

# WINTER STORM OPERATIONS PLAN

December 2021

## I. INTRODUCTION

### A. PURPOSE

This appendix describes the coordinating actions taken by the State Emergency Response Team (SERT) when a winter storm threatens or affects North Carolina.

### B. SCOPE

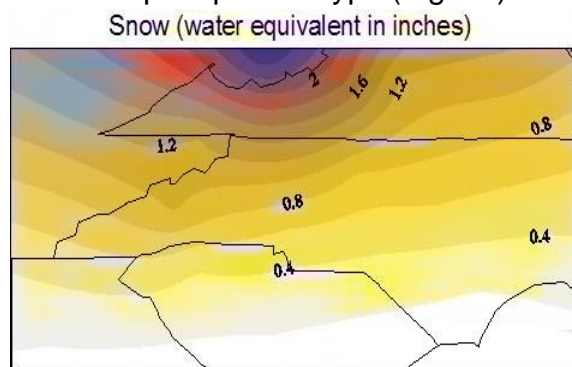
This appendix includes the anticipated actions of the Federal, State and local agencies, as well as private sector organizations.

## II. SITUATION AND ASSUMPTIONS

### A. SITUATION

Due to the geographic regions of North Carolina (Mountains, Piedmont and Coastal Plain) the State experiences a myriad of precipitation types (rain, freezing rain, sleet, and snow) during a winter weather event.

The mountain region of North Carolina is often more prone to winter weather than any other region in the State. In this region, snow is typically the most dominant precipitation type (Fig. 1a). Valley areas typically receive 10-20" of



**Figure 1a:** Average liquid equivalent of snow per season. The Mountains receive the most snowfall. In the Piedmont and Coastal Plain, the highest snowfall totals are to the northwest, while the southeastern Coastal Plain of NC experiences the least amount of snowfall per season. (North Carolina State Climate Office)

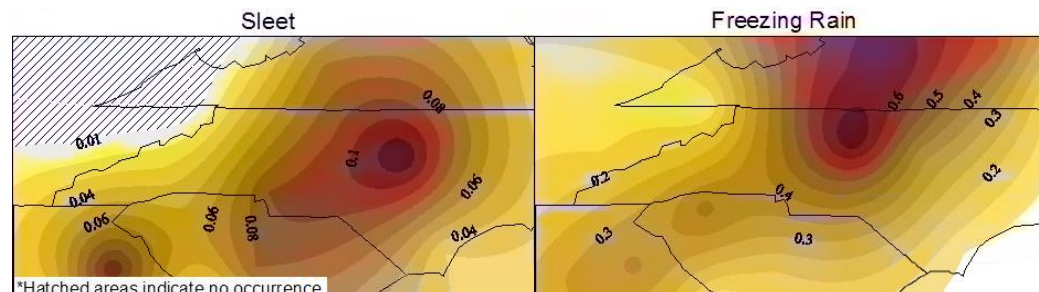
snowfall per season, while higher elevations on western facing slopes may receive 50-75". The Piedmont is the second most favored region for snowfall, averaging 5-10" of snow a year. The Coastal Plain is the least accustomed to winter weather with 5" or less of snowfall per season, often with several years passing where no measurable snow falls. The Piedmont and Coastal Plain are the most likely areas to experience sleet and freezing rain (Fig. 1b/1c).

Freezing rain, sleet and ice accumulations can cause problems across North Carolina. Ice accumulation of 1/4" is considered significant and will occur every few years. Less commonly, catastrophic accumulations of freezing rain

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occur ( $\frac{1}{2}$ " -  $\frac{3}{4}$ "+) which result in significant damage to trees, powerlines and infrastructure. While rare, large accumulations of sleet (>1") are possible.



**Figure 1b (left), 1c (right):** Average liquid equivalent of freezing rain and sleet per season. While the Mountains and Coastal Plain typically experience sleet and freezing rain, the most prone area to those precipitation types is the Piedmont. (North Carolina State Climate Office)

Wintry precipitation is not the only hazard that a winter storm can bring to the State. During Nor'easters, strong winds occur along the coastline and contribute to coastal flooding. While rare, high winds and blowing snow in the Mountains can create blizzard conditions, causing travel to be difficult if not impossible. Brutally cold temperatures may occur during and after a winter storm, making frostbite or hypothermia a concern for anyone outdoors or without heat.

