# **Primary Agencies:**

Department Archeology of Historical Preservation Department of Ecology Department of Fish and Wildlife Department of Natural Resources

## Support Agencies:

Department of Agriculture Department of Corrections Department of Enterprise Services Department of Labor and Industries Department of Transportation Office of Financial Management Parks and Recreation Commission Washington Military Department Emergency Management Division

# INTRODUCTION

### Purpose

This Appendix to Emergency Support Function (ESF) 11 – Agriculture and Natural Resources establishes policies for the effective coordination of activities to protect natural and cultural resources and historic properties (NCH) resources prior to, during and/or after an emergency or disaster.

### Policies

The Washington State Departments of Natural Resources (DNR), Ecology (ECY), Fish and Wildlife (WDFW) and Archeology and Historical Preservation (DAHP) represent the natural, cultural and historical resource concerns of Washington State.

The Department of Natural Resources in consultation with other primary and support agencies will evaluate the emergency situation and determine which agency or agencies will be activated to respond to the incident or event.

- Chapter 76.09 Revised Code of Washington (RCW), Forest practices
- Chapter 77.55 RCW, Construction projects in state waters
- Chapter 90.48 RCW, Water pollution control
- Chapter 90.56 RCW, Oil and hazardous substance spill prevention and response

# SITUATION AND ASSUMPTIONS

### Situation

Each year more than 1,000 earthquakes are recorded in Washington State, of those, 15 to 20 cause ground shaking strong enough to be felt. Since 1840, approximately 70 earthquakes have been recorded with a magnitude of 4.0 or higher. The eastern part of

Washington State is historically subject to infrequent, generally smaller earthquakes up to magnitude 7.0. The western part of the state is subject to more frequent and larger earthquakes, including a magnitude 7.0 in 1949, 6.5 in 1965 and 6.8 in 2001.

The main effect of severe local storms is immobility and utility (electrical) loss. Washington State is subject to severe storms each year, particularly snow storms and major flooding. These sever metrological events also include heavy rain, ice, hail, tornados, blizzards, wind and dust storms.

The potential for a volcanic eruption still exists from five volcanoes in the Cascade Mountain Range: Glacier Peak, Mount Baker, Mount Hood, Mount Rainier and Mount St. Helens, all of which could have an impact on lands. An increase in the intensity of a volcanic eruption may occur suddenly or with some warning, as indicated by the unexpected swarms of earthquakes and a dome building event like the one at Mount St. Helens in the fall of 2004. As long as volcanic eruptions are in progress, episodic changes in the level of activity can occur over days, weeks or even months. Each of these volcanoes has the potential to erupt with significant volumes of ash, pyroclastic flow, lahar and lava flows that can affect populations and lands across Washington State.

Of all hazards identified for the state, Washington State is most prone to flooding. The state is subject to three types of floods: (1) flood potential from heavy, prolonged rain or melting snow; (2) flash floods from extremely heavy amounts of rain in a short period; and (3) wind-driven flood tides along coastal areas.

Most landslides along the Puget Sound occur during or after storms that produce heavy rains. Landslides can occur in connection with other major natural disasters such as: floods, earthquakes, volcanoes or wildfires. Landslides can block streams and rivers causing areas to flood. As the water table rises, some slopes become unstable. They pose serious threats to highways and structures. Major storms have caused widespread flooding and landslide events along the Pacific Coast. In January 1997, February 1996 and November 2007 heavy rain and rain on snow in higher elevations triggered landslides and flooding that damaged homes, businesses and transportation infrastructure and clogged waterways.

# Assumptions

Each primary and support agency has statutory responsibilities for different aspects of the state's natural and cultural resources and historic properties.

Each primary and support agency has experts that are trained and equipped to respond to emergencies.

# CONCEPT OF OPERATIONS

DNR, ECY, WDFW and DAHP are the primary organizations for coordination, direction and control of identification, conservation, rehabilitation, recovery and restoration of NCH resources during an event. ESF 11 will coordinate the actions of primary and support agencies responding to events which have or will destroy, damage or endanger NCH resources within the statutory mandates of responding agencies and under the coordination authority of the State Emergency Operations Center (SEOC). Recovery and restoration activities will be consistent with the CEMP.

