

<p>Summary</p>	<p>The New York City Emergency Management Department (NYCEM) has plans and protocols in place to guide New York City’s response to weather emergencies, including plans for winter weather, coastal storms, extreme heat, flash floods, and events causing power outages, damage to structures, and/or significant amounts of debris. The four key weather emergency plans include the Winter Weather Emergency Plan, Coastal Storm Plan, Heat Emergency Plan, and Flash Flood Emergency Plan. Each plan:</p> <ul style="list-style-type: none"> • Describes a coordinated, flexible response to the hazardous weather event • Defines agency roles and responsibilities • Guides agencies through key decisions and actions to mitigate effects on people, critical infrastructure, and City operations 																	
<p>Plan Activation Process</p>	<ul style="list-style-type: none"> • NYCEM Watch Command tracks New York City weather conditions in real time in conjunction with the National Weather Service, 24 hours a day, seven days a week, and disseminates related hazard information to agencies. • When a weather emergency meets one or more of the forecast triggers, NYCEM activates the relevant plan and convenes interagency steering committee conference calls to coordinate preparation for the event. • NYCEM activates the Emergency Operations Center, when necessary, to prepare for and respond to weather emergencies. • NYCEM provides public messaging through Notify NYC, NYCEM’s website, and the NYC Severe Weather website, as well as social media, emails and calls to elected officials, private and non-profit partners and other means. • When a weather emergency exhausts New York City’s response resources, NYCEM will work with agencies to identify vendors that can provide appropriate resources or will request support from the state through the established mission request process. • If conditions warrant, NYCEM may concurrently activate additional all-hazards and recovery plans and protocols. 																	
<p>Activation Levels</p>	<p>Based on forecast triggers and interagency steering committee discussion, NYCEM may convene citywide coordination at one of the following levels:</p> <table border="1" data-bbox="305 1320 1521 1799"> <thead> <tr> <th data-bbox="305 1320 423 1404">Level</th> <th data-bbox="423 1320 678 1404">Coordination Center</th> <th data-bbox="678 1320 1521 1404">Agencies</th> </tr> </thead> <tbody> <tr> <td data-bbox="305 1404 423 1491">1</td> <td data-bbox="423 1404 678 1491">EOC (full)</td> <td data-bbox="678 1404 1521 1491">NYCEM personnel, all interagency steering committee agencies, and additional subject matter experts and partners as needed</td> </tr> <tr> <td data-bbox="305 1491 423 1577">2</td> <td data-bbox="423 1491 678 1577">EOC (partial)</td> <td data-bbox="678 1491 1521 1577">NYCEM personnel and a subset of interagency steering committee agencies</td> </tr> <tr> <td data-bbox="305 1577 423 1663">3</td> <td data-bbox="423 1577 678 1663">Situation Room</td> <td data-bbox="678 1577 1521 1663">NYCEM personnel and key interagency steering committee agencies</td> </tr> <tr> <td data-bbox="305 1663 423 1799">4</td> <td data-bbox="423 1663 678 1799">Watch Command</td> <td data-bbox="678 1663 1521 1799">The City’s EOC is always, at a minimum, at Level 4 activation. In modified Level 4 activations, EOC Team staff and agency representatives serve as an extension of Watch Command, as needed.</td> </tr> </tbody> </table>			Level	Coordination Center	Agencies	1	EOC (full)	NYCEM personnel, all interagency steering committee agencies, and additional subject matter experts and partners as needed	2	EOC (partial)	NYCEM personnel and a subset of interagency steering committee agencies	3	Situation Room	NYCEM personnel and key interagency steering committee agencies	4	Watch Command	The City’s EOC is always, at a minimum, at Level 4 activation. In modified Level 4 activations, EOC Team staff and agency representatives serve as an extension of Watch Command, as needed.
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Mutual Aid Assistance	If resources are required beyond City assets and procurement, NYCEM will request assistance from NYS OEM through the following options (in order):	
	Mutual Aid Options	Description
	State-level or federal-level assets	NYS OEM coordinates requested resource through appropriate NYS or federal agencies
	Intra-State Mutual Aid Program (IMAP)	Once an emergency is declared, NYS OEM requests assistance from participating local governments within New York State
	Emergency Management Assistance Compact (EMAC)	After gubernatorial declaration of state of emergency, NYS OEM requests assistance from surrounding states
Plan Development/ Maintenance Actions	<p>NYCEM continuously revises and improves upon its weather plans and protocols. During this reporting period (November 15, 2016 to November 14, 2017), NYCEM issued a technical memo to the Winter Weather Emergency Plan (previously issued on November 30, 2015)</p> <ul style="list-style-type: none"> • <i>Winter Weather Emergency Plan</i> (November 18, 2016) <ul style="list-style-type: none"> - Updated street and facility clearing strategies and maps to reflect modifications to DSNY routing - Updated agency alert triggers and thresholds 	

