

Massachusetts Emergency Support Function 3

PUBLIC WORKS AND ENGINEERING

Responsible Agencies

State Agencies

Primary State Agency

Department of Conservation and Recreation

- Division of State Parks
- Division of Water Supply Protection
- Office of Dam Safety
- Division of Engineering

Supporting State Agencies

Department of Environmental Protection

Division of Capital Asset Management and Maintenance

Massachusetts Department of Transportation

- Massachusetts Bay Transportation Authority
- Massachusetts Highway Division
- Massachusetts Port Authority

Massachusetts Water Resources Authority

Office of Public Safety and Inspections

Supporting Federal Agencies

United States Army Corps of Engineers

Federal Emergency Management Agency

Supporting Organizations

Boston Society of Architects

Boston Society of Civil Engineers Section (American Society of Civil Engineers)

American Public Works Association, New England Chapter

Massachusetts Municipal Association
Massachusetts Highway Association
Massachusetts Federation of Building Officials
Massachusetts Water Works Association
New England Water Works
New England Interstate Water Pollution Control Commission
Massachusetts Water Pollution Control Association

1.0. INTRODUCTION

1.1. Purpose

Massachusetts Emergency Support Function 3 (MAESF-3) *Public Works and Engineering* provides a framework for coordination and cooperation across state agencies regarding public works and engineering needs, issues, and activities before, during, and after a disaster or emergency in the Commonwealth.

In addition, this Annex details how the Commonwealth will provide public works, inspectional, and engineering assistance to local governments in support of life safety and protection activities prior to, during, and immediately following a major disaster or emergency.

For MAESF-3 purposes, emergency public works and engineering activities are defined as:

Public Works

Coordination of resources, including engineering, procurement and debris clearance, 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.

Inspectional and Engineering

Coordination of resources to support post-disaster evaluation of: buildings and similar structures to determine safety and usability, such as 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 (i.e. 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.

1.2. Scope

This Annex is applicable to agencies and departments within the Commonwealth, as well as affiliated public works and engineering partners, with a role in public works, inspectional, and engineering related activities in response to a disaster.

The objectives of MAESF-3 are to address the operational priorities of protecting lives and providing for the health and safety of the general public by attaining some or all of the following:

- Establish a framework for state-level public works, inspectional, and engineering related emergency preparedness, mitigation, response, and recovery activities.
- Coordinate state-level public works, inspectional, and engineering related response and recovery operations to maximize the use of resources.

- Share information and coordinate response activities across pertinent state agencies regarding public works, inspectional, and engineering related requests for assistance in a manner that ensures consistency with established state policies and procedures.
- Monitor and mitigate potential effects of a disaster on critical infrastructure before, during, and after an incident, with particular attention to problems that may threaten public safety or disrupt response activities.
- Provide situational awareness and expertise on the status of public works and engineering related infrastructure in Massachusetts and neighboring states to the SEOC.
- Provide technical assistance and evaluations, including engineering expertise, construction management, contracting and real estate services.
- During disasters coordinate resources to conduct safety inspections and other assistance for first responders.
- Direct state assistance and emergency contracting services for repair and restoration of potable water, infrastructure, wastewater and solid waste facilities.
- Coordinate resources to support emergency debris management operations for passage of emergency response personnel, equipment, and supplies.
- Coordinate resources to support the emergency repair and restoration of damaged emergency access routes necessary for the transportation of emergency rescue personnel and supplies.
- Coordinate resources to support emergency demolition and stabilization of damaged structures, as appropriate, to facilitate emergency response operations.
- Coordinate resources to support the emergency demolition or stabilization of dams.
- Process all public works and engineering assistance requests from local governments and other MAESFs.
- Coordinate resources to support emergency repair or procurement of backup power sources to critical infrastructure, including energy systems.

1.3. Policies

- MAESF-3 is an annex of the Massachusetts Comprehensive Emergency Management Plan (CEMP).
- As an incident requires, or at the direction of the MEMA Director, MAESF-3 will be activated to coordinate resources to support public works and engineering response.
- MAESF-3 will operate from the State Emergency Operations Center (SEOC). MEMA and the SEOC provide overall direction and control for the incident as it develops.
- All agencies assigned responsibilities within MAESF-3 will develop and maintain the necessary plans, standard operating procedures, mutual aid agreements, and model contracts to successfully accomplish their tasks.

