



ESF 3 — Public Works



Purpose

Emergency Support Function (ESF) 3 describes how the County will provide the resources (human, technical, equipment, facilities, materials, and supplies) to support emergency public works needs during a time of a major emergency or disaster.

Coordinating Agencies

PRIMARY AGENCY: Department of Transportation and Development (DTD)
SUPPORTING AGENCY: Water Environment Services (WES); Disaster Management (CCDM); City Public Works Departments, Water and Sanitary Districts

Scope

Activities within the scope of ESF 3 include:

Monitor, assess, restore, and repair hazard impacts to the County's public works infrastructure.

- Work with public and private providers to determine levels of damage to the following systems: transportation, water control structures, dams, levees, public water supplies and facilities, electrical, natural gas, sewage, hazardous materials, and hazardous waste sites (generation, distribution, collection, storage, and disposal).
- Coordinate requests for public works support from local municipalities and tribal partners.
- Close or repair of damaged segments of public works infrastructure.
- Coordinate repair and restoration of damaged public systems (e.g., water, electrical, natural gas, sanitary sewage, storm water collection, generating, distribution systems, dams, levees, water control structures).
- Provide for inspection and repair of essential facilities.
- Maintain undamaged or repaired public works infrastructure to ensure additional hazards do not occur.
- Demolish or stabilize damaged structures (public and private) to facilitate search and rescue and/or protect the public's health and safety.
- Coordinate disaster debris management activities including clearance of debris from public works infrastructure, and development and initiation of emergency collection, sorting, and disposal routes and sites for debris cleared from public and private property.
- Prioritize and initiate recovery efforts to restore, repair, and mitigate the impact of the public works and engineering needs listed above.
- Provide technical assistance to response team with respect to flooding, water management, structure integrity assessment, and impact assessments of infrastructure.

Response

Response activities take place **during** an emergency and include actions taken to save lives and prevent further property damage in an emergency situation.

Response roles and responsibilities for ESF 3 include:

All Tasked Agencies

- Provide a representative to operate from the EOC or other command location to ensure coordination with other agencies, as necessary.

DTD

- Immediately recall off-duty personnel.
- Inspect bridges and report other infrastructure for structural damage immediately following the occurrence of a natural hazard such as earthquake or flood.
- Clear debris from on roads, streets, culverts, and streams endangering bridges and other structures and coordinate with the EOC in matters of debris disposal.
- Perform temporary repairs of arterial routes and bridges.
- Coordinate restoration of public facilities, roads, and bridges.
- Demolish unsafe public works structures.
- When available, furnish equipment and operators as requested to assist fire and police in rescue operations.
- Support traffic control measures and provide signing for detours, shelters, routes, security, trespassing, etc.
- Document personnel and other costs related to the emergency or disaster response for possible Federal disaster assistance reimbursement.
- Ensure that public works emergency response activities and emergency public information are coordinated with the EOC, when it is operational.
- Advise the Board of County Commissioners on public works-related aspects of the emergency or disaster.
- Prioritize response activities in support of developing the EOC

Action Plan (EAP).

- Support public messaging related to ESF-related activities.
- Report suspicious devices found on infrastructure to Incident Command.
- Provide personnel and equipment to support emergency operations.

CCDM

- Coordinate with the EOC Planning Section to identify unmet needs.
- Establish a Public Works Branch in the County EOC if needed.
- Track the use of Public Works resources through the EOC Finance Section.

City Public Works Departments

- Public works officials of incorporated cities should respond in accordance with their cities' EOPs and coordinate public works response activities, as appropriate, with the County's public works resource coordinator in the County EOC.
- Public works officials of incorporated cities without their own EOPs should generally follow the response procedures outlined above, coordinating activities with local policy makers and the County's public works coordinator in the EOC.

WES, Water and Sanitary Districts

- Assist in assessing impacts when hazardous substances threaten to contaminate wastewater systems.
- Assess damage to storm water and sewer systems.
- Coordinate with sewer/wastewater districts/agencies.
- Coordinating and informing with regulatory agencies.
- Communicate and inform the public about situation updates through coordination with the County PIO.

