacco and Firearms (ATF):** Businesses may file claims for payment of Federal excise taxes paid on alcoholic beverages or tobacco products lost, rendered unmarketable or condemned by a duly authorized official under various circumstances, including where the President has declared a major disaster.
  - **U.S. Department of Labor:** Disaster unemployment assistance and unemployment insurance benefits may be available through the State unemployment office and supported by the U.S. Department of Labor.

- **Department of Veterans Affairs:** Provides death benefits, pensions, insurance settlements and adjustments to home mortgages for veterans impacted by a disaster.
  - **U.S. Department of Health and Human Services:** Offers a crisis counseling program to help relieve any grieving, stress, or mental health problems caused or aggravated by the disaster or its aftermath. These *short-term* services, provided by FEMA as supplemental funds granted to State and local mental health agencies, *are only available to eligible survivors of Presidential-declared major disasters*. Crisis counselors are often on-hand at Disaster Recovery Centers (when they are established). Crisis counseling services are also offered by the American Red Cross, the Salvation Army, other voluntary agencies, as well as churches and synagogues.
  - **Federal Emergency Management Agency:** Through an agreement with FEMA the **Young Lawyers Division of the American Bar Association**, provides free legal advice for low-income individuals regarding cases that will not produce a fee (i.e., those cases where attorneys are paid part of the settlement which is awarded by the court). Cases that may generate a fee are turned over to the local lawyer referral service.
  - Individuals, families and businesses may be eligible for Federal assistance if they live, own a business, or work in a county declared a Major Disaster Area, incur sufficient property damage or loss, and, depending on the type of assistance, do not have the insurance or other resources to meet their needs.
- Coordinating with private-sector and nongovernmental organizations involved in donations management and other recovery activities.
  - Coordinating public assistance grant programs authorized by the Stafford Act.
  - Coordinating with the private sector on restoration and recovery of CI/KR. Activities include working with owners/operators to ensure the restoration of critical services, including water, power, natural gas and petroleum, emergency communications, and healthcare.
  - Coordinating mitigation grant programs to help communities reduce the potential impacts of future disasters. Activities include developing strategies to rebuild resilient communities.

It is important to note that the coordination of Federal assistance through State command structure does not end following the demobilization of the field structure or the SEOC. In many cases, the agency that has primacy with that sector often continues to monitor and support the recovery efforts of that jurisdiction into the long-term recovery

phase. This is similar and consistent with the Federal approach as well. After the JFO closes, ongoing activities transition to individual agencies with primary recovery responsibilities. Federal partners then work directly with their regional or headquarters offices to administer and monitor recovery programs, support, and technical services.

## **2. Social and Economic Effects**

The economic effects of a coastal storm on the State, even on a small scale, may be enormous to the victims and their families, public and private entities, and to subsidiary and support industries of our economy. Employment may be affected over a wide range of sectors, from the farming and subsidiary industries, to distributors, the retail industry, the shipping industry, education, and to government. The impact on the sectors that serve as the foundational elements of our way of life may have a cascading effect. The potential exists for many businesses that rely upon or support those sectors to be severely impacted, including local businesses, distributors, healthcare, and any reliant business, market, or industry. Movement restrictions that occurred during pre and post-landfall may promote erratic prices of common products, services or commodities. This is especially the case in the food service industry where most food providers maintain minimal or “just in time” inventories. Those inventories are traditionally shipped via several bridge and tunnel networks that may have been severely impacted during the storm.

The State will need to take proactive measures in reenergizing the State’s economy. A variety of mechanisms to support the economy and the consumer (general public) in times of disaster are already identified in the Human Services Annex to the State CEMP. In addition, these efforts may include:

- Monitoring excessive pricing practices to prevent “price-gouging”.
- Providing Unemployment Insurance Benefits and personnel services, including job counseling.
- Providing additional assistance to small businesses with grants and loan programs and assist an even larger group of businesses, through a broad range of services, to help the entire business community.
- Utilizing discretionary powers for abating penalties and extending tax due dates as warranted by the emergency.
- Providing advice on tax law provisions for losses related to the disaster.
- Working with lending institutions in requesting compassion and restraint for victims of a coastal storm.
- Working with insurance companies to allow insurance adjusters to begin the process of assessing damages in an effort to speed up the loss adjustment process.

The bullets above note just a few of the potential State mechanisms that could be utilized to reenergize the economy and support the general population. The State’s ability to

implement such actions, and others, rests with the agency that has the statutory obligation and authority to do so. Additional recovery programs can be found in Volume-3 of the State CEMP, *Long-Term Recovery*.

### **3. Public Awareness**

Ongoing media campaigns may be conducted to re-emphasize the importance of personal and business preparedness. Informational and educational materials should be disseminated to the public through a variety of different venues. The State and County should foster relations with the media, especially prior to the start of future hurricane events to get out the messages necessary on preparedness plans and kits, evacuations and sheltering. The media has to be effectively used to disseminate information on evacuation and shelters, and informational websites should be made available for the public to access. All informational materials should also be converted to numerous languages to meet the needs of the populous.

#### **Attachments**

*Attachment 1: State Coastal Plan Timeline and Executive Action Guides*

*Attachment 2: Coastal Storm Regional Conference Calls*

*Attachment 3: ESF-Based Activities*

*Attachment 4: List of Reference used in Plan Development*

*Attachment 5: County Protective Action Decisions by County*

*Attachment 6: SLOSH, Evacuation, Shelter and Point of Distribution Maps*

*Attachment 7: State RSF Construct*

*Attachment 8: Glossary and List of Acronyms*

**Attachment 1**

***State Coastal Plan Timeline and Executive Action Guides***



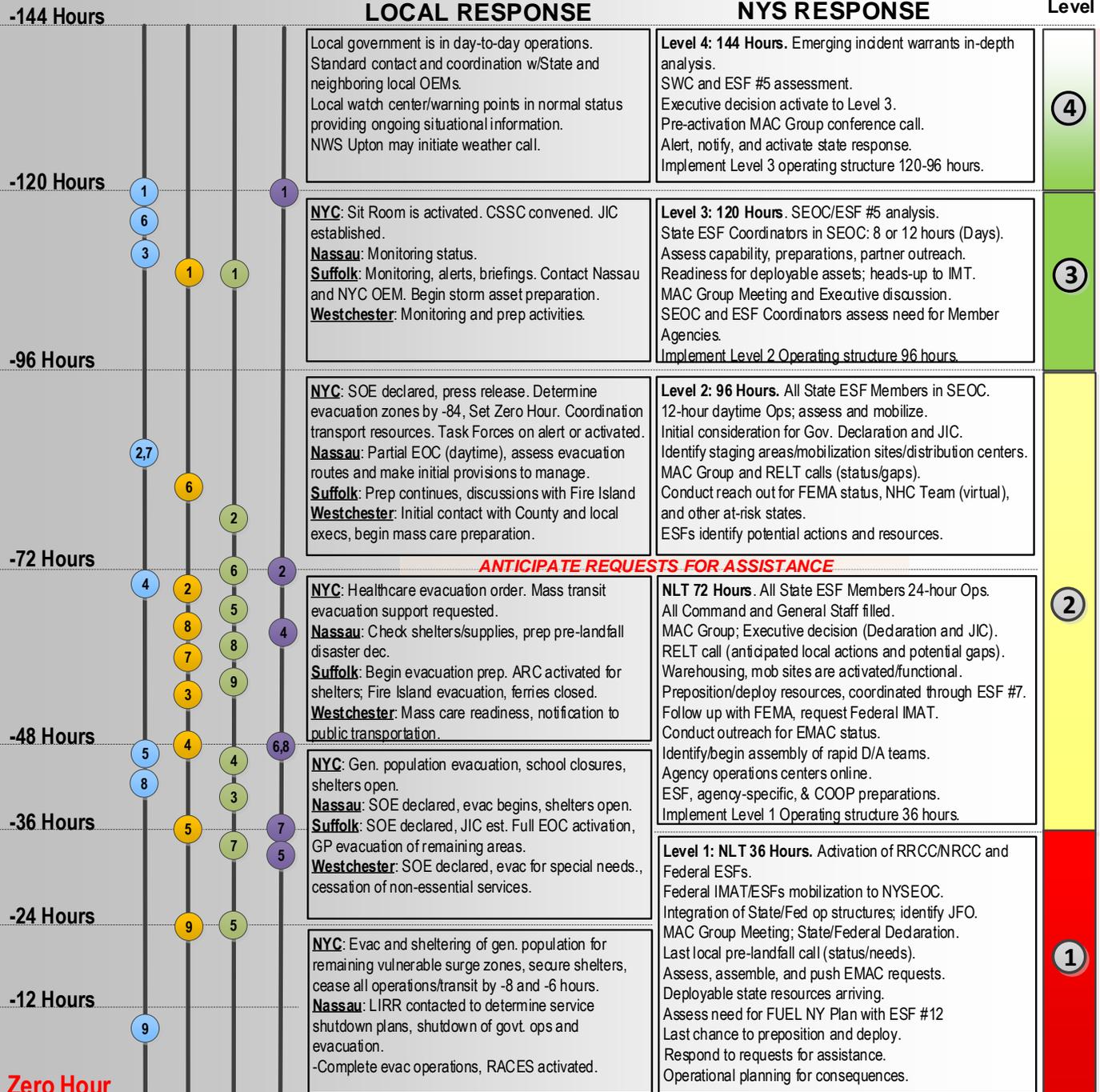
# Homeland Security and Emergency Services

## Emergency Management

### RESPONSE OPERATIONS & PROTECTIVE ACTION DECISION TIMELINE

#### STORM TIMELINE

SEOC Activation Level



#### Key: Local Decision-Making Timeline

- 1 = Data Gathering/Assess      2 = Activation Notification      3 = JIC established
- 4 = HCF Evacuation            5 = GP Evacuation            6 = Partial EOC
- 7 = Full EOC Activation        8 = Shelters                    9 = Begin Mass Transit Shutdown

February 2020



**STATE EMERGENCY OPERATIONS CENTER LEVEL 4 - GOAL:** Conduct joint assessment and decision-making, initial Multi-Agency Coordination (MAC) Group call, begin measures to increase state posture, and notify agencies of staffing requirements for upcoming operational period(s).

**Activities:** The State EOC maintains a readiness posture. Proceed with following at no later than -144 to -120 hours (6 days out):

- Direct State Watch Center staff, OEM Planning, Operations and GIS staff, to assess the anticipated storm path and timing.
- Obtain synopsis for informed Executive decision making.
- Decide to activate the State EOC to a Level 3 at **no later than 120-96 hours** (within the next 24 hours).
- Decide to conduct an initial MAC Group conference call.
- Decide on 8 or 12 hour shifts for the upcoming operational period.

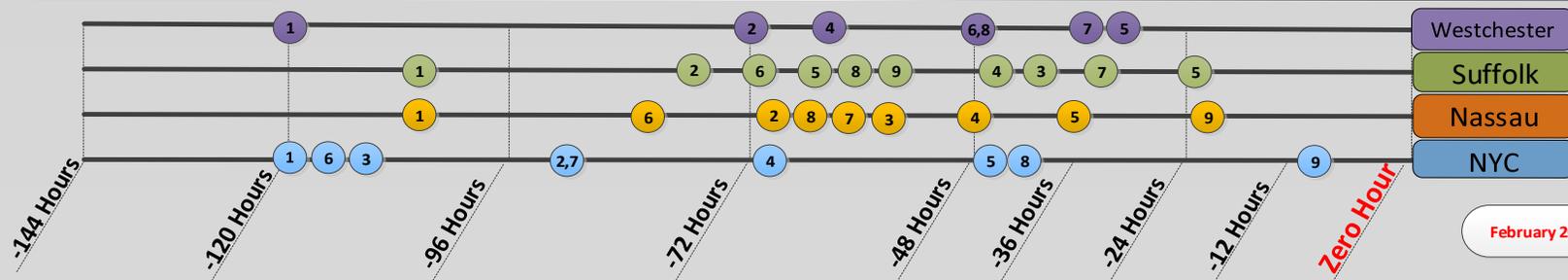
MAC Group call conducted with DPC Agencies:

- |                                   |                                  |
|-----------------------------------|----------------------------------|
| <input type="checkbox"/> SOFA     | <input type="checkbox"/> ITS     |
| <input type="checkbox"/> Ag&Mkts* | <input type="checkbox"/> DOL     |
| <input type="checkbox"/> OCFS     | <input type="checkbox"/> OMH     |
| <input type="checkbox"/> DOCCS    | <input type="checkbox"/> MTA     |
| <input type="checkbox"/> DCJS     | <input type="checkbox"/> DMNA    |
| <input type="checkbox"/> State ED | <input type="checkbox"/> OPRHP   |
| <input type="checkbox"/> ESD      | <input type="checkbox"/> OPWDD   |
| <input type="checkbox"/> NYSERDA  | <input type="checkbox"/> PANY&NJ |
| <input type="checkbox"/> DEC*     | <input type="checkbox"/> PSC*    |
| <input type="checkbox"/> DFS      | <input type="checkbox"/> DSP*    |
| <input type="checkbox"/> OFPC*    | <input type="checkbox"/> DOS     |
| <input type="checkbox"/> OGS      | <input type="checkbox"/> TA      |
| <input type="checkbox"/> DOH*     | <input type="checkbox"/> DOT*    |
| <input type="checkbox"/> DHSES*   | <input type="checkbox"/> OVS     |
| <input type="checkbox"/> HCR      | <input type="checkbox"/> ARC     |

**Direct ESF Coordinators (\*only) above to begin staffing State EOC no later than 120 hours.**

#### Key: Local Decision-Making Timeline

1 = Data Gathering/Assess    2 = Mobilization    3 = JIC established    4 = HCF Evacuation    5 = GP Evacuation    6 = Partial EOC    7 = Full EOC Activation    8 = Shelters    9 = Begin Mass Transit Shutdown



February 2020



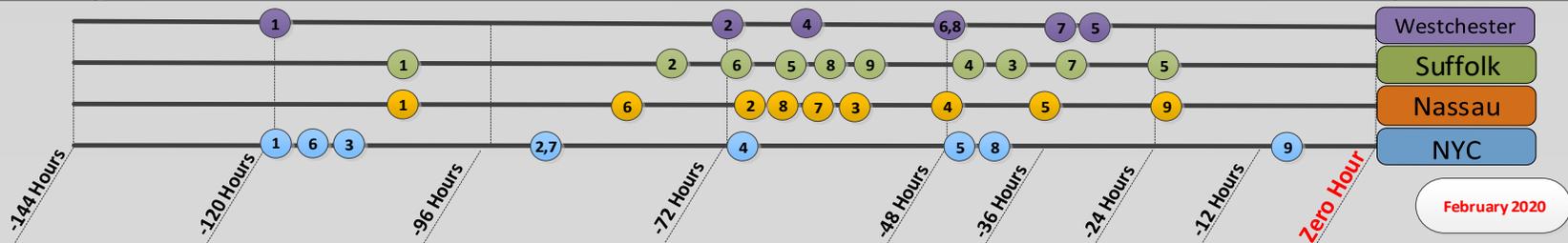
**STATE EMERGENCY OPERATIONS CENTER LEVEL 3 - GOAL:** To provide a continued assessment of storm information, make projections on potential consequences, assess local preparations, conduct initial briefings/analyses with agencies, and make preparations to increase the state response posture.

**Activities:** This level should be initiated no later than -120 to -96 hours (5 days out) prior to the forecast arrival of tropical storm force winds. Level 3 will consist of ESF Coordinators only.

- Determine if day-time staffing of the State EOC may be sufficient.
  - Implement **8 or 12-hour** staffing patterns to support operations.
  - Stand up the SEOC Situation Room, ESF #5; basic Ops section/ESF #7.
  - Determine need to activate multi-agency situation unit (MASU).
  - Determine the need for mobilization and pre-deployment of State resources/staff and/or an increase or decrease in state posture.
  - Instruct all DHSES-based assets to ensure a state of readiness. This includes:**
    - Logistical facilities, emergency stockpiles, supplies and equipment.
    - Emergency communications equipment, support equipment and vehicles.
    - Identifying staffing patterns, operational periods, shift rotations, and potential field deployments.
    - Initial notification to State IMT personnel of potential deployment.
    - Direct State ESF Coordinators** to address preparatory measures with partner agencies:
- ESF #1: DOT, ESF #2: OIEC, ESF #3: DEC, ESF #4: OFPC, ESF #6: DHSES IA, ESF #8: DOH, ESF #9: OFPC, ESF #10: DEC, ESF #11: Ag&Mkts, ESF #12: PSC, ESF #13: DSP, ESF #15: DHSES PIO
- Instruct ESF Coordinators in the SEOC to identify potential actions, develop staffing patterns, begin preparations to implement response activities, and identify any resource support issues as the State moves forward in the response.
  - Ensure State OEM and the ESF Coordinators jointly identify which agencies are required to address current needs.**
- Conduct MAC Group** conference call to discuss the implications of the weather synopsis; include aggressive development of staffing plans. Direct agencies to:
    - Assess the level of vulnerability to the impending event, and mitigate as appropriate.
    - Review the level of agency-specific preparedness to implement continuity measures.
    - Review the level of preparedness to support a collective, state response as identified in each ESF annex and the Coastal Storm Annex.
    - Establish priorities in preparing for the event - such as identifying available resources, future resources requirements and internal staffing patterns.
    - Address any sector-specific coordination or customer-based concerns or outreach, as appropriate.
    - Identify and raise any specific needs, issues or gaps that require support or coordination from State OEM.
  - Advise all Coordinator and Member Agencies of Level 2 (Days only) at 96 hours.
  - Advise all Coordinator and Member Agencies of 24/7 ops at 72 hours.

#### Key: Local Decision-Making Timeline

1 = Data Gathering/Assess 2 = Mobilization 3 = JIC established 4 = HCF Evacuation 5 = GP Evacuation 6 = Partial EOC 7 = Full EOC Activation 8 = Shelters 9 = Begin Mass Transit Shutdown



February 2020



**STATE EMERGENCY OPERATIONS CENTER LEVEL 2 - GOAL:** In addition to those identified in Level 3, assess local response posture and activities, continue briefings/analyses with ESFs, increase in preparations in implementing the state response posture, make preparations for initial requests for assistance, and make provisions to rapidly assess damages.

**Activities:** This level should be initiated no later than -96 to -72 hours out (4 days out / at least 48 hours in advance of a Tropical Storm Watch).