### B. ASSUMPTIONS

1. Significant accumulations of winter weather will make travel difficult and dangerous. Ramps and bridges will be the most susceptible to icing.
2. Blowing snow will create visibilities near zero and may accumulate into drifts which could block roadways.
3. Brutally cold temperatures combined with strong winds will make hypothermia a danger to anyone outside.
4. Snow and ice accumulations will cause power outages for several days. Extensive damage to trees and powerlines may result.
5. Roadways may be blocked by debris and extensive clearing work may be required.
6. Disruption of electricity for extended periods of time may affect water and sewer treatment plants, potentially making water unpotable without boiling after the storm.

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7. Road closures in coastal areas may occur due to coastal flooding from high winds.
8. Emergency transportation of resources may require permits, licenses, or exemptions.
9. Less-impactful winter storms may only require partial activation of this appendix and may involve coordination between NCEM and other supporting State agencies.

### III. ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES

#### A. LEAD STATE AGENCY

##### 1. NC DEPARTMENT OF PUBLIC SAFETY (NCDPS)

###### NORTH CAROLINA EMERGENCY MANAGEMENT (NCEM)

- a. Support local government efforts through resource and technical assistance during emergencies and coordinate State and Federal response and recovery activities.
- b. Provide aerial imagery (video, photos, and photogrammetry) via unmanned aerial vehicles (UAVs).

#### B. SUPPORTING STATE AGENCIES

##### 1. NC DEPARTMENT OF AGRICULTURE & CONSUMER SERVICES (NCDA&CS)

- a. Assess incident impact on food, agriculture, agribusiness, animals and other areas regulated or supported by the mission of NC DA&CS.
- b. Report disaster facts, loss records, response information and other impact data to the agriculture sector to the Agriculture Incident Management Team (AgIMT) and, by way of the Liaison Officer, SERT.
- c. Formulate and coordinate public information, guidance, recommendations, and information through approved channels with appropriate partners to the SERT, industry leaders, agriculture producers, and the public.
- d. Provide guidance for the safety and sheltering of companion animals.

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- e. Provide general and technical assistance to industries, partners, and other entities or persons as requested within the scope and mission of NCDA&CS and the Food and Agriculture response.
- f. Promote and implement actions and strategies that maintain consumer confidence for food and agriculture health and security.

### EMERGENCY PROGRAMS DIVISION

- a. Coordinate on behalf of the Commissioner of Agriculture with NC Emergency Management on the Governor's Executive Order declaring a State of Emergency.
- b. Activate the AgIMT to manage and coordinate the overall Food and Agriculture response from the department, partner and affiliate organizations, and agriculture stakeholders.
- c. Collect and retain disaster facts, loss records, response information and other impact data to the agriculture sector from reliable sources.
- d. Develop recovery strategies and reports and serve as NCDA&CS lead for recovery.
- e. Provide SERT Liaison for the Food and Agriculture Response to the Human Services Functional Group.

### NORTH CAROLINA FOREST SERVICE (NCFS)

- a. Chainsaw crews aiding in road clearance.

## 2. NC DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ)

### DIVISION OF MARINE FISHERIES (DMF)

- a. Render law enforcement assistance as requested by SERT.
- b. Provide land, sea, and air transportation.
- c. Provide aircraft and crew for surveillance/reconnaissance.
- d. Provide watercraft and crews to support enforcement of USCG-initiated restrictions on waterway use.

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### **DIVISION OF WASTE MANAGEMENT (DWM)**

- a. Identify procedures for storage of debris pending disposal.
- b. If debris is determined to be hazardous, provide a vendor list to the responsible party for proper waste management.
- c. Issue emergency permits for treatment, storage, disposal, and transportation of debris and associated clean-up activities.
- d. Provide vendor list to responsible party to facilitate cost assessment for proper waste management.
- e. Identify landfills that will accept contaminated solid waste and facilities/vendors that will accept and treat contaminated liquid waste.

