



ESF 3: Public Works

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ESF 3 Tasked Agencies

Primary County Agency	Department of Transportation and Development (DTD)
Supporting Agencies	Water Environment Services (WES) Finance (Facilities Management)
Community Partners	City Public Works Departments Water and Sanitary Districts Metro
State Agency	Oregon Department of Transportation (ODOT) Department of Environmental Quality (DEQ) Oregon Health Authority (OHA)
Federal Agency	U.S. Army Corps of Engineers (USACE)

1 Introduction

1.1 Purpose

Emergency Support Function (ESF) 3 describes how the County will conduct and coordinate public works operations and provide the resources (human, technical, equipment, facilities, materials, and supplies) to support public works needs during major emergencies and disasters.

While this annex briefly discusses the role of public works in urban search and rescue (USAR) and debris management, detailed information on those roles can be found in ESF 9 for USAR and Support Annex 4 for debris management. In addition, details regarding the role of public works in responding to dam failure scenarios can be found in Incident Annexes 4-6.

1.2 Scope

Activities encompassed within the scope of ESF 3 include:

- Monitor, assess, restore, and repair impacts to the County's public works infrastructure.
- Work with public and private providers to determine levels of damage to the following infrastructure: transportation, solid waste management, water and wastewater, dams, levees, facilities, and sewage.
- Coordinate requests for public works support from local municipalities, special districts and tribal partners.
- Close damaged portions of public works infrastructure.
- 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) as needed.
- Assist with urban search and rescue operations (See ESF 9).
- 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 (See Support Annex 4).
- 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 agreements 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)
- Oregon Resource Coordination Assistance Agreement (ORCAA)
- Clackamas County's Debris Management Plan (See Support Annex 6)
- Dam-specific incident annexes (See IAs 4-6)

2 Situation and Assumptions



2.1 Situation

Clackamas County faces a number of hazards that may damage public works systems and structures and require the County to manage, coordinate, and/or support public works response efforts. The county's public works infrastructure and resources are owned, operated, and/or managed by a wide variety of entities including the County Department of Transportation and Development (DTD), city departments (e.g., public works, water, sewer), special districts (e.g., water, sewer, transit), state agencies (e.g., ODOT), and the private sector (e.g., PGE dams). Considerations when implementing ESF 3 activities include, but are not limited to, the following:

- 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. Water and wastewater systems 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).
- Damage to public works infrastructure may result in a public health emergency (e.g., lack of potable water, damage to wastewater systems).
- A significant disaster or emergency 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.
- 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.
- 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:

- Public works agencies will have enough staff and equipment to implement their plans at a base level.
- Communications will be available to support operations.
- In some incidents, access to disaster impacted public works infrastructure will depend upon either the repair (permanent or temporary) of transportation routes, or the establishment of ad-hoc alternatives.
- 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.
- Resources from outside the county and/or state will not be available for at least several days and possibly longer.

3 Concept of Operations

3.1 General

Emergency public works operations involve:

- All activities to restore vital lifeline systems to the community, focusing on critical bridges, roads, potable water systems, and wastewater systems throughout the county.
- Identification of areas impacted and people at risk and assessing damages to County and partner agency public works infrastructure and resources.
- Coordinating the assessment of damages to commercial and residential properties.
- Implementing the County debris management plan and coordinating debris management operations.
- Coordination of arrangements to obtain additional resources to access public works infrastructure for system repair, maintenance, and operations.
- Seeking assistance from the State when local resources are insufficient or overwhelmed.

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. Plans and procedures developed by the primary and supporting agencies provide both the framework and details for carrying out the necessary ESF-related activities.

3.2 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 4, Firefighting:** Provide water resources integral to firefighting.
- **ESF 8, Health and Medical Services:** Identify impacts to healthcare facilities and small (i.e., County-regulated) drinking water systems and develop priorities for repair and restoration.
- **ESF 9, Search and Rescue:** May provide heavy equipment to support with search and rescue.
- **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 County

4.1.1 County EOC

The County EOC will coordinate public works response efforts with involved County departments, impacted cities and special districts, state agencies (e.g., ODOT), other public agencies, and the private sector. This will include assessing damages and other impacts to public works infrastructure across the county, prioritizing the impacts for support, and acquiring and allocating resources for response and restoration operations. The assessment will also include identifying the types and amounts of debris generated and determining if implementation of the County Debris Management Plan (Support Annex 4) is warranted.

The County EOC may, under some circumstances, seek resource support through appropriate mutual aid agreements (intra-county, inter-county, and statewide). When multiple counties are impacted by an incident and competition for resources is high, the County will declare an emergency and seek assistance from the State.

