



Catastrophic Incident Annex (CIA)

All Catastrophes

Catastrophic Incident Annex



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Executive Summary

In the first hours or days following a catastrophic disaster, individuals throughout the disaster area will act in decisive, possibly critical ways. Depending on the specific catastrophic incident, communications may be severely impaired or inoperable, and knowledge of how others are responding may be vague, incomplete, or unknown. Pre-incident planning involving specific capabilities, anticipated impacts, and resource management is required to overcome the lack of situational awareness that will follow. This Incident Annex to the Washington State Comprehensive Emergency Management Plan (CEMP) attempts to establish a general understanding of key state objectives and actions among executives, agency staff, elected officials, stakeholders, partners, and responders. This planning will establish the framework for our overall response and coordinate our actions specific to the unique nature of catastrophic incidents.

The extensive impacts that can be experienced during a catastrophic incident will involve elected leaders at all levels of government. The number of personnel and agencies involved in these incident types will require extensive cooperation and coordination to maintain a unity of effort and meet operational objectives in a time sensitive environment. This all-catastrophes incident annex, together with federal, state, Tribal, regional, and local plans, is part of a broad effort to share planning assumptions and considerations, response priorities, roles and responsibilities, essential elements of information, and resource management methodologies about response activities.

This plan is intended to act as a supplement to the use of the CEMP when a disaster occurs whose impacts have greatly impacted, impaired, or otherwise reduced the capabilities and capacities of the state to respond as they would during other incidents. This plan can be used as an overlay to other plans so that actions and responsibilities not normally implemented can be performed until the incident has stabilized to a point where other portions of the CEMP can take effect.

Following a catastrophic incident, it will be necessary to mobilize all or nearly all of state government to act in coordinating and supporting roles to either extend the breadth of their day-to-day responsibilities or to take on new unfamiliar roles to aid and assist the people of Washington in activities which will save and sustain life. This level of coordination will necessitate that Policy Groups standup and will likely require the establishment of Multi Agency Coordination Groups or Unified Command to mobilize an extraordinary amount of resource movement from both within and outside of the state.

The continuous planning efforts surrounding the creation and maintenance of this plan utilize a select number of the National Preparedness Goal's core capabilities which were chosen for



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their immediate impacts to life safety and sustainment. These core capabilities, alongside the adoption of FEMA response phases, allow this plan to vertically integrate into federal operations so that coordination can be established during pre-incident planning efforts. This annex, appendices, and attachments have been developed using previous and ongoing planning efforts conducted through the Statewide Catastrophic Incident Planning Team, the Regional Catastrophic Planning Teams, and FEMA Region 10 catastrophic plans.

As an incident becomes stabilized and begins to approach a sustained or long-term response, portions of this plan can scale down to allow for the implementation of the Washington State CEMP all-hazards plan, to also include efforts which transition to recovery and are beyond the scope of this plan.



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Purpose

The purpose of the Catastrophic Incident Annex is to establish the framework for disaster command, control, direction, coordination, assignment of responsibilities, order of operations, information requirements, and resource management support to conduct lifesaving operations, stabilize critical infrastructure, and re-establish life sustaining functions. This annex is also intended to act as the bridge for the transition into long-term response and recovery plans.

Similar to the “All-Hazards” approach, this annex takes an “All-Catastrophes” approach to catastrophic planning by discovering what similarities exist in responses to incidents of such magnitudes, regardless of type. Additionally, catastrophic hazard- and incident-specific appendices have been developed to prioritize activities, tailored to meet the unique needs of incidents identified as possessing catastrophic potential. Incident-specific appendices concern hazards that are tied to known geographic locations and have a level of predictive results (e.g., Cascadia Subduction Zone or Columbia Generating Station). Hazard specific appendices concern incident types that have the potential to occur in various locations and will result in diverse levels of coordination and resource management (e.g., a tsunami only affecting a portion of the coast, a pandemic, or a wildfire).

Hazard-Specific	Incident-Specific
<ul style="list-style-type: none">• Tsunami• Earthquake• Wildfire• Volcanic Eruption• Pandemic	<ul style="list-style-type: none">• Cascadia Subduction Zone Earthquake and Tsunami• Columbia Generating Station• Grand Coulee Dam Failure

Figure 1 – Comparison of Hazard- and Incident-specific disaster types

Note: While a hazard or incident type may be listed above, plans may not be currently included in this annex. Future development of this annex will address additional disasters that can require the implementation of this plan.