### **3. NC WILDLIFE RESOURCES COMMISSION (NCWRC)**

- a. Render law enforcement assistance as requested by SERT.
- b. Provide air, water, and land transportation as requested by SERT.
- c. Act as liaison between the SERT and interested environmental and conservation groups.
- d. Provide watercraft and crews to support enforcement of USCG-initiated restrictions on waterway use.

### **4. NC DEPARTMENT OF NATURAL AND CULTURAL RESOURCES (NCDNCR)**

#### **DIVISION OF PARKS AND RECREATION (DPR)**

- a. Evacuation of State parks when threats exist to public safety.
- b. Coordination with other law enforcement agencies.
- c. Provide areas on park property for use as assembly or staging areas for equipment and personnel.
- d. Provide transportation and communication within State park areas.

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- e. Determine access points and routes least likely to harm park facilities and advise the SERT Leader of same.
- f. Provide a liaison to the SERT authorized to grant permission for response and cleanup activities as well as issue any required permits concerning State park facilities.
- g. Provide liaison and carry out technical consultations with US National Park Service if a national park/seashore is threatened.

### 5. NC DEPARTMENT OF HEALTH AND HUMAN SERVICES (NCDHHS)

- a. Liaise with Division of Aging and Adult Services, Division of Child Development and Early Education, Division of Health Service Regulation/Office of Emergency Medical Services, Division of Public Health, Division of Services for the Blind, Division of Services for the Deaf and Hard of Hearing, Division of Social Services, Division of Vocational Rehabilitation Services, and the Division Of Mental Health, Developmental Disabilities And Substance Abuse Services, and other SERT agencies and volunteer organizations to ensure the effective integration of Human Services related resources and county departments of social services to support those who are affected by the disaster.
- b. Ensure all DHHS Divisions are staffed for response, recovery and mitigation.

### DIVISION OF PUBLIC HEALTH (DPH)

- a. Coordinate public health nurses to support local and state shelter requirements.
- b. Monitor health of shelter populations for potential infectious disease outbreaks and provide mitigation recommendations where appropriate.

### DIVISION OF SOCIAL SERVICES (DSS)

- a. Coordinate with mass care support agencies to support local sheltering operations.
- b. Obtain personnel rosters, sheltering listings, and number of shelter managers from county departments of social services responding in affected jurisdictions.

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- c. Provide technical assistance, when requested, to county departments of social services in organizing resources to provide food and water requirements for shelter population.
- d. Provide technical assistance, when requested, to county departments of social services in organizing transportation of food from identified warehouses to mass care feeding sites.
- e. Track and report the status of shelter operations.
- f. Coordinate with partners to answer questions from county departments of social services about accessibility in shelters.
- g. Coordinate all requests for spoken-language and American Sign Language interpreters.

### **DIVISION OF AGING AND ADULT SERVICES (DAAS)**

- a. Promote the exchange of technical and statistical information relevant to needs and outcomes of older adults and adults with access and functional needs from NCEM to area agencies on aging and county health and human services departments.
- b. Collaborate as requested with human services agencies to assist counties in meeting the needs of individuals needing functional support sheltering services.
- c. Collaborate as requested with NCEM ESF 8, DHSR, and DPH for individuals needing medical support sheltering services.

### **DIVISION OF MENTAL HEALTH, DEVELOPMENTAL DISABILITIES AND SUBSTANCE ABUSE SERVICES (MHDDSAS)**

- a. Coordinate/facilitate the provision of mental health/crisis counseling to victims at shelters, mass care facilities, and community settings.
- b. Coordinate distribution of Naloxone to shelters, mass care facilities, and fixed feeding sites with counties.

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### **DIVISION OF HEALTH SERVICE REGULATION (DHSR)**

#### **OFFICE OF EMERGENCY MEDICAL SERVICES (OEMS)**

- a. Provide leadership in coordinating and integrating the overall State efforts that provide medical assistance to a disaster-affected area.
- b. Coordinate and direct the activation and deployment of State resources of medical personnel, supplies, equipment, and pharmaceuticals with Public Health as needed.
- a. Assist in the development of local capabilities for the on-site coordination of all emergency medical services needed for triage, treatment, transportations, tracking, and evacuation of the affected population with medical needs.
- d. Establish and maintain the cooperation of the various State medical and related professional organizations in coordinating the shifting of Emergency Medical Services resources from unaffected areas to areas of need.
- e. Coordinate with the SERT Military Support Branch to arrange for medical support from military installations.
- f. Coordinate the catastrophic medical sheltering response by implementing the Medical Support Sheltering Plan.