Coordinating with Other ESFs

The following ESFs support public works-related activities:

- **ESF 1 – Transportation.** Identify impacts to the County's transportation infrastructure, establish emergency response and evacuation routes and develop priorities for repair and restoration.
- **ESF 10 – Hazardous Materials.** Identify impacts to hazardous materials and hazardous waste sites and develop priorities for repair and restoration.

- **ESF 12 – Energy.** Identify impacts to the County's energy infrastructure and develop priorities for repair and restoration.
- **ESF 18 – Military Support.** Provide public works support, including debris management, as resources allow.

EOC Operations

When public works-related activities are staffed in the EOC, the public works representative will be responsible for the following:

- Serve as a liaison with supporting agencies and community partners.
- Provide a primary entry point for situational information related to public works.
- Share situation status updates related to public works to inform development of Situation Reports.
- Participate in and provide public works-specific reports for EOC briefings.

- Assist in development and communication of public works-related actions to tasked agencies.
- Monitor ongoing public works-related actions.
- Share public works-related information with the Public Information Officer to ensure consistent public messaging.
- Coordinate public works-related staffing to ensure the function can be staffed across operational periods and into short-term recovery.

Preparedness

Preparedness activities take place **before** an emergency occurs and include plans or preparations made to save lives and to help response and recovery operations.

Preparedness roles and responsibilities for ESF 3 include:

All Tasked Agencies

- Develop operational plans for ESF 3 activities, as appropriate.
- Participate in ESF 3 related trainings and exercises, as appropriate.

DTD

- Develop and maintain an emergency notification list of departmental personnel.
- Develop and maintain operating procedures for disaster response, including evacuation transportation requirements.
- Provide appropriate training to personnel on the general concept of disaster response and self-preservation techniques and for utilization of the Incident Command System (ICS) in disaster procedures for damage assessment.
- Ensure that employees fully understand their obligations as emergency responders to report to work as soon as possible in the event of a major emergency or disaster.
- Ensure that employees are aware of the need for a family preparedness plan that will assist them and their families in dealing with the results of all hazards.
- Designate an emergency management program liaison that will be responsible for the department's mitigation and preparedness activities, including participating in the development, maintenance, and exercise of the EOP.
- Designate a Transportation and Development resource coordinator who will serve as a member of the County's EOC staff whenever the EOC is activated, for the purpose of training, exercising, or coordinating an actual response by the Clackamas County government to a major emergency or disaster. This coordinator shall also be responsible for developing and maintaining a working knowledge of resources available to the DTD through other local, State, and federal agencies for disaster response. This position will also work with utility companies, public works departments, the Oregon Department of Transportation, and the U.S. Army Corps of Engineers.
- Participate in the annual training exercises conducted by Emergency Management to test the EOP.

CCDM

- Maintain operational capacity of the County EOC to support public works activities.
- Ensure that staff are identified and adequately trained in the County EOC to include the tracking of public works resources.

City Public Works Departments

- Public Works officials of incorporated cities should work with their local policy makers to perform mitigation/preparedness activities similar to those outlined above in conjunction with the cities' EOPs.
- Public Works officials of incorporated cities without their own EOPs should utilize the mitigation/preparedness direction outlined above, as appropriate, and coordinate activities with the County Emergency Manager.

WES, Water and Sanitary Districts

- Develop and maintain an emergency notification list of personnel.
- Develop and maintain operating procedures for disaster response, including evacuation transportation requirements.
- Ensure that employees fully understand their obligations as essential employees to report to work as soon as possible in the event of a major emergency or disaster.
- Ensure that employees are aware of the need for a family preparedness plan that will assist them and their families in dealing with the results of all hazards.
- Designate an emergency management program liaison that will be responsible for the department's mitigation and preparedness activities, including participating in the development, maintenance, and exercise of the EOP.

Recovery

Recovery activities take place **after** an emergency occurs and include actions to return to normal or even safer conditions following an emergency.

Recovery roles and responsibilities for ESF 3 include:

All Tasked Agencies

- Demobilize response activities.
- Maintain incident documentation to support public and individual assistance processes.
- Participate in all after-action activities and implement corrective actions as appropriate.
- Provide support to recovery planning.

Recovery

- Continue to repair infrastructure and buildings on a priority basis.

DTD

- Continue necessary response operations.
- Assist other agencies with recovery operations and damage assessment, as appropriate.
- Return the focus of service to maintenance of the County infrastructure as soon as possible, releasing personnel and equipment for return to normal operations.