- State assistance provided to cities and towns may consist of personnel, equipment, facilities, materials and supplies, and/or subject matter expertise.
- State assistance through MAESF-3 will only be provided once a city or town has fully committed all public works, inspectional and engineering resources available to it, including resources available through existing mutual aid agreements and private-sector resources that the jurisdiction may have under contract.
- MAESF-3 supports, but does not supplant local and federal plans or policies.
- Local public works, inspectional and engineering assets will remain in the control of the respective jurisdiction.
- State assistance will be prioritized in the following manner:
 - Life Safety, including the evacuation of individuals from at-risk areas.
 - Emergency repair or demolition of infrastructure and critical facilities, including all aspects of the Commonwealth's construction, water, waste water, and solid waste infrastructure.
 - Emergency debris clearance of affected transportation corridors to enable passage of emergency traffic.
 - Management of debris operations to allow utility crews access to facilitate repairs of other damaged infrastructure.
- Hazardous materials will need special handling from appropriately trained and equipped teams.
- State assistance is intended to support life safety, immediate public health and safety needs, and the re-opening of transportation corridors and performance of temporary repairs to facilitate the passage of emergency traffic, not to restore damaged infrastructure to pre-disaster conditions. Permanent repairs and final debris removal/disposal following an emergency or disaster remain the responsibility of local governments.
- The state has resources and expertise that can be used to supplement local efforts. Federal assistance will be requested to support state and local efforts if an incident exceeds state and local capabilities.

2.0 SITUATION AND ASSUMPTIONS

2.1. Situation

During an emergency or disaster, a variety of hazards and disruptions to services could occur. Streets, roads and bridges could be damaged or destroyed, covered with water, mud or deep snow, or blocked by debris. Ground, air, rail, and water routes may be impassable or severely obstructed in the affected area. Homes, businesses, major industries, and commercial enterprises may be weakened or destroyed. Signs and signals may be destroyed

or may not be visible due to the event. Water systems and/or wastewater facilities may be damaged or threatened, storm drains may be damaged or plugged, and many structures may be compromised. Portions of the Commonwealth may be physically isolated due to an event. Critical facilities or equipment may be damaged or inaccessible, resulting in scattered or widespread areas affected by power outages, loss of water, or loss of sewage collection and treatment facilities. Normal communication systems may be damaged or overloaded. The structural integrity of many public buildings, bridges, dams, roadways and other facilities may be compromised, posing a risk to emergency workers and the public. Many of the facilities may need to be inspected, reinforced, demolished, or isolated to ensure public safety.

A large enough event may adversely affect the ability of local responders to perform their emergency duties; some employees may not be able to report for work. Local governments have a limited capacity and an immediate requirement to provide services, which may become quickly overwhelming following a catastrophic incident. Local governments will depend on mutual aid and other forms of assistance in order to respond to and recover from the incident. Need for public works and engineering services may exceed the Commonwealth's resources, and as such, 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 from the event.

2.2. Planning Assumptions

- Local governments have emergency management resources, plans, and procedures already in place.
- MAESF-3 responsible agencies have developed internal plans and procedures to respond to a disaster or emergency.
- The responsible agencies are assigned to MAESF-3 to support the restoration of public works infrastructures after a major disaster or emergency. Although the composition of the responding agencies will likely change as a result of the nature of the event and planning process, it is anticipated that these agencies will constitute the basis for providing public works, inspectional and engineering-type assistance to local governments.
- Many incidents, such as power outages, water and sewer service disruptions, and emergency building inspection are local in scope and can be addressed by local government or state agencies as part of normal day-to-day operations using resources readily available to them.
- When an incident occurs, local government will use their own response resources first, supplemented as needed by resources available through mutual aid or private sector contracts. Local governments will request state assistance when their ability to respond to the incident exceeds, or is expected to exceed, their own capacity.
- Demand on local resources in anticipation of or in response to a major threat may quickly overwhelm local public works, inspectional and engineering capabilities for personnel and equipment.

