

## ANNEX 3

### ESF-3 - UTILITY INFRASTRUCTURE SYSTEMS

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COORDINATING: SC National Guard

PRIMARY: State Fiscal Accountability Authority (Office of the State Engineer), SC Water/Wastewater Agency Response Network; Army Corp of Engineers, South Carolina State Guard

SUPPORT: SC Department of Health and Environmental Control, Environmental Affairs; SC Department of Agriculture; SC Forestry Commission; SC Department of Transportation; Clemson University Regulatory and Public Service Programs; SC Department of Natural Resources, Land, Water, and Conservation; SC Department of Public Safety. SC State Fiscal Accountability Authority, Office of Regulatory Staff; SC Department of Labor, Licensing and Regulation, Division of Fire and Life Safety, and Building Codes Council; SC Emergency Management Division; South Carolina Rural Water Association; SC Water/Wastewater Agency Response Network; South Carolina Law Enforcement Division

#### I. INTRODUCTION

- A. Utility Infrastructure Systems refers to those engineering and required to provide, restore or support emergency power supplies for critical facilities, including:
- Support temporary restoration of water supply and sewer systems
  - Coordinate technical expertise regarding the initial structural safety of damaged buildings, and dams.
  - Tracking, coordination and providing SITREPs of emergency repairs to public facilities.
  - If activation is required due to cascading effects caused by a cyber-event, a SLED member of the SC Critical Infrastructure Cybersecurity Program may integrate with ESF 3 in order to provide situation awareness to the executive group.

#### II. PURPOSE

- A. Provide support for water resources (potable, non-potable and firefighting), sewer facilities and waste disposal as requested.
- B. Provide for coordinating immediate engineering resources and expertise following a disaster.
- C. Provide an accurate assessment of damages and losses resulting from an emergency or disaster in order to determine the need for state and/or federal assistance and to support safety evaluations.

- D. Provide cyber consequence management interface regarding impacts on critical infrastructure.

### III. CONCEPT OF OPERATIONS

- A. The SC National Guard is the coordinating agency for ESF-3 and is responsible for the coordination of all ESF-3 administrative, management, planning, training, preparedness, and mitigation, response, and recovery activities to include developing, coordinating, and maintaining the ESF-3 Standard Operating Procedures (SOP).
- B. ESF-3 primary and supporting agencies will assist the SC National Guard in the planning and execution of the above.
- C. The SC National Guard will coordinate with all primary, supporting and other appropriate departments/agencies and organizations to ensure continual operational readiness.
- D. ESF-3 personnel will be familiar with the National Response Framework and the corresponding Federal Emergency Management Agency (FEMA) annex with Federal counterpart concepts, actions and responsibilities. This familiarization will include but not be limited to the structure, organization, functions and responsibilities of the Incident Management Assist Teams (IMAT) and the Joint Field Office (JFO).
- E. ESF-3 will coordinate with SCEMD and other ESF-3 primary and support agencies to coordinate or support the provision of:
- Emergency power and the restoration of water and sewer services.
  - Cyber consequence management assessment of critical infrastructure/facilities.
  - Engineering activities as required.
- F. ESF-3 will cooperate and coordinate with other ESFs to ensure State assets are deployed effectively and in response to appropriate priorities for the protection of the health, safety, and welfare of State citizens.
- G. ESF-3 will coordinate with Federal ESF-3 to obtain Federal assistance as needed. Support agency representatives collocate with Federal ESF-3 field personnel to coordinate support, as necessary.
- H. ESF-3 will support the State's coordinated flood fight operations to include planning, executing and monitoring related State activities. ESF-3 will synchronize State activities with Local requirements and Federal resources in order to provide a holistic approach to the flood fight activities across the state.