CCDM

- Manage the transition from response to recovery operations and keep all documentation collected relating to ESF 3-related response activities.
- Coordinate all after-action activities and implement corrective actions as appropriate.

City Public Works Departments

- Continue necessary response operations.
- Assist other agencies with recovery operations and damage assessment, as appropriate.
- Return the focus of service to maintenance of the city infrastructure as soon as possible, releasing personnel and equipment for return to normal operations.

WES, Water and Sanitary Districts

- Continue necessary response operations.
- Assist other agencies with recovery operations and damage assessment, as appropriate.

Mitigation

Mitigation activities take place **before and after** an emergency occurs and includes activities that prevent an emergency, reduce the chance of an emergency happening, or reduce the damaging effects of unavoidable emergencies.

Mitigation roles and responsibilities for ESF 3 include:

All Tasked Agencies

- Participate in the hazard mitigation planning process for the County.
- Provide agency and incident data to inform development of mitigation projects to reduce hazard vulnerability



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ESF 3 Tasked Agencies	
Primary County Agency	Department of Transportation and Development (DTD)
Supporting County Agency	Water Environment Services (WES)
Community Partners	City Public Works Departments, Water and Sanitary Districts
State Agency	Oregon Department of Transportation (ODOT) Department of Environmental Quality (DEQ)
Federal Agency	Department of Defense U.S. Army Corps of Engineers

1 Introduction

1.1 Purpose

Emergency Support Function (ESF) 3 describes how the County will provide the resources (human, technical, equipment, facilities, materials, and supplies) to support emergency public works needs during a time of a major emergency or disaster.

1.2 Scope

Activities encompassed within the scope of ESF 3 include:

- Monitor, assess, restore, and repair hazard impacts to the County's public works infrastructure.
- Work with public and private providers to determine levels of damage to the following systems: transportation, water control structures, dams, levees, public water supplies and facilities, electrical, natural gas, sewage, hazardous materials, and hazardous waste sites (generation, distribution, collection, storage, and disposal).
- Coordinate requests for public works support from local municipalities and tribal partners.
- Close or repair of damaged portions of public works infrastructure.
- Coordinate repair and restoration of damaged public infrastructure systems (e.g., water, electrical, natural gas, sanitary sewage, storm water collection, generating, distribution systems, dams, levees, water control structures).
- Provide for inspection and repair of essential facilities.
- Maintain undamaged or repaired public works infrastructure to ensure additional hazards do not occur.
- Coordinate with partners to demolish or stabilize damaged structures (public and private) is needed. Facilitate search and rescue and/or protect the public's health and safety.
- Coordinate disaster debris management activities including clearance of debris from public works infrastructure, and development and initiation of emergency collection, sorting, and disposal routes and sites for debris cleared from public and private property.
- Prioritize and initiate recovery efforts to restore, repair, and mitigate the impact of the public works and engineering needs listed above.
- Provide technical assistance to response team with respect to flooding, water management, structure integrity assessment, and impact assessments of infrastructure.

1.3 Policies and Agreements

The following policies and authorities are currently in place:

- Oregon Public Works Emergency Response Cooperative Assistance Agreement.
- ODOT Flexible Services Agreement, intergovernmental agreement for services with the Oregon Department of Transportation.
- Oregon Water/Wastewater Agency Response Network (ORWARN)
- Managing Oregon Resources Efficiently Intergovernmental Agreement (MORE-IGA)

2 Situation and Assumptions

2.1 Situation

The County faces a number of hazards that may require public works support. Considerations that should be taken into account when planning for and implementing ESF 3 activities include, but are not limited to, the following:

- Access to potable water and effective wastewater management plays a significant role in maintaining the health and safety of the public.
- A significant disaster or emergency situation may overwhelm local assessment and engineering capacity.
- Unsafe and unknown conditions may persist throughout a community as weakened or destroyed structures, homes, public buildings, roads, and bridges await assessment from engineers and emergency personnel.
- Debris may make transportation routes impassable and local standardized equipment may not be capable of removing it, thus making it difficult or impossible to reach Public Works infrastructure or get necessary equipment to sites in need of repair/restoration.
- Local equipment used for repair and removal may have been damaged or inadequate for the disaster or emergency event.
- Local personnel may have personal safety and health concerns following a disaster or emergency event making it impossible for them to perform their duties.

