



SUFFOLK COUNTY MULTI-JURISDICTIONAL DEBRIS MANAGEMENT PLAN

EXECUTIVE SUMMARY

Introduction

The Suffolk County Department of Fire, Rescue and Emergency Services (SC FRES) developed the Suffolk County Multi-Jurisdictional Debris Management Plan pursuant to the authorities of the Commissioner. FRES was assisted in this effort by: Suffolk County Department of Public Works (DPW); Suffolk County Department of Parks, Recreation, and Conservation; and Suffolk County's ten Towns (Babylon, Brookhaven, East Hampton, Huntington, Islip, Riverhead, Shelter Island, Smithtown, Southampton and Southold), working in conjunction with NYS Division of Homeland Security and Emergency Services (NYS DHSES), NYS Department of Environmental Conservation (NYS DEC), the United States Environmental Protection Agency (US EPA), the United States Army Corps of Engineers (US ACE), the Federal Emergency Management Agency (FEMA), and PSEG – Long Island for the purpose of protecting the health and welfare of Suffolk County's citizens in the event of a major natural disaster. The Suffolk County Debris Management Plan establishes the framework for the County and Towns to facilitate the proper management of debris generated by a natural disaster; i.e., hurricane, flood, earthquake, etc. Implementation of the Debris Management Plan will be coordinated through the Suffolk County Office of Emergency Management, utilizing local, Town, County, State, and federal agencies as required. The Plan will be activated for implementation in conjunction with the Activation Level of the County's Emergency Operations Center (EOC).

In 2014, Suffolk County's Multi-Jurisdictional Hazard Mitigation Plan (HMP) was approved by FEMA. The HMP includes complete hazard analyses and risk assessments for the natural disasters which may affect the county using a probabilistic approach to quantify risks. Included in this Plan are debris projections based on these FEMA approved probabilistic scenarios, including projections derived from FEMA's HAZUS estimating tool. The projections for both Hurricane and Flood disasters used in this Debris Plan are based on the 100 and 500 year return periods for these events. The earthquake model debris projections are based on the 500 and 2500 year return periods.

Although Suffolk County has not had a major hurricane directly strike us in recent years, local municipalities and federal agencies such as FEMA are concerned that the danger of a significant hurricane making landfall here is likely to occur. The 1938 hurricane, also known as the Long Island Express, and the flooding of 1955 that resulted from heavy rainfall associated with the remnants of two hurricanes are recorded as the worst natural disasters to strike Suffolk County.

The '38 Storm is generally considered by the Town and County personnel to be the model that all storms are gauged against, and is used as an unofficial worst case scenario. A HAZUS analysis of this storm, if it were to strike the County now, results in almost identical debris estimates as in the 100 year probabilistic hurricane-wind projections noted in Chapter 2. Similarly, it also compares with both the Regional Catastrophic Planning Team's debris projections in their 2012 Regional Debris Management Plan as well as the US ACE report that was based on a re-creation of the '38 Storm.

Super Storm Sandy, one of the most recent federally declared disasters to strike Suffolk County, touched down on October 29, 2012. The County experienced maximum wind gusts between 66 mph in East



Hampton and 96 mph in Eaton's Neck. The storm surge reached several feet along the entire coast of the county, measuring at over 6 feet in the Village of Lindenhurst and over 5 feet in the Hamlet of Montauk. The peak storm tide in the Hamlet of Hampton Bays was 6.53 feet on October 30th. The aftermath of Sandy resulted in prolonged power outages from downed wires, school and business closings, flooding, fuel shortages, and downed trees across the County. County-wide debris totals of approximately 284,100 tons resulted from this storm as noted in Table 2.6. As a direct result of this storm, FEMA issued disaster declaration DR - 4085 for several counties in New York, including Suffolk County. Lessons learned across the County with regard to managing storm debris from both 2011's Hurricane Irene and 2012's Super Storm Sandy have been incorporated into this Plan.

The types of debris resulting from massive storms and other natural disasters include: green waste/vegetative debris; putrescent municipal solid waste; household hazardous waste; hazardous waste; construction and demolition debris (C&D) from structures; aggregate (fill materials); scrap metal; white goods; electronic waste; contaminated soil, silt, and sediment; animal carcasses; vehicles and boats; waste tires; and utility related debris.

