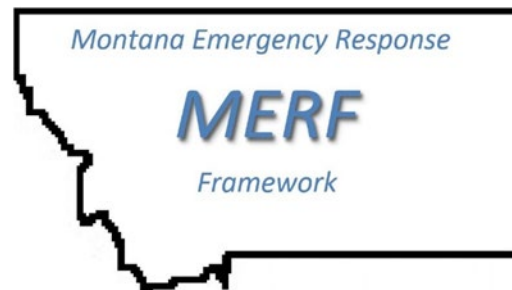


# Emergency Support Function



# 2022

## Annex # 3 Public Works & Engineering



Authorization & Concurrence:

This Annex is considered operational and serves as a guide for rendering assistance whenever the **Montana Emergency Response Framework (MERF)** is activated. It supersedes all previous editions.

Approved: \_\_\_\_\_

Date: \_\_\_\_\_



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## **Section I: Agencies**

### ***Coordinating Agency:***

Montana Disaster & Emergency Services

### ***Primary Agency:***

Montana Department of Environmental Quality

### ***Support Agencies:***

Montana Department of Military Affairs

Montana Department of Transportation

Montana Department of Administration

Montana Department of Justice

Montana Department of Public Health and Human Services

Montana Department of Natural Resources and Conservation

Montana Department of Commerce

Montana Department of Labor

## **Section II: Purpose & Scope**

### ***Purpose:***

The purpose of Emergency Support Function #3 (ESF #3) – Public Works & Engineering, is to provide support to local, state, tribal, private, non-governmental, voluntary, and federal entities through the delivery of state services, technical assistance, engineering expertise, compliance assistance, construction management, contracting services, and other relative actions in response to actual or potential incidents.

### ***Scope:***

In a significant emergency, public works and infrastructure such as drinking water, wastewater and/or solid waste facilities; public utility systems; public and private buildings; etc., may sustain damage or may be covered with debris restricting their use. The public works and infrastructure will need to be inspected and either cleared for use, restored, reinforced, quarantined, or demolished to ensure safety. The activities within the scope of ESF #3 include the following:

- Supporting pre-incident and post-incident assessments of public works and infrastructure. Note: This is a primary function of the local and tribal governments.
- Emergency contract support for life saving and life-sustaining services.
- Technical assistance to include engineering expertise, compliance assistance, construction management, and contracting services.
- Emergency repair of damaged public works infrastructure.

## **Section III: Assumptions & Relationships**

### ***Assumptions***

For the purpose of designing responses in an all-hazard environment, this annex outlines the following assumptions:

- The local and regional public works and infrastructure will sustain damage. The type and degree of damage will determine the effectiveness of response and recovery.

- Access to the incident area will be dependent upon the extent of debris removal from the damaged infrastructure. Gradual clearing of debris will permit a sustained flow of emergency relief efforts and restoration.
- Rapid damage assessment of the incident area will be made to determine critical response time and potential workload.
- Significant numbers of personnel with engineering and construction skills and construction equipment may not be available within the affected area.
- The immediate use of the public works and infrastructure for response and recovery activities may exceed local capabilities, thus requiring assistance from the State and Federal governments to supplement efforts.
- Each jurisdiction and agency are responsible for the inspection, status reporting, repair, and operation of its own facilities or to those agencies with contractual agreements to maintain facilities.
- The private sector owns or operates a large proportion of the public works and infrastructure and therefore, should be a partner in restoration of services/infrastructure.
- Private-sector mutual aid and assistance networks facilitate the sharing of resources to support response.
- Local, state, and federal agencies are responsible for complying with appropriate environmental and historic preservation statutes.
- Local agencies are responsible for complying with and enforcing local building, zoning, and subdivision regulations including accessibility requirements.
- Local agencies are responsible for obtaining emergency environmental waivers and legal clearances to dispose of emergency debris and materials from demolition activities.
- A major emergency may affect the public water supplies or power therefore causing water shortages, public health concerns, and affecting the wastewater collection and treatment.
- Debris clearance and emergency road repairs will be given top priority to support immediate lifesaving emergency response activities. Other tasks should be prioritized according to public health/safety and population affected.
- Numerous volunteers, both governmental and non-governmental, may mobilize personnel, supplies and equipment to affected areas without coordination or communication with the SECC and ESF #3 primary and support agencies.

