

## ESF 3. Public Works and Engineering

### 1. Purpose and Scope

#### 1.1 Purpose

The purpose of this annex is to outline the processes for organizing and coordinating public works and engineering services by the various jurisdictions of Coos County to help protect life and property during the response to a major emergency/disaster. It also addresses restoring the county infrastructure during the recovery phase and identifying mitigation and preparedness activities.

#### 1.2 Scope

This annex identifies Public Works and Engineering as the Coos County Road Department and may need to hire out the skills required under the engineering portion of this annex. The Coos County Road Department may call upon the Oregon Department of Transportation through Mutual Aid for their expertise and assistance, as needed.

### 2. Situation and Assumptions

#### 2.1 Situation

Most major emergency situations, natural or human-caused, will require the direct involvement and support of public works agencies in both the response and recovery phases of a disaster. In a flood or earthquake response, public works agencies will generally be assigned or assume the lead agency role.

#### 2.2 Assumptions

- Major emergency response operations for public works agencies will include assisting police and fire, as necessary, in traffic control and rescue operations in addition to clearing and maintaining critical lifeline routes.
- Each public works agency will utilize their existing directives and procedures in responding to major emergencies/disasters while working within the framework of their applicable Emergency Operations Plan (EOP).
- Interdepartmental liaison activities and requests for additional public works and engineering resources will be coordinated through the Coos County Road Department's designated resource coordinator, who will be located at the County's EOC during the response to a major disaster.
- Local contractors will be utilized by public works agencies in supplementing emergency response and recovery capabilities.

### **3. Concept of Operations**

#### **3.1 General**

##### **3.1.1 Pre-Disaster**

During the mitigation and preparedness phases, public works agencies in Coos County are expected to 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 jurisdiction's EOP for major emergencies and disasters. Pre-disaster planning should include the development of mutual aid agreements between the county and various cities, as appropriate and photographic documentation of facilities, major culverts, bridges, etc. for replacement purposes.

##### **3.1.2 Disaster Response**

Public works response will include all activities to restore vital lifeline systems to the community, focusing particularly on critical bridges and roads throughout the county. Protection of life and property will be the priorities, 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.

#### **3.2 Direction and Control**

- The Roadmaster for the County Road Department, or the designated supervisor will normally fulfill this role and is responsible for directing the County's public works response to a major emergency and coordinating response activities with the County's EOC.
- The Public Works Operations Superintendent also known to the county as the County Roadmaster or a designated representative shall serve as the public works resource coordinator, working as a member of the EOC Management State, coordinating the flow of public works information and processing requests for and allocating additional public works resources, as appropriate.
- An incident command post/department operations center may be established at the County shops or other locations as may be necessary to direct the on-scene response to major incidents occurring simultaneously.
- Communications between incident command posts and the EOC shall be established with regular updates provided on emergency response activities.

### **4. Organization and Assignment of Responsibilities**

#### **4.1 Organization**

- The County Emergency Management Organization shall respond in accordance with the direction provided in the County's EOP and/or this annex.

- The Road Department shall implement their own disaster procedures, as appropriate, and work within the framework of the County Emergency Management Organization and the EOP, coordinating with the County EOC at all times.
- Other jurisdictions should respond in accordance with the direction provided in their respective EOP's or the County's EOP as appropriate.

## **4.2 Task Assignments**

Task assignments for public works operations shall be consistent with those outlined in the Basic Plan section of the EOP; ESF Annex #5, Emergency Management; and Road Department policies and procedures. Specific tasks are outlined below by the phases or stages of emergency management.

### **4.2.1 Mitigation and Preparedness**

#### **4.2.1.1 Coos County Road Department**

- 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 response.
- Ensure that employees fully understand their obligation as emergency responders to report to work as soon as possible in the event of major emergency/disaster.
- Ensure that employees are aware of the need for a family preparedness plan which will assist them and their families in dealing with the results of a natural disaster such as an earthquake.
- Designate an emergency management program liaison who will be responsible for the department's mitigation and preparedness activities, including participating in the development, maintenance and exercise of the County EOP.
- Designate a Road Department resource coordinator who will serve as a member of the County's EOC staff whenever the EOC is activated either for the purpose of training, exercising, or coordinating an actual response by Coos County government to a major emergency/disaster.