Objectives of the Disaster Debris Management Plan

The objectives of the Plan are to:

- Provide an organizational structure, guidance, and standardized guidelines for the clearance, removal, staging, reduction, recycling, processing, and disposal of debris caused by major debris-generating events.
- Mitigate potential health hazards from hazardous debris materials.
- Develop tracing and documentation procedures required to allow for Federal reimbursement (Public Assistance, PA) of debris removal, recycling, and disposal efforts resulting from a declared disaster.
- Coordinate partnering relationships through communications and pre-planning with Towns, State, and Federal agencies which have debris management responsibilities.

Suffolk County's Approach to Debris Management

The Towns within Suffolk County follow their own approved individual criteria for effectively managing normal waste through established collection and disposal methodologies. Standard accepted solid waste management practices include keeping household hazardous waste, hazardous material and petroleum products out of the waste stream prior to collection and staging. These types of waste materials should not be comingled with other waste types such as household belongings or construction and demolition materials. The segregation of waste materials, either prior to curbside pick-up or at approved local drop off sites, helps to ensure that hazardous fluids and materials are not released to become contaminants. Local municipalities and Towns recognize that by paying careful attention to detail and following these accepted practices regularly, as well as in major debris generating disaster events, many safety issues and environmental impacts can be avoided or minimized. In this regard, local outreach efforts and public messaging to stress the importance of segregating waste is an important aspect of debris management in normal operations and in disaster events. This recognition and heightened awareness is especially important within Suffolk County where our geography, coastal exposure, flood potential, and sub-surface structure (including aquifers) can all contribute to potential vulnerabilities and issues

Suffolk County's *Debris Management Plan* functions within the framework of the NYS DEC Storm Debris Management guidelines and is consistent with FEMA guidance in that the overall approach used in managing disaster debris is as follows:



- Divert as much material from disposal as possible through recycling, composting and other legitimate diversion options. The types of materials that could be diverted from disposal could include: vegetative waste (clean wood from brush and trees); building materials (asphalt, brick and concrete); recyclable metals (i.e., abandoned vehicles, white goods; scrap metals); and household hazardous wastes.
- Utilize approved volume reduction techniques to improve debris management efficiencies and minimize impacts on landfill capacities;
- Utilize small capacity vegetative debris volume reduction techniques at local levels to minimize potential double handling of material.
- Use disposal capacities as efficiently as possible for disposal of disaster debris, recognizing that most mixed debris is transferred out-of-state for disposal;
- Allow for temporary tonnage increases at permitted in-state solid waste facilities on an emergency basis with the approval of the NYS DEC;
- Rely on permitted Transfer Stations (see listing in Appendix Section) to transfer waste that cannot be diverted from disposal (recycling, composting, other) to waste handling facilities outside of the county for disposal;
- Rely on permitted or authorized C&D Processing Facilities (see listing in Appendix Section) to reduce and transfer waste that cannot be diverted from disposal (i.e., recycling, composting, other) to waste handling facilities outside of the county for disposal;
- Consider alternative technologies for managing portions of the debris waste stream, in-state or out-of-state, such as biomass facilities;
- Use approved Temporary Debris Storage and Reduction (TDSR) and Vegetative debris sites for temporary storage and subsequent transfer of debris for recycling and disposal.

Roles and Responsibilities

Local governments: Towns (with their inclusive Villages) involved in planning include:

- Town of Babylon
- Town of Brookhaven
- Town of East Hampton
- Town of Huntington
- Town of Islip
- Town of Riverhead
- Town of Shelter Island
- Town of Smithtown
- Town of Southampton
- Town of Southold

County Agencies: There are a number of primary and supporting Suffolk County Agencies that are responsible for some aspect of disaster debris management. The primary agencies that have lead responsibilities with regard to disaster debris management are presented below:

- Suffolk County Department of Fire, Rescue and Emergency Services
- Suffolk County Department of Public Works
- Suffolk County Department of Parks, Recreation and Conservation
- Suffolk County Police Department

Each of the ten Towns and the County itself has prepared a Disaster Debris Management Plan as an



annex to this Multi-Jurisdictional Plan. Each Annex can also be appended to an existing Emergency Management Plan and includes identification of potentially suitable TDSR's and Vegetative Debris staging sites, availability of labor and heavy equipment, and a command structure for debris removal operations, in addition to pre-positioned contracts for both debris removal and monitoring of debris removal operations. These individual Town and County specific plans can be found in the Annex Section to this Multi-Jurisdictional Debris Management Plan.

