



NEW HAMPSHIRE

STATE EMERGENCY OPERATIONS CENTER



EMERGENCY SUPPORT FUNCTION 3 - PUBLIC WORKS & ENGINEERING

2019

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Acronyms

DAMF	NH Department of Agriculture, Market, and Footh
DAS	NH Department of Administrative Services
DES	NH Department of Environmental Services
DHHS	NH Department of Health and Human Services
DNCR	NH Department of Natural and Cultural Resources
DOS	NH Department of Safety
DOT	NH Department of Transportation
EMAC	Emergency Management Assistance Compact
FEMA	Federal Emergency Management Agency
FMO	NH Division of Fire Safety, Office of the State Fire Marshall
HSEM	NH Division of Homeland Security and Emergency Management
IEMAC	International Emergency Management Assistance Compact
LOA	Letter of Agreement
MOU	Memorandum of Understanding
NHAEERTF	NH Architects and Engineers Emergency Response Task Force
NIMS	National Incident Management System
NRF	National Response Framework
PUC	NH Public Utilities Commission
PWMA	NH Public Works Mutual Aid
SEOC	State Emergency Operations Center
SEOP	State Emergency Operations Plan
SME	Subject Matter Experts
SOP	Standard Operation Procedure
USACE	US Army Corps of Engineers



Lead Agency

NH Department of Transportation (DOT)

Support Agencies:

NH Department of Environmental Services (DES)

NH Department of Administrative Services (DAS)

NH Department of Agriculture, Market, and Foods (DAMF)

NH Department of Health and Human Services (DHHS)

NH Department of Safety (DOS), Division of Fire Safety, Office of the State Fire Marshal (FMO)

NH Department of Natural and Cultural Resources (DNCR)

NH Public Utilities Commission (PUC)

NH Public Works Mutual Aid (PWMA)

US Army Corps of Engineering (USACE)

Introduction

For Emergency Support Function (ESF) 3 – Public Works and Engineering purposes, emergency public works and engineering activities are defined as:

Public Works - Coordination of resources, including engineering, procurement, and debris clearance, in order to provide or restore emergency power supplies for critical facilities; Coordination of resources to restore and/or provide emergency supplement to water and sewer services, including emergency supply of potable water, temporary restoration of water supply and sewer systems; and providing water for firefighting.

Engineering - Coordination of resources to support post-disaster evaluation of buildings and similar structures in an effort to determine safety and usability. These structures could include dams, bridges, highways, and water structures. Coordination of resources to support the restoration of transportation infrastructure; implement emergency repairs to public and private facilities and other appropriate construction services (e.g. electrical, plumbing, soils, etc.); Coordination of resources to support emergency demolition and/or stabilization of damaged structures and facilities designated as hazards to public health and safety.

Purpose

The purpose of ESF 3 is to utilize resources (*i.e.*, human, technical, equipment, facility, materials, supplies) of member agencies to provide technical expertise; evaluation; engineering services; contracting for emergency repair of dams, drinking water and wastewater treatment facilities; potable water; emergency power; public real estate; and debris management to assist the State in meeting its goals related to lifesaving and life-sustaining actions, damage mitigation, and recovery activities before, during, and after an emergency/disaster event.



Concept of Operations

This annex will be activated at the direction of HSEM when there is potential for or an actual disaster situation or planned event impacting public works and engineering needs or requiring State public works, inspectional and engineering resources.

General

1. DOT, as the lead agency, must ensure that, through coordinated annual planning, all ESF 3 agencies are:
 - a. Participating in reviews and maintenance of the ESF 3 Annex; and
 - b. Receiving sufficient training and are capable of supporting responsibilities of ESF 3 in the SEOC; and
 - c. Coordinating, attending, and participating in ESF 3 meetings, training sessions, conferences and exercises.
2. Maintain manual or automated listings of the following:
 - a. DOT and support agency emergency points of contact that may need to be contacted by ESF 3 representatives; and
 - b. Available public works and engineering resources (i.e., state, local, contract) such as types of equipment, equipment operators, engineers, and construction materials.
3. Coordinate ESF 3 activities in the SEOC, during periods of activation, by developing and maintaining the ESF 3 staffing schedule.
4. Coordinate evaluation and performance of mission/task requests.
5. Ensure the status of committed and uncommitted equipment and inventory resources are tracked during activation of the SEOC.
6. Ensure Unified Command is used to manage assets in the field, due to the number and variety of government and private sector organizations that may be involved.