This coordinator shall also be responsible for developing and maintaining a working knowledge of resources available to the Road Department through other local, state, and federal agencies for disaster response. The person will also work with utility companies, public works departments, ODOT, and the Army Corps of Engineers.

- Participate in the annual training exercises conducted by the County's Emergency Management Office to test the EOP.

**4.2.1.2 Incorporated Cities**

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

**4.2.2 Response**

**4.2.2.1 Coos County Road Department**

- Immediately recall off-duty personnel.
- Inspect bridges, etc. for structural damage immediately following the occurrence of a natural hazard, i.e., earthquake, flood, etc. (See Support Annex 3, Damage Assessment and Disaster Recovery).
- Perform debris clearance on roads and streets and streams endangering bridges and other structures and coordinate with the EOC in matters of debris disposal.
- Make temporary repairs of arterial routes and bridges.
- Coordinate restoration of public facilities, roads, and bridges.
- Demolish unsafe structures.
- Furnish equipment and operators to assist fire and police in rescue operations.
- Support traffic control measures and provide signs for detours, routes, security, trespassing, and shelters as requested and able.
- Coordinate transportation resources for evacuations.

- Document personnel and other costs related to the major emergency/disaster response for possible federal disaster assistance reimbursement.
- Provide a public works resource coordinator who will serve as a member of the County's EOC staff when the EOC is activated by Coos County government in response to a major emergency/disaster. This coordinator shall be responsible for identifying and coordinating the allocation of resources available to public works through other local, state, and federal agencies for disaster response. This position will also work with the utility companies, other public works departments, ODOT, and the Army Corps of Engineers.
- 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/disaster.

**4.2.2.2 Incorporated Cities**

- Public works officials of incorporated cities should respond in accordance with their city EOP 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 a city EOP should generally follow the response procedures as outlined above, coordinating activities with local policy makers and the County's public works coordinator in the EOC.

**4.3 Recovery**

**4.3.1 Coos County Road Department**

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

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## **5. Annex Development and Maintenance**

The Emergency Management Program Manager in conjunction with the Road Department Liaison for Emergency Management, is responsible for ensuring that this annex is updated and revised, as necessary. The Road Department is responsible for developing and maintaining any related operational policies and procedures.

## **6. Supporting Plans and Procedures**

ESF 14, Long-Term Community Recovery.

Support Annex 3, Damage Assessment and Disaster Recovery.

Debris Management plan.

## **7. Appendices**

- A. Damage Assessment Operational Guidelines
- B. COE Sandbag SOP

## Appendix A. Damage Assessment Operational Guidelines

### 1. Introduction

Damage assessment is conducted in three phases: Initial Damage Assessment, Preliminary Damage Assessment, and Project Worksheet (formerly called a Damage Survey Report) development. The initial assessment provides information on which to base response and is supplemented by the preliminary assessment with supporting information for the disaster declaration. Both are the responsibility of local government. The Project Worksheet process is an in-depth analysis of long-term effects and costs of the emergency and is done with the combined efforts of local, state, and federal agencies. The Planning Section is responsible for damage assessment using cost information provided by the Finance Section.

### 2. Initial Damage Assessment

The initial damage assessment should begin as soon as possible according to the following priorities.

#### 2.1 Priority 1 - Public safety and restoration of vital services

Each facility should be analyzed for structural integrity and safety, functional capability, and estimated cost to repair or replace.

