
Public Works Annex

I. INTRODUCTION

The restoration of utility services, especially water, streets and roads, and the repair and restoration of City buildings can be vital to emergency response and recovery. This annex will guide the response, from preparedness activities, through the recovery activities of debris clearing and restoration of water, and waste water.

II. OBJECTIVES

- A. To coordinate the restoration of utility services, to clear debris and open roadways.
- B. Repair essential roads.
- C. Clear debris and open roads.
- D. Support damage assessment activities.
- E. Assess the usability of City facilities after the disaster.
- F. Clear debris and open City facilities.
- G. Support mass care efforts.

III. PHASES OF THE EMERGENCY

A. Before the emergency

During this phase, prepare plans, procedures, and checklists that will guide the disposition of public and private resources in and emergency. Plans and procedures should provide for coordination and communications with government agencies and private sector construction and engineering firms. Prepare and maintain resource lists.

Contact PUD and the Telephone Company to make sure you understand their emergency procedures and to make sure their representatives are familiar with our Emergency Operations Center. Obtain contact telephone numbers which can be reached during a disaster and which are not available to the general public.

Identify facilities (such as debris disposal sites) and structures required to support emergency operations.

If a situation such as an approaching storm or worsening situation warrants an increase in readiness, review and update documents, check facilities, supplies, and equipment and alert resource suppliers and emergency personnel.

B. During the emergency

1. Warning phase

This phase could begin with a warning, such as the forecast of a flood, fire, tsunami, or natural disaster. During the warning phase mobilize public works staff.

If the Emergency Operations Center is activated, contact PUD and the telephone company representatives and advise them of our status and check on theirs.

2. Impact Phase

Open roads, assess damage, clear debris, and help restore essential services, restore facilities to operating condition and assist with damage assessment.

C. After (Recovery)

Restore roads, bridges, and essential services, essential service facilities and work on long term reconstruction.

IV. ORGANIZATIONS AND RESPONSIBILITIES

A. Cities will do the following:

1. Oversee all debris clearance within the jurisdiction.
2. Oversee all shelter building activities within the jurisdiction.
3. Through the Public Information Officer, provide public information about road closures, unsafe structures and shelter development within the jurisdiction.
4. Coordinate with the operational area regarding resources and information.
5. Florence will rely on the emergency response efforts of private utility companies.

B. County (Operational Area)

Lane County will rely on the emergency response efforts of private utility companies. Those utility companies will usually provide representatives to the Emergency Operations Center.

1. In the unincorporated area of Western Lane County, the Lane County Public Works Coordinator will be responsible for:
 - a. Coordinating resources required for debris clearance, route recovery, and other engineering problems.
 - b. Coordinating countywide construction and engineering operations.
 - c. Giving information and requests for help to the Mutual Aid Coordinator
2. State
 1. ODOT will coordinate statewide construction and engineering operations and requirements.
 2. Oregon State Police
 - a. Assesses damage to streets and highways.
 - b. Closes dangerous roads.
 - c. Removes obstructing vehicles.
 - d. Controls traffic into and around impacted areas.
 - e. Helps ODOT with route recovery priorities.

3. ODOT
 - a. Assesses damage to state highways.
 - b. Establishes route recovery priorities.
 - c. Removes debris.
 - d. Makes repairs and establishes detours to restore highway transportation on selected routes.
 - e. Helps local agencies.

Threat Summaries

I. INTRODUCTION

Florence is situated in the western portion of Lane County and is subject to a variety of disasters, both natural and manmade. There are rail lines, two highways that meet in the city. Portions of the City and surrounding County areas are subject to effects of tsunami and the area is within a few miles of known earthquake faults. The area is generally sand over a rock base, which would lend to liquefaction. Whether considered alone or in conjunction with the others, they have disaster potential.

II. MAJOR EARTHQUAKE

The Cascadia Subduction Zone fault is located 50 to 60 miles west in the Pacific Ocean. The Juan de Fuca fault is also located in the Pacific Ocean approximately 200 miles west.

By earthquake standards, Florence is in a low earthquake probability zone. However, with its many liquefaction factors and the effect of tsunami, a quake in the area could have immediate and devastating effects. Additionally, earthquakes frequently occur in areas where there are no known faults.

A. Casualties

The number of casualties will vary with the time of day, with fewer at night and more during the day.

While no reliable studies exist to predict the total number of casualties, it is safe to believe that a 8.3 magnitude quake effecting a populated area would produce many deaths and more than enough casualties to overwhelm existing medical facilities. In addition, several hundred homeless could be expected.

B. Hazardous Materials Incidents

Although chemical storage laws require seismic restraints, there are storage facilities around the County, including Florence, that are old, inadequate, or illegal. A major quake could also cause many transportation accidents. Response will be hampered by damage to roads and communications systems.

Apart from the direct effects of an earthquake, the combination of hazardous materials incidents after a quake by themselves comprises a major disaster.

C. With the surrounding forest there is always a threat of forest fires, especially in the North Fork area of the rural western Lane County.

D. Several of the schools in the Florence area are built to modern earthquake standards. These structures provide a major source for mass shelter and feeding. Some damage to schools should be anticipated, however.

E. Transportation

Roadways will be temporarily closed to ground and structural failures. Roadway clearance, emergency repairs, detours, and inspections will restrict usage during the initial post-earthquake hours.

Highway 101 could be damaged by strong shaking or ground failure. Within 36 hours, some routes should be open.

Rail transport to and from Eugene and Coos Bay will be out for at least three days.

Florence Municipal Airport should be open for limited use.

F. Communications

Telephones will be overloaded by post-earthquake calls within the area and from the outside. Damage to equipment due to ground shaking and loss of electrical power will further complicate this situation. Because of shaking patterns corresponding with key facility locations, Florence is likely to experience complete localized telephone failures. Access for repairs will be a major problem.

The phone systems in the EOC are set up to have priority during an emergency. The City's internal system is not set up this way. Payphones are on a priority system for the public.

Most two-way radios will work, but there will be problems caused by overloading, loss of antennae, and misalignment of dishes. Most cellular phones will be out. Most radio communications centers have emergency generators with plenty of fuel. Amateur radio will become a primary link.

G. Utilities

Electrical power outages are expected to be widespread. It is assumed that all critical facilities such as hospitals, fire and police stations, emergency communications and operations centers, and water pumping stations will require standby generating equipment and emergency fuel supplies. It is not known how many private generators are in place, but police and fire stations and both hospitals have them in place.

The drinking water supply will have to be trucked to the affected neighborhoods. In some areas, the lack of water will hamper firefighting efforts. Power outages will cause problems for water systems that depend on pumps. The underground mains may be damaged or destroyed. We will need to rely on the remaining wells and reservoirs for water. With the abundance of fresh water lakes in the area drinking water should not be a problem.

The potential for loss of electricity for our local service stations is real, and a shortage of petroleum fuels may occur. However, for emergency services, several have been equipped with back up 12 volt pumping capabilities and/or portable generators.

III. HAZARDOUS MATERIALS INCIDENTS

A wide variety of hazardous materials are present in Florence and the surrounding region. These materials are stored, used in manufacturing, and moved by truck, train, plane, and pipeline. The materials may be poisonous, corrosive, explosive or a combination of any, and must be treated accordingly.