- Local public works, inspectional and engineering resources may be damaged and potentially unavailable to support local response efforts requiring immediate state assistance. A multitude of basic public works, inspectional and engineering services will be needed from the state following a disaster to clear debris, perform damage assessments, conduct structural evaluations, make emergency repairs to essential public facilities, reduce hazards by stabilizing or demolishing structures, and provide emergency water for human health needs and firefighting.
- It is anticipated that the majority of the requests for public works, inspectional and engineering services will concern the repair and restoration of emergency access routes, including the clearance, removal, storage and disposal of disaster debris.
- Rapid assessment of damages in disaster areas will be necessary to determine potential workloads and prioritization.
- Emergency environmental and other legal waivers for the disposal of snow, debris, animal carcasses, construction material, and other waste will need to be secured, as debris may include trees, rocks, dirt and sand, building materials, metal, garbage and sewage, damaged vehicles, various hazardous materials, tires, and personal property. Unattended and long-standing debris may pose safety and health threats to the public.
- Legal requirements that would delay procurement of contracting services or the purchasing of materials will need to be temporarily waived. Support services for feeding, clothing, sheltering, and equipping workers may need to be coordinated with MAESF-6 *Mass Care, Emergency Housing, Human Services*.
- The Commonwealth maintains a Debris Management Plan which describes the activities and coordination required to clear, remove, monitor, store, and dispose of debris deposited along or immediately adjacent to public rights-of-way.
- There are several private companies and municipal utilities that may provide emergency services for the response effort to help restore critical infrastructure. There are natural and propane gas utilities, electric and cable utilities, excavation and construction companies and a plentitude of others.
- State agencies may need to immediately deploy resources from unaffected areas of the Commonwealth to ensure an effective and efficient response.
- Large numbers of engineers, inspectors, construction workers, equipment operators, and other skilled personnel, along with equipment and supplies from outside the disaster area, will be needed.
- Depending on the magnitude of the incident, resources from other states or the Federal government may not be available for use in Massachusetts until as long as 72 hours after the incident occurs.

3.0. CONCEPT OF OPERATIONS

3.1. General

This annex will be activated at the direction of MEMA when there is a potential for or actual disaster situation involving public works or engineering impacts in Massachusetts. Depending upon the incident type and resource needs, MEMA will notify the primary agency at the time of SEOC activation to provide overall coordination of MAESF-3. All other agencies with responsibilities under MAESF-3 will serve as support agencies. The primary agency will provide direction to and work in conjunction with the support agencies to cohesively coordinate the activities of MAESF-3. The MAESF-3 primary agency will ensure that requests for assistance assigned to MAESF-3 are carried out in as efficient a manner as possible with prioritization for the protection of life and property.

MAESF-3 reports to the SEOC Operations Section, with an indirect report to the Planning Section. Depending on the size, scope, and complexity of the incident, the SEOC organizational chart may be expanded, to ensure proper Span of Control is maintained. To accommodate this, the ESFs may be aligned in appropriate Branches, with similar MAESF's grouped together. In this scenario, MAESF-3 will be organized under the Infrastructure Branch, together with MAESF's 1, 2, 12, and 17.

3.2. Organization

- All personnel and activities associated with MAESF-3 will operate under the Incident Command System.
- The Department of Conservation and Recreation (DCR) has been designated the primary agency for MAESF-3.
- Each agency shall designate a minimum of two persons who can serve as a representative for their agency at the SEOC to support MAESF-3 activities. The designated agency representative should have the capability and authority to reach back to its own agency to request resources and obtain necessary information to support the response to the incident.
- Public works, inspectional and engineering services will be provided upon mission assignment from MEMA when local resources are deemed inadequate or potentially inadequate for responding to and recovering from the incident. Operations will continue at the SEOC until the SEOC stands down or as otherwise directed.

3.3. Notification

MEMA will notify the MAESF-3 points of contact for each activated organization or agency to report to the State Emergency Operations Center for coordination and implementation of public works and engineering-related requests for assistance. Each MAESF-3 organization and agency is responsible for securing sufficient staff on a continuous basis to support and to carry out the activities tasked to their agency.