### **6. NC DEPARTMENT OF INSURANCE (NCDOI)**

#### **OFFICE OF STATE FIRE MARSHAL (OSFM)**

- a. Coordinate firefighting assets.
- b. Restoration of firefighting services and protection.
- c. Coordinate additional building inspection teams.



## **7. NC DEPARTMENT OF TRANSPORTATION (NCDOT)**

### **DIVISION OF HIGHWAYS (DOH)**

- a. Erect and maintain such signs, lights, barricades or other traffic control devices as deemed appropriate to maintain or control traffic along the affected routes or detour routes.
- b. Treat roadway surfaces with salt and brine, before, during and after the storm.
- c. Clear roadways of snow/sleet accumulations.
- d. Provide extra equipment and Motorist Assistance Patrols in area most prone to severe road blockages to facilitate quick and efficient traffic movement restoration.
- e. Provide debris clearance and removal operations in areas impacted by fallen trees.

## **8. NC DEPARTMENT OF PUBLIC SAFETY (NCDPS)**

### **STATE HIGHWAY PATROL (SHP)**

- a. Coordinate control measures and isolation of the impacted area as needed.
- b. Regulate motor vehicle traffic where indicated.
- c. Provide communications support as requested by the SERT Leader.

### **NORTH CAROLINA NATIONAL GUARD (NCNG)**

- a. Assist with debris clearance from roadways.
- b. Provide shelter support as needed.
- c. Provide transportation assets to assist SHP, DOT, and local agencies in road clearance as well as to transport resources.
- d. Provide emergency personnel, support fire, rescue and emergency medical response.

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- e. Provide power generation as needed to support widespread power outages affecting vital facilities when local resources have been exhausted.
- f. Provide NCNG mission capable packages as requested through NCEM.

### 9. UTILITY PROVIDERS

- a. Provide decision makers with up-to-date power outage information and expected restoration times.
- b. Provide support as needed to other utilities if able.
- c. Restore electrical power to residences and business.
- d. Repair and restore any downed power lines and/or transformers.

### C. SUPPORTING FEDERAL AGENCIES

#### 1. NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA)

##### NATIONAL WEATHER SERVICE (NWS)

- a. Provide detailed forecast information such as temperature, snowfall and freezing rain accumulations, etc. for locations across the State.
- b. Issue watches and warnings associated with the effects of a winter storm including winter storm warning, winter storm watch, winter weather advisory, coastal flood advisory, etc.
- c. Participate in conference calls to provide situational awareness and forecast updates.

## IV. CONCEPT OF OPERATIONS

### A. GENERAL

Activation of this appendix may not occur during a typical winter weather event in the mountains; however, an equivalent event in the Piedmont or Coastal Plain may require activation. Only partial activation of the State EOC may occur during winter storms that are expected to have limited impacts.

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During a full scale activation, the SERT agencies will report to the State EOC. NCEM Branch Offices become Regional Coordination Centers (RCCs) which serve as a control center for the distribution of information and resources in the RCC's area.

NCEM will use NC SPARTA as the primary mechanism for information dissemination during winter storm threats. The National Weather Service (NWS) will be used as the official source of weather information. The NWS offices provide guidance to emergency managers through briefings, conference calls, and webinars to achieve consistency between the forecast and emergency management response.

### B. RESPONSE ACTIONS

The change in activation levels is highly dependent upon the observed threat and expected impact. The following are general guidelines that may support a change in activation level. For information on staffing and general responses associated with an activation level, please refer to the North Carolina Emergency Operations Basic Plan.

- a. Level 4 Activation: The SERT Leader may decide to elevate the activation level to 4 under any or all of the following conditions:
  - The NWS has issued a Winter Storm Watch;
  - The NWS has issued a Winter Weather Advisory; and
  - A Nor'easter is expected with significant impacts.

At this level, NCEM or SERT Functional Leads will notify SERT agency representatives of the potential winter weather hazard threats.