This document summarizes the weather emergency protocols that are contained within the NYC *Winter Weather Emergency Plan* (WWEP).

<p>Triggers</p>	<ul style="list-style-type: none"> • Snowfall exceeding six inches • High temperatures below 15° F for a 48-hour period • Wind chill below 0° F • Sustained winds exceeding 40 miles per hour • Forecasted ice storms or freezing rain 	
<p><i>Winter Weather Emergency Steering Committee</i></p>	<ul style="list-style-type: none"> • 311 • American Red Cross • Amtrak • Community Affairs Unit • Con Edison • Department for the Aging • Department of Buildings • Department of Citywide Administrative Services • Department of Corrections • Department of Education • Department of Environmental Protection • Department of Health and Mental Hygiene • Department of Homeless Services • Department of Housing Preservation and Development • Department of Human Resources Administration • Department of Information Technology and Telecommunications • Department of Parks and Recreation • Department of Sanitation • Department of Transportation • First Deputy Mayor’s Office • Greater New York Hospital Association • NYC Health + Hospitals 	<ul style="list-style-type: none"> • Metropolitan Transportation Authority • Metropolitan Transportation Authority Police Department • National Grid • National Weather Service • New Jersey Transit • New York City Emergency Management Department • New York City Fire Department • New York City Housing Authority • New York City Office of Citywide Event Coordination and Management • New York City Police Department • New York City Street Conditions Observation Unit (SCOUT) • New York State Unified Court System • New York State Department of Health • New York State Department of Transportation • New York State Office of Emergency Management • Office of the Chief Medical Examiner • Port Authority of New York and New Jersey • Public Service Enterprise Group Incorporated (PSEG) – Long Island Regional Emergency Medical Services Council • United States Coast Guard • Verizon • VOAD

<i>Operational Strategies</i>	The following are WWEP strategies implemented by agencies and coordinated by NYCEM:	
	Operational Strategy	Agencies
	Issue Alerts and Declarations	311, DCAS, DOE, DOHMH, DOITT, DSNY, DOT, FDNY, LAW, Mayor's Office, NYCEM, NYPD, OLR
	Disseminate Public Information	311, DOITT, DSNY, Mayor's Office, NYCEM
	Transportation Network Condition Assessment	311, DOT, DPR, DSNY, FDNY, MTA, NYCEM, SCOUT
	Street and Facility Clearing	DOT, DPR, DSNY, MTA, PANYNJ
	Winter Weather Towing	DCAS, DOT DSNY, FDNY, MTA, NYCEM, NYPD
	Transportation Network Operations and Suspensions	DOT, MTA, NYPD, NYS DOT, PANYNJ
	No Heat/No Hot Water	311, CON ED, DOHMH, HPD, NATIONAL GRID, NYCHA, NYCEM
	Respond to Electric Utility Issues	CON ED, PSEG-LI
	Identify Public Health Conditions	311, ARC, CON ED, DHS, DFTA, DOE, DOHMH, Mayor's Office, FDNY, GNYHA, H+H, HPS, NATIONAL GRID, NYCEM, NYCHA, NYS DOH, PANYNJ, PSEG-LI
Homeless Outreach	311, DHS, DPR, DSNY, FDNY, MTA, NYPD, PANYNJ	