3.4. Activities

Responsible agencies for MAESF-3 should conduct the following actions:

a. Prevention Actions

- Communicate and share information across agencies with public works, inspectional and engineering responsibilities.
- Collaborate and coordinate on public works, inspectional and engineering related prevention and security initiatives.
- Identify opportunities to collaborate on protection of critical public works, inspectional and engineering related infrastructure and key resources in the Commonwealth.
- Identify potential emergency public works, inspectional and engineering issues and collaborate to develop or recommend protocols, procedures, and policies to prevent or mitigate their effects.

b. Preparedness Actions

- MEMA will convene regular meetings of MAESF-3 stakeholders and/or Emergency Support Function Team to review and update the MAESF-3 annex and standard operating procedures.
- Develop and maintain internal agency operational plans and procedures to support MAESF-3 activities.
- Agencies will maintain current inventories of their respective agency facilities, equipment, materials and supplies, and special capabilities and personnel throughout the state.
- As needed, conduct assessments of MAESF-3 capabilities to identify potential resource shortfalls. Develop plans to address identified shortfalls of resources.
- Maintain a list of construction contractors and engineering firms with active contracts with the state, who would be available for infrastructure repairs.
- Maintain an alternate list of contractors, inspectors and engineers who do not have active contracts, but who have expressed interest in providing infrastructure repairs.
- Agencies will develop procedures/protocol to support the evaluation of damage to infrastructure in the threatened and/or impacted area and, as appropriate, task personnel for response and recovery work.
- Complete appropriate training.
- Designate staff that will be available to support MAESF-3 activations.
- Ensure that MAESF-3 stakeholders notify MEMA of staff changes.
- Participate in exercises and training in order to test, validate, and provide working experience for MAESF-3 representatives.

- Manage resolution of any MAESF-3 outstanding after-action issues from previous activations or exercises.

c. Response Actions

Pre-Impact

Upon receiving notification to report to the SEOC in preparation of an incident, MAESF-3 agencies and organizations will complete the following actions commensurate with emergency priorities within the state and based on the availability of resources:

- Provide appropriate representative(s) to the SEOC to support MAESF-3, if needed.
- Maintain communications with the SEOC, obtain status reports, and keep the SEOC informed of progress of assigned tasks.
- Notify the appropriate points of contact at each respective MAESF-3 agency and organization to pre-position resources and response personnel as needed.
- Review existing plans and procedures.
- Ensure respective MAESF-3 agency and organization decision makers are kept informed of the situation.
- Test communications systems.
- Coordinate information to verify public works, inspectional and engineering activities, capabilities, and inventories and report this information on a regular basis to the SEOC Planning and Operations Sections.
- Coordinate with other MAESFs in anticipation of projected public works, inspectional or engineering related needs and coordinate appropriate efforts.
- Identify and coordinate the mobilization and pre-positioning of response resources when it is apparent that MAESF-3 or state public works, inspectional and engineering resources will be required, or as requested by the SEOC Manager.
- Ensure appropriate staffing levels at the SEOC for MAESF-3 to support the mission during each shift.
- Identify dams in affected areas and assess potential impacts of event on dams, particularly dams classified by DCR's Office of Dam Safety as having High or Significant hazard potential and/or as being in Poor or Unsafe condition according to ODS' dam hazard potential and condition classification schema.

Initial Response

- If agency has not already done so, provide appropriate representatives to the SEOC to support MAESF-3, if needed.
- Designate appropriate staff to support the state-level response effort.
- Gather and provide situational awareness.

- Verify inventories of available resources and provide a summary listing to the SEOC Operations and Planning Section Chiefs.
- Establish communications with appropriate deployed agency field personnel to coordinate resources to support response efforts.
- Develop and prioritize strategies to coordinate resources to support initial response actions, including equipment and personnel.
- Coordinate with MAESF-1 *Transportation* to commit agency resources for debris clearance, removal, transportation/roadway work, and other transportation-related tasks as needed.
- Coordinate the pre-positioning of resources at the designated staging area(s), as needed.
- Implement predetermined agency cost accounting measures for tracking overall MAESF-3 personnel, equipment, materials, and other costs incurred during emergency response actions.
- Coordinate with MAESF-1 *Transportation* to prioritize roadway corridors, bridges, ports, waterways, and airstrips for emergency debris clearance and repair in order to access affected areas.
- Coordinate the execution of legal waivers concerning state construction contracts, debris disposal, and other emergency response actions to ensure rapid restoration of services.
- Coordinate with the Federal Emergency Support Function counterpart as needed.