- EOC, Fire Stations, Law Enforcement offices
- Hazardous occupancy industry, i.e., mills, chemical plants, etc.
- Bridges and overpasses
- Major businesses and schools i.e., hospitals, courts, jail facility, etc.
- Telephone and radio communication systems
- Power, natural gas, water, and sewer systems

#### 2.2 Priority 2 - Assessment of damage to private dwellings and businesses

An estimate of the number of private dwellings and businesses affected by the incident will be needed to support the request for a State or Federal disaster declaration. A “Windshield” survey ( cursory drive-by damage assessment) should be made at the same time as the more detailed survey required by priority 1 facilities.

- Private homes, multiple family dwellings
- Businesses

### **3. Preliminary Damage Assessment**

The preliminary damage assessment builds on the initial damage assessment to provide supporting documentation for state and federal disaster assistance. The following tasks should be done:

- Complete the appropriate State/Federal Damage Assessment Worksheets.
- Assign personnel to State and Federal Damage Assessment Teams.

### **4. Project Worksheets Development**

This is a detailed process needing cooperation from a variety of agencies.

## Appendix B. COE Sandbag SOP

Friday, January 11, 2008 8:25 AM

The Corps deploys sandbags and other flood fight materials and equipment at OEM's request.

Here is COE policy from Engineer Pamphlet 500-1-1: Direct Assistance. Direct assistance may include, but is not limited to, the issuance of supplies, the loan of equipment, rescue operations, conducting flood fight operations and contingency contracting. All loaned supplies and equipment will be hand receipted to the receiving agency....

(1) Supplies and Equipment. Issuance of supplies and equipment to non-Federal interests is permitted only in declared emergencies.... Government supplies and equipment should be made available only if the arrival or non-availability of local supplies and equipment will cause delays in an effective response effort.... USACE supplies (e.g., sandbags or plastic sheeting) and equipment (e.g., pumps and generators) may be loaned to state and local officials for use in supplementing their flood fighting operations. All such supplies and equipment will be hand receipted to the receiving agency. The hand receipt will contain an agency billing address, and a statement similar to the following:

"I understand that my agency will be required to return loaned equipment and reimburse the US Army Corps of Engineers for expended supplies. Reimbursement may be in the form of (a) replacement in kind with an equivalent quality to those issued; (b) paying the cost for the Corps of Engineers to replace the supplies with those of an equivalent quality; or (c) returning in good, usable condition those supplies not used; or (d) any combination of the above. I understand that my agency will be billed for supplies not replaced, and agree to remit payment within 30 days of the bill date."

(a) All unused stocks loaned to local interests will be returned to USACE when the operation is complete.

(b) District commanders may waive loan replacement requirements for expendable supplies (sandbags, plastic sheeting, etc.) when a Presidential disaster or emergency declaration under the Stafford Act has been made. No waivers are permitted for loaned equipment. No waivers are permitted for supplies if no Presidential disaster or emergency declaration is made, unless an exception is approved by HQUSACE.

(c) Local interests will return loaned equipment in the same condition as it was when lent. If equipment is damaged or lost, either the equipment will

be replaced in kind, or reimbursement made to USACE by the hand-receiving agency.

Sandbag vendors/suppliers can be found on the web.

Requests for sandbags from the Corps must be made thru OEM. OEM will notify the Corps so they can begin internal coordination to be ready should they be tasked to provide the bags.

Besides the Portland District requests may go to COE EOCs Walla Walla, San Francisco and Sacramento Corps Districts, all having emergency response responsibility in Oregon.

**Below is a current vender list**

\_\_\_\_\_

Davis Bag Company -  
Portland OR  
Polypropylene 5000 25 cents per bag  
10,000 21 cents per bag  
Freight approx \$100 per pallet - 5000 bags per pallet

Justus Bag Company -  
Spokane WA - 24 hrs  
Polypropylene 10,000 29 cents per bag  
20,000 27 cents per bag  
Freight approx \$80 per pallet - 20,000 bags per pallet

Ace Industrial -  
Grants Pass - after hours  
Polypropylene w/ties 5,000 89 cents per bag  
10,000 79 cents per bag (shipping pre-paid)

[www.acetools.com](http://www.acetools.com)