

ANNEX 3

ESF-3 - PUBLIC WORKS AND ENGINEERING

COORDINATING: SC National Guard

PRIMARY: State Fiscal Accountability Authority (Office of the State Engineer); SC Department of Environmental Services, South Carolina Rural Water Association; SC Water/Wastewater Agency Response Network

SUPPORT: SC Department of Labor, Licensing, and Regulation, Division of State Fire, and Building Codes Council; 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; Office of Regulatory Staff; South Carolina State Guard, US Army Corp of Engineers, Department of Homeland Security-Cybersecurity and Infrastructure Security Agency

I. INTRODUCTION

A. Public Works and Engineering refers to those engineering assets required to provide, restore or support critical infrastructure, including:

- Provide emergency power for response activities and restoration of normal operations
- Support restoration of water supply and sewer systems
- Coordinate technical expertise regarding the initial structural safety of damaged buildings and critical infrastructure
- Tracking, coordination and providing SITREPs of emergency repairs to public facilities and critical infrastructure

B. Assets, commodities, and systems that describe “Public Works and Engineering” include the following:

- Public and private dams
- Public water supply; potable and non-potable water
- Structures including, but not limited to, public buildings, bridges, tunnels, utility support structures, physical infrastructure supporting fuel supply, and similar or related structures.

C. Physical structures related to public utilities and services are essential for public health and safety. Any disaster may impact essential services, and restoration of any disruptions is critical to support communities.

II. PURPOSE

A. Provide public health and safety by supporting operations for the continuity of the public water supply (potable and non-potable), sewer facilities, waste disposal, public facilities and physical structures as needed.

- B. Coordinate engineering resources and expertise.
- C. Provide accurate damage assessments and coordinate other state resources required response operations and for the support of safety evaluations.

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. ESF-3 will coordinate with SCEMD and other ESF-3 primary and support agencies to coordinate or support the provision of:
 - Emergency power; restoration of water, sewer services, and other critical infrastructure
 - Engineering activities as required.
- D. 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.
- E. ESF-3 will coordinate with Federal assets to obtain Federal assistance as needed.

IV. ESF ACTIONS

- A. Prevention / Protection
 - 1. Develop and maintain a current inventory of equipment and supplies including Points of Contact (POC) and telephone numbers required to sustain emergency operations.
 - 2. Assess readiness to support response operations for any potential impacts to public works services during the emergency.
 - 3. Coordinate any protective resource requests from local emergency management officials.
 - 4. Coordinate with any requested FEMA and US Army Corps of Engineers (USACE) ESF-3 personnel in the SEOC and the JFO.
 - 5. ESF-3 will support the State's coordinated flood risk reduction operations to include planning, executing and monitoring related State activities.

B. Response

1. Maintain situational awareness related to any reports of damage to public works. Identify resources anticipated for restoration of impacts.
2. Triage all reports of damage based on the impacts to public health and safety in coordination with local and state officials.
3. Coordinate assistance and deployment of personnel, equipment, technical expertise, and other resources necessary to address damage resulting from an emergency or disaster to the State and/or local facilities and property.
4. Identify provisions of temporary, alternate, or interim sources of emergency power, communication infrastructure, water/sewer services, or other public works as needed and in coordination with other ESFs.

C. Recovery

1. Coordinate full damage assessments to assess areas requiring restoration and resources needed for restorative operations.
2. Track operations, report progress, and maintain appropriate records of restorative activities.
3. Designate ESF-3 representation on the Recovery Task Force.

D. Mitigation

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

V. RESPONSIBILITIES**A. General**

1. 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 Assistance Teams (IMAT) and the Joint Field Office (JFO).
2. In coordination with ESF-3 leadership, each primary ESF-3 agency will identify and assign personnel to the SEOC during an activation (in person or virtual as dictated by each emergency declaration), maintain contact and

communication with the ESF-3 team, and support field operations during activation depending on the needs of the team and the incident.

3. In coordination with ESF-3 leadership, each supporting ESF-3 agency will identify a POC to report to and coordinate with the ESF-3 team within the SEOC for any field operations and situational reports during periods of activation.
4. All ESF-3 agencies must maintain procedures to deploy corresponding public works and engineering assets.
5. All primary and supporting agencies will participate at least annually in State exercises and/or conduct an exercise of this annex and supporting SOPs.
6. Each ESF-3 agency will maintain appropriate records of time and costs incurred during the event.

