

Mississippi Emergency Support Function #3 – Public Works and Engineering Annex

ESF #3 Coordinator

Mississippi Military Department - Construction and Facilities Management Office

Primary Agency

Mississippi Military Department – Office of the Adjutant General

Support Agencies

Mississippi Emergency Management Agency
Mississippi Department of Health-Water Supply Division
Mississippi Department of Environmental Quality-Wastewater Division
Mississippi Department of Transportation
Mississippi Department of Corrections
Mississippi Development Authority-Energy Division
Mississippi Forestry Commission
Mississippi Department of Finance and Administration
Mississippi Military Department
Mississippi Department of Marine Resources
Mississippi Department of Wildlife Fisheries, and Parks
Mississippi Public Service Commission, Public Utilities Staff
Mississippi Levee Board
Yazoo - Mississippi Delta Levee Board

Non-Governmental Organizations

AL/MS Section, American Water Works Association
Mississippi Water and Pollution Control Operators Association
Mississippi Rural Water Association
Mississippi Chapter of the American Public Works Association
Mississippi Water Environment Association
Building Officials of Mississippi
Community Resource Group/Mississippi Rural Community Assistance Program
Mississippi Municipal League
Mississippi Association of Supervisors

Federal ESF Coordinator

Department of Defense/U.S. Army Corps of Engineers

Federal Primary Agencies

Department of Defense/U.S. Army Corps of Engineers
Department of Homeland Security/Emergency Preparedness and Response/ Federal Emergency Management Agency

Introduction

Purpose

The purpose of this Emergency Support Function (ESF) is to describe how the public works and engineering tasks at the state level will be accomplished in disaster response and recovery and to designate the agencies responsible for their accomplishment. This includes designating state-level organizations to provide technical advice, engineering services emergency repair, and contracting for repairs and restoration to both state properties and to local governments. ESF #3 provides technical advice and evaluation, communicates and coordinates through Mississippi Emergency Management Agency (MEMA) with affected areas on infrastructure, recommends for tasking engineering services, contracts for construction management and inspection, and contracts for the emergency repair of local transportation systems, water and wastewater treatment facilities, emergency power, and other related support to assist the state in meeting goals related to lifesaving and life-sustaining actions, damage mitigation, and recovery activities following a major disaster or emergency.

Scope

Activities within the scope of ESF #3 include, but are not limited to:

- If an emergency or a major disaster should overwhelm the resources and capabilities of public works at the local government level, ESF #3 of the Comprehensive Emergency Management Plan (CEMP) will be activated to provide support in accordance with concepts of the National Response Framework (NRF).
- If the mobilization of Federal ESF #3 is required, the United States Army Corps of Engineers (USACE) is the primary agency.
- Participation in pre-disaster activities, such as state-sponsored training, pre-positioning assessment teams, mobilization of facilities, communications and transportation needs, where applicable, and deployment of other advance elements.
- Participation in needs/damage assessments immediately following a disaster.
- Coordinate emergency clearance of debris to enable reconnaissance of the damaged areas and passage of emergency personnel and equipment for lifesaving, property protection, and health and safety.
- Coordinate removal and disposal of debris from public property.
- Coordinate emergency access routes which include repairs to damaged streets, bridges, ports, waterways, airfields, and other facilities necessary for emergency access to disaster victims.
- Coordinate emergency restoration of critical public facilities, including the temporary restoration of water supplies and wastewater treatment systems.
- Coordinate inspection of damaged structures and facilities. Monitor demolition or stabilization designated by State or local government as immediate hazards to public health and safety, or as necessary to facilitate lifesaving operations (temporary protective measures to abate immediate hazards to the public for health and safety reasons until demolition is accomplished).
- Coordinate emergency contracting to support public health and safety such as providing for potable water, ice, or power.
- Coordinate technical assistance, including inspection of private residential structures and commercial structures.
- Support to other ESFs as outlined in the NRF.
- Assessment and coordination of emergency power to public facilities.

Policies

- The state, through the State Emergency Operations Center (SEOC), will maintain overall direction, control, and coordination of the response and recovery efforts through coordination with all participating agencies to include federal agencies tasked by the Federal Emergency Management Agency (FEMA).