State: There are a number of primary and supporting State Agencies that are responsible for some aspect of disaster debris management. The primary agencies that have lead responsibilities with regard to disaster debris management are presented below:

- Division of Homeland Security and Emergency Services
- Department of Environmental Conservation
- Department of Parks Recreation and Historic Preservation
- Department of Transportation

Federal: There are a number of federal agencies invested with varying authorities for debris management activities. These agencies include the US Department of Homeland Security, FEMA, US ACE, US EPA, United States Coast Guard (USCG), Federal Highway Administration (FHWA), and Departments of Agriculture, Commerce, and Transportation. The Robert T. Stafford Emergency Relief and Disaster Assistance Act (PL 93-288, as amended, and referred to as the Stafford Act) is the federal legislation that created a national program for disaster preparedness, response, recovery, and mitigation. This Act constitutes the statutory authority for most federal disaster response activities, especially as they pertain to FEMA and FEMA programs.

FEMA is the lead federal agency that responds to disasters and emergencies to help save lives and protect the public health, safety, and property. FEMA operates under specific regulations, which are found in Title 44 of Code of Federal Regulations (CFR). The Stafford Act and the CFR use the term debris removal in a broad sense to encompass the entire process of removing, handling, recycling, and disposing of debris. This regulation declares debris removal to be in the public interest, not only to protect life, public health, and safety, but also to ensure economic recovery of the affected community.

FEMA's most visible role in disaster recovery and debris management is in administering the Public Assistance (PA) Grant Program. The Program provides supplemental federal disaster grant assistance to eligible applicants which include states, local governments, and certain non-profit organizations for debris removal and disposal. The Program is administered through a coordinated effort among FEMA, the affected state, and the applicants. Communication and coordination among all of these agencies are important. After an emergency event, the State assumes the role of grantee and is responsible for administering the federal grant. Eligible applicants may receive PA funds for debris clearance, removal, and disposal operations.

Pre-event Preparation, Planning and Operations

All activities associated with massive debris clearance, removal, and disposal activities depend upon pre- event preparation and planning, and efficient operations. Important components include: separate contracts in-place for debris removal and the monitoring of debris removal contractors' day-to-day operations; the identification of TDSR and Vegetative Debris sites; and debris management operations. Summaries on contracts and phases of cleanup are provided below:



Contracts:

State Contracts: NY State has established contracts that may be used for the removal and disposal of debris.

County Contracts: Suffolk County DPW has pre-established contracts for Disaster Services and Equipment. These contracts enable the County, and any municipality within its borders that desires, to utilize the pre-identified terms and rates.

Town Contracts: Town governments are responsible for all peoples and property within their boundaries and jurisdictions to the limits of their resources. Each Town is required to make provisions for the safe and sanitary disposal of all solid wastes generated within its boundaries and to make provisions for the separation, collection, processing, and marketing of designated recyclables generated within its boundaries. FEMA recommends having pre-positioned contracts for both debris removal as well as monitoring. These contracts must exhibit full and open competition where an adequate and realistic specification or purchase description is publicly solicited and multiple responsible bidders are allowed to compete effectively for the business. It is recommended that Towns or other jurisdictions consult the FEMA Recovery Fact Sheet 9580.212 Public Assistance Grant Contracting FAQ for contract guidance.

Temporary Debris Storage and Reduction (TDSR) and Vegetative Debris Sites:

It is important to have TDSR and Vegetative Debris sites pre-identified and ready for use in the event of a disaster event. It can be expected that Suffolk County's solid waste management infrastructure will be quickly overwhelmed during a catastrophic natural disaster, such as a modeled probabilistic storm as detailed in Chapter 2. Therefore, TDSR and Vegetative Debris sites serve as the additional space needed to accommodate the debris generated. In addition, these sites provide a place to segregate and process vegetative waste subject to the solid waste management hierarchy that mandates recycling as the preferred approach to managing the waste stream. Upon request, NYS DEC will issue an Emergency Authorization for site activities related to the management of debris. It is required that municipalities notify the NYS DEC of the site location, and NYS DEC in turn will act upon their request for an Emergency Authorization.