Organization

1. **Command & Control:** ESF 3 shall function under the direction and control of the Infrastructure Branch under the SEOC Operations Chief. (***See Organizational Chart in SEOP Base Plan.***)
2. **Operational Facilities/Sites:** (*Offices that are staffed 24/7 year-round.)
 - a. DOT District Offices/Dispatch Centers:
 - i. District 1 – Lancaster*
 - ii. District 2 – Enfield
 - iii. District 3 – Gilford
 - iv. District 4 – Swanzey
 - v. District 5 – Bedford
 - vi. District 6 – Durham
 - vii. Transportation Management Center (TMC) – Concord *
 - b. State Police Troop Stations:



- i. Troop A – Epping
 - ii. Troop B – Bedford
 - iii. Troop C – Keene
 - iv. Troop D – Concord
 - v. Troop E – Tamworth
 - vi. Troop F – Twin Mountain
 - vii. Troop G – Commercial Vehicle Enforcement
 - viii. State Police Dispatch
3. **Federal Resources:** When ESF 3 anticipates or has a need for resources not otherwise available, action will be taken to secure such resources through the *National Response Framework* (NRF) or some other federal source. This request should be coordinated through the SEOC Operations Chief and Logistics Chief, as required.
4. **Contracts and Contractors:** Resources that are available through ESF 3 may, at times, be obtained through a contractor. State of NH contracts or private sector contracts should be facilitated through Logistics and ESF 7 – Resource Support.

Notification

1. HSEM will notify the lead agency points of contact when there is an immediate or anticipated SEOC activation requiring ESF 3 representation.
2. The lead agency will then notify the support agencies and determine coverage for the ESF 3 desk in the SEOC.
3. ESF 3 agencies will make notifications to their appropriate regions, districts, local offices, etc.
4. The above notification process will be utilized for all phases of activation and activities in which the ESF 3 will be involved.

Event Reporting

1. WebEOC will be utilized, to provide continuous situational awareness.
2. Position logs should be maintained by each ESF agency in sufficient detail to provide information on activities taken during the event.
3. Agencies are also expected to keep their lead agency updated upon all activities and actions.
4. The lead agency will be responsible for making periodic reports to the Operations Section Chief on activities taken by the ESF during the event and assure the actions are properly documented.
5. Lead and support agencies must maintain financial records of all activities and costs during the event. The records will be turned into the lead agency when requested.



ESF Actions

Prevention/Preparedness Actions

1. Maintain situational awareness, through coordination with ESF 3 support agencies, for current inventories of government public works and engineering facilities, supplies, and equipment.
2. Establish and maintain liaisons with the federal and border state public works and engineering officials.
3. Participate in state exercises or conduct an exercise to validate this Annex and supporting SOPs.
4. Support the Emergency Management Assistance Compact (EMAC) and International Emergency Management Assistance Compact (IEMAC), including training of ESF 3 personnel on EMAC/IEMAC responsibilities and pre-identification of assets, needs, and resources that may be allocated to support other states/provinces.
5. Annually review the U.S. Department of Homeland Security Core Capabilities and integrating tasks as appropriate.
6. Integrate NIMS principles in all aspects of planning for ESF 3.
7. Maintain notification systems to support emergency/disaster response.
8. In coordination with NHAERTF, organize and train a support unit of structural engineers to support operations of the DOS Division of Fire Safety in post-disaster building evaluations.
9. Coordinate training for building inspectors, local government engineers, and other interested persons required to make rapid evaluations and decisions regarding continued use and occupancy of damaged buildings.

Response Activities

1. Assign and schedule sufficient personnel to cover an SEOC activation for an extended period of time.
2. Provide information and status on lines of transportation to SEOC Operations via WebEOC.
3. Provide updates and briefings for personnel reporting for ESF 3 duty.
4. Notify ESF 3 counterparts in the threatened or impacted areas.
5. Generate information to be included in SEOC briefings, situation reports, and/or action plans.
6. Evaluate and respond to ESF 3 mission/task requests, including providing available resources for repair/service, refueling, parking, storage and staging facilities, mapping and global location capabilities, equipment and personnel for fulfilling ESF missions.
7. Consult with other ESFs that may need support of ESF 3.
8. Consult incident-specific annexes for specialized actions.
9. Support requests and directives resulting from a Governor's State of Emergency Declaration and/or Presidential Disaster Declaration.