- The Mississippi Military Department (MMD) will appoint overall mission coordinators for all ESF #3 response and recovery activities at the SEOC and Joint Field Office (JFO) as appropriate. The ESF #3 Emergency Coordinating Officer (ECO) appointed by the MMD will handle requests at the SEOC for emergency resources. ESF #3 will coordinate within MEMA protocol to continue to provide resources using support agencies and other agency resources and capabilities to affected communities in the recovery process.
- MMD will develop work priorities in cooperation with the SEOC and in coordination with the State Coordinating Officer (SCO).

Support

- ESF #3 primary and support agencies will coordinate with their respective private entities and non-governmental organizations to ensure ESF #3 responsibilities are being carried out.

Federal Government

Coordination with respective state and federal agencies will be ongoing, as follows:

- Mississippi Department of Environmental Quality (MDEQ)—Environmental Protection Agency (EPA), Region 4
- Mississippi State Department of Health (MSDH)—EPA, Region 4
- Mississippi Department of Transportation (MDOT)—Federal Highway Administration, U.S. Department of Transportation
- MEMA—FEMA; USACE
- MMD—National Guard Bureau/1st Army/U.S. Northern Command; USACE

Concept of Operations

Assumptions

- Most emergencies and disasters involve damage to property to some extent. Roads, bridges, public utility systems, public and private buildings, homes, and other facilities will have to be inspected and either cleared for use, reinforced, quarantined, or demolished to ensure safety.
- The inspection, repair, or demolition of buildings and infrastructure damaged by a disaster is the responsibility of local officials, as is the enforcement of local building, zoning, and subdivision regulations. ESF #3's function is resource assistance. ESF #3 may task inspectors to jurisdictions through Mutual Aid resources for assessments; the local jurisdiction will make final determinations and take appropriate action.
- Upon successful reinstatement of public water supplies, the probable overflow of inoperable wastewater collection and treatment systems may compound public health concerns.

- In the event power is lost and alternate power supplies are not adequate to the infrastructure, a critical water shortage may develop which can only be met through transporting bulk water into the affected area in tanker trucks or by using portable treatment facilities with local surface supply. Adequate pressurized water supplies or operable hydrants may not be available for fire-fighting operations.
- Immediate evaluation of the safety of public and private structural and non-structural damage will be critical to preventing further damage and to protect the public's health and welfare.
- Debris will restrict the use of streets and highways, making some impassable. Public utilities will also be damaged/covered by debris and may be partially or fully inoperable.
- Vital public works and engineering trucks and equipment in the immediate disaster area may be damaged or temporarily inaccessible for response and recovery applications.
- State or federal assistance may be required to identify and deploy resources from outside the affected area to ensure a timely, efficient, and effective response and recovery.
- Access to the disaster areas will be dependent upon the re-establishment of ground and water routes. In many locations, debris clearance and emergency road repairs will be given top priority to support immediate lifesaving emergency response activities.
- Early damage assessments will be general, incomplete, and may be inaccurate. Rapid assessments of the disaster area are required to determine critical response times and potential work loads.
- Methodology for prioritizing tasks will generally be found to be ranked by public health/safety and population affected.
- To minimize threats to public health, emergency environmental waivers and legal clearances may be needed to dispose of emergency debris and materials from demolition activities. Local authorities are responsible for obtaining required waivers and clearances.
- Significant numbers of personnel having engineering and construction skills and construction equipment and materials may be required from outside the disaster area.
- Primary agencies (including MMD) and support agencies will perform tasks under their own authorities, as applicable, in addition to missions received under the authority of MEMA.
- Maps (electronic or hard-copy) may be inaccessible locally for many utilities.
- Numerous volunteering entities, both governmental and non-governmental may mobilize personnel, supplies and equipment to affected areas with neither coordination nor communication with the ESF #3 cell. Duplication, chaos and confusion may ensue and vital resources will be found to have been better tasked to other areas.
- Regional and national resource networks may fail to operate.
- MMD and support agency personnel required to man the ESF #3 cell may not have access to fuel for personally owned vehicles (POV) to travel to work or field.
- Jurisdictions from both in and out-of-state will offer services to those in need.