For catastrophic incidents, the emphasis is on a functional approach using a select grouping of the National Preparedness Goals’ core capabilities that focus specifically on life safety and sustainment and incident stabilization. In addition to the core capability structure, a phased approach has been identified that aligns to FEMA Region 10’s catastrophic response plan to facilitate better coordination throughout the levels of government involved.



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Strategic Goals

The method this annex utilizes to establish and monitor incidents are the Community Lifelines. During a catastrophic incident, stabilizing Community Lifelines is vital and can represent an extraordinarily difficult challenge due to the dependencies that exist across impacted lifelines. Communities cannot meet these challenges solely by scaling up existing plans as capabilities and response capacities have become impacted. Impacts to these lifelines should be used in determining the focus areas that strategic goals will address.



A lifeline enables the continuous operation of **critical government** and **business functions** and is essential to **human health** and **safety** or **economic security**.

Figure 2 - FEMA Community Lifelines

Core capabilities are the means to ensuring a successful response and a clear path is established to implement a transition to recovery. Making core capabilities and Community Lifelines a focus of incident management and catastrophic incident response provides response organizations and decision makers with a situation overview of the impacted segments of society and provides for targeted approaches to stabilize and re-establish services.

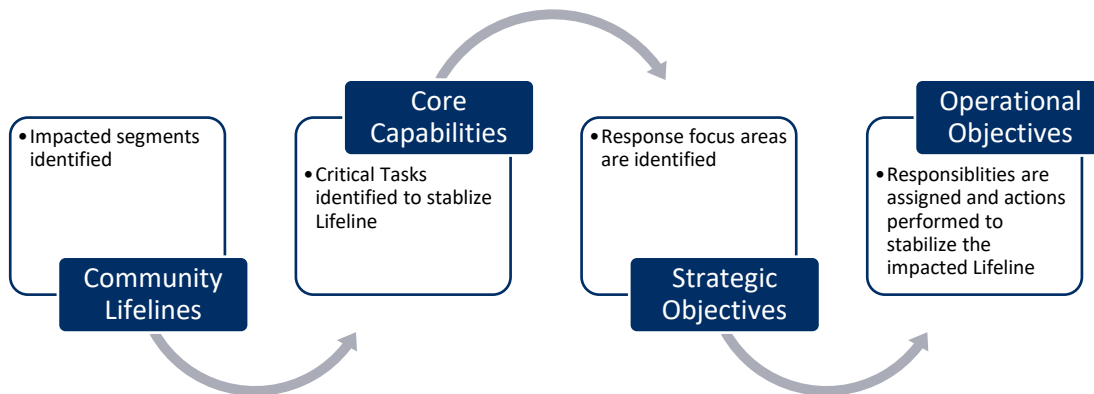


Figure 3 - Implementation of operational planning into incident management



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Life Safety

Life safety depends upon the nature, magnitude, and location of the threat or hazard. For catastrophes, life safety-focused priorities can be any circumstance that threatens the life of incident survivors, as well as the safety and security of all response personnel, up to the initiation of recovery strategies. Lifesaving activities and responder safety are always the highest priorities.

Incident Stabilization

Incident stabilization represents the actions taken to prevent an incident from growing and to minimize the potential impacts on life and operations. Stabilization activities occur when immediate threats to life and property are anticipated, resourced, and managed. A key metric of stabilization is characterized by basic Community Lifeline services being provided to survivors, by rapid re-establishment of lifeline services. Community lifeline stabilization is not the end state for incident response and recovery, but a construct to achieve efficacy and efficiency throughout the disaster response phase.¹

¹ Community Lifelines represent an effective “means to an end” and represent a singular construct to unite response operations and objectives across multiple partners and stakeholders. This structure is most effective during the initial incident response and into incident stabilization. As the Community Lifelines become stabilized, the response to the catastrophic incident will continue and only require more typical situational assessment mechanisms to track the incident and create appropriate strategies and objectives.