Continuing Response

- Coordinate ongoing public works, inspectional and engineering resource support requests.
- Reassess priorities and strategies to meet the most critical of public works, inspectional and engineering needs.
- Continue to assess impacts of event on dams, particularly those that have High or Significant hazard potential and/or are in Poor or Unsafe condition.
- For compromised water supply dams, assess impact to water supply and timeline of restoration of dam functions. Assess alternate water supplies to accommodate shortages.
- Track committed resources and provide regular updates to the SEOC Operations Section Chief on the status of all missions assigned to MAESF-3.
- Coordinate the provision of personnel to assist in completing Rapid Assessment Team (RAT) damage assessments or Preliminary Damage Assessments (PDAs), as needed.
- Debris monitoring.
- Coordinate with MAESF-6 *Mass Care, Emergency Housing, Human Services*, in providing emergency debris clearance for sheltering operations, safe passage for shelter workers/equipment, and other related matters.

- Coordinate with MAESF-1 *Transportation* to provide and/or coordinate resources for emergency closure and/or repair of damaged segments of the state roadways, subject to existing agreements.
- Provide technical assistance on flooding, water management, structural integrity assessments, public drinking water systems (PWSs), wastewater treatment facilities, and impact assessments of infrastructure.
- Obtain information on possible and/or actual damages to infrastructure in the threatened and/or impacted areas.
- Coordinate with other MAESFs represented in the SEOC, as appropriate, to anticipate projected public works, inspectional and engineering needs and coordinate appropriate response efforts.
- Continue to gather and provide situational awareness to the SEOC.
- Provide public works, inspectional and engineering information for the SEOC Roster for the next operational period and for ongoing Situational Awareness Statements.
- Ensure that the MAESF-3 desk at the SEOC is staffed on a continuous basis, as determined by the SEOC Planning and Operations Section Chiefs.
- Ensure that MAESF-3 staff briefings are conducted during shift changes and at designated times throughout the event.
- Coordinate emergency debris staging areas.

d. Recovery Actions

- In coordination with MAESF-14 *Recovery*, develop strategies for supporting recovery operations.
- Prioritize and coordinate resources for the repair and restoration of damaged public and private systems, including public water supply, wastewater treatment and debris disposal.
- Provide technical assistance and coordinate resources to support the monitoring, removal, sorting, and disposal of debris from public and private property, in accordance with the Massachusetts Debris Management Plan.
- Facilitate expedited permitting for repair/demolition work to be performed.
- Coordinate resources, including engineers, inspectors, skilled personnel, and construction workers, necessary equipment and materials, to assist in recovery operations.
- Provide technical assistance to affected jurisdictions in developing a prioritized list for the demolition or stabilization of damaged public and private structures and facilities that pose an immediate hazard or safety risk to the public health.
- Continue to coordinate with the Federal Emergency Support Function counterpart, as needed.

- Provide assistance, technical expertise, and personnel to support MEMA damage assessment teams.
- Coordinate and/or provide technical assistance, personnel, and resources for ongoing restoration of transportation infrastructure.
- Coordinate with support agencies to ensure financial tracking of all deployed assets and adequate cost accounting measures are being used. Generate summary reports and share with the SEOC.
- Participate in after-action meetings and review after-action reports, as appropriate.
- Draft recommendations for after-action reports and other reports as appropriate.

e. Mitigation Actions

- 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. Provide input to the State Hazard Mitigation Plan as needed.

4.0. RESPONSIBILITIES

4.1. MAESF-3 Primary Agency Responsibilities

- Regularly meet and coordinate with MAESF-3 supporting agencies, to:
 - Maintain a list of critical contacts, noting any changes to MEMA
 - Maintain a list of ESF-specific assets which could be deployed during an emergency
 - Maintain the ESF-3 Toolkit
 - Report any unmet needs to MEMA
- Maintain Situational Awareness, monitor weather conditions, and ensure a state of readiness for the ESF.
- As needed, pre-stage resources to support MAESF-3 requirements.
- Report to the SEOC as directed.
- Ensure agency decision makers are kept informed of the situation.
- Coordinate information to verify public works, inspectional and engineering activities, capabilities, and inventories and report this information on a regular basis to the SEOC Planning and Operations Sections.
- Coordinate with other functional areas in anticipation of projected needs and coordinate appropriate efforts.