- Local officials in affected areas will have little knowledge of procedures available to them in the aftermath of disaster (emergency procurement procedure). Where adequate Mutual Aid Agreements (MAA) are not in place, resistance to signing new ones will prevail.
- Local officials will resist “paying up front”.
- Attempts will be made to travel the “100% Assistance” path, delaying acceptable tasking options.
- Contractors offering ‘free and voluntary’ services or supplies will be on the scene seeking travel pass.

General

- Local officials, through their county Emergency Operations Centers (EOCs), should be encouraged to be self-sufficient during the first 2 – 3 days of a disaster.
- Local officials and managers should channel their requests for assistance where possible through county EOCs.
- County EOCs should encourage local officials to learn more about the benefits of Mutual-Aid Agreements (MAA), particularly for their utilities.
- Local officials must conduct initial damage assessment to determine the severity and magnitude of property damage in quantity, community impact, and dollar amount. These results will be reported to the SEOC where appropriate response actions will be initiated. Where possible, such communication should be routed through the jurisdiction’s county EOC.
- MMD is the leading agency responsible for ESF #3. The MMD Emergency Coordinating Officer (ECO) for ESF #3 will coordinate with all appropriate agencies/departments and organizations to ensure operational readiness in time of emergency. According to the following priorities, state program assistance for this function in conjunction with other ESFs includes:
 - Reconnaissance of the damaged areas and routes to be accessed by emergency personnel and equipment for lifesaving, life protecting, and health and safety purposes during the immediate response phase
 - Power generation support to affected areas
 - Emergency clearance of debris, ice, or snow as prioritized according to the needs of the affected areas
 - Emergency construction of temporary access to emergency routes such as streets, roads, bridges, waterways, airfields, and any other facilities necessary for movement of rescue personnel
 - Emergency construction management and inspection in conjunction with Federal ESF #3
 - Technical advice
 - Engineering services
 - Emergency contracting

- Regular situation reporting to the SEOC Operations Chief and ESF #5
- As the emergency or disaster situation exceeds the resources of the state, the MMD ECO will request assistance from the federal representative for ESF #3 through MEMA's procedural process.
- If a joint Preliminary Damage Assessment (PDA) is needed to verify the extent of the damage, FEMA representatives will join with state and local representatives to conduct these surveys to provide data needed for the Governor to request a Presidential Disaster Declaration.

Organization

State Emergency Operations Center

ESF #3 is part of the SEOC Operations Section and the Emergency Services Branch.

Headquarters ESF #3 Support

Protocol and Record keeping:

- MMD, as primary for ESF #3, and all participating agencies will follow administrative procedures and keep appropriate records according to prescribed guidance and standard Operating Procedures (SOPs).
- MEMA establishes/approves ESF #3 procedures.
- ESF #3 will operate in concert with the Incident Command System (ICS).
- MMD will assist in the development and maintenance of the ESF #3 SOP.
- Resources may be obtained by activating mutual aid agreements, Emergency Management Assistance Compact (EMAC), and Statewide Mutual Aid Compact (SMAC) through pre-existing state contracts, and through emergency bidding procedures.
- Resources acquired through mutual aid agreements, such as EMAC, SMAC, etc. will be managed according to the requirements of those agreements.

Contracting:

- Prior arrangements must be developed for direct contracting with private contractors, vendors, and engineers to assist in response and recovery efforts.

Mutual Aid Agreements

- Local government support is available to members of the State Mutual Aid Compact (SMAC).
- Support from other states is available through the Emergency Management Assistance Compact (EMAC).
- Other Mutual Aid Agreement Networks for interstate and intrastate assistance may exist for utilities; it should be strongly urged of those networks to coordinate their activities through ESF #3.

Operations and Planning ESF #3 Support

- ESF #3 will report all activity via appropriate media as required by MEMA.
- ESF #3 will provide daily situation reporting to ESF#5 as directed by that support function.