**IV. ESF ACTIONS****A. Preparedness**

1. In coordination with ESF-7 (Finance and Administration) develop an inventory of additional or alternative sources of potable water to augment or maintain water supplies.
2. Develop and maintain a current inventory of equipment and supplies, to include Points of Contact (POC) and telephone numbers, required to sustain emergency operations.
3. Assess operational needs for restoration of public works service during the emergency.
4. Coordinate engineering, public works repair, water supply, and sewer missions as requested by local emergency management officials.
5. In conjunction with ESF-19 (Military Support), plan for use of State military resources to support ESF-3 operations.
6. In coordination with ESF-24 (Business and Industry), determine if the private sector has the critical details to support incident action planning and decision making during an incident.
7. Participate at least annually in State exercises and/or conduct an exercise to validate this annex and supporting SOPs.
8. Anticipate and plan for arrival of and coordination with FEMA and US Army Corps of Engineers (USACE), ESF-3 personnel in the SEOC and the JFO.

**B. Response**

1. 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.
2. Coordinate with ESF-10 regarding solid waste disposal needs.
3. Coordinate with ESF- 7 regarding potable water supply and temporary sewage collection.
4. In coordination with local emergency management officials, recommend priorities to repair damaged water/sewer systems and coordinate the provision of temporary, alternate or interim sources of emergency power and water/sewer services.

5. Coordinate equipment, specialized labor, and transportation to repair or restore public works systems as required.
6. Coordinate with ESF-4 (Firefighting) regarding firefighting water supply.
7. Coordinate with ESF-6 (Mass Care) for shelter support requirements.
8. Coordinate with ESF-19 (Military Support) for use of State military assets.
9. Coordinate deployment of engineering assets and personnel into affected areas in the State.
10. Coordinate with ESF-14 for damage assessment personnel/support for joint State/Federal teams into affected areas, as required.
11. Coordinate with ESF-10 for the status of DHEC-regulated dams and unregulated dams (excluding FERC and USACE regulated dams) that may be threatened or compromised through damage by natural or man made events.
12. Coordinate with ESF-10 regarding regulatory requirements related to water and wastewater facilities.

**C. Recovery**

1. Coordinate in post-incident assessments of public works and infrastructure to help determine critical needs and potential workloads.
2. Maintain coordination with all supporting agencies and organizations on operational priorities for emergency repair and restoration.
3. Ensure ESF-3 team members, their agencies or other tasked organizations maintain appropriate records of time and costs incurred during the event.
4. Designate ESF-3 representation on the Recovery Task Force.

**D. Mitigation**

1. Review, evaluate and comment on proposed State Hazard Mitigation Plan amendments, upon initiation and within review period.
2. Review structural and non-structural mitigation projects.

**V. RESPONSIBILITIES**

**A. General**

1. ESF-3 primary and support agencies will identify, train, and assign personnel to maintain contact with, staff the SEOC as needed, and prepare

to execute missions in support of ESF-3 in the SEOC and in the field during periods of activation.

2. ESF-3 primary and support agencies must maintain procedures to deploy their agency's public works and engineering assets.

**B. SC National Guard**

1. Identify, train, and assign personnel to staff ESF-3 in the SEOC.
2. Identify available public works and engineering assets.
3. Coordinate with appropriate ESFs to identify water and sewer service restoration, clearance, potable water supply, and engineering requirements as soon as possible.
4. Recommend priorities to repair damaged water/sewer systems based on critical infrastructure need and coordinate the provision of temporary, alternate or interim sources of emergency power and water/sewer services.
5. In conjunction with ESF-19 (Military Support), plan for use of State military resources to support ESF-3 operations.
6. Develop and maintain listings of design professionals and construction contractors to include points-of-contact and telephone numbers, associated with public works and engineering functions.
7. Prioritize State flood fight missions and resources.
8. Coordinate State actions with the SEOC's Flood Fight Working Group which consists of the SEOC Supply Unit, Transportation Coordinator, Equipment Manager, ESF-1, ESF-7, ESF-19 and the US Army Corps of Engineers. This working group will coordinate flood fight strategies, resource requests, materials procurement, contracting, and transportation, emplacement of materials, recording and demobilization.