**At 96 hours:**

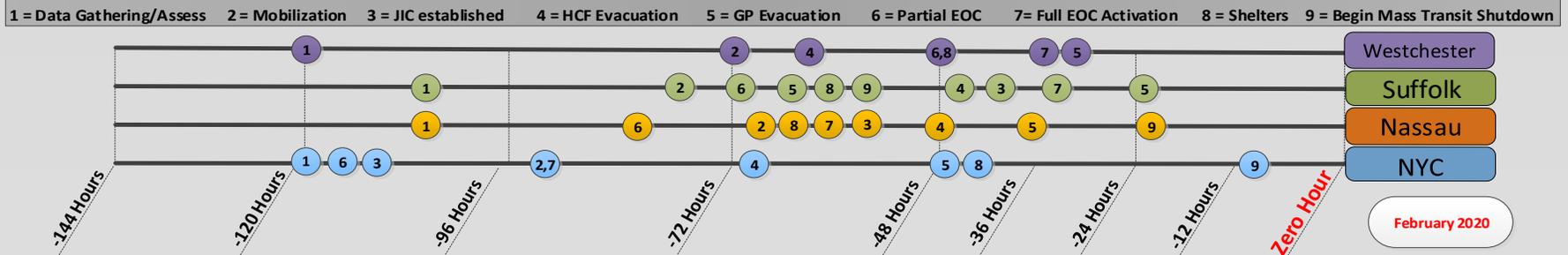
- Direct all ESF Coord. and Member Agencies to report to the State EOC.
- State EOC will be maintained at 12-hour (Day) staffing.
- Primer for initial consideration for a Governor's declaration of a State Disaster Emergency.
- Facilitate a RELT conference call (anticipate local request, protective actions, local response actions)
- Initial consideration to establish JIC.
- Contact FEMA Region II to determine Federal posturing, resources being mobilized.
- Open dialogue with other at-risk states in region to determine operating timelines and potential protective actions.
- Inquire of local, State, Federal partners to ascertain status and availability of potential field locations for staging, mobilization, etc.

**At 72 hours expect increase in local request for assistance:**

- Begin 24 hour staffing – All ESF Coord. and Member Agencies.
- Follow-up Executive-level discussion regarding Governor decision to declare State Disaster Emergency. Direct Legal staff to draft declaration and pre-landfall request.
- Follow up RELT call. Continue to facilitate at regular intervals until 12 hrs.
- Direct assembly of multi-agency teams to local EOCs, as needed.
- Stand up ALL command and general staff positions.
- Reinitiate contact with FEMA Region II; determine Federal posture. Request may be made for Federal IMAT.
- EMAC outreach to determine status of resources and other mission request.

- Convene MAC Group meeting. Direct agencies/ESFs to identify potential actions, staffing/resource support issues, and any specific agency issues (Protective actions of affected facilities, COOP issues, the need for AOC, etc.).
- Direct the pre-positioning of relief supplies, equipment, materials, and personnel to support feeding, shelters, and short-term recovery efforts (coordinated with ESF #7). Include the following:
  - Food, water, bedding, durable medical equipment (ESF #6 and #8).
  - Generators, fuel, tarps, portable pumps (ESF #7).
  - Debris clearing equip., chippers, chain saws (ESF #1 and #3).
  - Security, access, egress supporting equipment (ESF #13).
  - Environmental monitoring equip., supplies, personnel (ESF #8).
  - Personnel to support damage assessment (State DHSES).
  - Deployment of sandbags/equipment (ESF #7).
  - Establish contact with Hurricane Liaison Team at the NHC (ESF #5).
  - CI/KR sectors, efforts to support restoration of energy sector (ESF #12).
  - Support Healthcare evacuations coordinated with the HEC (ESF #8).
  - Prepare USART/Swift Water Rescue Teams (ESF #9).
- Identify and direct the deployment schedule of field-level ops components considered. Take note to deploy w/in 24 hours to allow staff to be in position 48-hours+ prior to landfall; test communications lines, coordination, incident reporting, and assess local needs, gaps and issues.
- If not identified at 96 hours, set activation for the JIC NLT 36-24 hrs through ESF #15.
- Incident support facilities that have been identified should be established and become functional.
- State DHSES begin to identify PDA teams, potential site visits, and deployment timeline.
- Agencies may activate their Agency Operations Center to support the level of response.

#### Key: Local Decision-Making Timeline





**STATE EMERGENCY OPERATIONS CENTER LEVEL 1 - GOAL:** In addition to those previously listed: ensure the appropriate level of functionality to effectively respond to requests for assistance, storm-related impacts, make final state-level preparations, and be capable to fully integrate with an incoming Federal response organization.

**Activities: This level will be initiated no later than -36 to -24 hours (1 day out).**

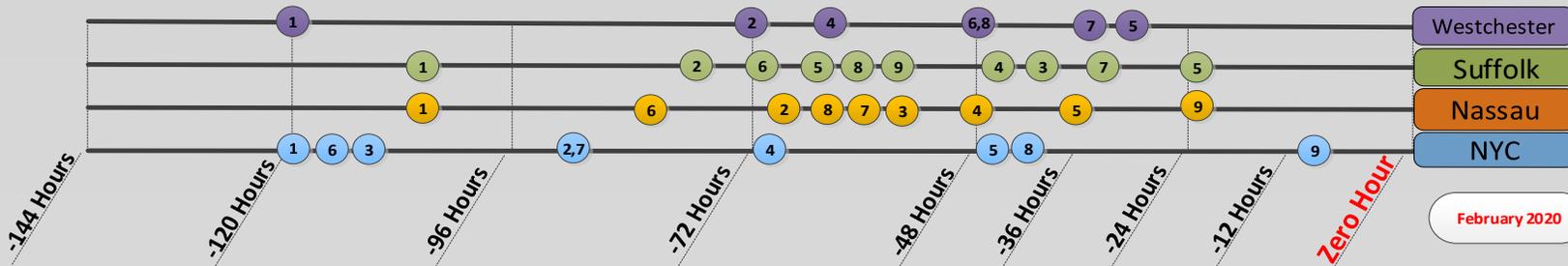
- Deployments should begin arriving at forward locations.
- Last opportunity to make decision and quickly deploy state resources and personnel to the at-risk areas.**
- Deployments must be completed and in place within 24 hours.
- Facilitate final pre-landfall RELT conference call with the at-risk communities:
  - Update on storm-related specifics, questions, or concerns.
  - Update on the state's response posture and structure.
  - Status of local response actions and protective actions.
  - Identify any outstanding resource requests and anticipated needs and gaps.
- Inquire as to State and Federal disaster declarations may be in process, pending or complete.**
- MAC Group meetings will continue. State Agencies in the State EOC will be advised of storm-related data to disseminate to their home agency staff for internal distribution. At this point, State agencies in the at-risk areas may be advised to cease all operations and implement continuity measures.

This time will likely coincide with the activation of the National Response Framework, the Regional Response Coordination Center (RRCC) and the National Response Coordination Center (NRCC), bringing Federal Emergency Support Functions (ESFs) on line. This level marks the point where a Federal IMAT and appropriate ESF leadership may begin to deploy/arrive at the State EOC. This will warrant the integration of the Federal system into the State's response organizational structure. Includes integration into:

- Arrival of Federal IMAT in the State EOC.
- MAC Group meetings, conference calls and briefings.
- ESF #5, operational planning cycles, and Command and General Staff meetings.
- Logistics and Operations sections.
- State and Federal ESFs begin integration and unity of effort.
- Preliminary discussions regarding a joint field office (JFO).
- Designate a State Coordinating Officer (SCO).
- Direct the assembly of and push out EMAC requests.
- Assess the need for the implementation of the FUEL NY Plan.
- Advise to cease all operations and implement continuity measures.

**Key: Local Decision-Making Timeline**

1 = Data Gathering/Assess    2 = Mobilization    3 = JIC established    4 = HCF Evacuation    5 = GP Evacuation    6 = Partial EOC    7 = Full EOC Activation    8 = Shelters    9 = Begin Mass Transit Shutdown

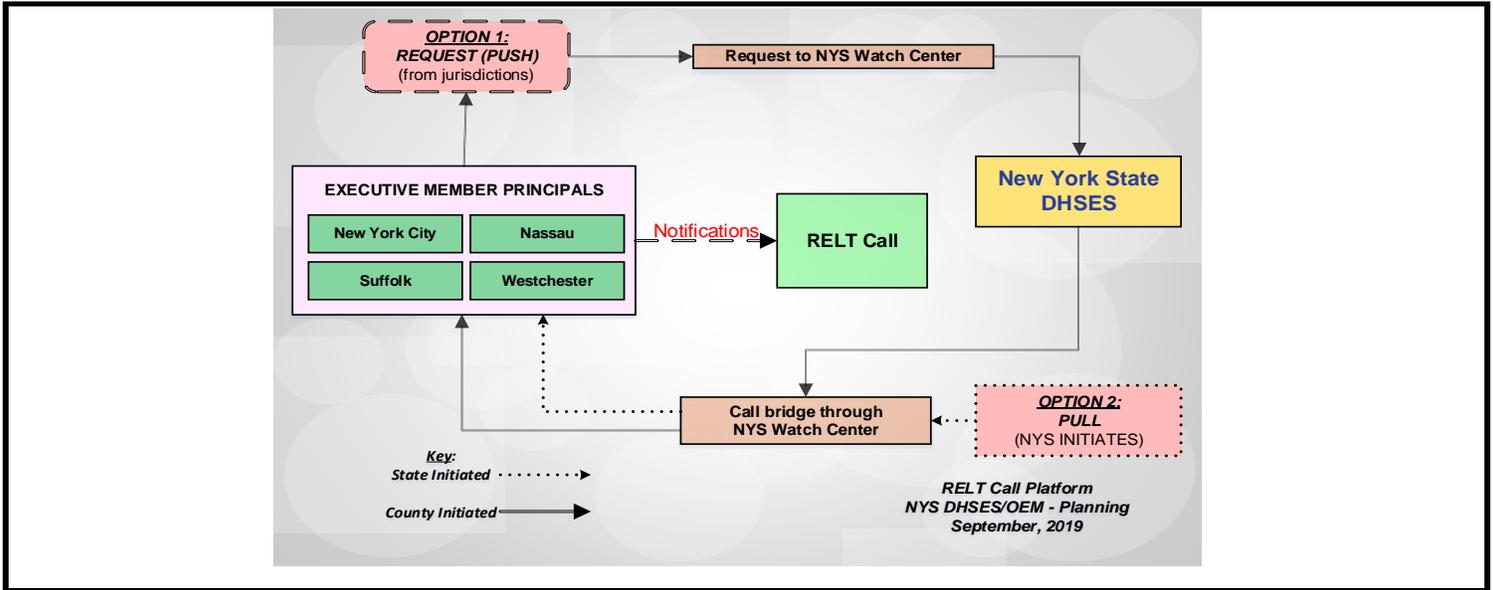


February 2020

**Attachment 2**

***Regional Emergency Liaison Team (RELT) Conference Call***

<b>VERSION</b> 2.0	<b>Regional Emergency Liaison Team (RELT)</b> <b>Conference Call Procedure</b>				
<b>DATE &amp; TIME:</b>		<b>Dial-In:</b> (    )		<b>Access #:</b>	
<b>REQUESTING AGENCY (Chair):</b>	<input type="checkbox"/> NASSAU	<input type="checkbox"/> NYC	<input type="checkbox"/> SUFFOLK	<input type="checkbox"/> WESTCHESTER	<input type="checkbox"/> NYS DHSES
<input type="checkbox"/> <i>Request from Key Agencies/Organizations – [NYS DHSES approval]:</i>					
<b>OVERVIEW:</b> <ul style="list-style-type: none"> <li>• <b>RELT</b> is a collaborative initiative of the New York City Urban Area Workgroup</li> <li>• <b>RELT</b> is a forum to support inter-jurisdictional situational awareness and decision-making. It functions through on-demand conference calls between principal emergency management representatives from NYC, Nassau, Suffolk, Westchester and NYS.</li> <li>• <b>RELT</b> may be initiated by any of the above-referenced entities</li> <li>• <b>The Chair</b> will be the entity that requests the <b>RELT</b> call</li> <li>• <b>RELT</b> should be focused on <b>discussing protective actions</b> and <b>timing</b> that may have an effect on all parties involved. Content discussed should be high-level decisions and/or information sharing.</li> </ul>					
<b>THRESHOLDS:</b> RELT works best for incidents that involve: <ul style="list-style-type: none"> <li>• Operations or actions that cut across jurisdictions</li> <li>• Resource needs based on impacts affecting the region</li> <li>• Executive decisions that have implications for other jurisdictions</li> <li>• Needs for coordinated public messaging</li> </ul>				<i>Requesting jurisdiction should describe the issues needing regional support when requesting the call.</i>	
<b>PROCESSES:</b> (NYS convenes the RELT call through either) <ol style="list-style-type: none"> <li>1. <b>(PUSH)</b> – Request from any principal: Nassau County, New York City, Suffolk County, or Westchester County</li> <li>2. <b>(PULL)</b> – NYSDHSES initiates the call on its own initiative.</li> </ol> <b>Steps to Initiate:</b> <ol style="list-style-type: none"> <li>1. <b>Requesting Jurisdiction</b> contacts DHSES</li> <li>2. <b>DHSES</b> endorses &amp; initiates request</li> <li>3. <b>State Watch Center</b> distributes notifications and information</li> </ol>				<i>NYS DHSES supports via the following:</i> <ul style="list-style-type: none"> <li>• <i>Receiving requests for RELT calls from jurisdictions</i></li> <li>• <i>Scheduling the RELT call and establishing a call bridge</i></li> <li>• <i>Forwarding RELT call requests to jurisdictions</i></li> </ul>	



ATTENDANCE			
<input type="checkbox"/> Nassau OEM	<input type="checkbox"/> NYCEM	<input type="checkbox"/> NYS DHSES	
<input type="checkbox"/> Suffolk DFRES	<input type="checkbox"/> Westchester DES	<input type="checkbox"/> Other:	
Key Agencies/Organizations - Upon Request			
<input type="checkbox"/> MTA	<input type="checkbox"/> PANYNJ	<input type="checkbox"/> FEMA	
<input type="checkbox"/> NYS DOH	<input type="checkbox"/> TRANSCOM	<input type="checkbox"/> National Weather Service	
<input type="checkbox"/> Public Information	<input type="checkbox"/> Legal Counsel	<input type="checkbox"/> Other:	
INCIDENT			
<input type="checkbox"/> Weather	<input type="checkbox"/> Transportation	<input type="checkbox"/> Public Health	<input type="checkbox"/> Mutual Aid
<input type="checkbox"/> Other:			
<b>Incident Name:</b>			
<b>Situation Report:</b>			

**Primary Issue(s) / Needs:**

## Notification List

(to be filled out by the Director, and notified by NYSOEM Watch Center)

### States

New York State

Agency Rep: \_\_\_\_\_

New Jersey

Agency Rep: \_\_\_\_\_

Connecticut

Agency Rep: \_\_\_\_\_

### Counties

New York City

Agency Rep: \_\_\_\_\_

Nassau

Agency Rep: \_\_\_\_\_

Suffolk

Agency Rep: \_\_\_\_\_

Westchester

Agency Rep: \_\_\_\_\_

Rockland

Agency Rep: \_\_\_\_\_

Orange

Agency Rep: \_\_\_\_\_

### Jurisdictional Agencies

MTA

Agency Rep: \_\_\_\_\_

PANYNJ

Agency Rep: \_\_\_\_\_

### Other

Agency: \_\_\_\_\_

Agency Rep: \_\_\_\_\_

## AGENDA

### 1. Attendance – NYS DHSES

### 2. Incident Overview / Status –

Chair/Requestor

### 3. Decision Making and Triggers – *Counties*

### NOTES

- Decision-making priorities
- Strategic objectives
- Timeframe
- Policy considerations

### 4. Operational Coordination – *Counties*

- Traffic control and routing plans
- Transit and road closures
- Sheltering
- Public health response
- Other operating agencies required

### 5. Logistics & Resource Requirements – *Counties*

- Scarce resources
- Mutual aid requests
- Heavy equipment movements
- Federal and state allocations

### 6. Public Messaging and Press – *Counties*

- Scheduled press conferences
- Press releases
- Public announcements
- Social media messaging

### 7. Schedule Next Call – Chair/Requestor

**Date:**

**Time:**

**Dial-in:**

**Access #:**

**ACTION ITEMS**

<b>1.</b>	<b>RESPONSIBLE PARTY:</b>
<b>2.</b>	<b>RESPONSIBLE PARTY:</b>
<b>3.</b>	<b>RESPONSIBLE PARTY:</b>
<b>4.</b>	<b>RESPONSIBLE PARTY:</b>
<b>5.</b>	<b>RESPONSIBLE PARTY:</b>
<b>6.</b>	<b>RESPONSIBLE PARTY:</b>
<b>7.</b>	<b>RESPONSIBLE PARTY:</b>
<b>8.</b>	<b>RESPONSIBLE PARTY:</b>
<b>9.</b>	<b>RESPONSIBLE PARTY:</b>
<b>10.</b>	<b>RESPONSIBLE PARTY:</b>

## **Attachment 3**

### ***ESF-Based Activities***

# New York State Coastal Storm Annex

## ESF-Based Activities

### *Operational Strategy*

#### ***ESF 1: Transportation***

**Strategy: Provide resources and support for the assessment, management, and restoration of the State transportation systems and infrastructure.**

Activate Full ESF.

Assess status of all transportation networks, including State Thruway system and State highways, waterways, and rail systems.

Obtain status of air traffic control and airports.

Utilizing established reporting networks, obtain status of privately-owned transportation infrastructure.

Provide initial assessment report to ESF 5.

Provide preliminary damage assessment information from affected areas.

Provide resources to clear and open impassable roadways for emergency vehicles.

Support operations associated with the re-opening of transportation infrastructure and other public property to facilitate repairs of the utility infrastructure.

Assist with identification of and provide support for traffic management for evacuations and re-entry.

Coordinate with Federal ESF 1 for operational planning integration.

Provide resources to inspect and, if necessary, repair PANY&NJ bridges, tunnels and/or transit systems.

Provide limited transportation for response personnel and general public.

Identify transportation routes for debris management resources.

Support debris clearance efforts as required.

Demobilize ESF and transition to RSF.