### ***Relationships***

This document does not relieve tasked agencies with the responsibility for emergency planning. The following section outlines the relationships between state agencies and local, tribal, private, and non-governmental organization partners in supporting ESF #3 response and recovery activities:

#### Local & Tribal Governments

Local and tribal area governments are responsible for their own public works and infrastructures and have the primary responsibility for mitigation, preparedness, response, and recovery. Local and tribal mutual aid and assistance networks facilitate the sharing of resources to support response activities. Local and tribal governments are responsible for complying with and enforcing local and tribal building, zoning, and subdivision regulations including accessibility requirements.

Local and tribal authorities are responsible for obtaining required waivers and clearances related to ESF #3 support and are responsible for requesting state support through the jurisdiction's emergency management agency when incident exceeds local capabilities.

Responsibility for situation assessment and determination of resource needs are ascertained primarily through the local or tribal incident management system. Shortages of resources are adjudicated at the lowest jurisdictional level. Local and tribal law enforcement offices coordinate with the local or on-site Incident Commander within the disaster area to determine evacuation areas, roadblocks, and access control points.

Private Sector/Non-Governmental Organizations

The private sector owns and/or operates a large proportion of the public works and infrastructure and is a partner and/or lead for the rapid restoration of infrastructure-related services. Through ongoing planning and coordination, the private sector provides critical details for incident action planning and decision-making processes during an incident. Private-sector mutual aid and assistance networks facilitate the sharing of resources to support response. Pre-awarded contracts and other emergency contracting vehicles are used to leverage private sector capabilities to support response activities.

State Government

State departments and agencies are responsible, within their statutory authorities, for providing assistance to local jurisdictions when local capabilities are overwhelmed by a disaster. The State Emergency Coordination Center (SECC) serves as the principal point for coordinating state, local, tribal, and federal resources as in the delivery of emergency assistance to affected jurisdiction(s).

The SECC will coordinate with the primary agency and support agencies in the use of state resources to support ESF #3 response activities. State resources will supplement, not supplant, local resources. When activated to respond to an incident, the primary agency and support agencies will develop work priorities in cooperation with local and tribal governments and in coordination with the SECC.

If the Governor has declared an emergency, resources may be requested through the Emergency Management Assistance Compact (EMAC), the nation’s state-to-state mutual aid system that is processed through the SECC.

**Section IV: Core Capabilities**

The following table list the core capabilities and their key activities that the coordinating, primary, and supporting agencies collectively support. Though not listed in the table, all ESFs, including ESF #3, support the core capabilities of Planning, Operational Coordination, and Public Information and Warning.

<b><u>CORE CAPABILITIES</u></b>	<b>Key Activities</b> – The SECC coordinates with the primary agency and supporting agencies to coordinate resources in support and response for the following key activities during actual or potential incidents:
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<p style="text-align: center;"><b>Infrastructure Systems</b></p>	<ul style="list-style-type: none"> <li>• Prepares for potential public works and engineering requirements. Activities include providing public information, contributing to situational awareness, establishing response teams, leveraging technological tools, training, and exercising with partners, establishing private sector contracts and agreements, and coordinating with volunteer organizations and other nongovernmental partners.</li> <li>• Conducts pre-incident and post-incident assessments of public works and infrastructure.</li> <li>• Executes emergency contract support for lifesaving and life-sustaining services.</li> <li>• Provides emergency repair of damaged public works and infrastructure and critical facilities.</li> <li>• Supports restoration of critical navigation, flood control, and other water infrastructure systems, including drinking water and wastewater facilities.</li> <li>• Provides assessment and emergency response support for drinking water, wastewater treatment facilities, levees, dams, buildings, bridges, and other infrastructure.</li> <li>• Provides temporary emergency power to critical facilities (e.g., hospitals, drinking water and wastewater facilities, shelters, fire/police stations).</li> <li>• Constructs temporary critical public facilities to temporarily replace destroyed or damaged following a disaster (e.g., schools, local government offices, fire stations, police stations, and medical facilities).</li> <li>• Provides assistance in the monitoring and stabilization of damaged structures and the demolition of structures designated as immediate hazards to public health and safety.</li> <li>• Provides structural specialist expertise to support inspection of mass care facilities and urban search and rescue operations in coordination.</li> <li>• Manages, monitors, and/or provides technical advice in the clearance, removal, and disposal of debris from public property and the reestablishment of ground and water routes into impacted areas. For the purposes of ESF #3, the term “debris” includes general construction debris that may contain inherent building material contaminants, such as asbestos or paint. Debris may also include livestock or poultry carcasses and/or plant materials.</li> <li>• Provides technical assistance to include engineering expertise, construction management, compliance assistance, contracting, real estate services, and inspection of private/commercial structures.</li> <li>• Provides engineering and construction expertise, responders, supplies, and equipment to address flooding to include providing advance measures in anticipation of imminent severe flooding</li> </ul>
<p style="text-align: center;"><b>Critical Transportation</b></p>	<ul style="list-style-type: none"> <li>• Provides coordination, response, and technical assistance to affect the rapid stabilization and reestablishment of critical waterways,</li> </ul>