## ORGANIZATION

DNR, ECY, WDFW and DAHP will jointly determine the organization necessary to coordinate the identification, conservation, rehabilitation, recovery and restoration of NCH resources during an event. The organization will use Incident Command System (ICS) principles, but the nature of the organization will depend upon the emergency itself and which agency's mandates are the most impacted. If multiple agencies are impacted, then the organization structure will be lead by a unified command.

### ACTIONS

### Initial

- Determine the critical needs and resources available to preserve, conserve, rehabilitate, recover, and restore NCH resources, in consultation with federal, state, tribal, local and private entities, and the Heritage Emergency National Task Force. Based on this determination, DNR, ECY, WDFW and DAHP consult to determine which agency will provide staff for the incident.
- Coordinate provision of necessary assistance within the affected area.
- Create short-term and long term plans

### Ongoing

- Coordinate NCH resources identification and vulnerability assessments.
- Facilitate development and application of protection measures and strategies.
- Assists in emergency compliance with relevant federal environmental laws during emergency response activities, such as emergency permits/consultation for natural resources use or consumption.
- Provide scientific/technical advice, information and assistance to help prevent or minimize injury to NCH resources.
- Coordinate with ESF 3 Public Works and Engineering and ESF 10 Oil and Hazardous Materials Response on the removal of debris affecting NCH resources.
- Coordinate with ESF 3 to manage, monitor or provide technical assistance on emergency stabilization (and during recovery, restoration) of shorelines, riparian buffer zones, and hillsides to protect NCH resources.
- Share best practices and assist in development of programmatic approaches to address and expedite NCH-related requirements for all state actions/initiatives taken to respond to or recover from an incident requiring a coordinated response.
- Provide assistance and expertise in addressing impacts to properties of traditional religious and cultural importance.
- Provide up-to-date geospatial data related to impacted NCH resources and develop/provide standard operating procedures for collecting NCH digital data, conducting GIS analyses and disseminating geospatial products related to NCH resources, such as maps.
- Provide Incident Management Teams to assist in NCH resource response and recovery actions.

- Provide scientific/technical advice, information and assistance for long-term recovery, restoration, preservation, protection, conservation, stabilization or rehabilitation of NCH resources.
- Establish logistical and communications links with organizations involved in long-term NCH resources protection, preservation, conservation, rehabilitation, recovery, stabilization and restoration.
- Address long-term community recovery activities carried out under ESF 14 that involve NCH issues.

# RESPONSIBILITIES

# **Primary Agencies**

Department Archeology of Historical Preservation, Department of Ecology, Department of Fish and Wildlife, Department of Natural Resources

- Communication with recognized providers and agencies.
- Appointment of the Incident Command Representative.
- Coordination of emergency management activities with SEOC and local jurisdiction(s).
- Coordination of multi-state event response and recovery with local, state and federal response agencies and appropriate emergency management agencies.
- Coordination of all press releases and public service announcements with the SEOC ESF 15 Lead and the Joint Information Center established on-scene.
- Determining which response personnel are authorized to enter the event area.

### **Support Agencies**

Department of Agriculture

• Provide animal health services in the event of mass casualties to farm animals.

### Department of Corrections

• Provide inmate labor and custodial staff.

Department of Enterprise Services

- Provide incident command with central support:
  - o Procurement
  - Engineering services
  - Real estate services
  - Facilities rental
  - Materials management

Department of Labor and Industries

• Provide safety inspections and consultation for event projects.

Department of Transportation

• Provide necessary equipment or personnel.

Office of Financial Management

• Provide a mechanism to consolidate costs for emergency recovery and restoration.

Parks and Recreation Commission

• Provide necessary equipment, personnel and/or facilities.

Washington Military Department, Emergency Management Division

• Provide necessary equipment and/or personnel.