## ***ESF 2: Communications***

**Strategy: Provide coordinated support for the repair and restoration of communications infrastructure. Work with private sector to reestablish communications systems.**

Activate full ESF.  
Assess status of communications infrastructure.  
Provide initial status report to ESF 5.  
Mobilize communications assets to safe locations.  
Provide mobile command post and radio communications vehicles.  
Establish and provide live video feed of impacted area, as requested.  
Coordinate with Federal ESF 2 for operational planning integration.  
Deploy and establish portable radio repeaters.  
Provide person to person communication via handheld radios on a limited basis in the field.  
Provide preliminary damage assessment information from affected areas.  
Deploy emergency remote office support to forward operating point.  
May support restoration of mainframes and servers, voice, and telephony services to government entities.  
Establish local operable communication networks, including local to state, state to state, and state to federal communications.  
Work with private sector in assessing and restoring the communications sector.  
Coordinate with private carriers for the access of temporary cell sites on wheels (COWs), cells on light trucks (COLTs), and other communications equipment.  
Demobilize ESF and transition to RSF.

### ***ESF 3: Public Works and Engineering***

#### **Strategy - Provide for restoration and monitoring of the public works systems, including water and wastewater.**

- Activate Full ESF.
- Assess status of public infrastructure.
- Assess status of water/wastewater systems, canals and waterways.
- Provide initial status report to ESF 5.
- Provide support for access to and egress from the area of impact.
- Assess bridges in the affected area for structural integrity.
- Provide support for the evaluation and testing of drinking water supplies in coordination with ESF 8.
- Provide technical assistance with waste water treatment plant recovery operations.
- Support damage assessment as required.
- Coordinate with Federal ESF 3 for operational planning integration.
- Identify and implement any permits that are applicable to the incident.
- Provide preliminary damage assessment information from affected areas.
- Identify potential debris management site(s).
- Provide engineering and contracted support for State facilities.
- Provide available contracting services for 911 centers and government buildings.
- Provide personnel with technical expertise in architectural, engineering, and construction management services, including support of damage assessments and hazardous materials testing, environmental analyses, engineering services, design analyses, and construction inspection services.
- Provide personnel and equipment for management of debris.
- Ensure that emergency workers at debris management sites are provided safety guidance from ESF 5, if required.
- Demobilize ESF and transition to RSF.

#### **ESF 4: Firefighting**

##### **Strategy - Activate and provide support for firefighting operations.**

Activate full ESF.  
Assess status of local fire operations/capability and needs.  
Provide initial status report to ESF 5.  
Deploy ESF 4 assets to the affected area(s).  
Implement the New York State Fire Mobilization and Mutual Aid Plan (FMMAP), as required.  
Provide assistance with evacuation as required.  
Provide preliminary damage assessment information from affected areas.  
Coordinate with Federal ESF 4 for operational planning integration.  
Provide coordination and support for traditional firefighting capabilities.  
Provide technical expertise for fire service issues.  
Coordinate technical support for specialized responder safety issues associated with fire ground activities.  
Provide resource support to triage/treatment sites as available.  
Coordinate and support wildland and urban fire operations.  
Provide limited aerial firefighting capability.  
Deploy Damage Assessment Response Teams (DARTs) and other inspection teams to assess properties.  
Demobilize ESF and continue coordination of FMMAP, as needed.

#### **ESF 5: Information and Planning**

##### **Strategy – Manage the collection and evaluation of information in regards to the incident.**

Fully activate ESF; augment with NWS.  
Provide operational briefings to ESFs.  
Request NWS Albany liaison.  
Contact Hurricane Liaison Team member at FEMA Region II.  
Provide ongoing analysis and updates/briefings of storm track, intensity, timing, and flood/storm surge potential.  
Advise ESF 15 of conditions for public dissemination, as appropriate.  
Coordinate with Federal ESF 5 for IAP and operational planning integration.  
Produce Incident Action Plans and coordinate operational reporting.  
Disseminate information regarding status of utilities, including power outages and public water safety.  
Demobilize the ESF.



## **ESF 6: Mass Care, Housing and Assistance**

**Strategy - Provide for Community Reception Centers (CRCs), and FNSS provision; provide, activate and support shelter sites; provide management and logistical support for family reunification.**

Fully activate ESF.

Assess need for and status of local/county shelters, congregate care centers.

Provide initial status report to ESF 5.

Mobilize shelter equipment/caches and stockpiles and statewide/national shelter support staff.

Identify and support general population shelters and the activation of additional mass care sites in contiguous counties.

Initiate contact with contiguous States and counties to determine their mass care status.

Mobilize and provide food preparation, delivery of ready-to-serve food.

Coordinate with ESF 8 to identify homebound/independent living in area of impact and to provide medical transport to mass care sites.

Coordinate with ESF 8 regarding food safety, functional medical need sheltering, and related medical functions for support of established facilities.

Provide language access assistance.

Assist with the reporting and reunification of displaced/missing persons and support family reunification efforts at mass care sites.

Coordinate shelter for service animals assisting individuals with disabilities.

Provide mental health assistance for survivors and responders.

Provide preliminary damage assessment information from affected areas and support the damage assessment process as needed.

Coordinate with Federal ESF 6 for operational planning integration.

Mobilize domestic pet sheltering resources and coordinate volunteers to support pet sheltering activities.

Facilitate the transportation of injured or stray domestic animals to animal care facilities.

Assist with the facilitation of capture and impoundment of animals at large.

Coordinate response with State veterinary associations and assist in obtaining reimbursement for veterinary services assisting or impacted by storm.

Assist with or provide medical treatment for animals that may be used during search and rescue activities.

Assist with the return of domestic animals to owners.

Stand up call center.

Begin case management.

Identify temporary housing needs; attempt to secure short term housing solutions.

Coordinate mobilization of Disaster Assistance Service Centers (DASCs) and transition to Disaster Recovery Centers (DRCs), as appropriate.

Coordinate unemployment benefits, job placements and assist with insurance claims.

Push disaster recovery information out to mass care sites.

Demobilize the ESF and transition to RSF.

## **ESF 7: Logistics**

**Strategy - Establish a coordinated State-Federal logistics response capability, including resource support and supply chain management by State/County; also establish a donations management program.**

Fully activate ESF.  
Activate all stockpiles; prepare to deploy to area of impact.  
Provide status report to ESF 5.  
Submit initial Emergency Management Assistance Compact (EMAC) requests.  
Assess local/county logistics and locations.  
Identify state staging areas and incident support bases that can be used; make contact to ensure availability.  
Provide preliminary damage assessment information from affected areas as it becomes available.  
Coordinate efforts for State logistics support to the incident; determine needs and respond to requests as necessary.  
Provide purchasing support of commodities, services, and labor through approved protocols.  
Establish and manage incident donations management program.  
Provide vehicle transportation support for the movement of supplies and equipment as needed.  
Ensure collection/documentation of equipment deployed, leased, and/or procured.  
Coordinate with FEMA IMT to identify joint state/federal staging areas, ISBs.  
Follow up EMAC requests: IMTs, EOC support.  
Coordinate the request of Intrastate Mutual Aid for potential resources as requested.  
Coordinate with Federal ESF 7 for operational planning integration.  
Provide procurement and contracting services as required and available.  
Consolidate asset tracking reports from ESFs.  
Demobilize ESF; return equipment to pre-event state.

## **ESF 8: Public Health**

### **Strategy - Identify the various medical and public health response capabilities and management.**

Fully activate ESF.

Assess status of local healthcare and EMS systems.

Provide status report to ESF 5.

Activate Statewide EMS plan; coordinate support to local healthcare facilities as required.

Coordinate the use of MCI equipment and supplies, if required.

Request national ambulance contract if necessary; coordinate with local government requests and assignments.

Coordinate with Federal ESF 8 for operational planning integration.

Coordinate with healthcare coalition and HEC (NYC Metro area).

Coordinate with all ESFs regarding health issues.

Assess the public health and medical needs in unison with the Federal Emergency Response Team. This includes an assessment of the healthcare system/facility infrastructure.

Through ESF 15, use various risk communications to inform the public, media, and healthcare providers in responding to the event to enhance public health and safety and reduce hazard risks.

In coordination with ESF 3, provide wastewater treatment plant inspection and operation expertise.

Respond to medical surge capacities; identify Federal facilities (e.g., VA, Federal military installations) that may be able to support triage, treatment, and available bed space.

Ensure that the protective actions in healthcare facilities are synchronized with local governments.

Invoke the Governor's legal authorities, such as the suspension of licensing requirements, to support the availability of survey clinical and hospital staffing,

holding and control of drugs and medical supplies intended for wholesale distribution, obtaining necessary inventories, and coordinating the distribution of assets to the designated locations.

As needed, coordinate the distribution of the Strategic National Stockpile (SNS), utilizing volunteers at traditional and/or nontraditional Points of Dispensing (PODs) and at the SNS mobilization center and distribution sites.

Coordinate State and Federal medical personnel (USPHS, NDMS, DMORT) to support patient care and fatality management.

In coordination with ESF 6, assist in the trace-forward or trace-back of animal borne diseases that may occur as a result of the event.

Implement enhanced epidemiological surveillance in affected jurisdictions, if required.

Coordinate the support and delivery of emergency responder medical needs and provide technical knowledge on EMS issues.

Provide support for management and coordination of public health needs for the population and healthcare systems impacted by the event.

Provide regulatory oversight and guidance to reception and congregate care centers.

Identify and support medical needs shelters.

Coordinate support for worker protection and safety of emergency responders.

Provide for environmental and water quality testing and monitoring and food inspection services in public facilities.

Provide for safety monitoring and inspections of food and livestock that may be subjected to contamination.

Provide guidance for cemetery management and supervisory support for operations.

Provide limited chaplain personnel, mental health services, and counseling support at established Family Assistance Centers (FAC).  
As needed, coordinate with Disaster Mortuary Services (DMORT) in establishing temporary morgue facilities, victim identification, and processing, preparing, and disposition of the remains.  
Demobilize the ESF and transition to RSF.

## **ESF 9: Search and Rescue**

### **Strategy - Identify, provide, and coordinate search and rescue capabilities in response to an emergency event.**

Fully activate ESF.  
Through ESF 4, activate Fire Mobilization and Mutual Aid Plan for resources needed to support USAR efforts.  
Assess status of actionable USARTs.  
Provide status report to ESF 5.  
Assess status of FDNY/NYC NYTF-1, request activation if not already deployed.  
Activate NYTF-2.  
Request EMAC teams through ESF 7.  
Obtain communications assessment from ESF 2. Coordinate point-to-point communication needs if required.  
Coordinate technical support for specialized responder safety issues related to structural collapse activities.  
Coordinate the use of fire service assets for USART activities.  
Coordinate and support wildland and urban related search and rescue activities.  
Provide preliminary damage assessment information from affected areas.  
Coordinate with ESF 8 to determine locations of triage/treatment sites.  
Coordinate decontamination of SAR members and equipment used with ESF 10 if hazardous materials are identified.  
Report access/egress challenges to ESF 1 and ESF 3.  
Coordinate with Federal ESF 9 for operational planning integration.  
Coordinate federal/state USART activities in support of local government.  
Return all equipment in service; document costs for reimbursement.  
Demobilize ESF.

## **ESF 10: Oil and Hazardous Materials**

**Strategy - Coordinate the direction and control of State multi-agency resource capabilities and assistance in response to an oil or hazardous materials incident.**

Fully activate ESF.

Through ESF 4, activate the State Fire Mobilization and Mutual Aid Plan for resources needed to support hazardous materials response.

Obtain safety protocols, including dose/exposure, from ESF 5.

Assess current status of local/regional hazardous materials teams.

Provide status report to ESF 5.

Deploy capabilities to the affected area(s).

Provide decontamination support for people, vehicles and emergency workers as needed.

Coordinate State support and response to the control and containment of an actual or potential hazardous materials release, with a focus on identification of hazardous substances, environmental sampling, air plume modeling, private sector response, substance recovery, and long-term environmental concerns. This shall include applying and coordinating State and Federal Superfund stabilization measures.

Coordinate State hazardous materials repose activities with the USCG for releases or cascade effects on waterways or with the EPA for effects on land, as outlined in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP).

Provide preliminary damage assessment information from affected areas.

Coordinate with Federal ESF 10 for operational planning integration.

Coordinate technical support for specialized responder safety issues associated with hazardous materials operations.

Provide support to monitor levels of contamination in identified zones and debris sites.

Document all responder activities, exposures, and equipment usage/loss.

Coordinate private contracted resources for response and remediation, as needed.

Demobilize ESF and transition to RSF.

## **ESF 11: Agriculture and Natural Resources**

### **Strategy - Coordinate efforts to ensure the agricultural community and national resources are preserved and protected.**

Fully activate ESF.  
Identify agricultural, natural, cultural, and historic resources affected.  
Provide status report to ESF 5.  
Coordinate with ESF 8 to push information in regards to protective actions for agricultural community, if any.  
Support food inspections and testing, as appropriate.  
Activate and deploy rapid reaction team (RRT) to assess food storage, handling, and disposal.  
Ensure that protected natural resources such as rivers, streams, and freshwater and tidal wetlands are protected during emergency response and recovery activities.  
Provide preliminary damage assessment information from affected areas.  
Coordinate the closure and manage access controls to state parks.  
In support of ESF 6, coordinate efforts for county animal response teams, if warranted.  
Provide laboratory testing services in support of surveillance and monitoring activities for diseases affecting the health of animals in the State.  
Coordinate with Federal ESF 11 for operational planning integration.  
Support the transportation, evacuation, and sheltering of farm animals, as appropriate.  
Coordinate available volunteers to assist with the evacuation, feeding, and sheltering of farm animals.  
Obtain safety measures for animals; provide information to veterinarians and animal health inspectors.  
Implement increased inspection programs and movement control for contaminated animals, supplies, and goods. Embargo as required.  
Support the transportation, evacuation, sheltering and reunification with owners of domestic animals and pets, as appropriate.  
Assist emergency response teams with animal related problems that may arise.  
Facilitate the impoundment or capture of animals at large.  
Assist with the assessment of medical needs of animals affected by the storm; provide medical treatment and stabilization for affected animals.  
Provide technical advice and coordinate with local communities and other government agencies as needed on carcass management issues.  
Provide waste transporter and solid waste facility emergency authorizations/permit modifications as needed.  
Coordinate with ESF 3 to determine debris management sites for disposal of contaminated debris.  
Coordinate the implementation of Federal programs to secure/protect cultural resources, such as museums, archives, and state/national icons.  
Document projected losses to agricultural community.  
Demobilize ESF and transition to RSF.

## **ESF 12: Energy**

### **Strategy - Provide for restoration and monitoring of the electrical grid following a coastal storm.**

Activate full ESF.  
Assess status of electrical grid and fuel supply infrastructure.  
Provide status report to ESF 5.  
Provide ongoing status assessments of the energy sector.  
Provide early warning and analyses of potential disruptions to the energy supply chain, and provide monitoring of fuel inventory trends, pricing, and consumer patterns leading up to and following a hurricane/coastal storm event.  
Coordinate receipt of damage assessment information from energy providers.  
Coordinate with the energy sector to address supply/distribution issues.  
Act as a liaison between the utilities and local/State entities to facilitate the utility service restoration process.  
Provide regulatory oversight of private, investor-owned, and municipal utilities. Coordinate the flow of information from other State Power Authorities.  
Allocate supplies of energy or resources; impose restrictions or implement waivers pertaining to energy use and resources.  
Provide preliminary damage assessment information from affected areas.  
Monitor and ensure adherence to requirements related to customers with life support equipment.  
Coordinate with local energy producers/providers and NYISO for restoration.  
Identify and support public and private utility providers that may have difficulty continuing to operate.  
Provide energy sector information in regards to access, egress, and points of entry.  
Coordinate with Federal ESF 12 for operational planning integration.  
Implement NYS Strategic Fuel Reserve plan if directed to do so by the Executive Chamber.  
Coordinate fuel supply/delivery issues associated with transportation with ESF 7.  
Demobilize ESF and transition to RSF.

### **ESF 13: Law Enforcement and Security**

#### **Strategy - Provide intelligence, security and integration with response efforts; Support evidence collection, access and egress.**

Fully activate ESF.

Assess status of State and local law enforcement and security capabilities.

Obtain initial situational assessment from actionable intelligence on the ground.

Provide initial status report to ESF 5.

Provide assessment of intelligence/threat information for those that are authorized.

Coordinate with Federal ESF 13 for operational planning integration and serve as lead in coordinating with Federal law enforcement personnel.

Provide personnel to work with law enforcement agencies who will investigate crimes occurring within the coastal storm event (i.e. looting, etc.).

Provide preliminary damage assessment information from affected areas.

Coordinate with ESF 1 regarding the clearance of debris and access to shelters and other related facilities.

Support traffic and access control points for areas where travel restrictions or evacuations are identified, including interstate thoroughfares.

Provide evacuation assistance as needed to State and local authorities.

Support security at mass care centers, adjunct medical facilities, and morgue sites.

Support security for the transportation of commodities, supplies, and relief materials.

Provide support in implementing security measures at SNS Mobilization Centers, traditional and non-traditional PODs, and distribution points

where medical assets are being distributed to medical personnel.

Obtain safety information from ESF 8 if warranted; push to county/local law enforcement.

Provide fixed and rotary-wing aviation support. Coordinate with ESF 1 to obtain airspace/restrictions.

Provide security and protection to identified critical infrastructure, including marine patrol vessels.

Coordinate the deployment and movements of law enforcement personnel/equipment from around the State, Federal or EMAC sources.

Provide general law enforcement, traffic control, civil disturbance support, and security support as needed.

Provide support to ESF 8 for fatality management for scene security, access, and locating human remains.

Provide security at MTA and Port Authority facilities.

Provide assistance to local medical examiners and coroners in location, identification, and disposition of the deceased victims of a disaster.

Document all responder activities, exposures, and equipment usage/loss.

Demobilize ESF and transition to RSF.

## **ESF 15: External Affairs**

### **Strategy - To coordinate the release of public information and warning.**

Activate full ESF.

Assess status of public notification and warning systems.

Identify and summarize releases of public information provided from known sources.

Provide assessment of public information to ESF 5.

Coordinate release of public messaging through IPAWS, NWS broadcasting, and other available sources, as needed.

Issue emergency alerts through press releases and social media.

Obtain health guidelines from ESF 8/DOH PIO, if warranted.