	<p>channels, and ports to include vessel removal, significant marine debris removal, emergency dredging, and hydrographic surveys.</p> <ul style="list-style-type: none"> <li>• Clears debris from roads to facilitate response operations.</li> <li>• For incidents involving a blast or explosion associated with a chemical, biological, radiological, or nuclear (CBRN) threat agent resulting in a contaminated debris field, leads actions to clear critical transportation routes of CBRN-contaminated debris, during the emergency phase.</li> </ul>
<p><b>Environmental Response/Health &amp; Safety</b></p>	<ul style="list-style-type: none"> <li>• Collects, segregates, and transports to an appropriate staging or disposal site(s) hazardous materials that are incidental to building demolition debris, such as household hazardous waste and oil and gas from small-motorized equipment; removes and disposes of Freon from appliances; and removes, recycles, and disposes of electronic goods.</li> <li>• For incidents involving a blast or explosion associated with a CBRN threat agent resulting in a contaminated debris field.</li> <li>• Provides structural specialist expertise to support inspection of damaged CBRN-contaminated infrastructure and may employ temporary stabilization measures or take other actions as necessary to address structural instability concerns.</li> <li>• Performs demolitions after a determination is made that a building is unstable and creates an imminent hazard to workers, in conjunction with other appropriate Local, state, tribal, territorial, insular area, and Federal authorities, makes a determination that demolition is the desired cleanup approach.</li> </ul>
<p><b>Logistics &amp; Supply Chain Management</b></p>	<ul style="list-style-type: none"> <li>• Executes emergency contracting support for infrastructure related to lifesaving and life-sustaining services to include providing potable water, emergency power, and other emergency commodities and services.</li> </ul>
<p><b>Fatality Management</b></p>	<ul style="list-style-type: none"> <li>• Manages debris to facilitate fatality recovery efforts to include establishing a system for sorting debris and recovering human remains.</li> <li>• Provides construction and engineering support for temporary morgues.</li> </ul>
<p><b>Mass Care Services</b></p>	<ul style="list-style-type: none"> <li>• Provides construction, engineering, and project management expertise and support for sheltering; ensuring accessibility for those with disabilities and others with access and functional needs to include management of temporary roofing support following hurricane disasters.</li> <li>• Inspects mass care shelter sites to ensure suitability and accessibility of facilities to safely shelter survivors.</li> <li>• Constructs temporary shelter facilities, including accessible shelters, in the affected area, as required.</li> </ul>

## Section V: Operational Functions

The following table lists the operational functions that both the primary agency and supporting agencies most directly support for ESF # 3:

<u>PRIMARY AGENCY</u>	<b>Operational Functions</b> – Department of Environmental Quality serves as the primary agency. The operational functions for the primary agency include:
<p style="text-align: center;"><b>Montana Department of Environmental Quality</b></p>	<ul style="list-style-type: none"> <li>• Gathers and shares information on energy system damage and estimations on the impact of energy system outages within affected areas.</li> <li>• Provides information concerning the energy restoration process, such as projected restoration schedules, percent completion of restoration, geographic information on the restoration, and other information as appropriate.</li> <li>• Supports drinking water, wastewater, and/or solid waste facility risk and vulnerability assessments in response to actionable intelligence and other information.</li> <li>• Provides engineering personnel to assist in damage assessment, structural inspections of drinking water, wastewater, and/or solid waste facility, design estimation, in determining the operating status of drinking water and wastewater systems, and construction for repair, reconstruction, and restoration of eligible facilities.</li> <li>• Supports prioritizing recommendations for the stabilization and reestablishment of the associated critical drinking water, wastewater, and/or solid waste facilities.</li> <li>• Supports administration of special funding that can be used for repair or reconstruction of eligible facilities as well as grant programs that could be used for repair and rehabilitation of damaged facilities.</li> <li>• Provides engineering, technical, and/or compliance assistance in support of temporary protection and repair of drinking water, wastewater, and/or solid waste facilities.</li> <li>• Assist in identifying critical drinking water and wastewater needs, including personnel, electrical power, and treatment chemicals.</li> <li>• Assist in coordinating the provision of temporary emergency power to critical facilities (e.g., hospitals, drinking water and wastewater facilities, shelters, fire stations, police stations).</li> <li>• Provides engineering, technical, and/or compliance assistance for environmental assessments and to address flooding.</li> <li>• Assists in investigation and intelligence analysis for hazardous materials incidents involving contaminated drinking water and wastewater systems, pursuant to existing statutory authorities.</li> <li>• Provides guidance and/or subject matter expertise on contaminated or hazardous materials pollution response operations associated with debris removal, salvage operations, and the transportation of contaminated materials.</li> </ul>