- b. Level 3 Activation: The SERT Leader may elevate the activation level to 3 if a winter storm is causing or has caused impacts in the State. This could include any or all of the following:
  - The NWS has Issued a Winter Storm or Ice Storm Warning;
  - A winter storm has caused widespread power outages;
  - A Nor'easter has caused widespread flooding/road closures; and
  - State resources have been requested.

Necessary SERT agencies will be activated at this level. The State EOC will be staffed by NCEM which includes the following; Lead SERT Meteorologist, Planning Chief with support staff,

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Communications Branch Manager, Operations Chief and Operations Branch Managers, Logistic Chief with support staff, and the lead SERT Public Information Officer. The State EOC will begin publishing situation reports for the event and incident action plans for the next 24-hour period will be published. NCEM field staff will prepare for Branch Office operations. If required, the Logistics Section will begin to provide and coordinate resource support for the branch office(s). The State EOC will use conference calls as the primary mechanism for coordinating State emergency management officials with other State agencies and local governments. The SERT Leader will determine a schedule to place these calls, or they may be managed at the branch level. For more information on the role of the SERT Leader and others in the conference call, please refer EOC SOG.

The calls will focus on creating action plans for counties and communities that are expected to be impacted by the winter storm. More specifically, calls will include the following:

- County EOC activation;
- State of Emergency declarations;
- Public information news releases;
- Shelter locations and support needs (if needed);
- Variable message board placement;
- Preparatory road actions;
- Utility status;
- Resource deployments; and
- Identification of unmet needs.

In most cases, local government officials will be ultimately be responsible for actual implementation of the action plans.

- c. Level 2 Activation: The SERT Leader may elevate the activation level to 2 if a winter storm is causing or has caused widespread significant impacts across the State. This could include any or all of the following.
  - Major traffic problems, power outages and shelter openings are expected or occurring;
  - A Nor'easter has impacted the State causing flooding, road closures and damages to structures; and
  - Numerous State resources have been requested.

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At this level, all necessary SERT agencies will be activated in the State EOC and Branch Offices/RCC. Movement of supplies after the storm will be directed by the SERT Leader and the Logistics Section. If power outages are expected to be long lasting, shelters will be opened in the affected region. If needed, the Planning Section will assist the NCEM Governor's Liaison in drafting a State of Emergency Proclamation to be forwarded to the Governor for signature.

- d. Level 1 Activation: The SERT Leader may elevate the activation level to 1; activation if any or all of the following circumstances are met:
- A substantial part of the State has been impacted by major snow or ice accumulations;
  - Injuries or deaths have occurred and sheltering is ongoing;
  - Major damage has occurred; and
  - Numerous State resources have been requested.

Multiple branch offices may be activated and transitioned into RCCs on this level to assist in the coordination and movement of supplies to the affected region. If needed, the Planning Section will assist the EM Governor's Liaison in drafting a request for Federal disaster assistance, and coordinate with Operations and Recovery/Hazard Mitigation to begin damage assessment activity.

### C. RECOVERY ACTIONS

#### 1. INITIAL

If State resources are overwhelmed and additional assets are needed, mutual aid agreements between neighboring States will be implemented. This will be largely dependent on the disasters effect on the neighboring State.

With respect to winter storms that do not cause significant damage to trees and powerlines, recovery will be limited to a few days. Weather conditions typically warm in the days after the storm as snow and ice accumulations melt away. Initial recovery efforts will include, but are not limited to:

- Plowing of roadways by DOT to remove snow, sleet and ice accumulations;
- Treating of problem areas with salt, sand and brine;
- Restoration of electricity and other utilities if they were lost; and
- Removal of debris from roadways.

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### 2. CONTINUING

In the event of a major ice storm, there will likely be widespread and extensive damage to trees, powerlines and possibly structures. In this case, it may be weeks after the snow and ice accumulations melt before the recovery actions cease. Ongoing recovery efforts will include, but are not limited to:

- Continued utility restoration; and
- Repairs to buildings or infrastructure that may have been damaged by ice accumulations.

### V. REFERENCES

- A. Chapter 166A of the North Carolina General Statutes, North Carolina Emergency Management Act, as amended.
- B. NCEM Human Services Mass Feeding Plan
- C. NCEM Human Services Mass Shelter Plan