Coordinate with Federal ESF 15 for operational planning integration.

Establish (or support) a Joint Information Center (JIC) with Federal ESF 15. Provide staff as required.

Coordinate the release of information from across all state agencies, at the direction of the Command Element and the Executive Chamber's Office of Communication.

Release guidance on safety issues for people and pets, along with locations of mass care/shelter sites.

Release information on disaster assistance, call centers, recovery centers, and help lines.

Release information on hazardous waste disposal, food spoilage, and other personal safety concerns.

Coordinate public information with contiguous states regarding evacuees.

Establish contact with other State agencies for the release of public information as needed.

Release information on family assistance centers and family reunification.

Provide information on re-entry/return to affected area(s).

Demobilize the JIC as appropriate.

Document all releases of information, reports, and briefing documents produced by ESF 15.

Demobilize the ESF; continue to provide information as required in support of Joint Field Office (JFO).

## **Attachment 4**

### ***List of References Used in Plan Development***

The following is a list of State and Federal documents that were used in the preparation of this Annex:

1. The New York State Comprehensive Emergency Management Plan (CEMP):

Volume 1: State All-Hazard Mitigation Plan

Volume 2: Response and Short-Term Recovery

- Emergency Support Functions #1-13, #15 Annexes

Volume 3: Long-Term Recovery Plan

2. New York City Coastal Storm Plan

3. Nassau County Coastal Storm Plan

4. Suffolk County Coastal Storm Plan

5. Westchester County Coastal Storm Plan

6. National Infrastructure Protection Plan, 2013.

7. National Response Framework; June, 2016.

8. Homeland Security Presidential Directive (HSPD) # 5 – Management of Domestic Incidents; February, 2003.

9. Homeland Security Presidential Directive (HSPD) # 7 – Critical Infrastructure Identification, Prioritization and Protection; December, 2003.

10. *A Failure of Initiative*, Select Bipartisan Committee, February, 2006.

11. *Federal Response to Katrina: Lesson Learned*, The White House, 2006.

**Attachment 5**

***Protective Action Decision Timeline in New York City, and Nassau,  
Suffolk, Westchester Counties***

## I. New York City

1. EOC activation and declaration are predicated on storm progression, status of operations, and protective actions required.

2. Evacuation: Based on Category of storm and potential storm surge:

Zone A – Islands and all areas inundated by Category 1 storm surge

Zone B – all areas inundated by Category 2 (and some 3) storm surge

Zone C – all areas inundated by Category 3 and vulnerable to Category 4 storm surge

### 96 – 72 hours - Monitoring and preparedness activities

- Medical Transportation Resource Clearinghouse and Target Evacuation Operations to stage or deploy resources for evacuation of healthcare and special need evacuation in inundation zones;
- Prepare special needs shelters for activation;
- Initiate contact with utilities; advise of customers on life-sustained equipment;
- Coordination of transportation resources and establish evacuation routes as per plans
  - Mass transit (MTA - all divisions, LIRR, taxis);
  - Initiate contact with schools for bus availability.

72 hours: Disseminate notification for individuals with special needs and healthcare facilities; MTRC to activate special needs evacuation plan for facilities and populations within surge zones.

### 72 – 48 hours

- **State of Emergency Declaration**
- JIC established;
- Mass transit evacuation plans implemented at all transit areas – including bridges and tunnels – protocols in place for rerouting and reorganizing transportation services;
- Shelter systems and evacuation centers activated beyond at-risk areas;
- Evacuation order and press release for healthcare facilities, special needs, and nursing homes in inundation zones;
- Evacuation management plans activated; evacuation routes marked and accessible;
- US Coast Guard contacted for drawbridge closure timeline;
- Notification: Public notification of storm and possible evacuation within areas at-risk of or vulnerable to storm surge.

### 48 – 36 hours

- Targeted Evacuation Operations (FDNY) activated and deployed to Coney Island and the Rockaway Peninsula fire stations - transport special needs and healthcare populations;
- Assessment of transportation routes to determine need for contra-flow of Route 878 or traffic directional changes to support outgoing traffic.

### 36 – 24 hours

- Preparation for mass transit shutdown and reactivation;
- Evacuation routes evaluated for route changes or transportation reorganization;
- Utility companies contacted for operational status and in city generation capabilities;
- School closure.

### 24 – 6 hours

- Open general population shelters beyond surge zones as per plan;
- Evacuation and sheltering of general population from remaining vulnerable surge zones;
- Dissemination of evacuation orders to public within inundation zones.

### 6 – 3 hours

- Secure shelters;
- Secure transportation resources;
- Announce refuges of last resort;
- Termination of operations – mass transit, evacuation, infrastructure and road closures, utilities as per protocol.

### 3 – 0 hours

- Cease all operations;
- Utilities shutdown;
- Cease public transportation;
- Closure of transportation infrastructure;
- Divert evacuees to refuges of last resort;
- Termination of essential services.

**NYC Coastal Storm Activation Playbook:  
Pre-Storm Decision-Making Timeline Worksheet**

<b>Hours To Zero Hour</b>	<b>Date and Time* (X/XX, XXXX HRS)</b>	<b>Action</b>
<b>-120</b>		Convene Costal Storm Steering Committee
		Finalize shelter facility list
		Initiate checks of DOE School Food supplies
<b>-117</b>		<b>Issue mobilize orders for Interim Flood Protection Measures (IFPM)</b>
		Open LC
<b>-108</b>		Issue first notification (“alert”) to shelter staff
<b>-96</b>		All CSP Task Forces and Functions on alert
		Order Generator Power Pack for SMNS and DAFN sites
		<b>Validate HCF shelter-in-place requests</b>
		City Emergency Declaration/Activate DDC Contracts
<b>-84</b>		Open HEC
		Open UORC/SCC
		Issue second notification (“stand-by”) to shelter staff
		<b>Mobilize ESS and issue additional shelter support services notifications (no later than -84 HRS)</b>
		Confirm fixed Zero Hour
<b>-72</b>		HCF Evacuation Order takes effect
		Begin deploying IFPM just-in-time measures
<b>-60</b>		Issue third notification (“deployment”) to shelter staff
		<b>Deploy ESS and issue additional shelter support services notifications (no later than -60 HRS)</b>
<b>-48</b>		<b>Evacuation Order and/or Recommendation takes effect</b>
		Shelter staff arrive at Evacuation Centers
		Evacuation Centers open to the public
		Mobilize CDP staff and supplies
		HEO begins
		Schools close
<b>-8</b>		Subway service begins to curtail
<b>-6</b>		Bus service begins to curtail; HEO ceases
<b>0</b>		Zero hour – evacuation activities cease
<i>To be completed by the EOC Planning Section in advance of the Commissioner Conference Call</i>		

\*Timing of actions is suggested and may be altered as necessary

## II. Nassau County

Emergency Operations Center (EOC) Activation Levels (storm dependent criteria):

- Level I 48 hours or when a Hurricane Watch is issued
- Level II 36 hours or when a Hurricane Warning is issued (SOEM requested to EOC)
- Level III 24 hours or when evacuation commences

### Ongoing Activities

1. Communications with State, County Executives and agencies, Local governments, RELT, ARC, Port Authority and NYC, Westchester, and Suffolk County OEMs.
2. Monitor and support operations.
3. Press briefings and notifications throughout storm event; 1<sup>st</sup> briefing with County Executive at 72 hours.

### 120 – 96 hours

- Initial contacts to State, County, Local, RELT, ARC, RACES, and CERT;
- County and jurisdictional public works departments to survey evacuation routes for accessibility and status of refuges of last resort.

### 72 – 48 hours

- Joint information system established within a County MAC;
- Contact initiated with school superintendents;
- Long Island Bus Para-transit to suspend regular service at start of 48-hour period for special needs evacuation within surge areas;
- Critical transportation accessibility monitored at key locations along evacuation routes as per plan; evacuation routes established with assets pre-staged;
- ARC to establish out of surge shelters. *(For school-based emergency shelters, BOCES superintendents will be liaisons between school officials and ARC.);*
- Shelter supply trailers mobilized from surge zones, special needs shelter preparation.  
\*\* Appendix G States it will take “upwards of 48 hours” to evacuate the south shore’s vulnerable population (those not needing assistance).

### 48 – 36 hours - Level I activation - Watch

- **State of Emergency Declaration**
- Evacuation order for healthcare facilities, special needs, and nursing homes within surge zones;
- Long Island Para-transit activated;
- Long Island Bus to curtail regular service to commence emergency transport at 36 hours;

- Evacuation management plan implemented within surge areas: ensure route accessibility, traffic control; conduct door-to-door evacuation notifications, provide security in evacuated areas, and changes in traffic patterns;
- Request NY State Police to facilitate spontaneous evacuation on NYS Parkways;
- Pet Safe Coalition shelters activated;
- School closures.

36 – 24 hours - Level II activation - Warning

- General population evacuation of barrier beaches and coastal communities;\*\*
- *Long Beach and Far Rockaways will be evacuated to Valley Stream Train Station*
- Long Island Bus begins emergency stops along evacuation routes to Nassau Community College;
- Evacuation and closure of park and recreational areas;
- Utilities contacted regarding time frame for service shutdown.

24 hours - Level III activation

- General population evacuation of remaining surge prone areas;
- Relocation of affected police and fire departments from surge areas– open first responders shelters;
- Evacuation of non-essential government personnel from surge areas;
- Shutdown places of assembly.

12 hours

- Long Island Railroad contacted to determine service shutdown plans. (LIRR protocol is 8 hours prior to arrival of 39 mph sustained winds.);
- Announce and divert evacuees to refuges of last resort;
- RACES activated;
- Shutdown and relocation of County assets in surge zones;
- Press briefings on shut down of government operations and evacuation.

**Arrival of 55 mph winds**

- Cessation of evacuation and all exterior operations;
- Secure EOC and all County assets.

**III. Suffolk County**

Emergency Operations Center (EOC) Activation Levels (storm dependent criteria)

<u>Limited</u>	72 - 48 hours
<u>Full</u>	48 - 0 hours

### Ongoing Activities

1. Communications with State, Local, County governments, ARC, hospitals, transportation and utilities
2. Communications with the RELT
3. Press releases, media advisories and emergency instructions

#### 120 – 72 hours

- Monitoring, initial alerts and briefings
- Contacts: Nassau OEM, New York City OEM, Port Authority, RELT to coordinate objectives
  - Private bus companies – availability for evacuation
  - DPW mobilized with request for NYSDOT to assess evacuation route accessibility

#### 72 – 48 hours - Limited EOC Activation

- Halt incoming ferries to Fire Island;
- County Dept. of Health Services to begin preparations for evacuation of healthcare facilities, special needs, and nursing homes in inundation zones;
- American Red Cross activated for sheltering preparations;
- Joint Emergency Evacuation Program (JEEP) notified for evacuation of prequalified special needs individuals;
- Pre-stage police, DPW, and resource assets for traffic management along critical transportation segments used as evacuation routes (includes portions of and intersections along Sunrise and Montauk Highways, Route 27, Route 111, Route 25, and the ferry service from Fire Island);
- Initiate contact with school superintendents and utilities;
- Fire Island evacuation. Notifications to LIRR and Ferry Operators.

#### 48 – 36 hours

- **By 48 hours: State of Emergency Declaration**
- JIC established;
- Evacuation order for healthcare facilities, special needs, and nursing homes in inundation zones;
- Press release advising of evacuation routes, pick-up points for evacuees with no transportation and public information call line;
- Evacuation Management Plan implemented – road closures, traffic control, detours;
- LIRR to activate Coastal Storm Evacuation Train Plan;
- School closures.

By 36 hours, Initiate or support Town initiatives to recommend or order Fire Island evacuation.

36 – 24 hours - Full EOC activation

- Staged zone evacuation for general population in inundation zones beginning with Zone 1;
- Activation of Bus Evacuation Pick-up Points Plan for general population with no means of transportation from inundation zones;
- Public notification of evacuation and transportation routes, emergency warnings and instructions;
- Pet-friendly shelters open;
- County Parks and Recreation Department to evacuate and close recreation areas;
- Utilities contacted for planned service shutdown.

24 – 12 hours - Full EOC Activation - Federal, State, County, Local, ESF agency representatives

- Evacuation orders for general population from other inundation zones;
- Evacuation of non-essential government personnel from inundation zones;
- Relocation plans for PD and fire departments located in storm surge zones;
- Shutdown places of assembly;
- Shutdown & relocation of County assets in storm surge zones;
- County-run shelters activated;
- RACES activated.

12 hours - **Arrival of 55 mph winds**

- Cease all evacuations;
- Divert evacuees to refuges of last resort;
- Cease all exterior operations;
- Secure EOC, County assets and equipment.

**IV. Westchester County**

Emergency Operations Center (EOC) Activation Levels (storm dependent criteria):

Level III        72 - 48 hours - Preliminary  
Level II         48 - 36 hours - Partial  
Level I          36 - 24 hours - Full

Ongoing Activities

1. Maintain contact and coordination with State, County, Local, other municipalities, and agencies;
2. Press briefings, public information and emergency instructions through JIC;
3. Monitor roadways, airports, and other transportation routes;
4. Monitor and support all operations, including but not limited to sheltering and evacuation of

healthcare facilities, special need populations and general population within surge areas.

- With Category 3 storms: Evacuation will begin when storm is off the South Carolina coast; NYS

#### 120 Hours

- Storm monitoring and dissemination of information
- Initiate pre-planning activities including review of plans and procedures and operational readiness

#### 96-72 Hours

- Storm monitoring and dissemination of information
- Communication with Region, County government, non-county response partners and municipal officials, including D/AFN stakeholders and select special facilities
- County departments initiate readiness activities:
  - Assess potential incident impact on their daily operations
  - Evaluate the status of personnel and equipment that will be needed for incident response / evacuation
- Initiate public communications planning
- Initiate mass care planning and transportation planning
- Initiate healthcare facility planning including scheduled conference calls
- Initiate cost tracking

#### 72 – 48 Hours - Level III activation

- WCEOC Activated – Limited:
  - Operational during normal business hours but on call 24/7
- Continue storm monitoring and dissemination of information
- Continue intergovernmental and interagency conference calls
- Continue mass care planning and transportation planning
- Disseminate public preparedness information
- Plan for potential evacuation operations for health care facilities and people with disabilities and others with access and functional needs

#### 48 – 36 Hours

- WCEOC Activated – Partial:
- Key personnel may be required for a period of time while others are on call, 24/7
- Continue storm monitoring and dissemination of information
- Continue intergovernmental and interagency conference calls; including D/AFN stakeholders, select special facilities, and other partners
- Special facility evacuation monitoring
- Mass care readiness – compile list of shelter locations in cooperation with Red Cross and local municipalities
- Initial consideration of:
  - Declaration of State of Emergency
  - Emergency protective measures
  - Pre-event Presidential Declaration request to NYS
- Facilitate information sharing with United Way-211 Call Center

#### 36 – 0 Hours

- WCEOC Activated – Full:
- EOC becomes fully staffed and operational until directed otherwise
- Continue storm monitoring and dissemination of information
- Intergovernmental coordination conference calls, including D/AFN stakeholders, select special facilities, and other partners
- Continued discussion and coordinated planning for:
  - Declaration of State of Emergency
  - Emergency protective measures
  - Pre-event Presidential Declaration request to NYS
- Cessation of non-essential services
- Coordinate timing and support cessation of mass transportation activities and determine availability of buses and paratransit vehicles for evacuation support
- Monitor local shelter and mass care operations

#### 24- 0 Hours

- Continue storm monitoring and dissemination of information
- Continue Intergovernmental coordination conference calls, including D/AFN stakeholders, select special facilities, and other partners
- Monitor evacuation and emergency protective measures
  - Shelters /Evacuation Centers open for public use
  - Support, as needed, public notification of Emergency Orders
  - Monitor local evacuation and mass care operations

### 0 Hours

- Arrival of sustained Tropical Storm Force Winds (34kts/39mph) marks cessation of operations due to the potential for unsafe working conditions for responders
- Continue storm monitoring and dissemination of information
- Personnel, evacuees and any non-evacuated residents advised to relocate in to storm secure locations

### +0-2 Days

- WCEOC Activated – Full:
- EOC fully staffed and operational until directed otherwise
- Continue monitoring and dissemination of information
- Re-establish communications with Municipal EOCs, hospitals, etc.
- Continue Intergovernmental coordination conference calls; including D/AFN stakeholders, select special facilities, and other partners
- Gather information relating to preliminary assessments of storm impacts:
  - Identify areas of the County without electricity
  - Status and function of water and sewer systems
  - Critical infrastructure damage, including communications systems, bridges and tunnels and roadways
  - Volume and location of storm-related debris
  - Status of private sector assets such as grocery stores and gas stations
- Support the restoration of essential public health and safety services
- Support the restoration interrupted utility and other essential services
- Support local mass care operations, upon request

### +2-14 Days

- WCEOC Activated – Partial:
- EOC staffed and operation with key personnel as appropriate to the event impacts while others are on call, 24/7
- Continue monitoring and dissemination of information as needed; including D/AFN stakeholders, select special facilities, and other partners
- Continue Intergovernmental coordination conference calls as needed
- Support the restoration of essential public health and safety services
- Support the restoration interrupted utility and other essential services
- Support local mass care operations, upon request
- Support debris management operations
- Collect Initial Damage Assessment data for report to NYS OEM
  - Government response and recovery costs
  - Infrastructure damage
  - Business and residential damage
- Facilitate disaster recovery activities such as assistance programs and centers
- Demobilize EOC operations as appropriate to the event

### +15 Days until Concluded

- Work with Federal Emergency Management Agency and New York State Office of Emergency Management to coordinate recovery programs as appropriate for the event; these may include:
  - Public Assistance
  - Individual Assistance
  - Small Business Administration assistance.
- Support the establishment of a Long Term Recovery Coalition
- Document event damages and compile event history and County response
- Recover deployed assets and restock consumed supplies and materials

### Post Incident Analysis

- Develop schedule to conduct post-incident analysis
- Collect and analyze feedback from local, County and non-County partners
- Develop post-incident analysis including identifying areas of strength, areas for improvement and recommended actions
- Review and revise plans, procedures and guidelines as appropriate