2.2 Assumptions

ESF 3 is based on the following planning assumptions:

- A major emergency or disaster may cause extensive damage to property and infrastructure. Structures may be destroyed or severely weakened. Homes, public buildings, bridges, and other facilities may have to be reinforced or demolished to ensure safety. Debris may make streets and highways impassable. Public utilities may be damaged or be partially or fully inoperable.
- Each public works agency will utilize its existing directives and procedures in responding to major emergencies/disasters while working within the framework of their applicable emergency operations plans (EOPs).
- Access to disaster impacted public works infrastructure may depend upon either the repair (permanent or temporary) of transportation routes, or the establishment of ad-hoc alternatives.
- Interdepartmental liaison activities and requests for additional public works and engineering resources may be coordinated through the County Department of Transportation and

Development Director or designee, who may be located at the County's Emergency Operations Center (EOC) during the response to a major disaster.

- In many locations, debris clearance and emergency road repairs will be given top priority to support immediate life-saving emergency response activities.
- Damage to public works infrastructure may result in a public health emergency (e.g., lack of potable water, damage to wastewater systems).
- Damage assessment of the disaster area will be required to determine potential work load.
- Assistance may be needed to clear debris, perform damage assessments and 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.
- Debris may include many different types of materials, including hazardous materials that require specialized equipment and personnel to remove.
- Following disasters that cause significant debris, existing disposal sites may not provide effective debris management solutions because of capacity limitations and their need to provide continuous waste management operations for day-to-day debris generation.
- Local contractors will be utilized by public works agencies in supplementing emergency response and recovery capabilities.

3 Concept of Operations

3.1 General

All ESF-related activities will be performed in a manner that is consistent with the National Incident Management System and the Robert T. Stafford Disaster Relief and Emergency Assistance Act.

- Plans and procedures developed by the primary and supporting agencies provide the framework for carrying out the necessary ESF-related activities.
- Requests for assistance will first be issued in accordance with established mutual aid agreements and once those resources have been exhausted, a request may be forwarded to the State Emergency Coordination Center.
- The County EOC will provide guidance for the coordination of ESF-related activities.

3.2 Pre-Disaster Operations

During the mitigation and preparedness phases, public works agencies in Clackamas County should develop internal emergency procedures to handle daily situations while also preparing for larger-scale events. This includes developing and maintaining emergency call-out lists, contributing to and participating in the development and exercise of their jurisdictions' EOPs for major emergencies and disasters. Pre-disaster planning should include the development of mutual aid agreements between the County and the various cities, as appropriate, and documentation of condition including photographic documentation of facilities, major culverts, bridges, etc. for Federal Emergency Management Association reimbursement purposes.

3.3 Disaster Response

Public works response will include all activities to restore vital lifeline systems to the community, focusing on critical bridges, roads, potable water systems, and wastewater systems throughout

the County. Protection of life will be the priority, which in many response situations will mean that public works will be providing direct support to police and fire units in rescue, evacuation, and traffic control.

3.4 Coordination with Other ESFs

The following ESFs support public works-related activities:

- **ESF 1 – Transportation.** Identify impacts to the County’s transportation infrastructure, establish emergency response and evacuation routes and develop priorities for repair and restoration.
- **ESF 10 – Hazardous Materials.** Identify impacts to hazardous materials and hazardous waste sites and develop priorities for repair and restoration.
- **ESF 12 – Energy.** Identify impacts to the County’s energy infrastructure and develop priorities for repair and restoration.
- **ESF 18 – Military Support.** Provide public works support, including debris management, as resources allow.

4 Emergency Coordination

4.1 Special Districts

County officials collaborate with special districts in coordinating emergency preparedness, response and recovery operations. An intergovernmental mutual aid agreement between the County and special districts is available to all jurisdictions that choose to participate. The agreement establishes procedures for requesting and providing mutual aid resources in a major emergency or disaster.

5 ESF Annex Development and Maintenance

DTD will be responsible for coordinating regular review and maintenance of this annex. Each primary and supporting agency will be responsible for developing plans and procedures that address assigned tasks.