Key Actions	The following represents the range of decisions and actions city agencies may initiate:			
	Action		Description	
	Issue hazardous weather advisory		Identifies weather-related hazards and advises the public to stay off roads, use public transportation, and exercise caution while driving.	
	Close schools or delay opening		Reduces number of children and parents using roadways.	
	Suspend alternate side parking and/or meter rules		Reduces number of people moving vehicles due to parking rules.	
	Begin towing operations		NYPD or entity designated by DOT may remove vehicles obstructing traffic or illegally parked.	
	Activate Tow Truck Task Force		Coordinated towing of stuck ambulances, buses, and other vehicles.	
	Issue Cold Weather Alert		Triggers increased outreach to vulnerable populations; issued automatically when overnight temperatures are forecast to fall below 32°.	
	Issue DSNY Snow Alert		DSNY operates normally and prepares for storm; issued when snow is predicted within 24-48 hours.	
	Issue NYCEM Travel Advisory and Hazardous Travel Advisory		Increase hazard awareness for the public and diminish numbers of vehicles on roadways	
Issue weather emergency declaration		A mayoral weather emergency declaration may include any of the actions listed above necessary to protect public safety.		
Plan Activations	<ul style="list-style-type: none"> NYCEM activated the <i>Winter Weather Emergency Plan</i> five times during the reporting period of November 15, 2016 to November 14, 2017: 			
	December 15, 2016	January 7, 2017*	February 9, 2017*	February 12, 2017 March 13, 2017*
<p>* Snow event with snowfall equal to or in excess of six inches within a period of 24 hours; reportable in the 2017 Interagency Snow Preparedness and Response Report (Local Law 26/2011)</p>				

This document summarizes the weather emergency protocols that are contained within the NYC *Coastal Storm Plan* (CSP).

Trigger	<ul style="list-style-type: none"> National Weather Service forecasts a coastal storm making landfall north of North Carolina with potential impacts to New York City. 	
Coastal Storm Steering Committee	<ul style="list-style-type: none"> 311 Amtrak American Red Cross Community Affairs Unit Con Edison CUNY Department of Buildings Department of Citywide Administrative Services Department of Corrections Department of Design and Construction Department of Education Department of Environmental Protection Department for the Aging Department of Health and Mental Hygiene Department of Homeless Services Department of Housing Preservation and Development Department of Human Resources Administration Department of Information Technology and Telecommunications Department of Parks and Recreation Department of Sanitation Department of Small Business Services Department of Transportation Federal Emergency Management Agency Greater New York Hospital Association Greater New York Health Care Facilities Association Mayor's Office Mayor's Office of Contract Services Mayor's Office of Intergovernmental Affairs Mayor's Office for People with Disabilities Mayor's Office of Recovery & Resiliency Metropolitan Transportation Authority MTA Police Department 	<ul style="list-style-type: none"> National Grid National Parks Service National Weather Service NYC Health + Hospitals NYC Service New Jersey Transit New York City Emergency Management Department New York City Fire Department New York City Housing Authority New York City Law Department New York City Office of Citywide Event Coordination and Management New York City Office of Labor Relations New York City Police Department New York Racing Association New York State Department of Health New York State Department of Transportation New York State Office of Emergency Management Office of the Chief Medical Examiner Office of Management and Budget Port Authority of New York and New Jersey Public Service Enterprise Group Incorporated (PSEG) – Long Island Regional Emergency Medical Services Council Taxi and Limousine Commission Transportation Operations Coordinating Committee (TRANSCOM) United States Coast Guard U.S. Department of Health and Human Services Verizon