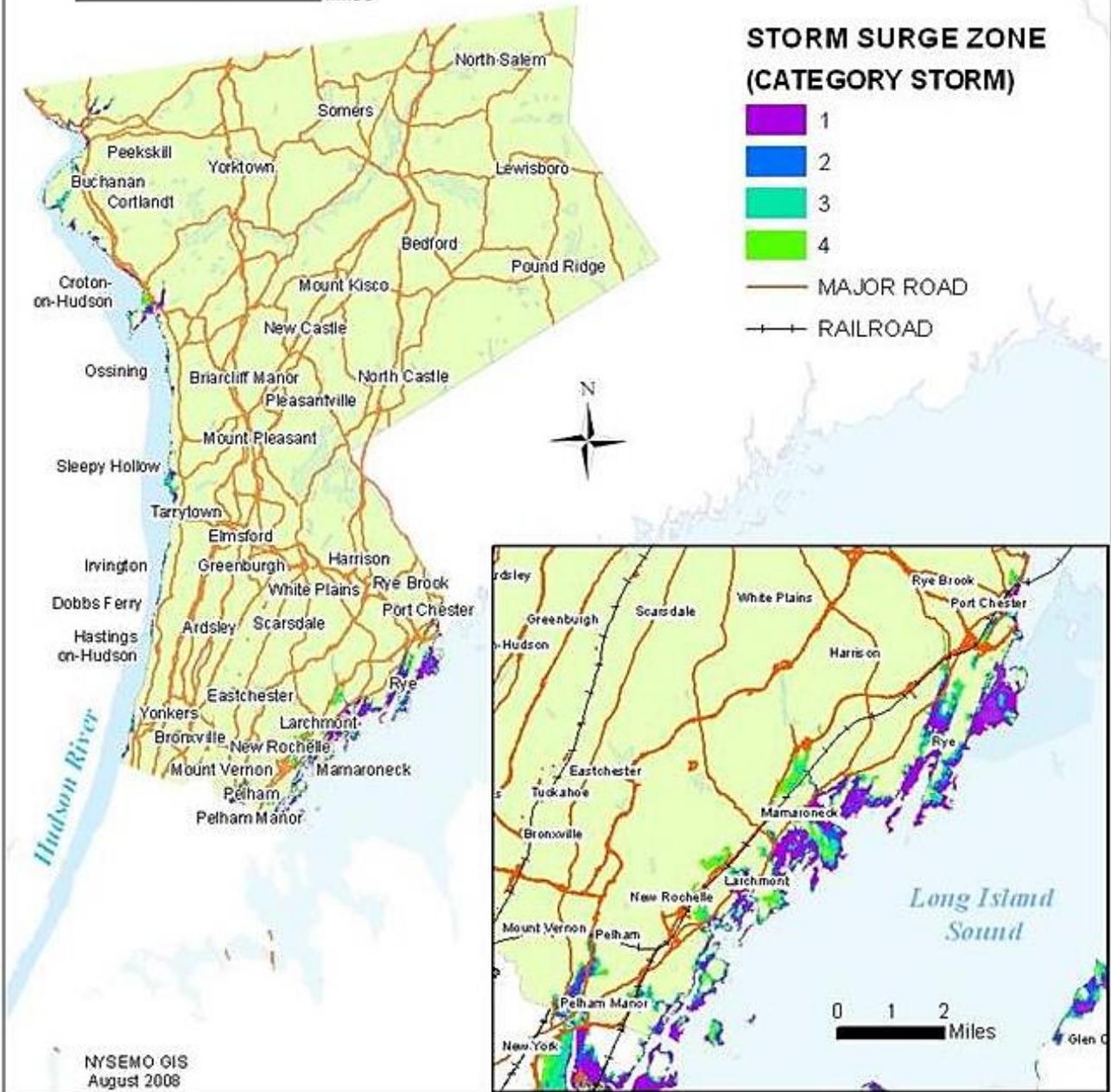
**Attachment 6**

***Hurricane SLOSH Maps, Evacuation Zones, Shelter Locations, Points of  
Distribution for New York City, and Nassau, Suffolk, Westchester  
Counties***

# WESTCHESTER COUNTY, NY HURRICANE STORM SURGE INUNDATION ZONES\*

\* Based on NOAA's Sea Lake Overland Surge from Hurricanes (SLOSH) model. A number of possible storm landfall locations are factored providing worst case flooding at any given location for associated category storm.

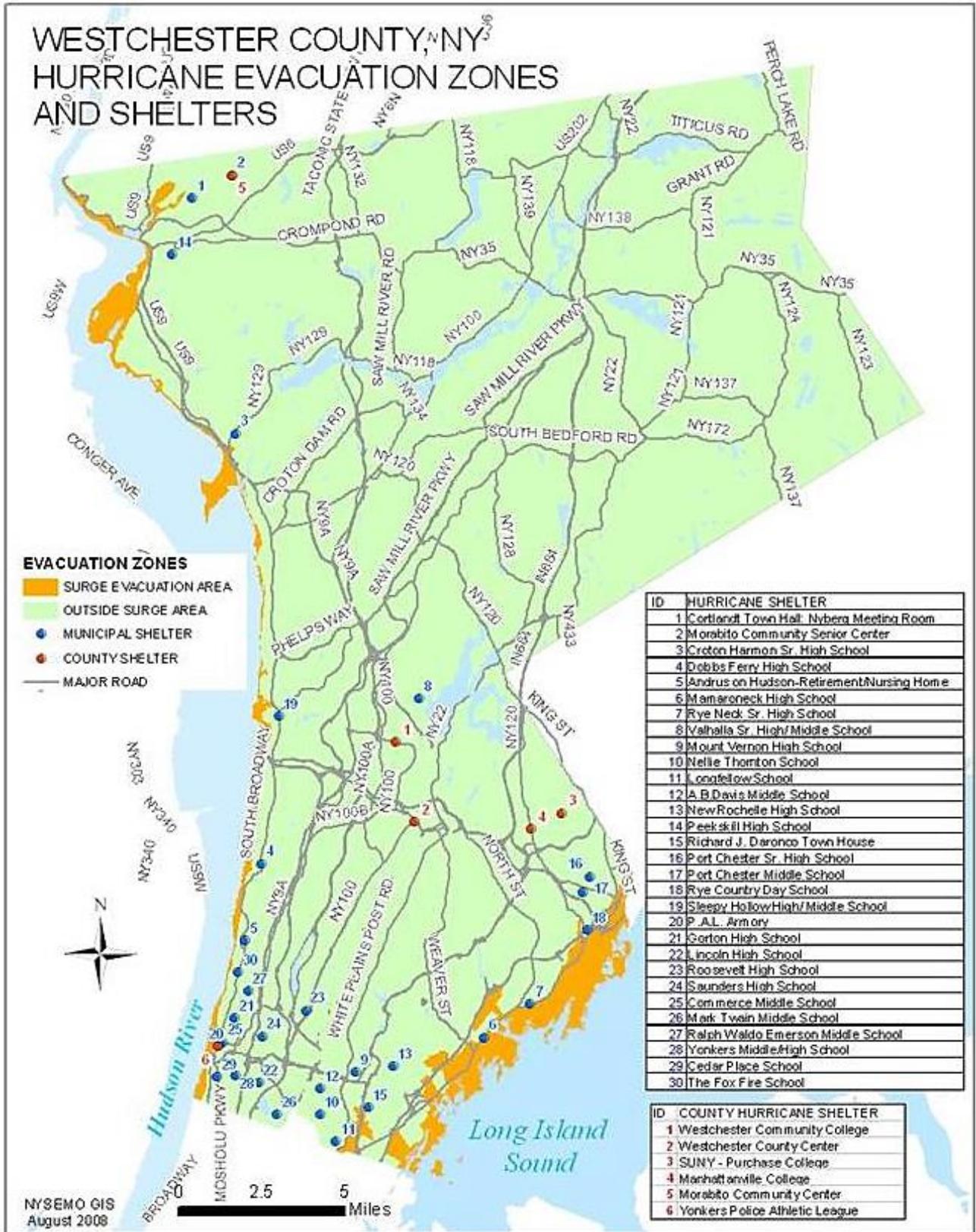
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# WESTCHESTER COUNTY, NY HURRICANE EVACUATION ZONES

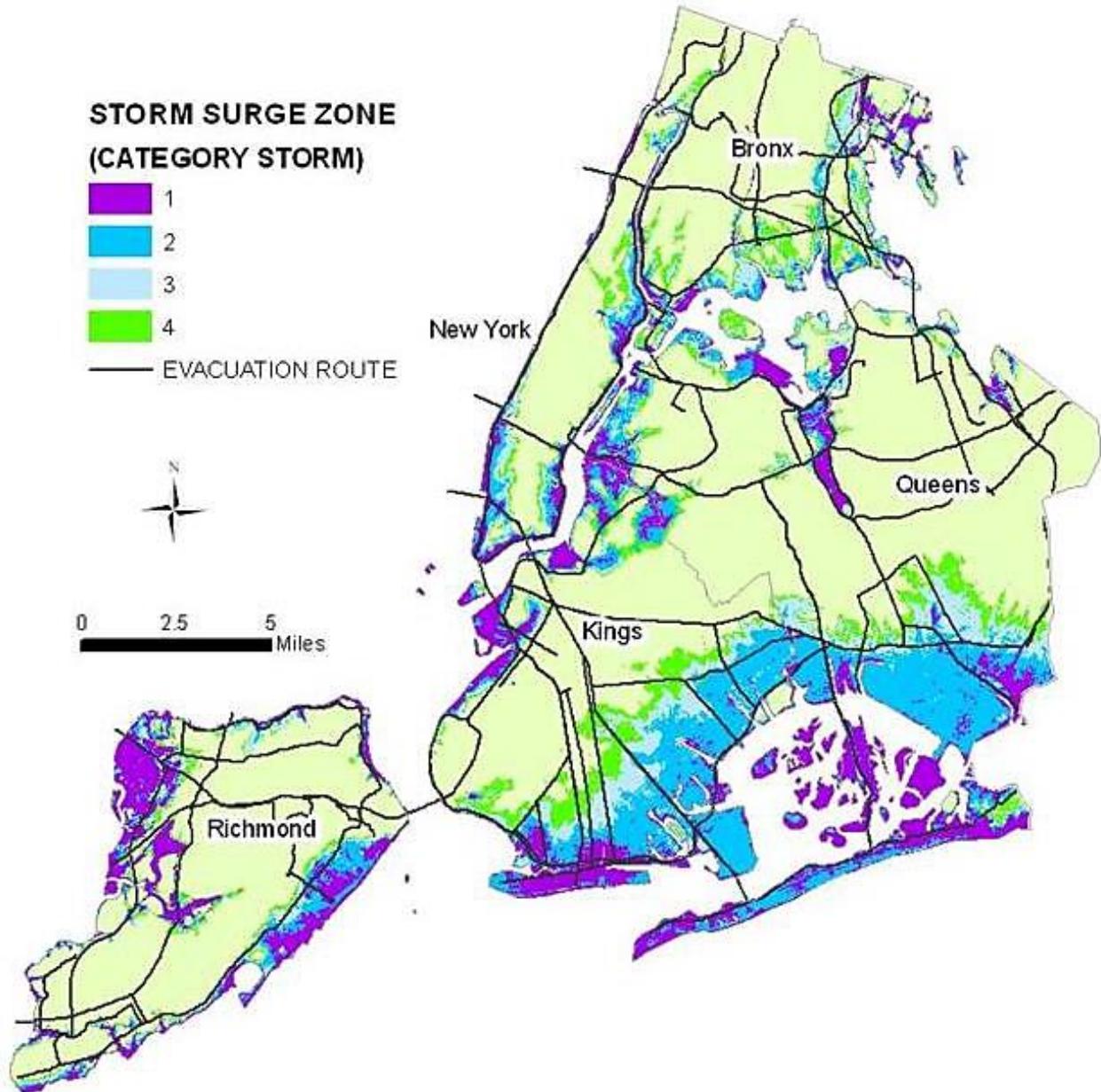


# WESTCHESTER COUNTY, NY HURRICANE EVACUATION ZONES AND SHELTERS



# NEW YORK CITY HURRICANE STORM SURGE INUNDATION ZONES\*

\* Based on NOAA's Sea Lake Overland Surge from Hurricanes (SLOSH) model. A number of possible storm landfall locations are factored providing worst case flooding at any given location for associated category storm.

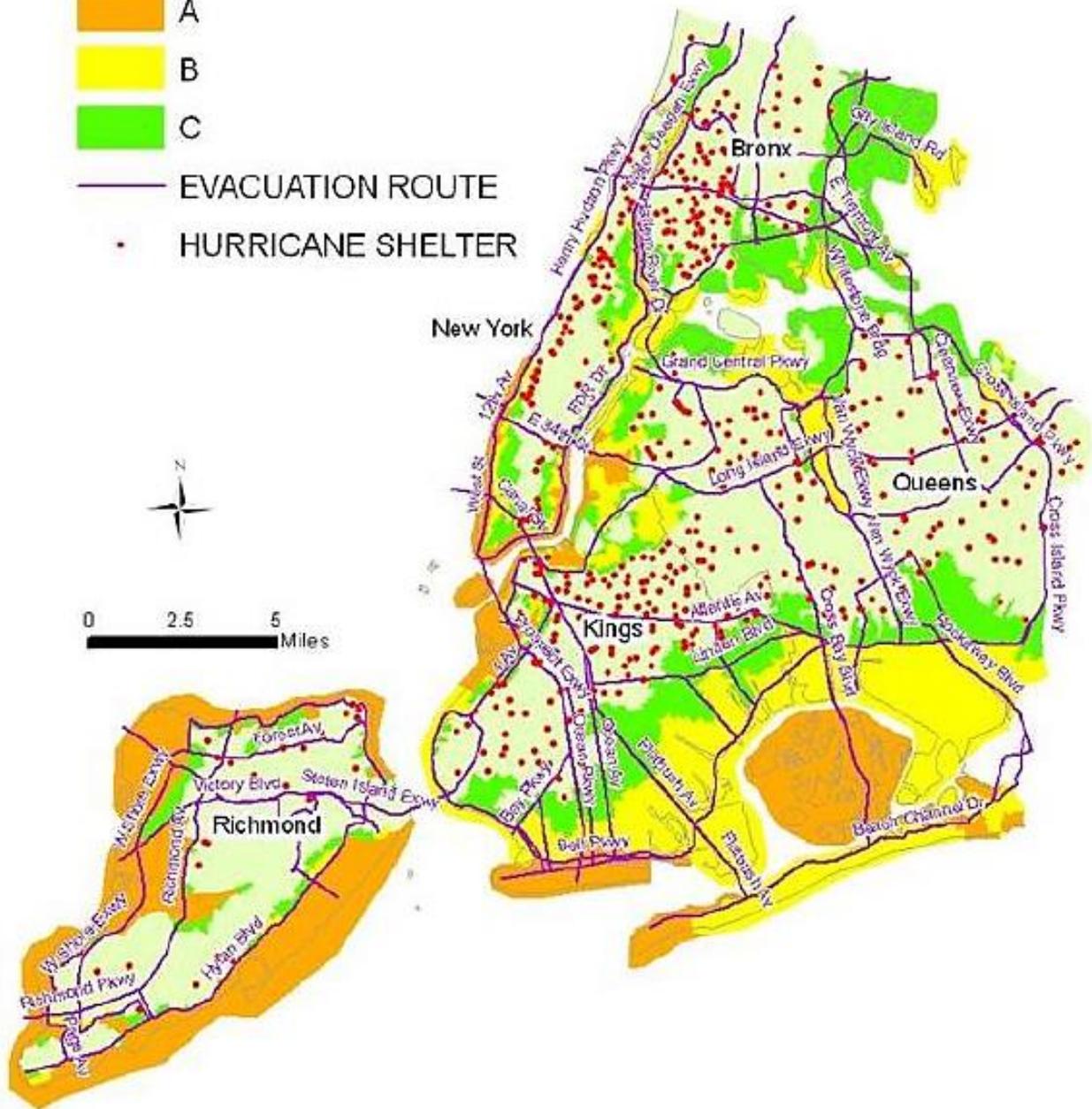
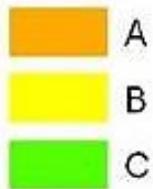