10. Assess water and sewer service restoration, potable water supply, solid waste disposal, and engineering requirements as soon as possible.
11. In coordination with local entities, establish priorities to repair damaged water/sewer systems and coordinate the provision of temporary, alternate, or interim sources of emergency power and water/sewer services.
12. Coordinate debris removal, reduction, and disposal operations for the State and provide technical assistance to local governments, in accordance with the NH Debris Management Plan.
13. Coordinate with ESF 11 – Agricultural, Natural and Cultural Resources for advice and assistance regarding disposal of debris containing or consisting of animal carcasses.
14. Coordinate assistance to include personnel, equipment, and technical expertise necessary to assess damage resulting from an emergency or disaster to state and/or local facilities and property.
15. Assess the status of dams that may be threatened or compromised through damage by natural or human-caused events.
16. Provide for temporary construction of emergency routes necessary for passage of emergency response personnel, construction of firebreaks, etc., as requested.
17. Facilitate expedited permitting for repair/demolition work to be performed.
18. Plan for and establish relief resources to replace or rotate committed resources for extended operations.
19. Coordinate with ESF 12 regarding restoration of electrical power for critical infrastructure and essential buildings.
20. Coordinate with ESF 10 for assistance with disposal of contaminated environmental media (e.g., vegetation, soils, etc.), hazardous materials (TSCA - could be recycled, reused, or recovered after the event) and hazardous wastes (RCRA).
21. Prepare for the arrival and coordination of FEMA ESF 3 personnel, as appropriate.
22. Prepare damage assessment documents to be submitted to HSEM and other appropriate ESFs/agencies.
23. Evaluate the probability and time period of the recovery phase for the event. Continue development of an “After-Action Report” for ESF 3.
24. **Radiological Emergency Preparedness Actions**
Refer to the ESF 3 section of the *NH Radiological Emergency Response for Nuclear Facilities Incident Annex, Attachment A – Implementing Procedures for State Agencies*.



Recovery Activities:

1. Maintain information and status on public and private systems to SEOC Operations via WebEOC. This report should include water supply, wastewater treatment, and debris removal.
2. Continue to coordinate activities and requests with partner ESFs.
3. Prepare for arrival and coordination of FEMA ESF 3 personnel, as appropriate.
4. Generate information to be included in SEOC briefings, situation reports, and/or action plans.
5. Ensure ESF 3 lead and support agencies document event-related costs for any potential reimbursement.
6. Refer to the NH Recovery Annex, RSF 5 – Infrastructure Systems Recovery.

Mitigation

1. Provide input to the State Hazard Mitigation Plan, as needed.
2. Support and plan for mitigation measures including monitoring and updating mitigation actions in the State Hazard Mitigation Plan.
3. Support requests and directives from the Governor and/or FEMA concerning mitigation and/or redevelopment activities.
4. Identify potential hazard impacts to public works and engineering infrastructure and collaborate to develop or recommend hazard mitigation plans, protocols, procedures, projects, and/or policies to prevent or mitigate their effects.



Responsibilities

General

1. Agencies will provide Subject Matter Experts (SME's) to support ESF 3 in the SEOC.
2. Agencies will maintain inventories/databases, status of availability, and procedures to obtain access to and use of their public works and engineering assets.
3. Participate in the evaluation and mission assignment of ESF 3 resource requests submitted to the SEOC including resources that are available through mutual aid agreements, compacts, contracts, etc.

Agency Specific

Lead Agency

NH Department of Transportation

1. Identify, train, and assign personnel to staff ESF 3 in the SEOC.
2. Notify all ESF 3 supporting agencies upon activation.
3. Provide staff and resources necessary to conduct impact assessments of the affected area(s).
4. Provide available public works and engineering resource support for the ESF 3 mission to include:
 - a. Public works and engineering resources, expertise, equipment, and facilities;
 - b. Providing critical facilities engineering, technical and specialty support, and coordination; and
 - c. Assisting in suspension and clearance of all construction and maintenance after notice of an evacuation order.
5. Provide mutual aid data and points of contact.
6. Implement the State Debris Management Plan, if appropriate.

Support Agencies

1. **NH Department of Safety, Division of Fire Safety, Office of the State Fire Marshal (FMO)**
 - a. Provide information, expertise, and personnel relevant to hazardous materials clean up, search and rescue, and other agency-appropriate services relative to the workings of ESF 3.
 - b. Assist in providing engineering standards and evaluations for disaster-impacted structures.
 - c. Coordinate and maintain records on related risks, inspections, and evaluations of buildings and similar structures relative to safety.
 - d. Assist in activities pertaining to buildings and similar structures, tents and other structures for public assembly, including temporary structures and appropriate power supplies.