4.1.2 Transportation and Development (DTD)

The Director of DTD or designee will serve in the EOC to help coordinate public works operations and assistance under this annex. DTD will assess impacts on County maintained roads and bridges and residential and commercial properties for which the County has regulatory responsibilities. As part of the road and bridge assessment, DTD will also identify locations where debris (flood related, wind-blown, collapsed structures, etc.) impedes traffic flow and work with the County EOC to prioritize debris clearance operations. If the County Debris Management Plan is activated, DTD will work with the plan stakeholders to implement the plan's processes and procedures.

4.1.3 Water Environment Services (WES)

WES will assess damage and other impacts to its infrastructure and systems and provide that information to the County EOC. WES will prioritize and initiate its repair and restoration efforts and seek resource assistance from the County EOC as needed. In incidents where there isn't widespread damage to water and wastewater facilities across the county, WES may seek resource support directly through the Oregon Water/Wastewater Agency Response Network (ORWARN).

4.1.4 Finance (Facilities Management)

Facilities Management will assess damage and other impacts to County owned and/or maintained facilities and provide that information to the County EOC. Facilities Management will work with department leadership and County administration to prioritize its repair and restoration efforts and seek resource assistance from the County EOC as needed.

4.2 Cities

Incorporated cities have primary responsibility for the safety and well-being of their citizens and for resource allocation and emergency operations within their jurisdictions. Each city is responsible for the utilities, streets, and bridges it owns and for utilizing its resources for jurisdictional needs. Each city is responsible for assessing damages to the public works infrastructure for which it has responsibility and for reporting that information to the County EOC. The County EOC will work with the impacted cities to prioritize and provide resource support for infrastructure repair. Cities may request assistance through appropriate mutual aid agreements or through an emergency declaration. If a city emergency is declared to request resources, the city will forward the declaration to the County EOC and Disaster Management Director.

4.3 Special Districts

Special districts own and operate numerous public works facilities in the county, most notably for water intake, treatment, and distribution and wastewater collection and treatment. Each district is responsible for the infrastructure it owns and for utilizing its resources for district needs. Each district is responsible for assessing damage to its public works infrastructure and for reporting that information to the County EOC. Prior to soliciting support from the EOC, water providers may leverage mutual aid relationships through the Oregon Water/Wastewater Agency Response Network (ORWARN). The County EOC will work with impacted districts to prioritize and provide resource support for infrastructure repair in cases where the need exceeds capacity. Districts may request assistance through appropriate mutual aid agreements when infrastructure impacts aren't widespread across the county but should otherwise work through the County EOC for support.

4.4 Regional

The Regional Disaster Preparedness Organization (RDPO) has identified Regional Emergency Transportation Routes (ETRs) in the Portland-Vancouver metro area. These routes cover Clackamas, Columbia, Multnomah, and Washington counties in Oregon, and Clark County in Washington. The routes are designated for priority damage assessment and repair following an earthquake and are intended to assist the region in establishing routes for emergency response and restoration efforts and providing continuity across the five counties. The County EOC will share the findings of its route assessments with the ETR planning partners, including the counties, Metro, ODOT, and Washington State Department of Transportation (WSDOT)

Metro, the Portland metropolitan area's regional government, has day-to-day and emergency

responsibilities for regulating and managing solid waste across the region. Metro also operates two transfer stations for garbage collection, recycling, and disposal of household hazardous waste, one of which is located within Clackamas County. The County will coordinate its debris management efforts with Metro in any incident where there is a significant amount of debris (other than woody debris) generated and/or when the County Debris Management Plan is being implemented.

4.5 State and Federal Assistance

ODOT is responsible for construction, maintenance, and repair of interstate freeways, and state highways and bridges, and may impose restrictions and implement temporary closures of highways. ODOT also regulates motor carriers and railroads (including rail freight and passenger planning and operations) and the transport of hazardous materials by rail. ODOT has executed an Intergovernmental Agreement with Clackamas County for transportation maintenance and operational support and assistance. If incident response requires resources beyond those available day-to-day and through mutual aid, the EOC will request assistance from the State through the emergency declaration process. Depending on incident impacts (i.e., water, wastewater, debris, etc.) the State may provide assistance through the Oregon Military Department, Oregon Health Authority (OHA), Department of Environmental Quality (DEQ), or other state agencies.

The U.S. Army Corps of Engineers (USACE) may provide technical assistance to help coordinate debris management and environmental permitting efforts and, in very large debris generating incidents where a federal disaster declaration has been made, could be tasked to take over the debris management process. The Corps' role in debris management is described in more detail in the County Debris Management Plan.

5 ESF Annex Development and Maintenance



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