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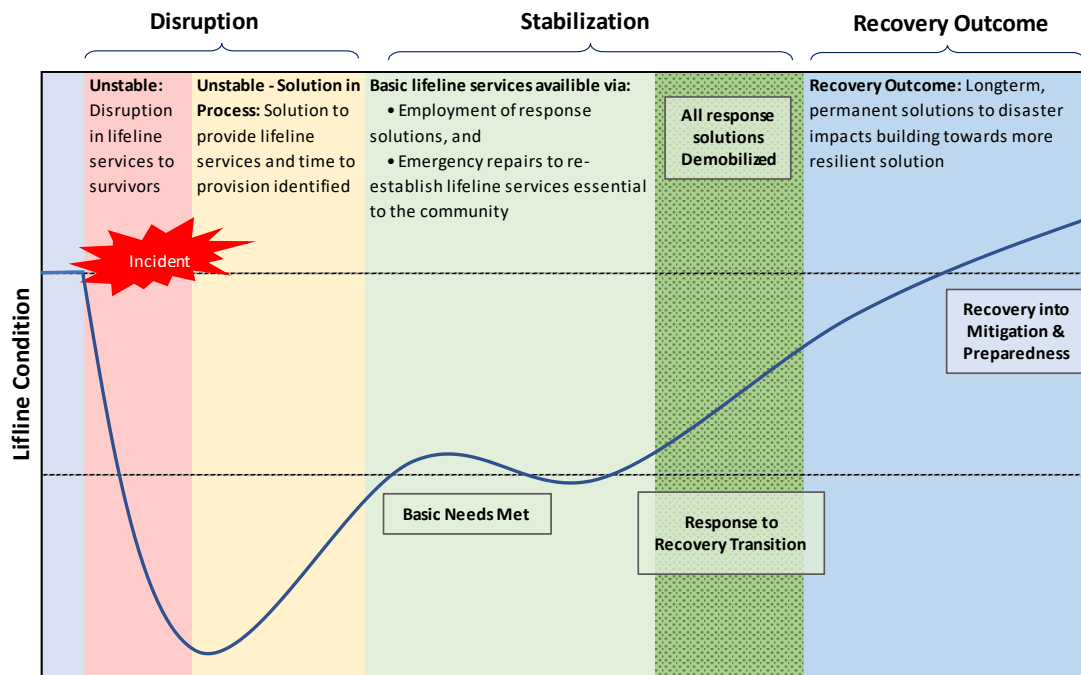


Figure 4 - Community Lifeline Continuum

Exclusion of Property and Environmental Protection

Due to the magnitude of devastation and disruption caused by catastrophic incidents, decision makers will be forced to consider the landscape of requirements for all activities and correspondingly prioritize resources to manage shortfalls, rather than address all needs at once. For this reason, the primary focus of catastrophic incident response will be saving lives and stabilizing the Community Lifelines impacted by the incident. Only when these two priorities are achieved can decision makers broaden their focus by transitioning back to the all-hazards-focused Response Plan of the CEMP, related to the protection of the property and environment.

Authorities and Policies

Revised Code of Washington (RCW)

RCW 38.52: Emergency Management

Defines catastrophic incident, identifies connection of Continuity of Government planning related to catastrophic incidents, and outlines the "director's" responsibility regarding catastrophic incidents.

RCW 68.50.010: Coroner's jurisdiction over remains.



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The jurisdiction of bodies of all deceased persons who come to their death suddenly when in apparent good health without medical attendance is vested in the county coroner or medical examiner, which bodies may be removed and placed in the morgue under such rules as are adopted by the coroner or medical examiner.

Washington Administrative Code (WAC)

WAC 118-30-060: Local and Joint Local Organizations for Emergency Management, Plans and Programs

Requires political subdivisions to develop Comprehensive Emergency Management Plans (CEMPs) that includes a hazard analysis listing the natural and "man-made" disasters to which the political subdivision is vulnerable. Every political subdivision in Washington State is vulnerable to catastrophes; therefore, each political subdivision [of Washington State] must incorporate catastrophic incidents into their emergency planning.

Situation Overview

General

Definition of a Catastrophic Incident

The designation of a catastrophic incidents varies based on the overall size and scale of the incident. The National Response Framework (NRF) highlights this by pointing out that a localized flood can be catastrophic to an individual family who lost their home and possessions, a severe tornado can be catastrophic to a town or city, and a hurricane can be catastrophic to a state or territory. At the national level a catastrophic incident is one of such extreme and remarkable severity or magnitude that the Nation's collective capability to manage all response requirements would be overwhelmed, thereby posing potential threats to national security, national economic security, and/or the public health and safety of the Nation.