Field Units

Requisite- All mobilization, dispatch, equipping, and billeting of advance personnel shall be coordinated through MEMA for travel pass. All field personnel shall request needs and report accordingly through ESF #3. Support agency personnel will mobilize through their respective agencies.

- ESF #3 may be asked by MEMA to provide personnel to the Joint Field Office (JFO) to work closely with their federal counterparts at the established JFO(s) and in the field.
- ESF #3 may, through MSDH, dispatch couriers to accept and deliver to the state laboratory potable water samples from affected communities.
- ESF #3 may, through MSDH and/or MDEQ, arrange for portable laboratories for environmental analysis at prescribed locations in order to expedite public water & wastewater sampling.
- ESF #3 may, through MDEQ and/or MSDH, establish temporary field offices and communications centers for monitoring and assessment of potable water, wastewater, waste disposal, and fire protection systems.
- ESF #3 may, through MDOT, dispatch inspecting engineers, or other support.

Actions

Preparedness

The MMD, in conjunction with support agencies:

- Ensures that state-level ESF #3 SOPs are developed and maintained that conform to this plan and provide greater detail on the ESF operations.
- Trains and exercises MS ESF #3 personnel.
- Designates an ECO, alternate ECO, and an ESF #3 liaison who will go to the SEOC, State Hurricane Support Center (SHSC), State Earthquake Support Center (SESC), Joint Field Operations (JFO), or on the State Emergency Response Team (SERT), Rapid Needs Assessment Team (RNA), or other areas of operation.

All agencies with MS-ESF #3 responsibilities:

- Support development and maintenance of SOPs to enable them to perform appropriate levels of mitigation, preparedness, response, and recovery related to public works and engineering.

- Assign and train personnel to support emergency operations at the SEOC, SHSC, SESC, JFO, or on the SERT, RNA, or other areas of operation.
- Participate in training and exercises when scheduled.
- Ensure their administrative, supervisory and technical personnel remain aware of the agency's role with MEMA and ESF #3.

Pre-Incident

- Provide an ECO (and alternate if 24- hour coverage is necessary) and MS-ESF #3 liaison to the SEOC.
- Arrange meeting with MEMA Director on MMD actions to be taken; request assignment of MEMA ESF #3 Liaison Officer (LNO) to MMD.
- Assign responsibility to MMD personnel in regard to ESF #3 Team.
- Notify support agency and partners on activation as needed and minimal staffing requirements.
- Conduct preliminary staff meeting with complete ESF #3 team at EOC facility assigned to establish strategies for approaching incident(s).

Incident

- Upon activation of ESF #3, ECO will communicate pertinent information to all ESF #3 members. Such information will be a complete orientation of the ESF #3 mission, purpose, and scope of work. Issue, or have available ESF #3 SOP manual for team reference.
- Ensure adequate communications are established and maintained.
- Ensure all MEMA incident forms to be used by the team are in supply.
- Obtain an initial situation and damage assessment through established intelligence procedures.
- Establish report with geospatial technology personnel according to MEMA mapping procurement guidelines.
- Coordinate the distribution of assets as needed.
- Per SOP, establish and maintain a complete log of actions taken, resource orders, records, and reports.
- Establish per SOP protocols for interface with federal counterparts, if applicable.

ESF #3 Incident Actions

Activities within the ESF #3 function include, but are not limited to, the following:

- Participation in pre-incident activities, such as pre-positioning assessment teams and contractors, and deploying advance support elements.

- Participation in post-incident assessments of public works and infrastructure to help determine critical needs and potential workloads.
- Implementation of structural and nonstructural mitigation measures, including deploying of protective measures, to minimize adverse effects or fully protect resources prior to an incident.
- Support in the monitoring and stabilization of damaged structures and the demolition of structures designated as immediate hazards to public health and safety.
- Support in emergency repair of damaged infrastructure and critical public facilities (temporary power, emergency water, sanitation & transportation systems, etc.), supporting the restoration of critical navigation, flood control, and other water infrastructure systems.
- Management and coordination of monitoring, and/or providing technical advice in the clearance and removal of debris from public property, and the reestablishment of ground and water routes into impacted areas. The management of contaminated debris is coordinated with ESF #10— Oil and Hazardous Materials Response. For purposes of ESF #3, contaminated debris is intended to mean debris that displays the same characteristics of regulated hazardous materials. Waste management related to hazardous site remediation is addressed under ESF #10.
- Providing technical assistance to include: engineering expertise, construction coordination, contracting assistance, and inspection of public structures.