- Use information provided by the SEOC Planning Section to plan effective response actions.
- Develop and prioritize strategies for initial response actions to include the mobilization of resources and personnel.
- Coordinate with MAESF-1 *Transportation* and MAESF-16 *Military Support* to commit agency resources for debris removal, transportation/roadway work, and other transportation related tasks as needed.
- Coordinate with other responsible agencies in directing public works, inspectional and engineering resources, including engineers, skilled personnel, inspectors, construction workers, equipment, and materials for the following tasks:
 - Removal of debris to restore access.
 - Repair and restoration of water and wastewater facilities.
 - Repair and restoration of critical public services and facilities.
 - Repair or demolition of damaged structures and facilities as appropriate.
 - Completion of damage assessments.
- Coordinate with Federal Emergency Support Function counterpart as needed.
- Coordinate ongoing public works, inspectional and engineering resource support requests.
- Commit and deploy agency resources in coordination with MAESF-3.
- Reassess priorities and strategies in coordination with the SEOC Operations Section Chief to meet the most critical of public works and engineering needs.
- Track committed resources and provide regular updates to the SEOC Operations Section Chief on the status of all missions assigned to MAESF-3.
- Coordinate with MAESF-6 *Mass Care, Emergency Housing, Human Services*, in providing emergency debris clearance for sheltering operations, safe passage for emergency workers/equipment, and other related matters.
- Coordinate with MAESF-1 *Transportation* to provide and/or coordinate resources for emergency closure and/or repair of damaged segments of the state highway system and connecting links, subject to existing agreements.
- Coordinate with other MAESFs represented in the SEOC, as appropriate, to anticipate projected public works, inspectional and engineering needs and coordinate appropriate response efforts.
- Ensure that the MAESF-3 desk at the SEOC is staffed on a continuous basis, as determined by the SEOC Planning and Operations Section Chiefs.
- Ensure that MAESF-3 staff briefings are conducted during shift changes and at designated times throughout the event.

- Make available to MAESF-3 an inventory of agency public works, inspectional and engineering capabilities and available resources to include those located at headquarters, district, regional, or other affiliated offices statewide.
- Ensure that necessary cost accounting measures are being used and that summary reports are generated as needed and shared with SEOC Command Staff.
- Support other MAESFs according to established priorities.
- Coordinate with other MAESFs to obtain information related to vendors, volunteer groups, and other organizations that may be able to supplement local and state public works, inspectional and engineering resources.
- Coordinate with other responsible agencies to commit agency resources for debris removal, inspections, construction work, and other public works-related tasks as needed.
- While Primary Agencies are designated in advance, this may be subject to change during an SEOC Activation, dependent on the specific circumstances and needs of the incident, and therefore the agency most appropriate to take the primary assignment.

a. Department of Conservation and Recreation

The DCR Divisions will coordinate with MAESF-3 agencies to commit resources, as needed, in support of public works and engineering response efforts:

- The *Division of State Parks* operates and maintains nearly 450,000 acres of the state's forests, beaches, mountains, ponds, riverbanks, trails and parks. The Division protects land and resources on privately and municipally held land through technical assistance, grant and planning programs, policy development, and other services.
- The *Division of Water Supply Protection* manages and protects the drinking water supply watersheds serving Greater Boston, Metro West, and select Chicopee Valley communities. The Division provides technical support to other state agencies, monitors lakes and ponds, and rainfall throughout the state.
- The *Office of Dam Safety* maintains records of dams located throughout the Commonwealth, ensures compliance with acceptable practices pertaining to dam inspection, maintenance, operation and repair of dams, and ensures that Emergency Action Plans are updated by individual dam owners.
- The *Division of Engineering* provides comprehensive engineering and construction management services throughout the Commonwealth in support of the DCR's state parks, forests, and reservations, and water supply divisions.

Under MAESF-3, DCR may provide a range of technical assistance, including, but not limited to: civil and structural engineering support; dam safety inspections; facilities, water resource, or flood control engineering; and flood hazard forecasting. DCR may also provide specialized equipment and staffing support, such as chainsaw crews for debris management operations. DCR may provide assistance with debris monitoring as needed.