The Post-Katrina Emergency Management Reform Act (PKEMRA) of 2006 defines the term "catastrophic incident" as "any natural disaster, act of terrorism, or other man-made disaster that results in extraordinary levels of casualties or damage or disruption severely affecting the population (including mass evacuations), infrastructure, environment, economy, national morale, or government functions in an area."

For the purposes and intent of this annex, and all related appendices and attachments, a catastrophic incident aligns with both the NRF's and PKEMRA's definitions.

Characteristics of a Catastrophic Incident

Community Lifelines are those services that enable the continuous operation of critical government and business functions and are essential to human health and safety or economic security. In serious but purely local incidents, interruptions of water service, electric power, and



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other community lifeline components are typically brief and easy to mitigate. However, severe and widespread incidents can halt lifeline services for many weeks or months. Such disruptions are especially extensive in catastrophic incidents and may result in mass casualties and other cascading consequences. Characteristics of these incidents include:

- Critical infrastructure is severely damaged or inoperable.
- First responders and supporting organizations cannot perform traditional initial incident response activities due to overwhelming losses of personnel, facilities, and/or equipment.
- Local capabilities and mutual aid agreements are exceeded and exhausted.
- All resource types are strained or potentially unavailable.
- Span of control is impractical during the first several operational periods.
- Situational awareness takes days to acquire. There is little to no information sharing, and information received is fragmented, conflicting, and/or chaotic.
- Workforce absences will complicate restoration and operations at all critical infrastructure facilities.

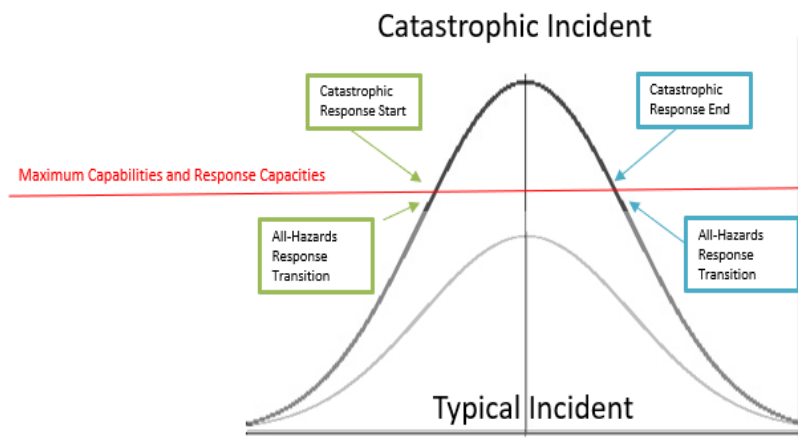


Figure 5 - Incident Thresholds

Hazard-Specific Disasters

The following descriptions hazards are snapshots from the Washington State Enhanced Mitigation Plan. Only information pertaining to the general description of the hazard and its risk is highlighted in this base document. For more detailed information concerning impacts and concerns, refer to the hazard’s specific appendix.

Tsunami

Hazard Profile

Washington’s coastline facing the Pacific Ocean has two different tsunami threats: distant-source tsunamis and local tsunamis. Tsunamis generated as far away as Alaska and Japan can cross the ocean and impact the Washington’s coastline (distant source tsunami).

Tsunamis are a series of extremely long waves caused by a large and sudden displacement of water. This is usually the result of an earthquake or volcanic eruption underwater but can also



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be caused by landslides flowing into bays or occurring underwater. Tsunamis pose a threat to people and property located along Washington State’s coastline, Strait of Juan de Fuca, Puget Sound, large lakes and rivers.

In the ocean, typical waves have a wavelength (measures from crest to crest) of about 330 feet. In comparison, tsunami waves have very long wavelengths, typically spanning tens or hundreds of miles and can move up to 600 miles per hour.

These walls of moving water go all the way down to the ocean or lake floor and the entire water column moves within it. This is different than typical waves that tend to move across the surface and leave the depths undisturbed. Out in the ocean, a tsunami wave may only register as a few inches or feet rise in the surface. But as these waves approach shorelines and shallower depths, they grow in size. The underwater topography, configuration of the shoreline, infrastructure and debris work to shape the tsunami waves and impacts.

