

The preservation of life and property is a responsibility of local, state, and federal governments. SVFR has prepared this Plan in an effort to ensure the most effective and economical use of all resources for the maximum benefit and protection of the civilian population in time of an emergency.

The basic tenets of emergency preparedness/civil defense are self-help and mutual aid. The policies, principles, concepts, and procedures contained in this Plan are designed to provide the basis for SVFR to successfully conduct emergency operations.

The objectives of this Plan are to incorporate and coordinate all facilities and personnel of the District into an efficient organization capable of reacting adequately and promptly in the face of disaster, and to conduct such operations as the nature of the disaster requires, whether during a local emergency or to assist other jurisdictions should they need help.



Florence, Oregon is a rapidly growing community with a population approaching 8,000. An additional 8,000 – 12,000 citizen lives within six miles of Florence within the lush forests and near many lakes and streams that surround this community. Federal 1990 census figures indicate a 17% increase in the population of Florence with a significant proportion (68%) of that growth being fueled by individuals in the over 65 age group. This compares with a 13% growth rate for 65 and older citizens in Lane county as a whole.

Florence is located on the Siuslaw River approximately 50 miles west of Eugene. To access Florence one must take either Highway 126 from east or Highway 101 from the north or south. Highway 126 crosses the coastal mountains from Eugene and follows the last 16 miles of the Siuslaw River on its way to Florence. Highway 101 to the north is a narrow scenic road cut out of basalt cliffs overlooking the Pacific Ocean. The nearest neighbor to the north is the small coastal village of Yachats. Several bridges built in the 1930's cross-streams and canyons to the north of Florence. Highway 101 to the south crosses the historic Siuslaw river Bridge and meanders through coastal hills and skirts several lakes of its way to Reedsport, it's nearest southern neighbor 25 miles away.

PROBLEMS ASSOCIATED WITH CATASTROPHIC DISASTERS

It is in the context of catastrophic disasters, which can, and in all probability will, result in the isolation of citizens from outside assistance by professionally trained emergency services personnel.

As a consequence of its location, Florence is highly susceptible to several potential disaster scenarios including earthquake, tsunami, flooding, fire and high winds. There are three primary reasons why Florence, and

local citizens groups specifically (neighborhoods, Retirement communities, lakeside communities, etc.), would be subject to isolation from outside assistance: 1) Damage to local and regional highways, bridges, and infrastructure limiting emergency access to local citizens, 2) large scale disasters tend to occur regionally and neighboring communities would find it necessary to help themselves initially, 3) the ability of local agencies to respond quickly to a community wide disaster where infrastructure is severely damaged could be seriously limited. The following information specifically addresses potential catastrophic disasters and their effect on the citizens and infrastructure within the Florence metropolitan area.

EARTHQUAKES

The greatest earthquake threat to western Oregon, and Florence, is from the Cascadia Subduction Zone, which stretches from the northern end of California to northern Washington. Scientific evidence indicates that earthquakes of Richter scale magnitude, eight have occurred within this region in the past. In a 1995 report to the Senate NOAA reported that "the probability of a magnitude 8 Cascadia Subduction Zone earthquake occurring in the next 50 years is about 35%...which is comparable to that of southern California...a region recognized as having a very high seismic potential".

Specific damage to infrastructure and injury to citizens in western Oregon and specifically in the Florence area would come as the result of four factors: 1) structural damage as the result of seismic waves, 2) landslides, 3) soil liquefaction, and 4) tsunami.

Seismic Waves:

In addition to significant damage to local infrastructure including medical and emergency services building, access

routes to Florence would likely be severed. Bridges which control ground vehicle access to Florence via Highway 101 (Siuslaw River bridge south, Big Creek, Ten Mile, and Cape Creek north) were built in the 1930's well before the threat of earthquake to the Oregon coast was understood. In all likelihood seismic damage to these structures would be significant and would render them impassable. Bridges on the North Fork of the Siuslaw two miles east on Highway 126 and the Mapleton bridge 15 miles east while newer and constructed of wood and steel rather than concrete would, in all probability, also sustain major damage. Additional damage due to seismic waves which could isolate local citizens include fallen trees, power lines and damaged highways.

Landslides Resulting from Earthquake: Major tunnels drilled through basaltic rock control access to Florence to the north and east. The Heceta Head tunnel 13 miles north of Florence was constructed during the 1930's at the same time as the coastal bridges. The Highway 126 tunnel 20 miles east of Florence was constructed in the early 1960's. Both tunnels could be susceptible to damage caused by seismic waves in the form of landslides. Access to the tunnels along Highways 101 and 126, in fact many miles of those highways, are carved from sheer rock cliffs and are highly susceptible to landslide both from seismic waves or excessive rainfall.

Soil Liquefaction: Sandy soil, "fill" dredged from river bottoms, and water saturated soil are highly susceptible during strong earthquakes to an event called "soil liquefaction". The entire city of Florence and a sizable percentage of the metropolitan area are built on sand. Highways, housing, businesses, and schools are

constructed on said deposited by the Pacific Ocean. Due to its geometric structure, this type of sand is particularly susceptible to liquefaction. Highway 126, which runs sixteen miles through the Siuslaw River delta was built upon layer after layer of this sand and fill dredged from the river. It is famous locally for its constant settling and needs for repair. Florence being virtually at sea level will suffer significant disruptions of services as a result of soil liquefaction if a large earthquake occurs.

Tsunami: Tsunami are large waves created as the result of an earthquake generated in or near the ocean.