Critical to the County and Town's debris management operations, is the establishment of TDSR and Vegetative debris sites to be used for debris originating from highways and roads as well as other public properties. TDSR and Vegetative Debris sites are those sites that have been pre-identified by the Towns and municipalities, and which have been evaluated and approved by the DEC for the purposes of collection, volume reduction, and transfer to final permitted disposal and recycling facilities. Suffolk County recognizes that the capacity of the pre-identified TDSR and Vegetative Debris sites cannot accommodate the amount of debris generated by a probabilistic storm. Therefore, the pre-identified Suffolk County sites are reserved for Suffolk County debris management activities. NYS DEC is responsible for the permitting of these sites (by issuance of an Emergency Authorization), as well as ensuring that they are properly closed out.

Municipalities must identify their own TDSR and Vegetative debris staging locations either on municipally-owned land or through an agreement on non-municipally owned land. NYS DEC is responsible for the permitting of these sites by issuance of an Emergency Authorization. Each Town is responsible for the set-up, operations, and closeout of their TDSR and Vegetative debris sites, consistent with the requirements of the contract documents and relevant state and federal laws. For any future disaster, sites will be chosen based on past storm experiences so that previously used sites may be used again or new sites may be chosen depending on impact areas, amount of debris, and availability of public and private sites, within minimal transportation distance of the damaged areas. Based on the projections of the amount of debris that could be generated and area impacted, sites will be selected by the Town officials.



Suffolk County's Concept of Operations Plan (ConOps) for Debris Management, Activation and Use of the Debris Removal and Monitoring Contracts:

This Plan details the steps that will be taken by the County, Towns, contractors, and other parties so as to facilitate the removal, management, collection and disposal of all debris generated from a catastrophic natural disaster, such as a modeled 100 year probabilistic storm identified in Chapter 2. This ConOps is tied to the activation and use of the County and Town contracts for disaster debris removal and monitoring.

The debris management strategy for the County and the Towns is divided into four major operational time periods following the Initial Preparation and pre-event activities: Immediate Response and Clearing; Clearance and Removal Operations; Removal Operations; and Final Disposal and Closeout. Immediate Response through Clearance, Removal and Final Disposal are major operational areas. The initial response typically occurs during the first 24 to 70 hours following an event, and consists primarily of pushing the debris that hinders immediate lifesaving actions and that poses an immediate threat to public health and safety out-of-the right of way along major roadways. Continued operations for clearance, removal and final disposal, which can last up to a year or longer, consist of removing, segregating, and disposing of the debris that hinders the orderly recovery of the community and poses less immediate threats to health and safety. The County and Town contracts may be initiated as early as the initial preparation and pre-event activities if it is determined that the storm event may overwhelm local emergency response and County resources.

Federal - Financial, Direct and Technical Assistance

When the response and recovery efforts are beyond the capacity of the Towns, the County and the State, the Governor may request federal assistance, in the form of a Presidential Disaster Declaration. FEMA evaluates the request and recommends to the President the type of federal assistance that is warranted. Assistance is usually provided in the form of financial reimbursement of a portion of the disaster related costs (for example, a 75 percent Federal/ 25 percent State cost share). FEMA can also provide direct and technical assistance. It is prudent to be familiar with FEMA eligibility and reasonable costs guidelines during the planning stage in order to appropriately plan for critical issues such as contracting, monitoring and preparing appropriate documentation to support requests for funding. FEMA and the Public Assistance Program are governed by the Stafford Act (Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended, 42 U.S.C. 5121 et seq.) and regulations. These laws and regulations provide the criteria for determining eligibility of debris activities for reimbursements. This includes: Stafford Act, Sections 403, 407, 502; 44 CFR, Sections 206.224, 206.225; and FEMA Policies.

Summary

By preparing the *Suffolk County Debris Management Plan*, establishing inter-municipal agreements, and establishing contracts for debris removal operations and monitoring of the debris, Suffolk County and its ten Towns have positioned themselves to be responsive to meet the emergency needs of the County. At the same time, the Plan and the contracts will expedite enhanced federal assistance to the County and the Towns in the event of a disaster.