4.2. MAESF-3 Supporting Agency Responsibilities

All agencies who have not been designated as the primary agency at the time MAESF-3 is activated will assume a support agency role. The depth and breadth of the support agency responsibilities will be dependent upon the nature of the emergency, but a full range of responsibilities for each responsible/support agency is detailed below.

a. Office of Public Safety and Inspections

The Office of Public Safety and Inspections (OPSI) is a multi-discipline agency comprised of building, engineering, elevator, and regulated activities divisions. Among other things, OPSI promulgates and maintains the State Building Code, operates various construction related programs including licensing building construction supervisors, heavy equipment operators, elevator mechanics and others. Additionally, OPSI certifies municipal and state building inspectors to perform construction inspection and related activities.

State building inspectors conduct building and structure assessments and enforce the state building code. OPSI inspectors are trained to identify vulnerabilities to structures based on specific criteria and regulations. These services may be used to assess the structural integrity of buildings and structures post-incident as part of MEMA damage assessment teams or in assisting local communities. State engineering inspectors and elevator inspector supervisors have received awareness level training to assist building inspectors with post-event damage assessments.

Coordinate private structural engineers and municipal building inspectors.

b. Department of Environmental Protection

The Department of Environmental Protection (MassDEP) is responsible for ensuring clean air and water, the safe management of toxics and hazards, the recycling of solid and hazardous wastes, the timely cleanup of hazardous waste sites and spills, and the preservation of wetlands and coastal resources. MassDEP is comprised of several bureaus related to air and water resources as well as hazardous waste.

- The Bureau of Water Resources: Oversees the protection of critical inland and coastal water resources, water quality and quantity of the state's major river basins, safeguarding public drinking water supplies and protection of public health relating to discharges from treatment plants, industrial facilities and sewers.
- The Bureau of Air and Waste: Oversees the protection of public health and the environment by ensuring that discharges and emissions, solid and hazardous wastes, toxic chemical use, and the health risks associated with them are reduced to the maximum extent possible and, when pollution or waste cannot be prevented, they are safely and effectively controlled or managed.
- The Bureau of Waste Site Cleanup: Oversees the immediate and effective response to environmental emergencies, such as oil spills and chemical fires, as well as timely assessment and cleanup of hazardous waste sites by private parties responsible for them.

- Field Assessment and Support Team (FAST): a team of chemists, biologists, engineers, and environmental scientists tasked to provide 24/7 technical support at chemical and oil spill incidents. A number of equipment assets have also been procured to facilitate and support these deployments, including a 27-foot long mobile laboratory vehicle.

Under MAESF-3, MassDEP may provide engineers, water quality/ water treatment specialists, specialized testing equipment, mobile laboratory (FAST unit) or environmental waivers to assist emergency response and recovery.

c. Division of Capital Asset Management and Maintenance

The Division of Capital Asset Management and Maintenance (DCAMM) is the state agency responsible for public building planning, design and construction; facilities maintenance and management; real estate services; and leasing, acquisition, renovation and demolition of state public buildings.

DCAMM may provide construction management services; support in identifying, leasing or seizing property for disaster operations; or damage assessment staff support through existing contracts with vendors and consultants.

d. Massachusetts Department of Transportation (MassDOT)

The Massachusetts Department of Transportation (MassDOT) will coordinate with MAESF-3 in the deployment of MassDOT public works and engineering-related resources to support emergency response efforts.

MassDOT *Highway Division* has responsibility for the design, construction, and maintenance of all state roadways, bridges and tunnels. The Division is responsible for overseeing traffic safety and engineering activities including the Highway Operations Control Center (HOC) to ensure safe road and travel conditions.

The MassDOT *Rail & Transit Division* is responsible for all transit initiatives and oversees the Massachusetts Bay Transportation Authority and all Regional Transit Authorities of the Commonwealth.

The *Massachusetts Bay Transportation Authority* (MBTA) will coordinate the emergency use, repair, and restoration of its buses, trolleys, trackless trolleys, and rapid transit in the seventy-nine cities and towns of the MBTA district.