The strength of the tsunami is determined by the magnitude of the triggering event and the proximity to shore. Powerful tsunamis can travel several miles over low-lying coastal land. The wave causes destruction as it travels across land and as it recedes back into the ocean dragging debris with it. Multiple tsunami waves can strike the coastline for hours to days following the occurrence of an earthquake.

Risk Summary

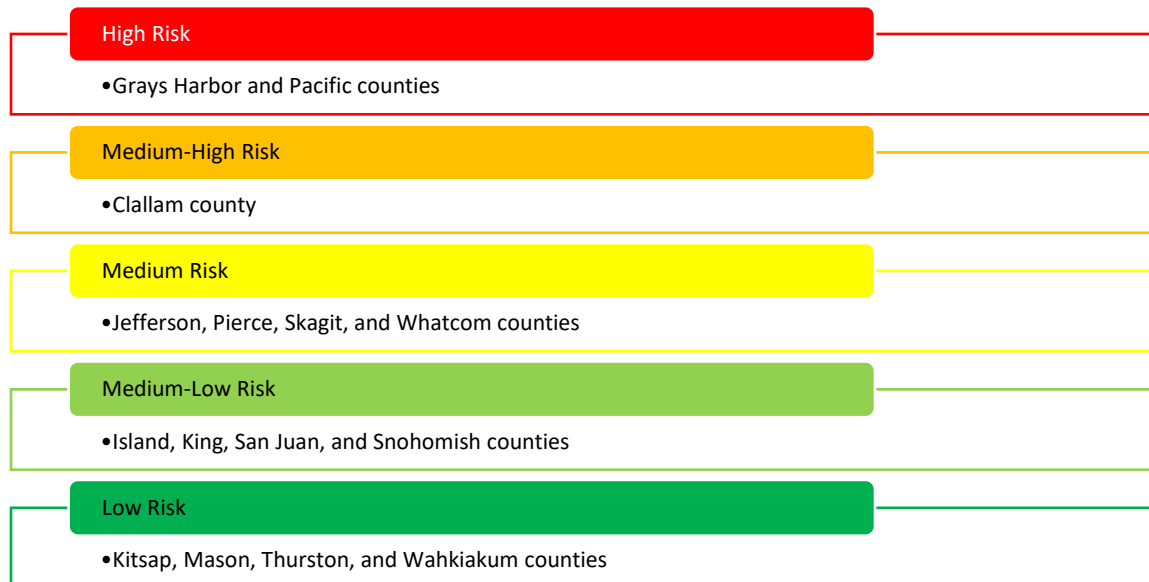


Figure 6 - Tsunami Risk by County



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Geological investigations indicate that tsunamis have struck the coast a number of times in the last few hundred years as detailed within the Washington State Enhanced Mitigation Plan.

Earthquake

Hazard Profile

Washington ranks second only to California for earthquake risk in the United States. There are thousands of earthquakes in Washington State every year, but most are too small to be felt. There have been 15 earthquakes greater than Magnitude 5 since 1870. Washington State experiences three types of earthquakes – Cascadia Subduction Zone, Crustal Shallow Zone Earthquakes and Wadati-Benioff Deep Zone Earthquakes. Each type has a different profile that may alter response plans.

According to the Washington State Department of Natural Resources, more than 1,000 earthquakes occur annually in the State. This is an average of approximately three per day, though most go unfelt and cause no damage. Larger magnitude earthquakes, which result in damage, occur less frequently in the State. The annual likelihood of a major earthquake is 17 percent. According to the Pacific Northwest Seismic Network, there’s a 10-20 percent chance of a Cascadia subduction zone earthquake in the next 50 years.

Risk Summary

Washington has dozens of active faults and fault zones. There are several faults in Washington that could produce catastrophic effects for the state including, but not limited to, the Seattle Fault, Southern Whidbey Island Fault, Darrington-Devils mountain fault zone.