Significant threat to low lying communities can occur when these waves reach land. In 1964 an earthquake in Alaska produced a 16-foot tsunami that reached Florence in a matter of hours. Although Tsunami generated by earthquakes as far away as Alaska or Japan can threaten coastal Oregon, the Cascadia Subduction Zone provides the most serious threat of damage and loss of life to the Oregon coast including Florence. In addition to other damage associated with earthquakes, tsunami presents the community of Florence with unique risks and the need for planning. There is a need to rapidly evacuate citizens from low-lying areas that can be reached by tsunami.

Flooding and Landslides caused by excessive Rainfall:

Flooding poses an ongoing threat to the citizens of Oregon. During the February 1996 flood communities throughout the northwest were cut off from assistance and many citizens had to be evacuated from their homes by boat and helicopter. The entire town of Mapleton, 16 miles east of Florence, had to be evacuated by boat during the worst of the flooding. In Florence, entire housing developments were inundated by floodwaters for several weeks. At the same time Oregon's rivers and streams were overflowing their banks, landslides created by the torrential rainfall washed out major roads and highways. Highway 126 had multiple areas of washouts

and mudslides, which blocked the road as, did Highway 101 south. In recent years, landslides closed highway 101 north for several months, which created havoc for travelers and businesses using Highway 101.

High Winds: Western Oregon is frequently battered by high winds during the winter months. Usually these winds cause little or no damage to the hearty trees and vegetation in this temperate rainforest climate. Occasionally, however, storms of hurricane force sweep the coast and cause major damage to trees, power lines and structures. The Columbus Day Storm of 1962 wreaked havoc to a large area of Oregon and Washington. Old growth trees twenty feet in circumference crashed over roadways and cut off power and access to local citizens for several days. Storms in 1988 and 1995 caused similar, although to a lesser extent, damage.

Fire-Urban-Interface: An urban-interface fire receives its definition from the geographical and topological location. Housing that is located within the urban boundary of a city and is surrounded by densely packed trees and/or wild vegetation is particularly susceptible to wildland fires and presents unique, and difficult, fire suppression tactics. Vegetation in the Florence metro area consists mainly of densely packed scrub pine, fir, scotch bloom, rhododendron, and the highly flammable European gorse. The potential for interface fire in the urban Florence area is magnified by local building codes that allow construction within the urban Florence area is magnified by local building codes that allow construction within the urban areas without encroaching vegetation removal.

Purpose

The purpose of this Plan is to organize and guide the District's response to major emergency situations associated with natural disasters, technological incidents and national security emergencies.

Specific objectives are to:

- Manage and coordinate emergency operations (including on-scene incident management) in Western Lane County.
- Establish an understanding of the authority, responsibilities, functions and operations of the Operational Area during emergencies.
- Request, receive and allocate resources within the Operational Area.
- Coordinate resources.
- Coordinate mutual aid.

Priorities

In times of disaster, the priorities of the District are:

- Save human lives and prevent injuries.
- Protect property.
- Provide for the needs of survivors.
- Provide public information.
- Preserve government.
- Restore essential services.

Activation of this Plan

Use this Plan during situations that require a response beyond the scope of normal emergency operations.

Consider this Plan to be officially activated:

- On the order of the Director of Emergency Services or his/her alternate, provided the existence or threatened existence of a Local Emergency is imminent.
- When the Emergency Operations Center is activated.

Emergency Management Organization

An emergency management organization can start small and grow as the need arises. Fully activated, the statewide emergency management system consists of all jurisdictions through the state level. Cities will coordinate emergency operations within their boundaries and Counties will coordinate emergency operations within their unincorporated areas. Operational Areas, Mutual Aid Regions and the State will coordinate operations at their respective levels.

I. PHASES OF EMERGENCY MANAGEMENT

A comprehensive emergency management system coordinates the actions of numerous agencies and includes the four phases of emergency activity.

- **Mitigation:** Pre-event planning and actions which aim to lessen or even prevent the effects of potential disasters.
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- **Preparedness:** Activities which governments, organizations and individuals develop to save lives and minimize damage.
- **Response:** Action taken to save life, protect health and property, and minimize damage to the environment.
- **Recovery:** Short and long term activities which improve or return all systems to normal.

II. DISTRICT

The SVFR emergency organization has the purpose of coordination and direction of response and recovery operations in the unincorporated areas, as well as the City of Florence.

Management is responsible for overall emergency policy and coordination through the joint efforts of governmental agencies and private organizations.

Operations is responsible for coordinating all jurisdictional operations in support of the response to the emergency.

Planning/Intelligence is responsible for collecting, evaluating, and disseminating information; developing the action plan in coordination with the other functions; and maintaining documentation.

Logistics is responsible for providing facilities, services, personnel, equipment, and materials to the emergency response effort.

Finance/Administration is responsible for financial activities and administrative aspects not assigned to other functions.

Emergency Operations Center

The Emergency Operations Center (EOC) is located at the Florence Justice Center, with SVFR Station No. 2 as a backup facility.

I. FACILITIES

The EOC is on an emergency generator capable of providing 300 kilowatts of electricity. The fuel supply is a 6,000 gallon underground tank. Refueling is coordinated through the Logistics Section Chief. The generator provides enough electrical capacity to operate the entire building, if necessary.

II. ACTIVATION

A. Normal Operation

Day-to-day operations; the EOC is not activated. This is the time to ensure familiarity with the contents of this Plan and participate in training exercises.

B. Partial Activation

The EOC is activated, but only some of the positions are filled. This may involve a smaller emergency that a limited number of people can handle, or it might involve the early states of what later becomes a larger problem.

C. Full Activation

The EOC is activated and all or most of the positions are filled. This is an emergency requiring an all-out district (or greater) response effort.