Operational Strategies	The following functional plans comprise the NYC <i>Coastal Storm Plan</i> . Each document is a stand-alone plan implemented by agencies and coordinated by NYCEM:	
	Coastal Storm Functional Plan	Description
	Activation Playbook	Provides a summary view of the plan and includes a series of timelines designed to guide decision-makers through the actions needed to activate and implement the numerous operations that constitute the citywide response.
	Advance Warning System*	Pushes targeted emergency information to individuals with special needs during emergencies.
	Evacuation	Describes the systems, processes, and procedures to evacuate the general at-risk population from areas of the City that will be inundated with storm surge to safer areas prior to the predicted Zero hour.
	Healthcare Facility Evacuation	Describes a coordinated operation to evacuate at-risk healthcare facilities in evacuation zones to like facilities on higher ground.
	Sheltering	Explains the procedures to activate and manage a disaster sheltering system for New Yorkers and visitors who are unable to find alternative shelter outside of storm surge areas.
	Logistics*	Outlines the basic activities and timelines needed to effectively implement shelter system support and post-storm commodities distribution operations.
	Public Information*	Outlines steps for City public information efforts before, during, and after a coastal storm.
	Recovery and Restoration	Addresses post-storm recovery and restoration activities including: declaration and reimbursement management, initial response and re-entry, damage and needs assessment, essential services restoration, reconstruction coordination, human services.
Debris Management Plan*	Provides organizational structure, guidance and standardized procedures for debris clearance, removal, storage, and disposal.	
* All-Hazards plans not limited to Coastal Storm activations.		

Key Actions	The following represents the range of decisions and actions city agencies may initiate:	
	Action	Description
	Issue recommended evacuation	Issued when risks do not warrant an evacuation order; may target specific areas, facilities, or populations.
	Issue ordered evacuation	Issued under authority of executive law; empowers the mayor to make emergency orders to protect life and property.
	Suspend alternate side parking and/or meter rules	Reduces the number of people moving vehicles due to parking rules.
	Issue recommended/ordered cessation of non-essential services	Allows citywide resources to be directed toward response operations, especially in specific areas or facilities.
	Open shelters	Allows voluntary evacuation as a response to a localized threat or supports a mandatory evacuation.
	Issue weather emergency declaration	A mayoral weather emergency declaration may include any of the actions listed above necessary to protect public safety.
Plan Activations	<ul style="list-style-type: none"> NYCEM activated the <i>Coastal Storm Plan</i> one time during the reporting period of November 15, 2016 to November 14, 2017: September 15, 2017 Hurricanes Jose and Maria 	

This document summarizes the weather emergency protocols that are contained within the NYC *Heat Emergency Plan* (HEP).

<p>Triggers</p>	<p>Heat Emergency Plan Activation Criteria:</p> <ul style="list-style-type: none"> • Predicted Heat Index of 100° F or higher for one day or more • Predicted Heat Index of 95° F or higher for two consecutive days or more <p>In addition to <i>Heat Emergency Plan</i> activation criteria, the following triggers for excessive heat considerations include:</p> <ul style="list-style-type: none"> • Predicted Heat Index of 105° F for any duration, or • Predicted Heat Index of 95° F for four days or more 	
<p>Heat Emergency Steering Committee</p>	<ul style="list-style-type: none"> • 311 • American Red Cross • Community Affairs Unit • Con Edison • Department of Buildings • Department of Citywide Administrative Services • Department of Corrections • Department of Design and Construction • Department of Environmental Protection • Department of Youth and Community Development • Department for the Aging • Department of Education • Department of Health and Mental Hygiene • Department of Homeless Services • Department of Housing Preservation and Development • Department of Human Resources Administration • Department of Information Technology and Telecommunications • Department of Parks and Recreation • Department of Sanitation • Department of Transportation • Deputy Mayor’s Office 	<ul style="list-style-type: none"> • Economic Development Corporation • Greater New York Hospital Association • NYC Health + Hospitals National Grid • Mayor’s Office for People with Disabilities • Metropolitan Transportation Authority • National Weather Service • New York 811 • New York City Emergency Management Department • New York City Fire Department • New York City Housing Authority • New York City Police Department • New York Power Authority • New York State Department of Health • New York State Office of Emergency Management • Office of the Chief Medical Examiner • Office of Citywide Event Coordination and Management • Port Authority of New York and New Jersey • Public Service Enterprise Group Incorporated (PSEG) – Long Island • Regional Emergency Medical Services Council • Salvation Army • Verizon