	<ul style="list-style-type: none"> <li>• Identifies locations of—and provides safety guidance for—areas affected by hazardous materials.</li> <li>• Assists solid waste agencies with assessments of staging/storage areas, solid waste facilities, and wastewater facilities; environmental sampling and monitoring; and inspections, resources, data, and other support as appropriate.</li> <li>• Provides assistance to solid waste agencies regarding municipal solid waste landfills and construction and demolition of waste landfills. Provides technical assistance for nonhazardous waste management including debris management and recycling/reuse opportunities.</li> <li>• Assists in determining the suitability for human consumption of water from local sources and in identifying hazardous materials having the potential to affect drinking water supplies.</li> <li>• Provides expertise on waste and debris disposal options.</li> <li>• Assists radiological contaminated debris management activities by coordinating and/or providing resources, assessments, data, expertise, technical assistance, monitoring, and other appropriate support.</li> </ul>
<b>SUPPORTING AGENCIES</b>	<b>Operational Functions</b> – The operational functions for the supporting agencies may include:
<b>Montana Department of Military Affairs</b>	<p><b>National Guard - 83<sup>rd</sup> Civil Support Team (CST)</b>  <i>Upon approval by the Governor:</i></p> <ul style="list-style-type: none"> <li>• Support civil authorities at domestic CBRN incident sites by identifying CBRN agents/substances, assessing current and projected consequences, advising on response measures, and assisting with requests for additional support.</li> </ul> <p><b>Army National Guard</b>  <i>Upon approval by the Governor:</i></p> <ul style="list-style-type: none"> <li>• Provides engineering expertise and construction resources and support.</li> </ul> <p><b>Disaster and Emergency Services Division</b></p> <ul style="list-style-type: none"> <li>• Coordinates National Guard assistance, when requested and upon approval by the Governor.</li> <li>• Coordinates and/or deploys personnel to fill positions in operations centers and on emergency response teams and other entities, as necessary.</li> <li>• Coordinate emergency-related response and recovery functions related to public works.</li> <li>• Coordinates international and domestic offers of public works-related assistance and support.</li> <li>• Provides assistance in the allocation and prioritization of public works resources.</li> <li>• Coordinates the prevention, protection, mitigation, response, and recovery actions among public works infrastructure stakeholders at state and local levels.</li> <li>• Provides equipment and personnel as needed for immediate lifesaving response operations.</li> </ul>