Recovery

- Continue actions initiated during response as long as needed.
- Undertake recovery actions as required by MEMA.

Post-Incident

- Prepare an after-action report. The after-action report identifies key problems, indicates how they are to be/were solved, and makes recommendations for improving ESF response operations. All ESF #3 staff and organizations assist in preparation of the after-action report.
- Review and recommend revision to plans and procedures as determined necessary.
- Copy, catalogue and properly file all records and documents pertaining to incident. Maintain in electronic and paper form.
- Compare ESF #3 staff records with MEMA network tasking and tracking system to assure accuracy.

Responsibilities

Mississippi Military Department (MMD)–ESF Coordinator/Primary Agency

- Develop Standard Operating Procedures (SOPs) in conjunction with MEMA and ESF #3 supporting agencies.

- Designate individuals who will report to the SEOC upon activation and will act as the ECO for ESF #3 (ensure an alternate ECO for 24-hour availability).
- Coordinate resources and prioritize needs of engineering and public works support agencies regarding the provision of manpower and equipment for debris removal, damage assessment, and clearing roadways for accessibility during emergency and/or disaster situations.

Support Agencies

Agency	Functions
Mississippi State Department of Health	<ul style="list-style-type: none"> • Provide information to Water Supply Engineer for ESF #3 team regarding state public and private potable water supplies and treatment processes (<i>provide alternate Point of Contact (POC) for 24-hour duty</i>). • Establish, maintain, and have available effective database(s) on all public & private water supply infrastructures, including multiple POC information. • Obtain and utilize, where appropriate, agency authority to mobilize field personnel and effect necessary procurement. • Recommend/Request Mission Assignments (MA) for assisting public water supplies.
Mississippi Bureau of Pollution Control	<ul style="list-style-type: none"> • Supply Wastewater Engineer for ESF #3 team seat information regarding all state public and private sanitary sewer systems and wastewater treatment processes (<i>provide alternate POC for 24-hour duty</i>). • Establish and maintain effective database(s) on all public & private wastewater system infrastructures, including multiple POC information. • Obtain and utilize, where appropriate, agency authority to mobilize field personnel and effect necessary procurement. • Recommend/Request Mission Assignments (MA) for assisting public wastewater systems. • Assess environmental damage and to wastewater systems. • Review plans for debris management activities to ensure compliance with existing state and federal environmental regulations. • Develop protocols and procedures for the opening, operation, and closing on debris staging sites, dumps and other facilities necessary for debris operations.
Mississippi Military Department	<ul style="list-style-type: none"> • Mobilization of personnel and equipment, where necessary, to assist forward field ESF #3 elements. • Assist with sandbagging and construction of temporary levees. • Assist in removal of debris from public rights of way and critical facilities. • Assist in Flood Flight Operations. • Provide general engineering support.