MassDOT will coordinate with MAESF-3 in the deployment of equipment and technical personnel to support public works and engineering emergency response efforts.

e. Massachusetts Water Resources Authority

The Massachusetts Water Resources Authority (MWRA) is a regional water and wastewater utility serving the greater Boston, Metro West, and select Chicopee Valley communities. MWRA manages two major source water supply reservoirs, several smaller distribution

reservoirs, numerous dams, and the water treatment and transmission systems which serve 51 communities. MWRA works closely with the water departments of the cities and towns that receive MWRA water. MWRA also manages collection and treatment of wastewater from 61 communities in the Greater Boston area. MWRA also manages flood control of the Sudbury Reservoir system.

MWRA will coordinate with MAESF-3 to provide equipment and expertise as needed in an emergency. To support SEOC response and recovery efforts, MWRA may provide licensed operators for water treatment, collection, and/or distribution. MWRA may also provide engineering staff, in such disciplines as civil, mechanical, electrical and geotechnical engineering to support the operation, repair and restoration of affected water and wastewater treatment systems. To support internal emergency operations, MWRA also maintains an Emergency Operations Center (EOC) in Chelsea, MA and a backup EOC in Marlborough, MA.

4.3. Other Agencies

Other agencies not explicitly covered in this annex may have authorities, resources, capabilities, or expertise required to support MAESF-3 activities. These agencies may be requested to support MAESF-3 activities as needed.

5.0. ADMINISTRATION AND LOGISTICS

5.1. Staffing

As required by Executive Order 144, all MAESF-3 stakeholders must designate at least two personnel to act as SEOC liaisons. These liaisons should be knowledgeable about the resources and capabilities of their respective agencies and have access to the appropriate authorities for committing said resources and capabilities.

5.2. Mutual Aid

A statewide public works municipal mutual aid agreement (Massachusetts General Law. 40, Section 4K) is available to communities that opt in for the provisions of public works resources across jurisdictional lines in the case of a public works incident that requires mutual aid assistance from one or more municipalities. The mutual aid assistance to be provided under the agreement shall include, but not be limited to, services related to public works, personnel, equipment, supplies and facilities to prepare for, prevent, mitigate, respond to and recover from public works incidents. Communities that have opted into the Commonwealth Public Works Mutual Aid Agreement should exhaust those resources prior to requesting resources from MAESF-3.

The Massachusetts Water/Wastewater Agency Response Network (MA WARN) is also available as another formal mutual aid agreement designed to provide a mechanism

specifically for water and wastewater utilities that face threatened or particular damages from a natural or human-caused event. MA WARN allows water/wastewater utilities to quickly obtain emergency assistance in the form of personnel, equipment, materials, and other associated services from other water/wastewater utilities after an emergency declaration has been made by the Appropriate Authorized Official in accordance to their governmental structure, or under the auspices of Massachusetts General Law Chapter 40N. MA WARN is available to water/wastewater utilities that operate as separate entities from public works, including commissions, districts and privately owned companies that serve the public. Water/wastewater utilities that have opted to join MA WARN should exhaust those resources prior to requesting resources from MAESF-3.

In the event MAESF-3 requires resources from outside Massachusetts, the MAESF-3 primary agency will work with the SEOC Operations Section Chief to request additional resources from other states via EMAC, IEMAC or other mutual-aid agreements, or from the Federal government.

5.3. Annex Review and Maintenance

This annex will be updated every two years at a minimum, in accordance with the Emergency Management Program Administrative Policy, and will ensure that appropriate stakeholder input is incorporated into updates. Additionally, the annex will be reviewed following any exercise or activation of the plan that identifies potential improvements. Revisions to this annex will supersede all previous editions and will be effective immediately.

6.0. AUTHORITIES, RESOURCES, AND REFERENCES

6.1. Authorities

See Authorities section of the State CEMP Base Plan

6.2. Resources

See Resources section of the State CEMP Base Plan

6.3. References

- Massachusetts General Law 40, Section 4K
- Massachusetts General Law Chapter 40N
- Massachusetts Executive Order 144
- Massachusetts General Laws, Chapter 253, Sections 44-50
- Massachusetts Comprehensive Emergency Management Plan

- Massachusetts Debris Management Plan
- Commonwealth of Massachusetts State Hazard Mitigation Plan
- SEOC ESF SOP Guidance Document
- Threat Hazard Identification and Risk Assessment (THIRA)
- Hazard Identification and Risk Assessment (HIRA)
- State Hazard Mitigation Plan