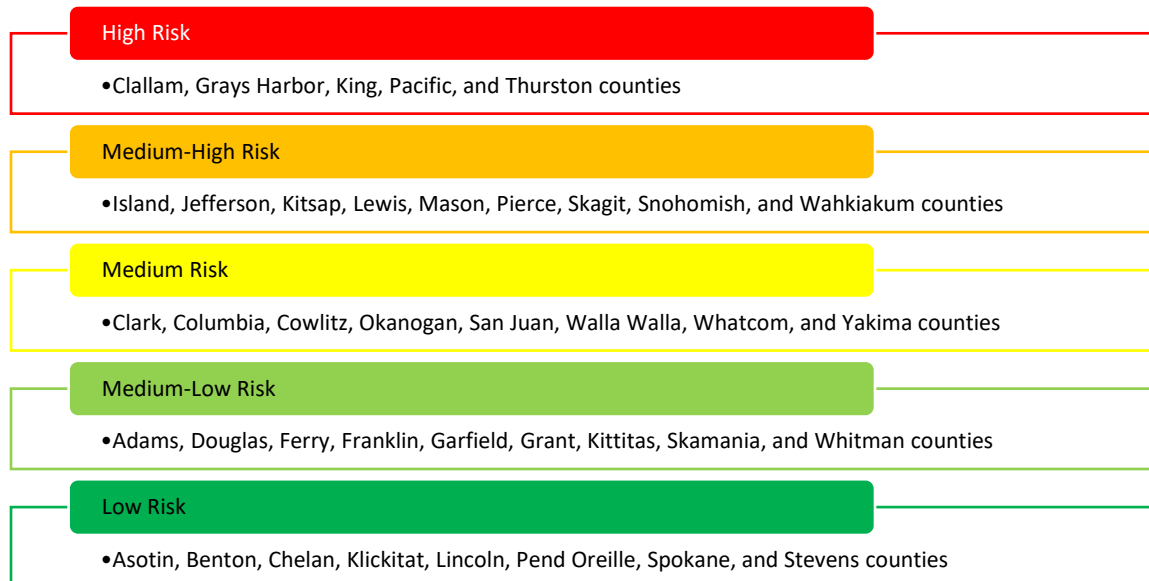


Figure 7 - Earthquake Risk by County



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Pandemic

Hazard Profile

A pandemic is an outbreak of a disease that occurs over a wide geographic area and affects an exceptionally high proportion of the population. Although pandemics occur infrequently, planning and preparing for a pandemic is important to ensure an effective response. Planning for and responding to a pandemic is complex and pandemics can affect everyone in a community.

Pandemics have been recorded as early as 430 BCE in ancient Greece. Since that time pandemics have regularly occurred with an unpredictable frequency. They occur whenever a new infectious agent appears, which can be bacterial or viral. With an estimated number of 50 million or more deaths in 1918 and 1919, The Spanish flu is the deadliest pandemic in modern history. Since then, there have been 4 pandemics severely affecting the United States²:

- 1957 H2N2 “Asian Flu” Pandemic
First reported in coastal cities in the United States in the summer of 1957. The estimated number of deaths was 1.1 million worldwide and 116,000 in the United States.
- 1968 H3N2 “Hong Kong Flu” Pandemic
First reported in the United States in September 1968. The estimated number of deaths was 1 million worldwide and about 100,000 in the United States. Most excess deaths were in people 65 years and older.
- 2009 H1N1 “Swine Flu” Pandemic
First reported in the United State in the spring of 2009. The estimated number of deaths worldwide was between 151,700 and 575,400 in the United States was between 8868 and 18,306.
- 2019 SARS-CoV-2 “COVID-19” Pandemic
COVID-19 is a respiratory disease caused by SARS-CoV-2, a new coronavirus discovered in 2019. The virus is thought to spread mainly from person to person through respiratory droplets produced when an infected person coughs, sneezes, or talks. Some people who are infected may not have symptoms. For people who have symptoms, illness can range from mild to severe. Adults 65 years and older and people of any age with underlying medical conditions are at higher risk for severe illness. At the time of

² The following pandemics, associated data, and information on past pandemics can be found on the Centers for Disease Control and Prevention’s (CDC) website at <https://www.cdc.gov/flu/pandemic-resources/basics/past-pandemics.html>



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this plan update, COVID-19 is still an active pandemic with new variants of the disease continuing to appear. The estimated number of deaths worldwide is 5.06 million as of the writing of this document, and in the United States there have been approximately 753,500 deaths. Washington state has accounted for approximately 8,800 of the total deaths.