Agency	Functions
Mississippi Department of Transportation	<ul style="list-style-type: none"> • Supply Transportation Engineer for ESF #3 team seat (<i>provide alternate POC for 24-hour duty</i>). • Assess damage to roadways, traffic control systems, bridges, culverts, airports, ports, and harbors and other transportation-related infrastructure. • Dispatch MDOT technical assistance personnel. • Assist in pumping out flooded areas. • Recommend/Request Mission Assignments (MA) for assisting affected area. • Establish and maintain effective database(s) on all regional MDOT offices, including multiple POC information.
Mississippi Department of Corrections	<ul style="list-style-type: none"> • Identify to ESF #3 appropriate personnel for potential ESF #3 team seat (<i>provide alternate POC for 24-hour duty</i>). • Supply supervised manpower for debris and arboreal removal, sandbagging, emergency construction and other response efforts where required. • Provide Mutual Aid personnel and equipment to restore damaged facilities to full operation. • Supply supervised manpower where required throughout recovery process.
Mississippi Department of Economic and Community Development, Energy Division	<ul style="list-style-type: none"> • Identify to ESF #3 appropriate personnel for potential ESF #3 team seat (<i>provide alternate POC for 24-hour duty</i>). • Perform applicable responsibilities as established in ESF #12, Energy. • Provide reporting to ESF #3 on commercial power status in affected area(s).
Mississippi Emergency Management Agency	<ul style="list-style-type: none"> • Provide individual with considerable Public Works experience to serve as Liaison Officer (LNO) between MEMA SEOC, ESF #5 and MMD/ESF #3. • Initiate and coordinate the debris removal process following a disaster. • Assist local officials with site determination and include selected sites and related contacts in each county CEMP. • Assist state agencies and local governments in the preparation and submission of federal disaster assistance applications. • Process and initiate mission assignments (MAs) or Action Request Form (ARFs), where appropriate. • Process by electronic means requests not directly sent through ESF #3 for their action and provide requests to ESF #3 for tasking. • Provide ESF #3 access to EOC computer and other networking structure.
Mississippi Department of Finance and Administration	<ul style="list-style-type: none"> • Provide architectural and engineering technical assistance to evaluate damaged structures, especially public buildings and critical facilities.
Mississippi Forestry Commission	<ul style="list-style-type: none"> • Identify to ESF #3 appropriate personnel for potential ESF #3 team seat (<i>provide alternate POC for 24-hour duty</i>). • Provide qualified personnel and equipment for debris clearance on state-owned lands as necessary. • Provide technical assistance to evaluate the risk of fire from debris and other operations. • Provide technical assistance in Incident Command System (ICS) activities.