NYSEMO GIS  
August 2008

# NEW YORK CITY HURRICANE EVACUATION ZONES

## EVACUATION ZONE

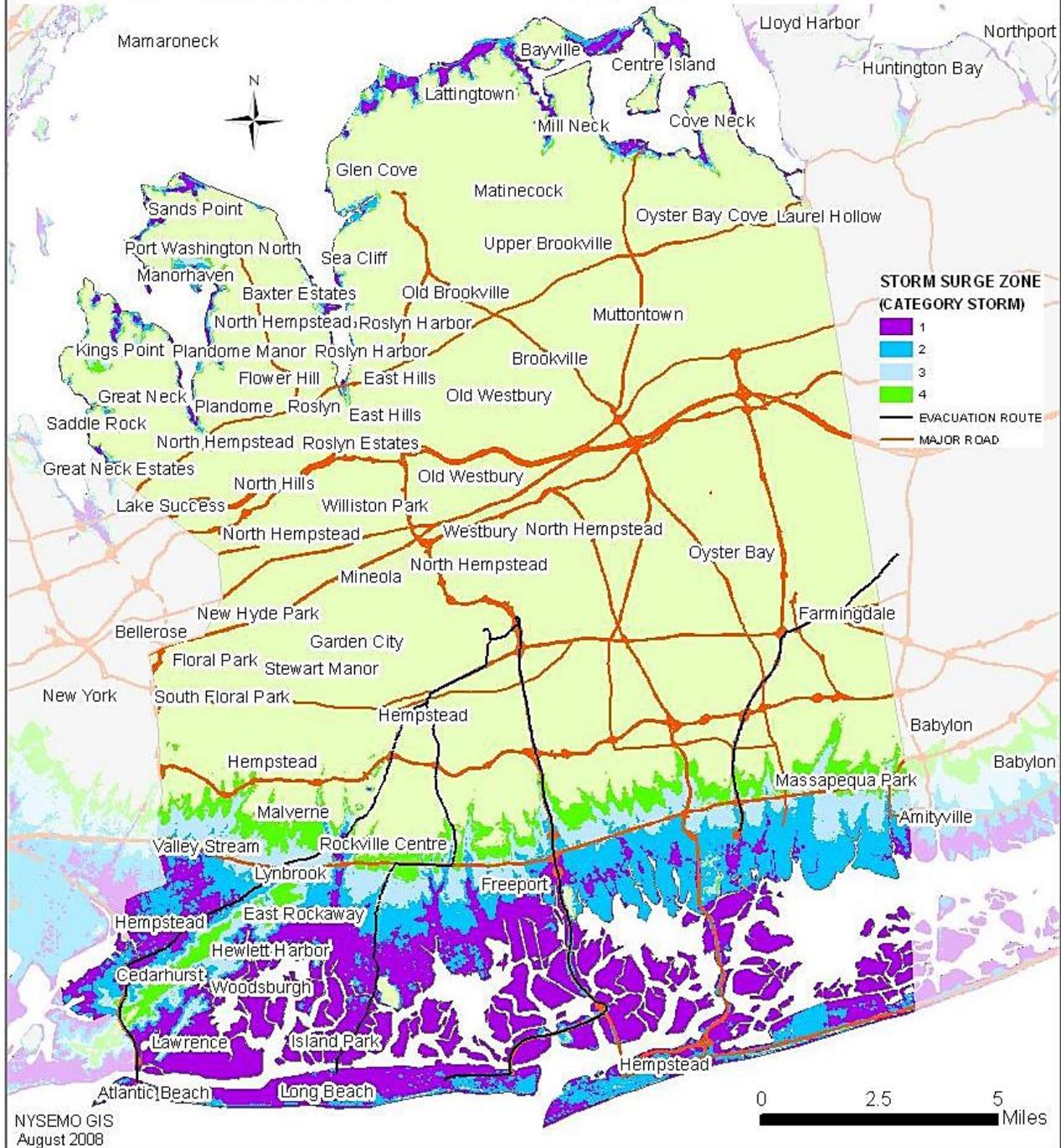
### ZONE

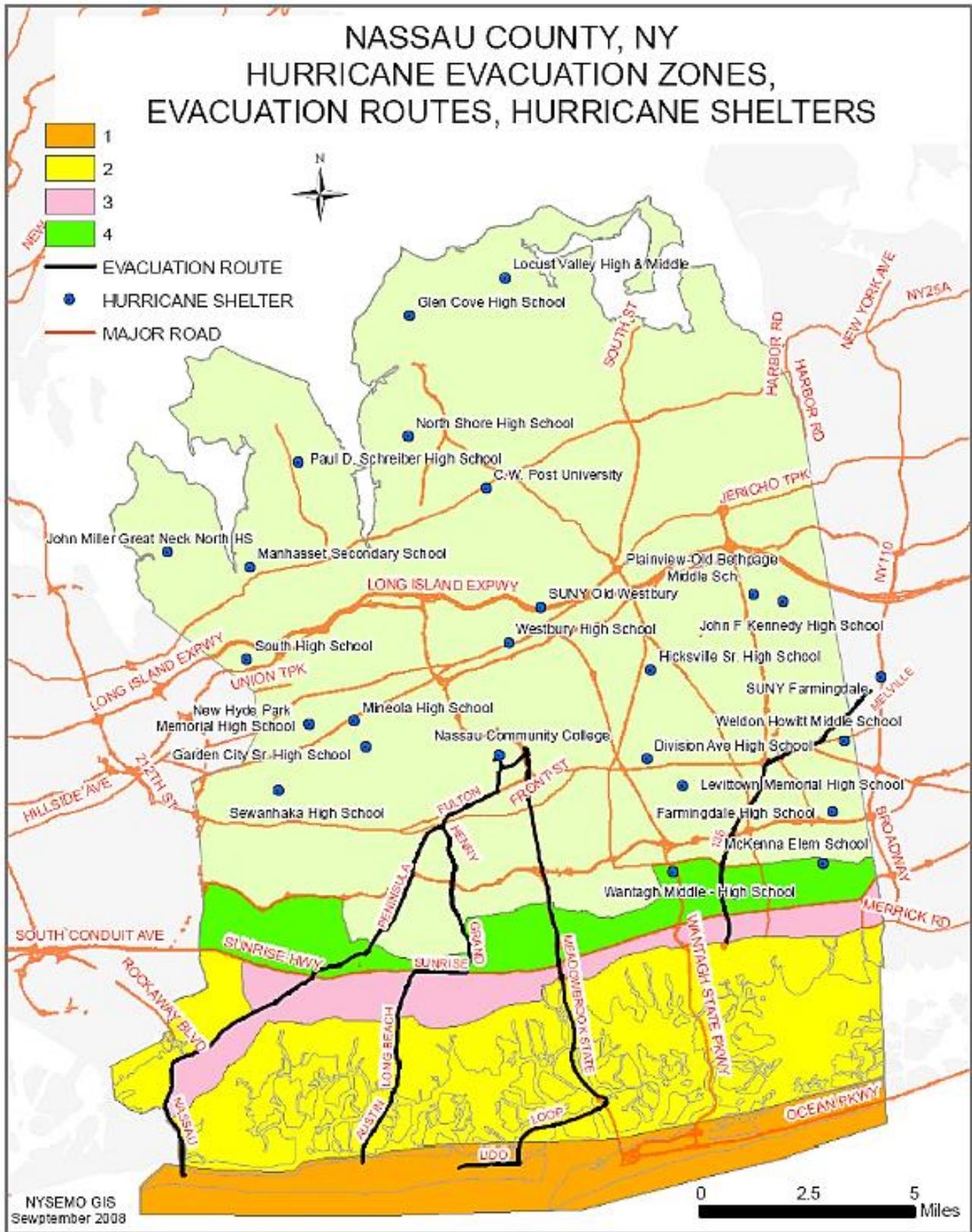


NYS/SEMO GIS  
August 2008

# NASSAU COUNTY, NY HURRICANE STORM SURGE INUNDATION ZONES\*

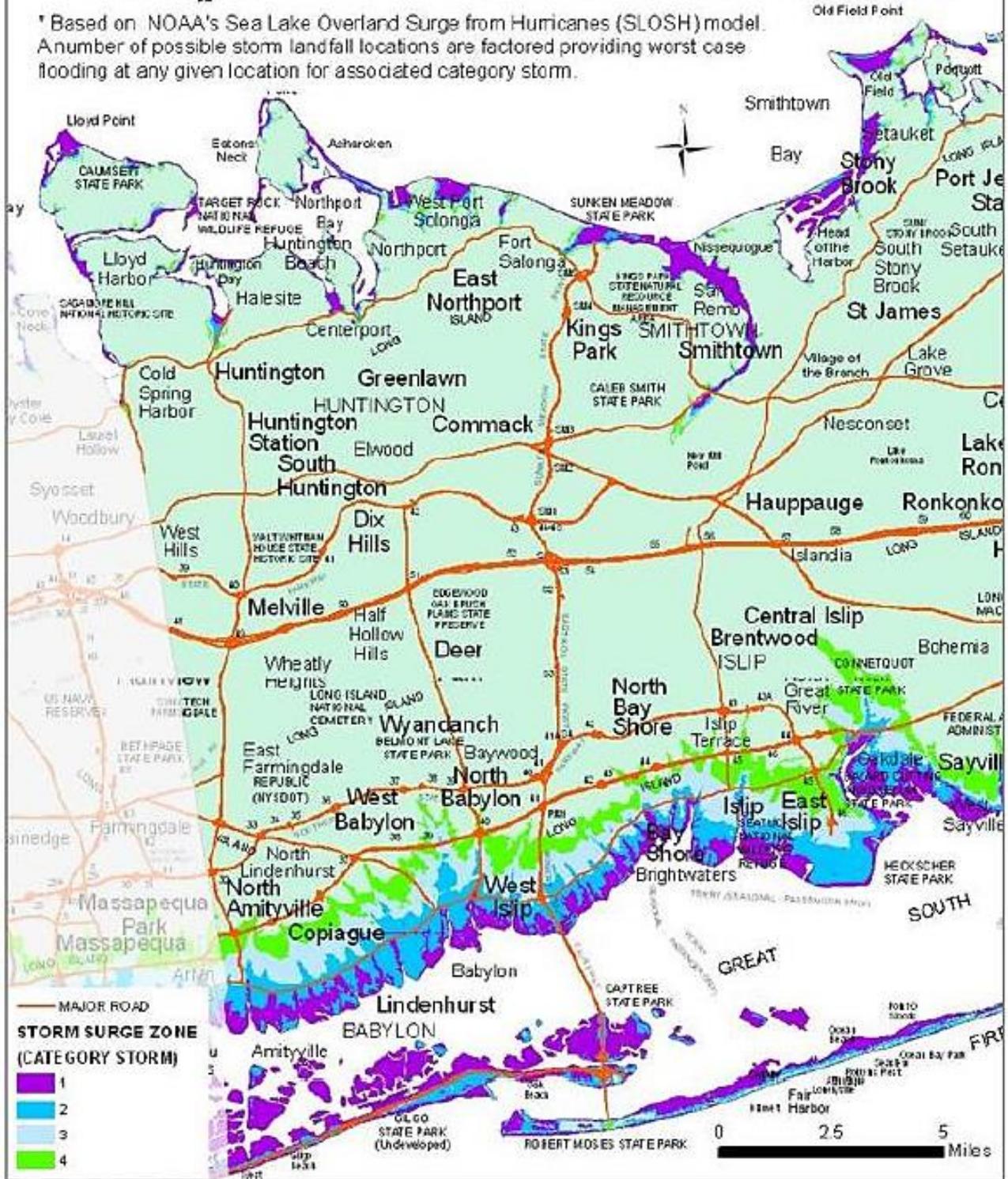
\* Based on NOAA's Sea Lake Overland Surge from Hurricanes (SLOSH) model.  
A number of possible storm landfall locations are factored providing worst case flooding at any given location for associated category storm.



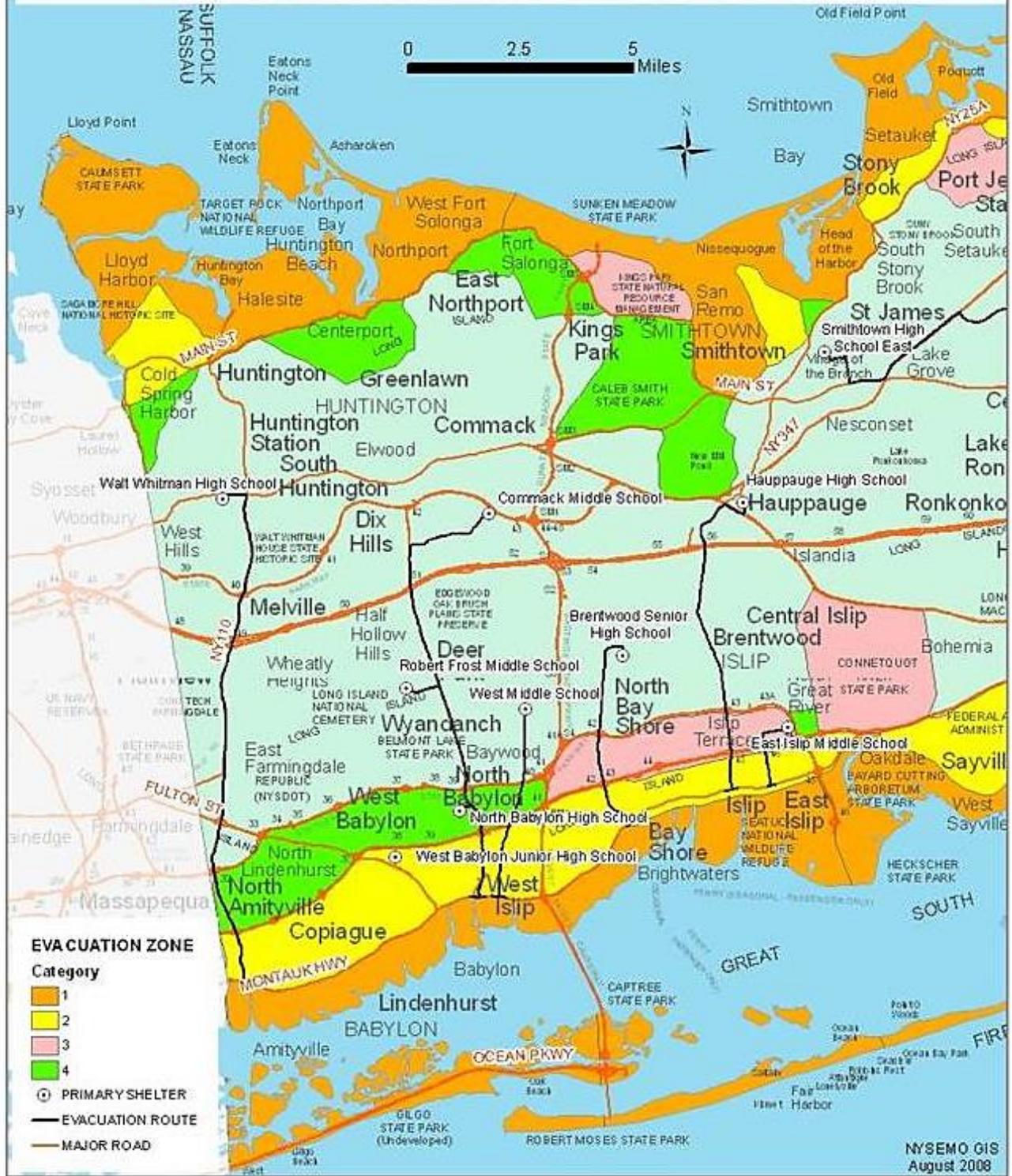


# SUFFOLK COUNTY, NY (WESTERN) HURRICANE STORM SURGE INUNDATION ZONES\*

\* Based on NOAA's Sea Lake Overland Surge from Hurricanes (SLOSH) model. A number of possible storm landfall locations are factored providing worst case flooding at any given location for associated category storm.