B. SC National Guard

1. Identify available prevention, response, and recovery assets.
2. Provide leadership for ESF-3 operations.
3. Coordinate ESF-3's efforts to identify water, sewer service, and physical infrastructure restoration, clearance, public water supply, engineering requirements, and all other ESF activities.
4. Gather recommended priorities from ESF-3 agencies to repair damaged public works, coordinate provisions of temporary, alternate or interim sources of emergency power and water/sewer services, and deploy supporting resources as needed.
5. Participate in the SC Flood Response Working Group meetings, planning, and operations.

C. SC State Fiscal Accountability Authority (Office of the State Engineer)

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

D. SC Department of Environmental Services

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 DES-regulated dams (excluding FERC regulated and USACE operated regulated dams) that may be impacted by an emergency.
- E. SC Department of Labor, Licensing and Regulation
1. Division of Building Codes Council
Provide building assessment technical assistance and building inspectors.
 2. Division of State Fire
Provide inspectors (engineering and fire).
- F. SC Department of Transportation
Provide available public works and engineering assets.
- G. South Carolina Rural Water Association
1. Provide technical assistance to support the restoration of water/wastewater services.
 2. Coordinate and facilitate SCWARN resource requests and deployments.
- H. SC Water/Wastewater Agency Response Network (SCWARN)
Provide web-based resource request portal to support the restoration of water/wastewater services
- I. Clemson University Regulatory and Public Service Programs
1. Identify, train and assign personnel and support ESF-3 during periods of activation through coordination with ESF-17 (Animal and Agricultural Response)
 2. RPSP will provide laboratory services for analysis of pesticide or agricultural chemicals as needed under emergency response.
 3. Requests for laboratory assistance for pesticide or agricultural chemical samples can be sent through ESF-17 or directly to RPSP.
- J. SC Department of Natural Resources, Land, Water, and Conservation
1. Assign personnel by request to the SEOC to support ESF-3 during periods

of activation.

2. Provide material and technical support (to include drone and vehicle support) to ESF-3 activities during periods of activation.

K. Department of Public Safety (DPS)

1. Identify, train and assign personnel to staff and support ESF-3 during periods of activation.

L. Office of Regulatory Staff (ORS)

1. Maintain communications with electric utilities in responding to and recovering from emergencies regarding electric generating capacity shortages, electric generating fuel shortages, transmission and distribution line outages, and electrical service outages affecting the public and coordinate with ESF-3 to prioritize water/wastewater systems, when possible.
2. Communicate efforts to manage fuels and fuel supplies in the event of a shortage impacting residential, commercial, or industrial customers and assist ESF-3 in locating additional fuel supplies, if necessary.

M. State Guard

1. Identify, train and assign personnel to maintain contact with and prepare to execute missions in support of SCNG during periods of activation.
2. Provide personnel to support SCNG operations.
3. Coordinate State Guard mission assignments, reporting, and tasks through SCNG JOC.

N. United States Army Corps of Engineers (USACE)

1. Assign personnel by request to the SEOC to support ESF-3 during periods of activation.
2. Upon notification of needs ahead of time, provide material and technical support to ESF-3 activities during periods of activation.

O. Department of Homeland Security-Cybersecurity and Infrastructure Security Agency (DHS/CISA)

1. Maintain a current list of critical infrastructure/facility systems.
2. Provide upstream and downstream mapping of potential impact.

VI. FEDERAL ASSISTANCE

- A. This annex is supported by the National Response Framework, Federal 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. 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 infrastructure to help determine critical needs and potential workloads.
 - 4. Coordinate contract support for lifesaving 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 designated as immediate hazards to public health and safety; and provide structural 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 includes 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.
- C. Federal when there is a need for additional resources or capabilities to sustain response and recovery operations.
 - 1. A Federal ESF-3 representative will deploy upon request 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.

- D. The Department of War (DoW)/USACE is the coordinating agency for providing ESF-3 technical assistance, engineering, and construction management resources and support during response activities.
- E. FEMA is the primary agency for providing ESF-3 recovery resources and support, to include assistance under the FEMA Stafford Act Public Assistance Program.