**C. SC State Fiscal Accountability Authority (State Engineers Office)**

1. Identify, train, and assign personnel to staff ESF-3 in the SEOC.
2. Assist in identifying available engineering assets.

**D. SC Department of Health and Environmental Control, Environmental Affairs.**

1. Provide technical assistance to affected water and sewer providers regarding water quantity and quality concerns to return systems to service as quickly as possible.

2. Provide technical assistance concerning the disposal of solid waste, construction and demolition waste, and storm debris. Coordinate with ESF-17 (Animal/Agriculture Emergency Response) for technical assistance regarding disposal of debris containing or consisting of animal carcasses.
  3. Provide status of DHEC-regulated dams (excluding FERC and USACE regulated dams) that may be threatened or will fail as a result of natural or manmade threats.
- E. SC Department of Labor, Licensing and Regulation
- Provide building assessment technical assistance; and building inspectors.
- F. SC Department of Labor, Licensing and Regulation, Division of Fire and Life Safety
- Provide inspectors (engineering and fire).
- G. SC Department of Transportation
- Provide available public works and engineering assets.
- H. SC Emergency Management Division
- Provide training for tagging damaged buildings.
- I. South Carolina Rural Water Association
- Provide technical assistance to support public works and water/wastewater.
- J. SC Water/Wastewater Agency Response Network (SCWARN)
- Provide database of assets to support public works.
- K. SC Law Enforcement Division
- Provide assets to support cyber consequence management assessment and restoration of critical infrastructure/facilities and fusion center interface/liaison.

## **VI. FEDERAL ASSISTANCE**

- A. This annex is supported by the National Response Framework, ESF-3 (Public Works and Engineering).
- B. Federal ESF-3 assists FEMA by coordinating and organizing the capabilities and resources of the Federal Government to facilitate the delivery of services, technical assistance, engineering expertise, construction management, and other support to prepare for, respond to, and/or recover from a disaster or an incident requiring a coordinated Federal response.

- C. Activities within the scope of Federal ESF-3 include:
1. Coordinating and supporting infrastructure risk and vulnerability assessments.
  2. Participating in pre-incident activities, such as pre-positioning assessment teams and contractors, and deployment of other advance teams.
  3. Participating in post-incident assessments of public works and infrastructure to help determine critical needs and potential workloads.
  4. Coordinate contract support for life-saving and life-sustaining services, to include providing emergency power, and other emergency commodities and services.
  5. Providing assistance in the monitoring and stabilization of damaged structures designed as immediate hazards to public health and safety; and structural specialist expertise to support inspection of mass care facilities and urban search and rescue operations.
  6. Providing emergency repair of damaged infrastructure and critical public facilities (temporary power, emergency water, sanitation systems, etc.); and supporting the restoration of critical navigation, flood control, and water infrastructure systems.
  7. Providing technical assistance to include engineering expertise, construction management, contracting, and inspection of private/commercial structures.
  8. Implementing and managing the Federal Public Assistance program and other recovery and mitigation programs to include efforts to permanently repair, replace, or relocate damaged or destroyed public facilities and infrastructure.
- D. Providing Federal public works and engineering support when there is a need for additional resources or capabilities to support and sustain the response and initial recovery.
- E. A Federal ESF-3 representative will normally deploy to the SEOC as a part of the IMAT, and a supplemental ESF-3 cell will also deploy which will evolve into the ESF-3 cell after the JFO is established.
- F. The Department of Defense (DoD)/USACE is the coordinating agency for providing ESF-3 technical assistance, engineering, and construction management resources and support during response activities.
- G. FEMA is the primary agency for providing ESF-3 recovery resources and support, to include assistance under the FEMA Stafford Act Public Assistance Program.

- H. Federal ESF-3 maintains close coordination with Federal, State, tribal, and local officials to determine potential needs for support and to track the status of response and recovery activities.
- I. Priorities are determined jointly among State, tribal, and/or local officials. Federal ESF-3 support is integrated into the overall Federal, State, tribal, local, Non-Governmental Organization (NGO), and private-sector efforts.