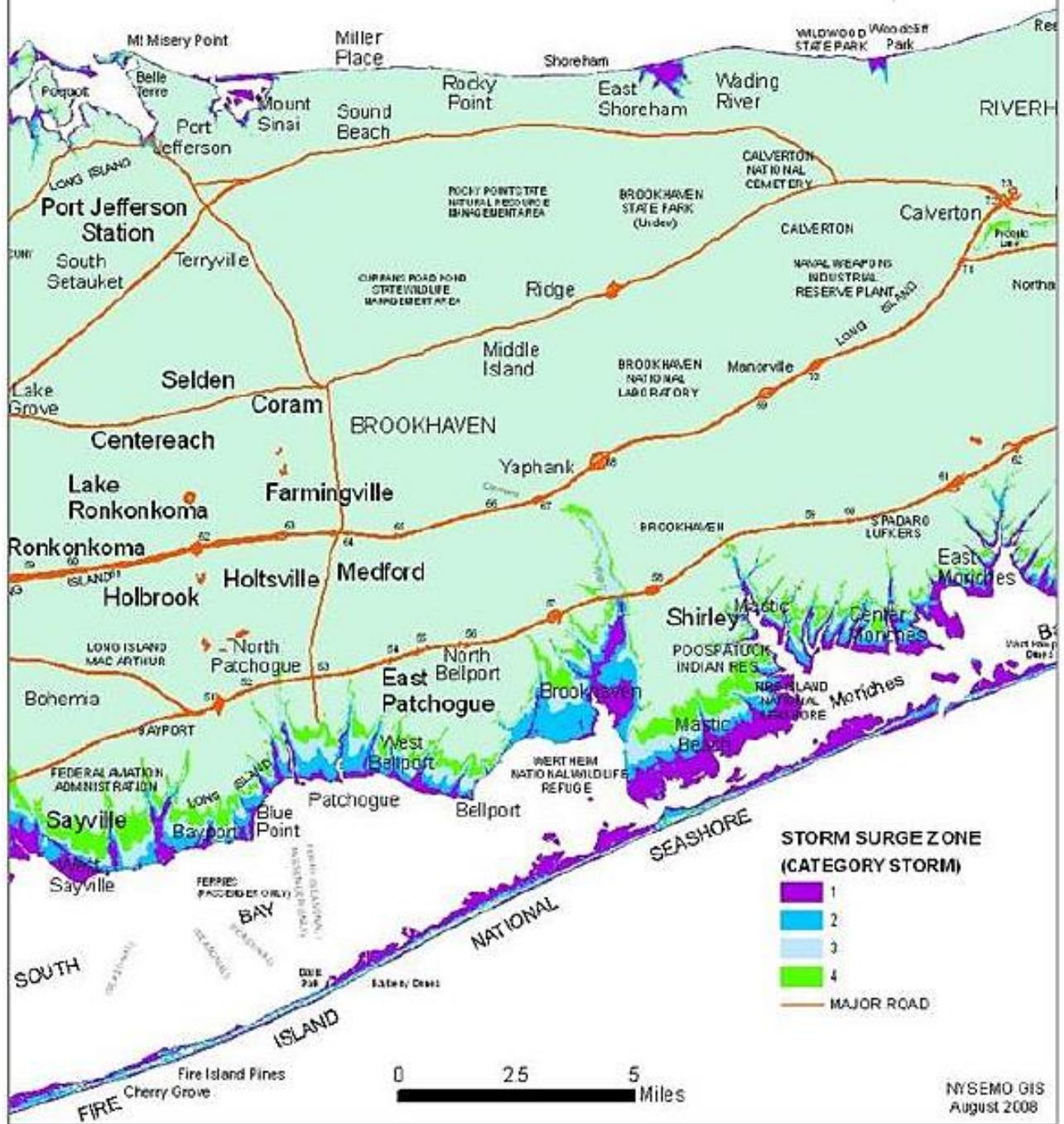


# SUFFOLK COUNTY, NY (WESTERN) HURRICANE EVACUATION ZONES

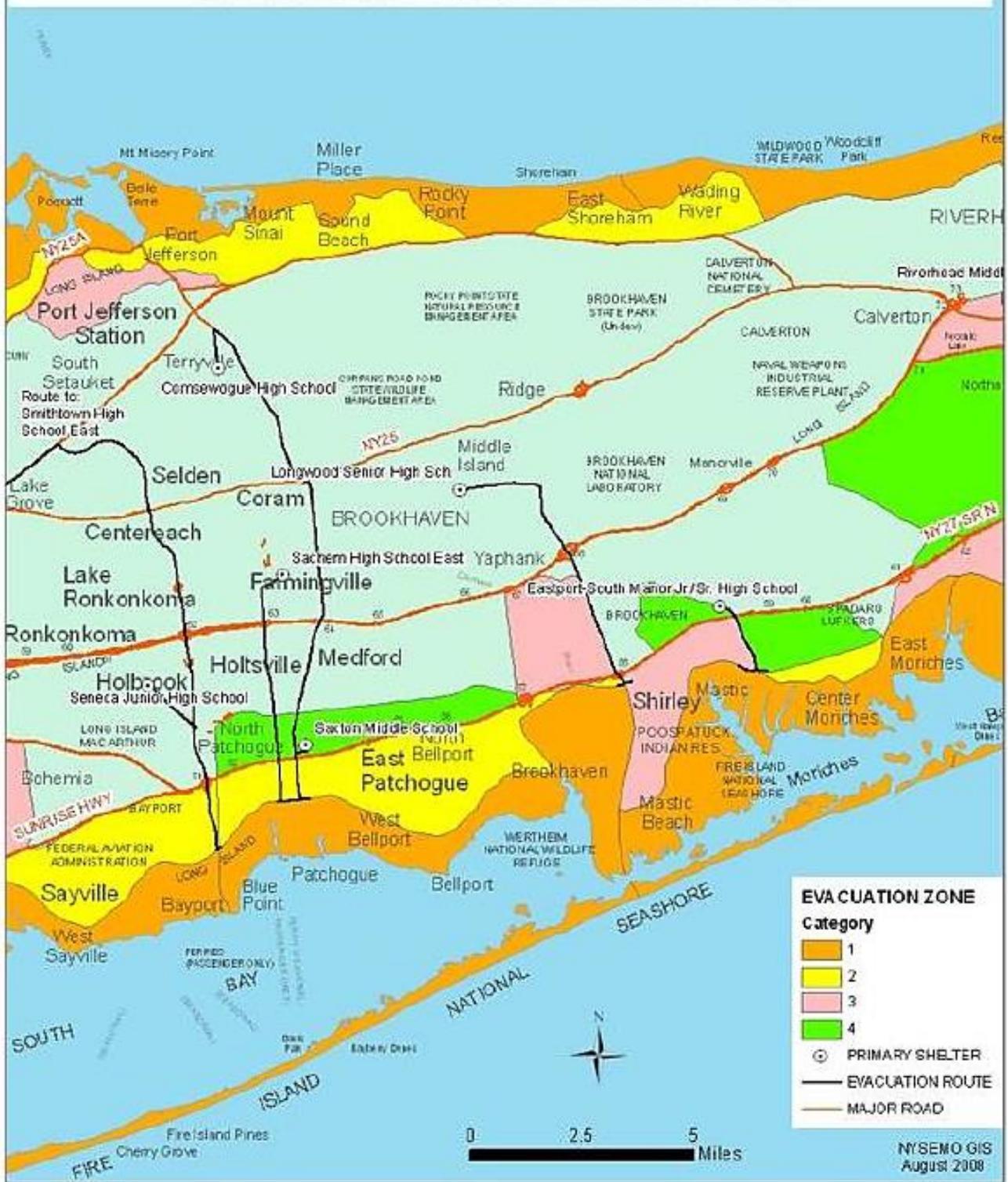


# SUFFOLK COUNTY, NY (CENTRAL) HURRICANE STORM SURGE INUNDATION ZONES\*

\* Based on NOAA's Sea Lake Overland Surge from Hurricanes (SLOSH) model. A number of possible storm landfall locations are factored providing worst case flooding at any given location for associated category storm.

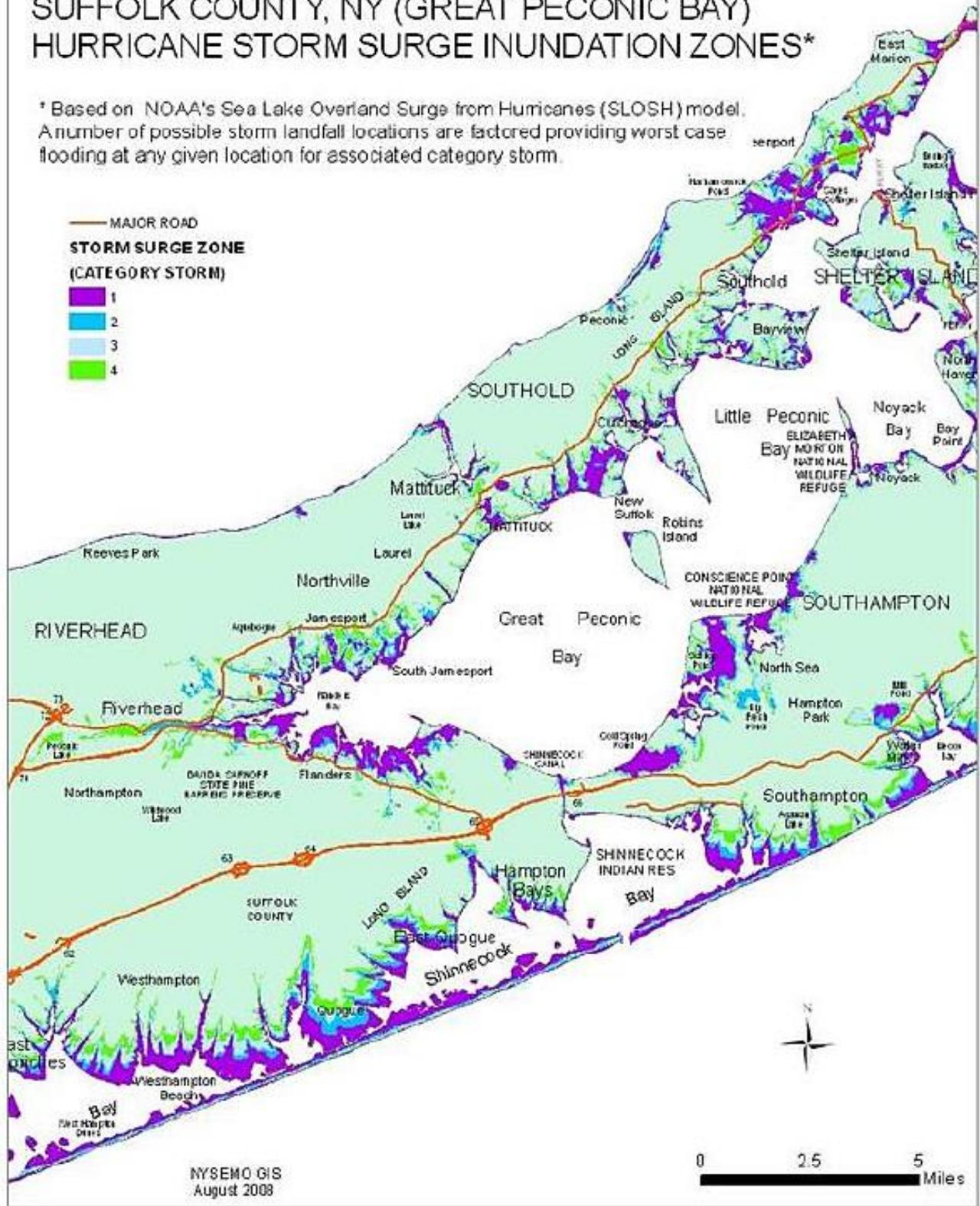


# SUFFOLK COUNTY, NY (CENTRAL) HURRICANE EVACUATION ZONES

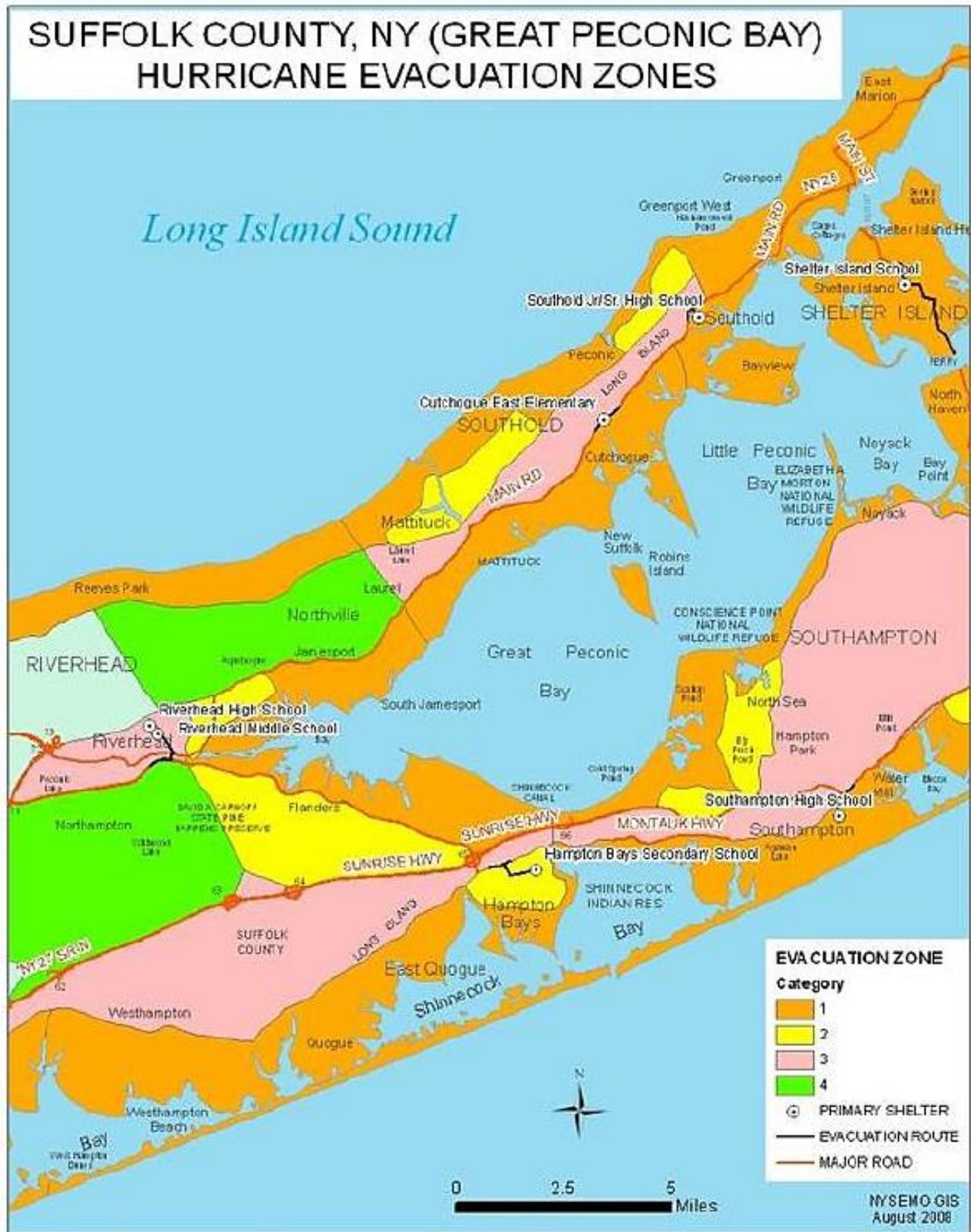


# SUFFOLK COUNTY, NY (GREAT PECONIC BAY) HURRICANE STORM SURGE INUNDATION ZONES\*

\* Based on NOAA's Sea Lake Overland Surge from Hurricanes (SLOSH) model. A number of possible storm landfall locations are factored providing worst case flooding at any given location for associated category storm.

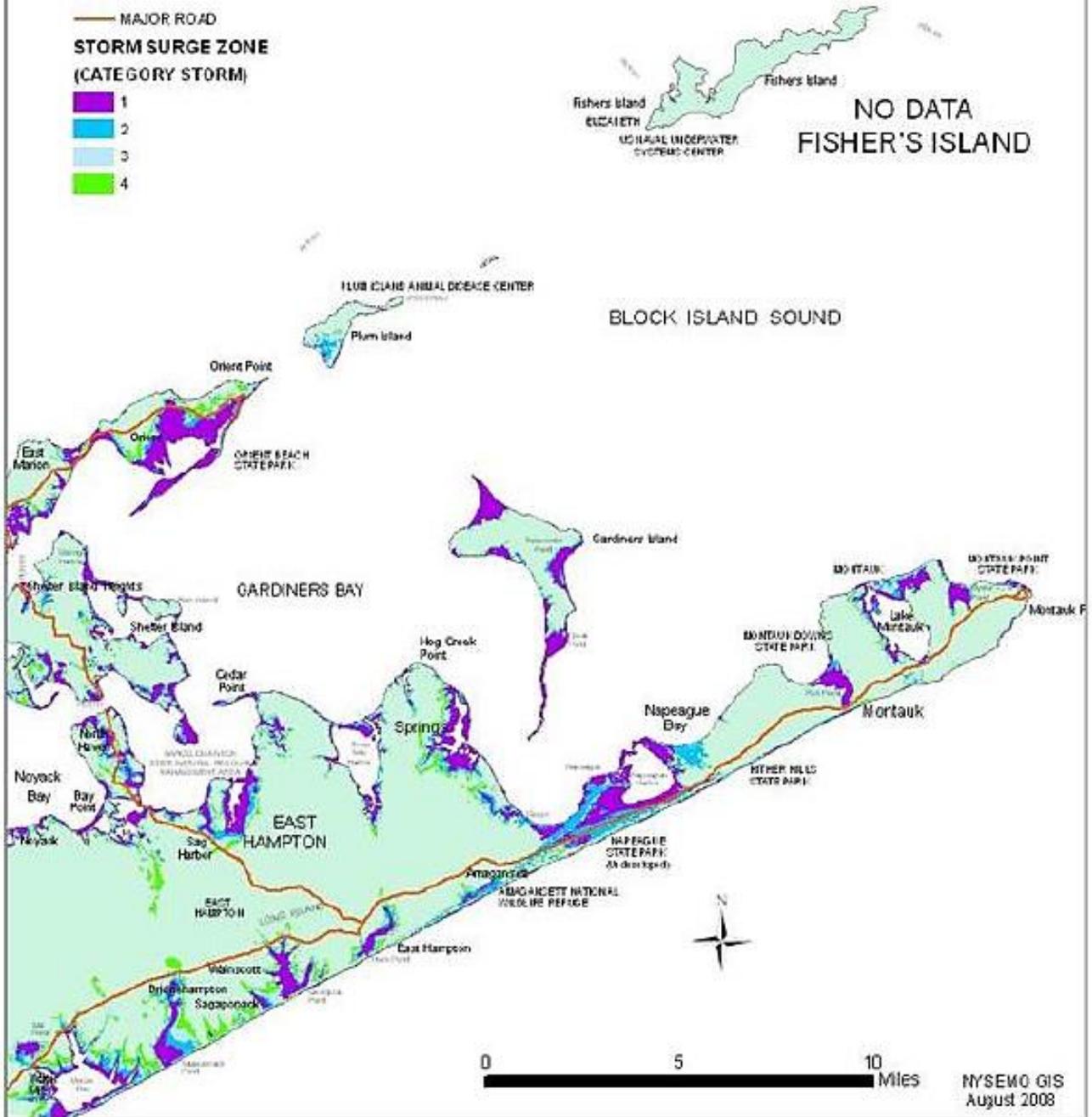


# SUFFOLK COUNTY, NY (GREAT PECONIC BAY) HURRICANE EVACUATION ZONES



# SUFFOLK COUNTY, NY (EASTERN) HURRICANE STORM SURGE INUNDATION ZONES\*

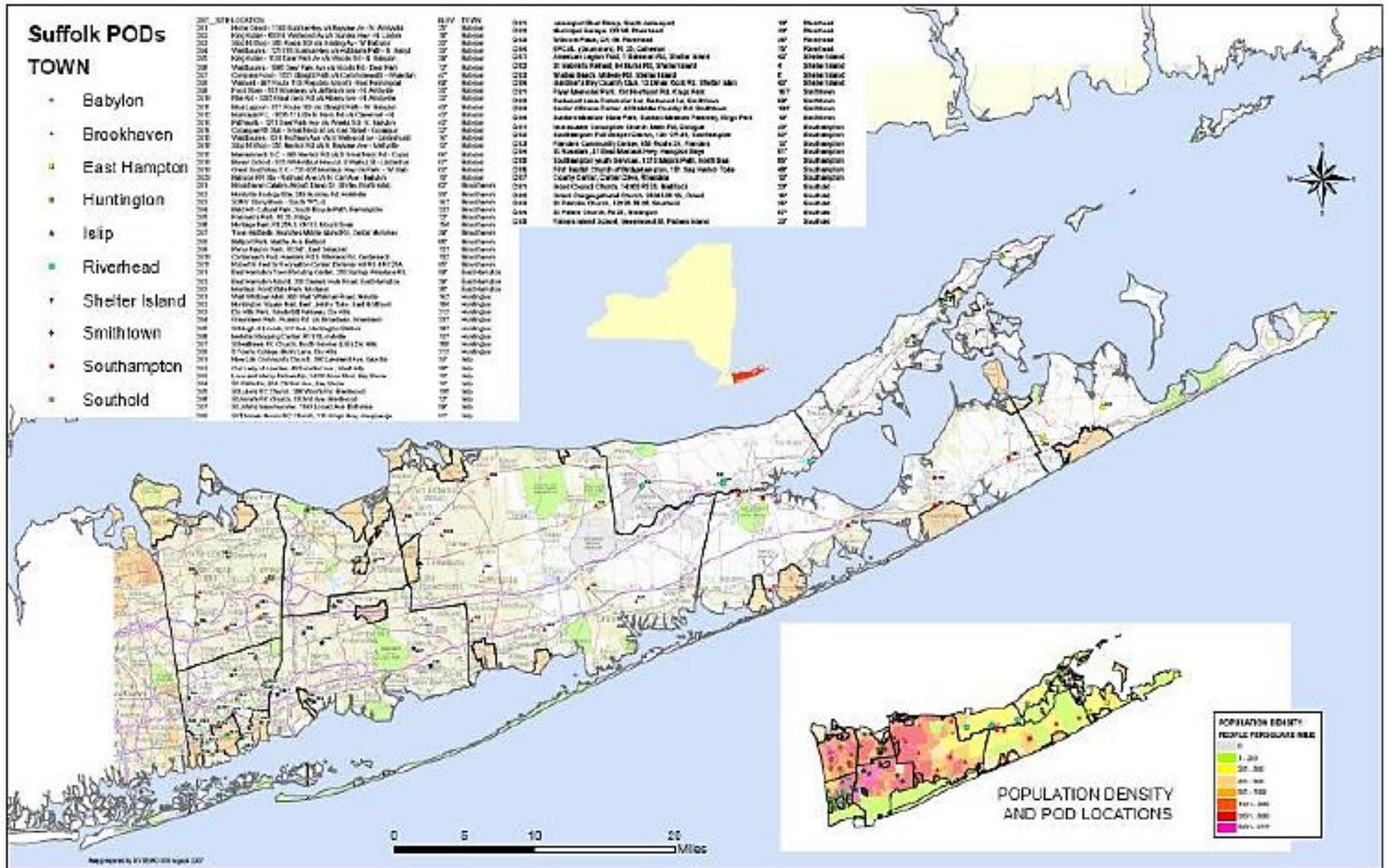
\* Based on NOAA's Sea Lake Overland Surge from Hurricanes (SLOSH) model. A number of possible storm landfall locations are factored providing worst case flooding at any given location for associated category storm.