- e. Provide safety information to ESF 15 – Public Information for dissemination to the public and workers on back-up power supplies (hook-ups and use).
- f. Conduct post-disaster building and structure evaluations. Coordinate and track evaluation teams and activities.
- g. Serve as member of the safety and damage assessment teams assessing public buildings for safety, fire damage, and hazards.

2. NH Department of Environmental Services (DES)

- a. Inspect and provide technical assistance to public water systems including drinking water treatment plants, storage tanks, distribution systems, and water supply sources.
- b. Provide information on critical public water systems.
- c. Investigate water supply complaints and problems.
- d. Provide technical expertise on wastewater treatment facilities.
- e. Provide information on and respond to dam incidents, high water levels, and flooding.
- f. Direct emergency water control management through dams in the state.
- g. Provide guidance on dam construction, operations, and maintenance.
- h. Provide liaison with dam operators and dam emergency procedures.
- i. Provide emergency permitting, on-scene inspection services and consultation during events that affect jurisdictional wetlands and state surface waters when a danger to the public health, real property, or the environment is imminent or has occurred.
- j. Provide geological information, including surficial and bedrock.
- k. Provide expertise in evaluation and mitigation of river erosion hazards, issues related to river fluvial geomorphology, landslides, and other natural hazards.
- l. Provide collected data on the state’s river and stream features including stream crossings, river geomorphologic condition, and a statewide database of locally identified flood hazard locations.

3. NH Department of Health and Human Services (DHHS), Public Health Laboratory

- a. Provide microbiological analysis, primarily on water samples; inorganic analyses for metals, nutrients, and radioactive elements in a variety of media; and organics analysis in a variety of media.
- b. Provide expert advice on the analysis and chemical issues in general.
- c. Provide air toxics modeling (NHDES-ARD) and laboratory analysis (NHDPHS), if an airborne threat is involved

4. NH Department of Natural and Cultural Resources (DNCR)

- a. Assist in debris clearance.

- b. Assist in construction of fire lines and other specialty needs.
- c. Provide damage assessment of forested areas.
- d. Assist in procurement of information and resources from the private sector.
- e. Provide critical facilities, infrastructure-related technical, specialty support, and coordination.

5. US Army Corps of Engineers (USACE)

- a. Provide information on and assistance in recovery of USACE-managed dams and infrastructure.
- b. Reduce downstream flooding by storing floodwaters behind USACE-managed flood control dams.
- c. Assist in provision of emergency power sources for critical facilities and infrastructure.

6. NH Public Utilities Commission (PUC)

- a. Provide a liaison for the NH public and private electric, natural gas, water, sewage, and communications industry and coordinating groups for utility restoration support.
- b. Obtain initial and updated damage reports for utility infrastructure and emergency repair/restoration plans.
- c. Obtain initial and updated reports of utility coordination groups' activations and implementation of intrastate and interstate mutual aid agreements.
- d. Obtain reports on utilities' work accomplished, restoration and project restoration status.
- e. Assist in coordination with public works and civil engineering resources, including technicians, specialists, managers, and supervisors.

Coordination with Other Emergency Support Functions:

ESF 3 will coordinate with other ESFs through the SEOC by:

1. Notifying organizations of available resources.
2. Providing availability of subject matter experts for specialized requests.
3. Notifying ESFs and support agencies of any pertinent information that may impact their ability to carry out missions/tasks.

Mutual Aid

Lead and Support Agencies will maintain up-to-date Memorandums of Understanding (MOU), Letters of Agreement (LOA), etc. with other agencies, regions, states, or countries, as appropriate.

Each agency is responsible for keeping these documents updated and with appropriate points of contact. Support agencies should keep the lead agency informed of any such agreements which may impact resources or capabilities during an emergency incident.

The State of New Hampshire also maintains agreements and mutual aid compacts on behalf of various organizations. These may be activated, as the situation warrants.

Attachments

Plans/Procedures, Etc.

1. State of New Hampshire Debris Management Plan
2. Dam Emergency Action Plans and Inundation Maps

MOUs/LOAs

1. New Hampshire Public Works Mutual Aid
2. NH Architects and Engineers Emergency Response Task Force

Record of Update

Date	Title and Agency of ESF Lead Approving Update