	<ul style="list-style-type: none"> <li>• Assist in coordinating the provision of temporary emergency power to critical facilities (e.g., hospitals, drinking water and wastewater facilities, shelters, fire stations, police stations).</li> <li>• Coordinates EMAC, Federal, and International offers of public works and engineering assistance and support for private/commercial structures.</li> <li>• Coordinates and/or provides situational awareness regarding drinking water and wastewater needs at healthcare critical infrastructure sector facilities.</li> </ul>
<p><b>Montana Department of Transportation</b></p>	<ul style="list-style-type: none"> <li>• Coordinate with private-sector organizations to obtain necessary resources.</li> <li>• Provides engineering personnel to support damage assessment and structural inspections of public works and public infrastructure.</li> <li>• Assists with prioritizing recommendations for the stabilization and reestablishment of the associated critical infrastructure sectors.</li> <li>• Provides engineering and/or contractual/procurement personnel and equipment to assist in temporary protection and repair of roads and bridges.</li> <li>• Provides engineering and/or contractual/procurement personnel and equipment to assess and support buildings, bridges, and other public infrastructure.</li> <li>• Provides engineering personnel and equipment to assist in emergency removal of debris and obstructions declared to be hazards.</li> <li>• Assist with providing expertise and supports specialized salvage/wreck removal operations as part of a coordinated response and restoration strategy.</li> <li>• Provides guidance and/or subject matter expertise on the transportation of contaminated materials.</li> </ul>
<p><b>Montana Department of Administration</b></p>	<p><b>Architecture &amp; Engineering Division</b></p> <ul style="list-style-type: none"> <li>• Provides technical assistance, engineering expertise, and construction management resources and support.</li> </ul> <p><b>State Procurement Bureau</b></p> <ul style="list-style-type: none"> <li>• Procurement</li> <li>• Contract and Project Management</li> </ul>
<p><b>Montana Department of Justice</b></p>	<p><b>Highway Patrol</b></p> <ul style="list-style-type: none"> <li>• Leads efforts to protect public works infrastructure from the effects of acts of terrorism and support efforts to protect public works infrastructure from the effects of manmade disasters.</li> <li>• Assist in providing evacuation and traffic control from impacted areas in coordination with local authorities and provide for road closures as needed during emergency operations.</li> </ul> <p><b>Montana Analysis &amp; Technical Information (MATIC)</b></p> <ul style="list-style-type: none"> <li>• Designated by the Governor as the fusion center in Montana.</li> <li>• A focal point for the collection, analysis, and dissemination of public safety and threat related information for the purposes of decision</li> </ul>

	<p>making for local, state, federal, and tribal partners while ensuring the rights and privacy of citizens.</p> <ul style="list-style-type: none"> <li>• Provides relevant information on criminal activity and credible threats that could potentially threaten public safety and critical infrastructure security to appropriate partners.</li> </ul>
<p><b>Montana Department of Public Health and Human Services</b></p>	<ul style="list-style-type: none"> <li>• Administers the provisions of the Safe Drinking Water Act within the state.</li> <li>• Authorizes laboratories to analyze public water supplies in Montana.</li> <li>• Provides lab testing/analysis for private wells and public water.</li> </ul>
<p><b>Montana Department of Natural Resources and Conservation</b></p>	<p><b>Water Resources Division</b></p> <ul style="list-style-type: none"> <li>• Regulates the permitting, construction, operation, and maintenance of Montana’s dams to protect life and property from damages due to failure.</li> <li>• Assists dam owners and engineers with Dam emergency preparedness activities.</li> <li>• Provides engineering personnel to assist in damage assessment, structural inspections of dam infrastructure and in determining the operating status of construction for repair, reconstruction, and restoration of eligible dams.</li> <li>• Regulates licensing for contracting and drilling of water wells</li> <li>• Enforces water well construction standards.</li> <li>• Regulates permitting for anyone planning to do work in or near Montana’s floodplains, streams, wetland, etc.</li> <li>• Subject Matter Experts on the Model Floodplain Hazard Management Regulations.</li> <li>• Subject Matter Expertise for development planning in flood prone areas.</li> <li>• Administers National Flood Insurance Program.</li> <li>• Provides flood engineering expertise for advance measures in anticipation of imminent severe flooding.</li> <li>• Archives flood photos and videos for informational purposes.</li> </ul>
<p><b>Department of Commerce</b></p>	<p><b>Community Development Division</b></p> <ul style="list-style-type: none"> <li>• Administers emergency funding for infrastructure and water/wastewater infrastructure projects through the Treasure State Endowment Program (TSEP).</li> <li>• Administers non-emergency funding for infrastructure and water/wastewater infrastructure through the Community Development Block Grant (CDBG) Program.</li> <li>• Administers Community Technical Assistance Program that provides planning assistance to communities across Montana in support of sound land use and development decisions, economic revitalization, and overall community resilience (staff include a land use attorney, professional planners, planning and outreach specialists, and licensed engineers).</li> </ul>

<p><b>Montana Department of Labor and Industry</b></p>	<p><b>Employment Relations</b></p> <ul style="list-style-type: none"> <li>• Provides technical assistance related to worker safety and health issues.</li> </ul> <p><b>Business Standards Division</b></p> <ul style="list-style-type: none"> <li>• Administers the licensing and regulation of professionals relative to engineering and construction professionals.</li> <li>• Provides regulatory professional licensing waivers and exemptions during emergencies.</li> </ul>
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