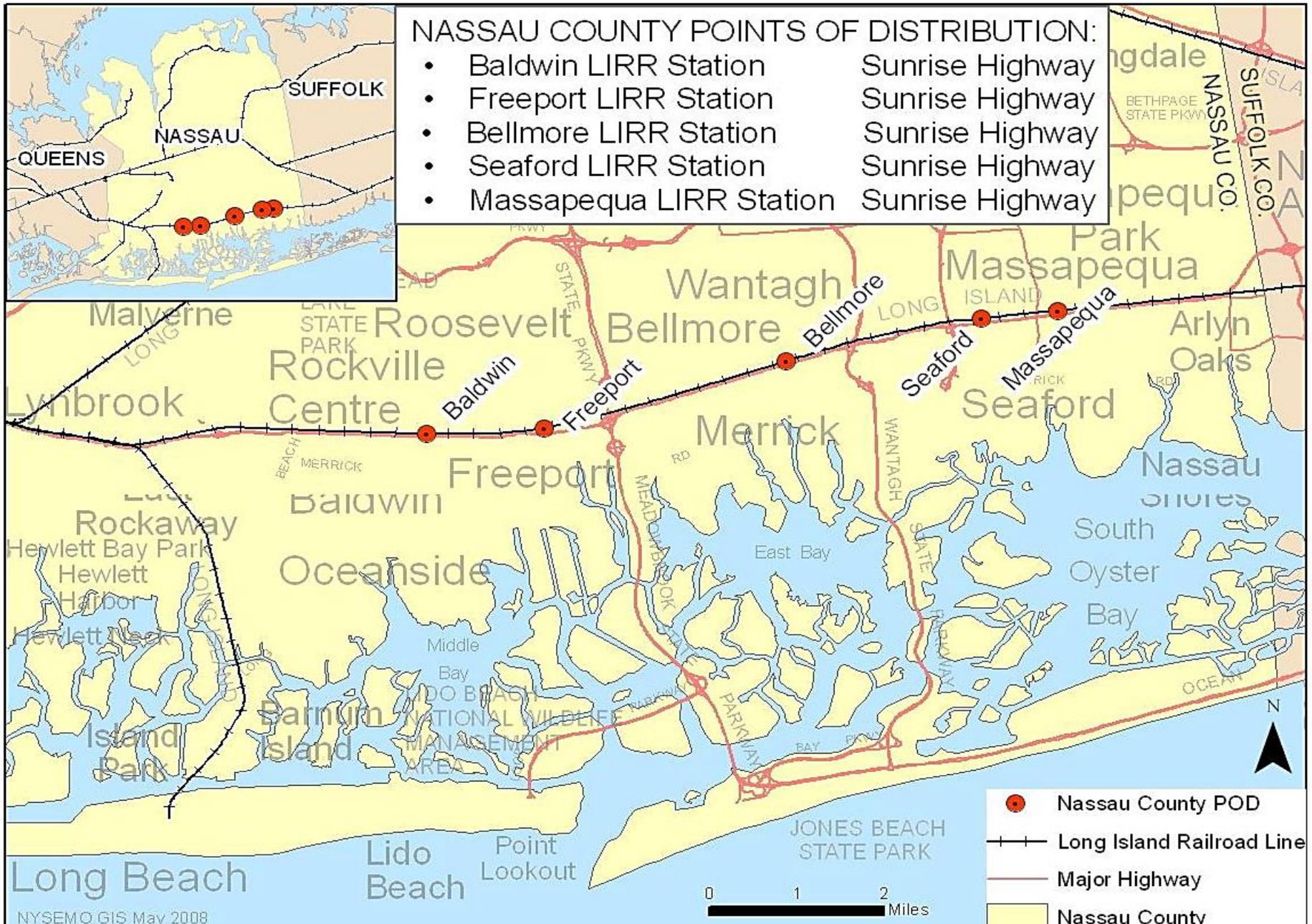


# SUFFOLK COUNTY, NY (EASTERN) HURRICANE EVACUATION ZONES



# SUFFOLK COUNTY POINTS OF DISTRIBUTION (POD)





**Attachment 7**

***State RSF Construct***

Recovery Support Functions	New York State Recovery Support Function Complement (Updated 02/2018)																											
Federal RSF and Mission Scope	A	R	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	
<b>Community Planning and Capacity Building:</b> Supporting and building recovery capacities and community planning resources needed to effectively plan for, manage and implement disaster recovery activities.					X	X	X	X		X	X	X		X	X											X		X
<b>Economic:</b> Sustain and/or rebuild businesses and employment, and develop economic opportunities that result in sustainable and economically resilient communities after large-scale and catastrophic incidents.				X	X	X	X		X	X	X					X	X		X						X			X
<b>Health and Social Services:</b> Assist locally-led recovery efforts in the restoration of the public health, health care and social services networks to promote the resilience, health and well-being of affected individuals and communities.	X	X		X		X		X		X	X	X				X		X	X			X		X	X	X		X
<b>Housing:</b> Address pre/post-disaster housing issues, coordinate and facilitate resources and activities to assist in the restoration/reconstruction of destroyed/damaged housing and development of other new accessible, permanent housing.	X	X				X	X	X		X	X	X				X	X			X				X	X			
<b>Infrastructure Systems:</b> Support all levels of government and other infrastructure owners and operators in their efforts to achieve recovery goals relating to the public engineering of the Nation's infrastructure systems.		X	X	X		X		X	X		X	X	X			X	X	X		X	X		X			X	X	X
<b>Natural and Cultural Resources:</b> Assist all levels of government and communities address long-term environmental and cultural resource recovery needs after large-scale and catastrophic incidents.				X		X		X		X															X			X

## **Attachment 8**

### ***Glossary and List of Acronyms***

## I. Glossary

- Advisory:** Official information issued by tropical cyclone warning centers describing all tropical cyclone watches and warnings in effect along with details concerning tropical cyclone locations, intensity and movement, and precautions that should be taken. Advisories are also issued to describe: (a) tropical cyclones prior to issuance of watches and warnings and (b) subtropical cyclones.
- Best Track:** A subjectively-smoothed representation of a tropical cyclone's location and intensity over its lifetime. The best track contains the cyclone's latitude, longitude, maximum sustained surface winds, and minimum sea-level pressure at 6-hourly intervals. Best track positions and intensities, which are based on a post-storm assessment of all available data, may differ from values contained in storm advisories. They also generally will not reflect the erratic motion implied by connecting individual center fix positions.
- Center:** Generally speaking, the vertical axis of a tropical cyclone, usually defined by the location of minimum wind or minimum pressure. The cyclone center position can vary with altitude. In advisory products, refers to the center position at the surface.
- Cyclone:** An atmospheric closed circulation rotating counter-clockwise in the Northern Hemisphere and clockwise in the Southern Hemisphere.
- Direct-Hit:** A close approach of a tropical cyclone to a particular location. For locations on the left-hand side of a tropical cyclone's track (looking in the direction of motion), a direct hit occurs when the cyclone passes to within a distance equal to the cyclone's radius of maximum wind. For locations on the right-hand side of the track, a direct hit occurs when the cyclone passes to within a distance equal to twice the radius of maximum wind. Compare indirect hit, strike.
- Extratropical:** A term used in advisories and tropical summaries to indicate that a cyclone has lost its "tropical" characteristics. The term implies both poleward displacement of the cyclone and the conversion of the cyclone's primary energy source from the release of latent heat of condensation to baroclinic (the temperature contrast between warm and cold air masses) processes. It is important to note that cyclones can become extratropical and still retain winds of hurricane or tropical storm force.

<b>Eye:</b>	The roughly circular area of comparatively light winds that encompasses the center of a severe tropical cyclone. The eye is either completely or partially surrounded by the eyewall cloud.
<b>Eyewall/ Wall Cloud:</b>	An organized band or ring of cumulonimbus clouds that surround the eye, or light-wind center of a tropical cyclone. Eyewall and wall cloud are used synonymously.
<b>Flash Flood Warning:</b>	Means a flash flood is imminent; take immediate action to protect life and property.
<b>Flash Flood Watch:</b>	Means a flash flood is possible in the area; stay alert.
<b>High Wind Warning:</b>	A high wind warning is defined as 1-minute average surface winds of 35 kt (40 mph or 64 km/hr) or greater lasting for 1 hour or longer, or winds gusting to 50 kt (58 mph or 93 km/hr) or greater regardless of duration that are either expected or observed over land.
<b>Hurricane:</b>	Pronounced rotary circulation, constant wind speed of 74 miles per hour (64 Knots) or more.
<b>Hurricane Conditions:</b>	Winds of 74 miles per hour (64 Knots) or greater and/or dangerously high tides and waves.
<b>Hurricane Local Statement:</b>	A public release prepared by local National Weather Service offices in or near a threatened area giving specific details for its county/parish warning area on (1) weather conditions, (2) evacuation decisions made by local officials, and (3) other precautions necessary to protect life and property.
<b>Hurricane Season:</b>	The portion of the year having a relatively high incidence of hurricanes. The hurricane season in the Atlantic, Caribbean, and Gulf of Mexico runs from June 1 to November 30. The hurricane season in the Eastern Pacific basin runs from May 15 to November 30. The hurricane season in the Central Pacific basin runs from June 1 to November 30.
<b>Hurricane Warning:</b>	A warning that sustained winds 64 kt (74 mph or 119 km/hr) or higher associated with a hurricane are expected in a specified coastal area in 36 hours or less. 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.

<b>Hurricane Watch:</b>	An announcement for specific coastal areas that hurricane conditions are possible within 48 hours.
<b>Indirect Hit:</b>	Generally refers to locations that do not experience a direct hit from a tropical cyclone, but do experience hurricane force winds (either sustained or gusts) or tides of at least 4 feet above normal.
<b>Landfall:</b>	The intersection of the surface center of a tropical cyclone with a coastline. Because the strongest winds in a tropical cyclone are not located precisely at the center, it is possible for a cyclone's strongest winds to be experienced over land even if landfall does not occur. Similarly, it is possible for a tropical cyclone to make landfall and have its strongest winds remain over the water.
<b>Nor'easter</b>	A strong low pressure system that affects the Mid-Atlantic and New England States. It can form over land or over the coastal waters. These winter weather events are notorious for producing heavy snow, rain, and tremendous waves that crash onto Atlantic beaches, often causing beach erosion and structural damage. Wind gusts associated with these storms can exceed hurricane force in intensity. A nor'easter gets its name from the continuously strong northeasterly winds blowing in from the ocean ahead of the storm and over the coastal areas.
<b>Probability of Tropical Cyclone Conditions:</b>	The probability, in percent, that the cyclone center will pass within 50 miles to the right or 75 miles to the left of the listed location within the indicated time period when looking at the coast in the direction of the cyclone's movement.
<b>Radius of Maximum Winds:</b>	The distance from the center of a tropical cyclone to the location of the cyclone's maximum winds. In well-developed hurricanes, the radius of maximum winds is generally found at the inner edge of the eyewall.
<b>Storm Surge:</b>	An abnormal rise in sea level accompanying a hurricane or other intense storm, and whose height is the difference between the observed level of the sea surface and the level that would have occurred in the absence of the cyclone. Storm surge is usually estimated by subtracting the normal or astronomic high tide from the observed storm tide.
<b>Sub-Tropical Cyclone:</b>	A non-frontal low-pressure system that has characteristics of both tropical and extratropical cyclones. Like tropical cyclones, they are non-frontal, synoptic-scale cyclones that originate over tropical or subtropical waters, and have a closed surface wind circulation about a well-defined center. In addition, they have organized moderate to deep convection, but lack a central dense

overcast. Unlike tropical cyclones, subtropical cyclones derive a significant proportion of their energy from baroclinic sources, and are generally cold-core in the upper troposphere, often being associated with an upper-level low or trough. In comparison to tropical cyclones, these systems generally have a radius of maximum winds occurring relatively far from the center (usually greater than 60 n mi), and generally have a less symmetric wind field and distribution of convection.

**Sub-Tropical Depression:**

A subtropical cyclone in which the maximum sustained surface wind speed (using the U.S. 1-minute average) is 33 kt (38 mph or 62 km/hr) or less.

**Sub-Tropical Storm:  
Small Craft Cautionary Statements:**

A subtropical cyclone in which the maximum sustained surface wind speed (using the U.S. 1-minute average) is 34 kt (39 mph or 63 km/hr) or more. When a tropical cyclone threatens a coastal area, small craft operators are advised to remain in port or not to venture into open sea.

**Tornadoes:**

A violently rotating column of air, usually pendant to a cumulonimbus, with circulation reaching the ground. It nearly always starts as a funnel cloud and may be accompanied by a loud roaring noise. On a local scale, it is the most destructive of all atmospheric phenomena.

**Tropical Cyclone:**

A warm-core non-frontal synoptic-scale cyclone, originating over tropical or subtropical waters, with organized deep convection and a closed surface wind circulation about a well-defined center. Once formed, a tropical cyclone is maintained by the extraction of heat energy from the ocean at high temperature and heat export at the low temperatures of the upper troposphere. In this they differ from extratropical cyclones, which derive their energy from horizontal temperature contrasts in the atmosphere (baroclinic effects).

**Tropical Depression:**

A tropical cyclone in which the maximum sustained surface wind speed (using the U.S. 1-minute average) is 33 kt (38 mph or 62 km/hr) or less.

**Tropical Disturbance:**

A discrete tropical weather system of apparently organized convection -- generally 100 to 300 nmi in diameter -- originating in the tropics or subtropics, having a non-frontal migratory character, and maintaining its identity for 24 hours or more. It may or may not be associated with a detectable perturbation of the wind field

**Tropical Storm:**

A tropical cyclone in which the maximum sustained surface wind speed (using the U.S. 1-minute average) ranges from 34 kt (39 mph or 63 km/hr) to 63 kt (73 mph or 118 km/hr).

<b>Tropical Storm Watch:</b>	An announcement that sustained winds of 34 to 63 knots (39 to 73 mph or 63 to 118 km/hr) are <i>possible</i> within the specified area within 48 hours in association with a tropical, subtropical, or post-tropical cyclone.
<b>Tropical Storm Warning:</b>	A warning that sustained winds within the range of 34 to 63 kt (39 to 73 mph or 63 to 118 km/hr) associated with a tropical cyclone are expected in a specified coastal area within 36 hours or less.
<b>Tropical Wave:</b>	A trough or cyclonic curvature maximum in the trade-wind easterlies. The wave may reach maximum amplitude in the lower middle troposphere.

## II. List of Acronyms

APHIS	Animal and Plant Health Inspection Service
BLS	Basic Life Support
CDC	U.S. Centers for Disease Control
CEMP	State Comprehensive Emergency Management Plan
CI/KR	Critical Infrastructure and Key Resources
COOP	Continuity of Operations Planning
CSCIC	Cyber Security and Critical Infrastructure Coordination
DHS	Department of Homeland Security
DMAT	Disaster Medical Assistance Teams
DMNA	Division of Military and Naval Affairs
DMORT	Disaster Mortuary Services
DOCCS	Department of Corrections and Community Supervision
DOD	Department of Defense
DOT	Department of Transportation
DPC	State Disaster Preparedness Commission
DPS	Department of Public Service
EMS	Emergency Medical Services
EOC	Emergency Operations Center
EMAC	Emergency Management Assistance Compact
EPA	U.S. Environmental Protection Agency
ERT-A	Federal Emergency Response Team-A
ESF #1	Emergency Support Function (Transportation)
ESF #2	Emergency Support Function (Communications)
ESF #3	Emergency Support Function (Public Works and Engineering)
ESF #4	Emergency Support Function (Firefighting)
ESF #5	Emergency Support Function (Information and Planning)
ESF #6	Emergency Support Function (Mass Care, Emergency Assistance, Housing and Human Services)
ESF #7	Emergency Support Function (Logistics)
ESF #8	Emergency Support Function (Public Health and Medical Services)
ESF #9	Emergency Support Function (Search and Rescue)
ESF #11	Emergency Support Function (Agriculture and Natural Resources)
ESF #12	Emergency Support Function (Energy)
ESF #13	Emergency Support Function (Public Safety and Security)
ESF #15	Emergency Support Function (External Affairs)
FEMA	Federal Emergency Management Agency
HAN	NYS DOH Health Alert Network
HHS	U.S. Department of Health and Human Services
HSPD #5	Homeland Security Presidential Directive-5; NIMS
IA	Individual Assistance

ICS	Incident Command System
IMT	Incident Management Team
ITS	NYS Office of Information Technology Services
JIC	Joint Information Center
LHD	Local Health Department
MAC	Multi-Agency Coordination
MASU	Multi-Agency Situation Unit
MERC	Medical Emergency Response Cache
MI	Managed Inventory
NDMS	National Disaster Medical System
NFPA 1600	Standard on Disaster/Emergency Management and Business Continuity
NIMS	National Incident Management System
NIIMS	National Interagency Incident Management System
NIPP	National Infrastructure Protection Plan
NRF	National Response Framework
NYSERDA	NYS Energy Research and Development Authority
OMH	NYS Office of Mental Health
OSTP	Office of Science and Technology Programs
OTDA	Office of Temporary and Disability Assistance
PA	Public Assistance
PFO	Principal Federal Official
POD	Point of Dispensing
PPE	Personal Protective Equipment
SOEM	State Office of Emergency Management
SEOC	State Emergency Operations Center
SNS	Strategic National Stockpile
SSA	Sector Specific Agencies
USAR	Urban Search and Rescue
USDA	U.S. Department of Agriculture
USPHS	U.S. Public Health Service
WHO	World Health Organization
WPU	NYS DEC Wildlife Pathology Unit