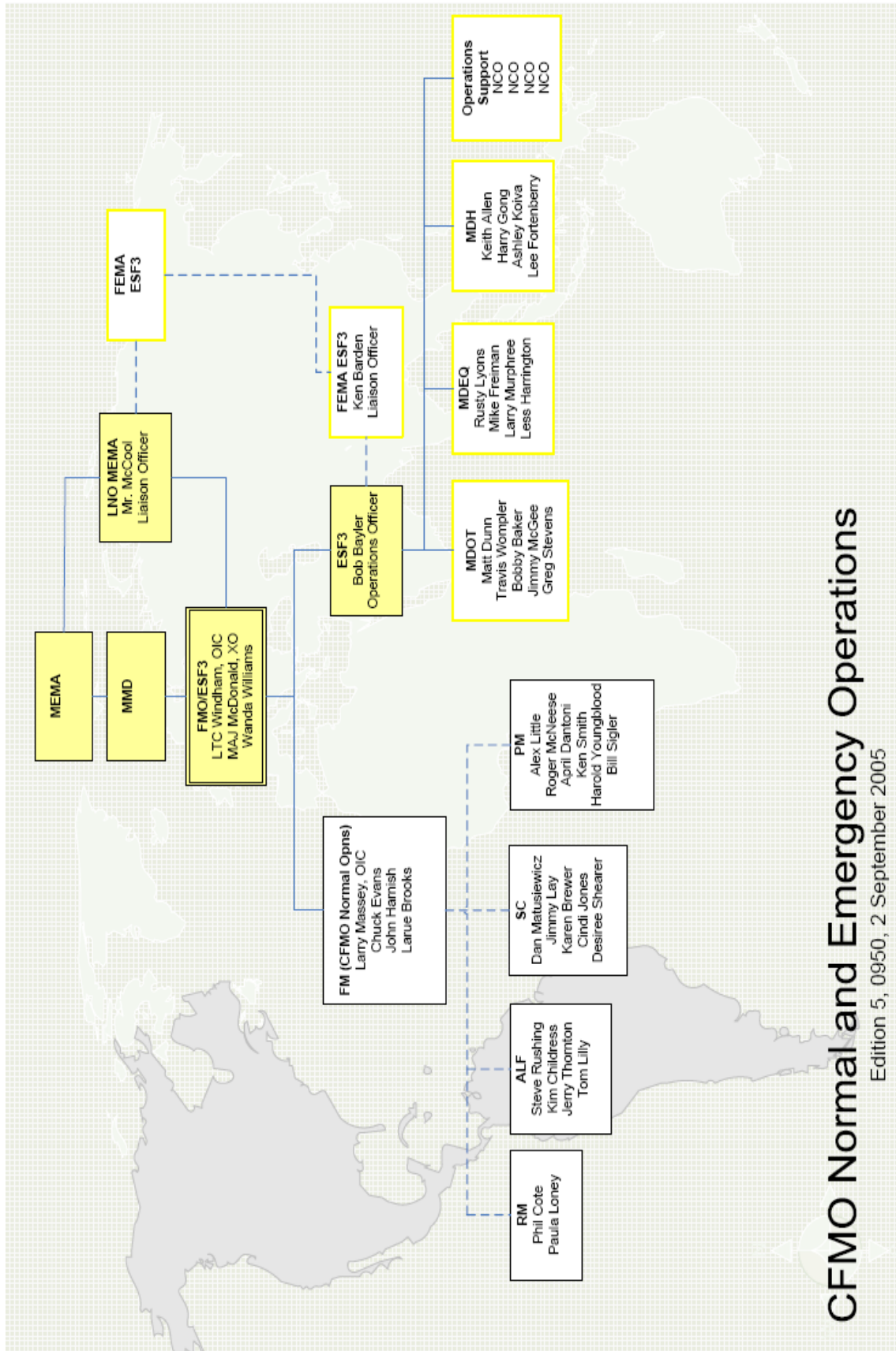
Agency	Functions
Mississippi Department of Marine Resources	<ul style="list-style-type: none"> • Identify to ESF #3 appropriate personnel for potential ESF #3 team seat (<i>provide alternate POC for 24-hour duty</i>). • Assess damage to coastal preserves and public trust tidelands. • Assist in evaluating the extent of environmental damage to areas outside of the coastal preserves and public trust tidelands. • Streamline the permit procedures for disaster-related coastal restoration activities. • Assess damage to all beaches for future evaluation & restoration. • Assess damage to ports and harbors.
Mississippi Department of Wildlife, Fisheries, and Parks	<ul style="list-style-type: none"> • Identify to ESF #3 appropriate personnel for potential ESF #3 team seat (<i>provide alternate POC for 24-hour duty</i>). • Integral to the environmental permit process. • Coordinate the removal of debris from all state parks and recreational facilities.
Mississippi Public Service Commission – Public Utilities Staff	<ul style="list-style-type: none"> • Assist Mississippi Development Authority (MDA) in performing applicable responsibilities as established in ESF #12. • Provide information support on private utilities. • Provide Certificated Mapping information for all utilities via appropriate media.
Mississippi Levee Board	<ul style="list-style-type: none"> • Coordinate Flood Flight Operations between local, state, and federal partners within its area of responsibility. • Provide technical and resource support for other operations as available.
Yazoo - Mississippi Delta Levee Board	<ul style="list-style-type: none"> • Coordinate Flood Fight Operations between local, state, and federal partners within its area of responsibility. • Provide technical and resource support for other operations as available. • Support Preparedness, Response, and Recovery activities by making emergency management centers available to partner organizations as long as it does not interfere with the Yazoo-Mississippi Delta Levee Board (YMDLB) operations.
Mississippi Non-Governmental Organizations	<ul style="list-style-type: none"> • Sponsor training and awareness of disaster operations so that individual members will be better able to prepare for, respond to, and recover from all types of hazards. • Assist in identifying unmet needs among members and relaying this information to ESF #3. • Coordinate assistance between members through ESF #3 to maintain situational awareness of response and recovery activities.

ESF #3 Review and Maintenance

As a minimum, the state agency contact will coordinate and conduct an annual review of this annex with all support agencies. Additional reviews may be conducted if experience with an incident or regulatory changes indicate a need. Recommendations for change will be submitted to MEMA for approval, publication, and distribution.

Appendices

Appendix 1 – CFMO Normal and Emergency Operations



CFMO Normal and Emergency Operations

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