Operational Strategies	The following are HEP strategies implemented by agencies and coordinated by NYCEM:	
	Operational Strategy	Agencies
	Advance Warning System	ACS, ARC/GNY, CCNY, CCBQ, Con Ed, DFTA, DHS, DOE, DOE District 75, DOHMH, ESRD, HBCA, H+H, HRA, National Grid, MOPD, MTA, NYCEM, NYCHA, NYS DOH, NYS OMH, OPWDD, PSEG – LI, SA, VA
	Cooling Centers	311, ARC, Brooklyn Public Library, CERT, CUNY, DFTA, DOE, DoITT, DPR, HRA, MTA, NYCEM, NYCHA, NYPD, NY Public Library, Queens Library, SA
	Homeless Outreach	311, DHS, DPR, DSNY, MTA
	Excavation Safety Alert	Con Ed, DDC, DEP, DOT, DPR, National Grid, MTA, NYCEM, NY 811, PSEG – LI, Verizon
	Spray Cap Program	DEP, FDNY, NYPD
Key Actions	The following represents the range of decisions and actions city agencies may initiate:	
	Action	Description
	Activate Advance Warning System	Provide advance information about forecasted weather, potential hazards of heat, health information, and the availability of resources such as cooling centers to NYC agencies and organizations whose clients consist of special needs populations.
	Open cooling centers	Protocol for opening free air-conditioned facilities (e.g., senior centers, libraries, community centers) to the public.
	Begin homeless outreach strategy	Increase outreach efforts and monitoring of homeless persons to determine need for further protection from heat exposure.
	Issue excavation safety alert	Provide guidance to contractors on enhanced protective measures to excavate safely around underground critical facilities.
	Implement spray cap program	Distribute fire hydrant spray caps to the public to provide relief from the heat and minimize impact to municipal water supply pressure.
	Issue heat-related information to the public	Communicate information about heat safety and power conservation tips to the public.
Plan Activations	<ul style="list-style-type: none"> NYCEM activated the <i>Heat Emergency Plan</i> three times during the reporting period of November 15, 2016 to November 14, 2017: 	
	July 12, 2017	July 19, 2017 August 21, 2017

This document summarizes the weather emergency protocols and procedures that are contained within the NYC *Flash Flood Emergency Plan* (FFEP).

Trigger	<ul style="list-style-type: none"> • Rainfall rate of one inch per hour for the duration of 60 minutes or longer 			
Flash Flood Conference Call Agencies	<ul style="list-style-type: none"> • 311 • CAU • City Hall • Con Edison • Department of Environmental Protection • Department of Buildings • Department of Information Technology and Telecommunications • Department of Parks and Recreation • Department of Sanitation • Department of Transportation 	<ul style="list-style-type: none"> • National Grid • Metropolitan Transportation Authority • National Weather Service • New York City Emergency Management Department • New York City Fire Department • New York City Police Department • Port Authority of New York and New Jersey • Public Service Enterprise Group Incorporated (PSEG) – Long Island • Verizon 		
Operational Strategies	The following are FFEP strategies implemented by agencies and coordinated by NYCEM:			
	Operational Strategy		Agencies	
	Targeted Cleaning and Maintenance		DEP, DSNY, DOT, MTA	
	Monitoring and Response		DEP, FDNY, NYPD, DOT, NYCEM	
Recovery Assistance		ARC, CAU, DEP, DOHMH, DHS, HRA, DoITT, NYCEM		
Key Actions	The following represents the range of decisions and actions city agencies may initiate:			
	Action		Description	
	Commence targeted cleaning and maintenance operations		City agencies deploy personnel to designated recurring flooding locations to clear streets and catch basins of debris.	
	Monitor recurring flood locations		City agencies and volunteers provide targeted monitoring of recurring flood locations to improve response during a flood event and to help direct recovery efforts.	
	Begin dewatering operations		FDNY provides dewatering equipment and personnel to support flood response at critical streets and intersections.	
	Provide recovery assistance		City agencies provide services and distribute appropriate recovery resources to affected residents through reception centers or Disaster Assistance Service Centers (DASC).	
Issue weather emergency declaration		A mayoral weather emergency declaration may include any of the actions listed above necessary to protect public safety.		
Plan Activations	<ul style="list-style-type: none"> • NYCEM activated the <i>Flash Flood Emergency Plan</i> eight times during the reporting period of November 15, 2016 to November 14, 2017: 			
	January 22, 2017	July 18, 2017	July 21, 2017	August 18, 2017
September 18, 2017	October 6, 2017	October 22, 2017	October 27, 2017	