Evidence suggests that the likelihood of pandemics has increased over the past century because of increased global travel and integration, urbanization, changes in land use, and greater exploitation of the natural environment (Jones and others 2008; Morse 1995).³

Risk Summary

The following risk summary table is from the Centers for Disease Control and Prevention’s Influenza Risk Assessment Tool (IRAT) Results.

Influenza Virus	Date of Assessment	Potential Emergency Estimate	Potential Impact Estimate	Summary Risk Score Category
H1N1	Nov 2011	2.3	2.4	Low
H1N2 variant	Jul 2019	5.8	5.7	Moderate
H3N2 variant	Jul 2019	6.6	5.8	Moderate
H3N2 variant	Dec 2012	6.0	4.5	Moderate
H3N2	Jun 2016	3.7	3.7	Low
H5N1 Clade 1	Nov 2011	5.2	6.6	Moderate
H5N1	Mar 2015	3.6	4.1	Low-Moderate
H5N2	Mar 2015	3.8	4.1	Low-Moderate
H5N6	Apr 2016	5.0	6.6	Moderate
H5N8	Mar 2015	4.2	4.6	Low-Moderate
H7N7	Jun 2012	4.6	5.8	Moderate
H7N8	Jul 2017	3.4	3.9	Low
H7N9	Oct 2017	3.1	3.5	Low
H7N9	Oct 2017	2.8	3.5	Low
H7N9	May 2017	6.5	7.5	Moderate-High
H7N9	Apr 2016	6.4	7.2	Moderate-High
H9N2 G1 lineage	Feb 2014	5.6	5.4	Moderate
H9N2 Y280 lineage	Jul 2019	6.2	5.9	Moderate
H10N8	Feb 2014	4.3	6.0	Moderate

Figure 8 - Pandemic Risk Assessment

³ Disease Control Priorities: Improving Health and Reducing Poverty. 3rd edition. <https://www.ncbi.nlm.nih.gov/books/NBK525302/>



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Radiological Incident

Hazard Profile

In a radiological emergency, effects caused by radiation will be a significant concern. For the purposes of the CIA, these incidents will likely be caused from:

- Accidents involving the transportation or storage of radiological material in sufficient quantity and the location of the incident
- Release of radioactive material from a fixed facility
- Accidents involving nuclear powered military vessels
- An attack involving nuclear weapons

Transportation Accidents

Millions of packages of radioactive materials are transported in the United States annually. Most shipments consist of medical and industrial products. Other shipments include nuclear power plant fuel, nuclear weapons and weapons material, and radioactive waste generated by hospitals, laboratories, nuclear reactors, and military facilities.

Because of the sheer number of radioactive material shipments, transportation accidents are the most common type of incident involving radioactive materials. Despite their frequency, there have been no known serious nuclear radiation exposures resulting from transportation accidents⁴. This is due largely to the nature of the radioactive materials transported and the use of protective packaging commensurate with the degree of potential hazard of the radioactive material contained.

Nuclear Detonations

The end of the cold war and the dissolution of the Soviet Empire has changed, not eliminated, the nuclear threat to the United States. Other countries who previously had the weapons but did not have weapon delivery vehicles able to reach the United States now have the ability to do so. Improvised nuclear devices (IND) or radioactive dispersion devices (RDD) (radioactive material placed inside a conventional explosive device) are becoming increasingly possible.

Volcano

Hazard Profile

According to the USGS, Washington State is of great concern because of its several volcanoes that fall in the very high and high threat groups. The Cascade Range includes 5 very high threat volcanoes in Washington whose explosive behavior and lahar potential can impact both large

⁴ Information obtained from FEMA's IS-3 Radiological Emergency Management Independent Study Course.



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populations and extensive development on the ground as well as heavily traveled air-traffic corridors.

Volcanic hazards are divided into “near-volcano” and “distant” hazards. Near volcano hazards are pyroclastic flows, lava flows, extremely heavy ash fall, avalanches, and debris flows. These mostly remain within the bounds of the Federal lands that prevent people from living by volcanoes. Volcanic Mudflows (Lahars) and Volcanic Ash (Tephra) are considered distant hazards and are the most likely to cause catastrophic incidents in a volcanic eruption for their widespread effects. Lahars can flow many miles downstream from the volcano, making this the most threatening hazard in the Cascades. Washington is home to five volcanos capable of producing a significant lahar. These include Mount Rainier, Mount Adams, Mount Baker, Glacier Peak and Mount St. Helens.

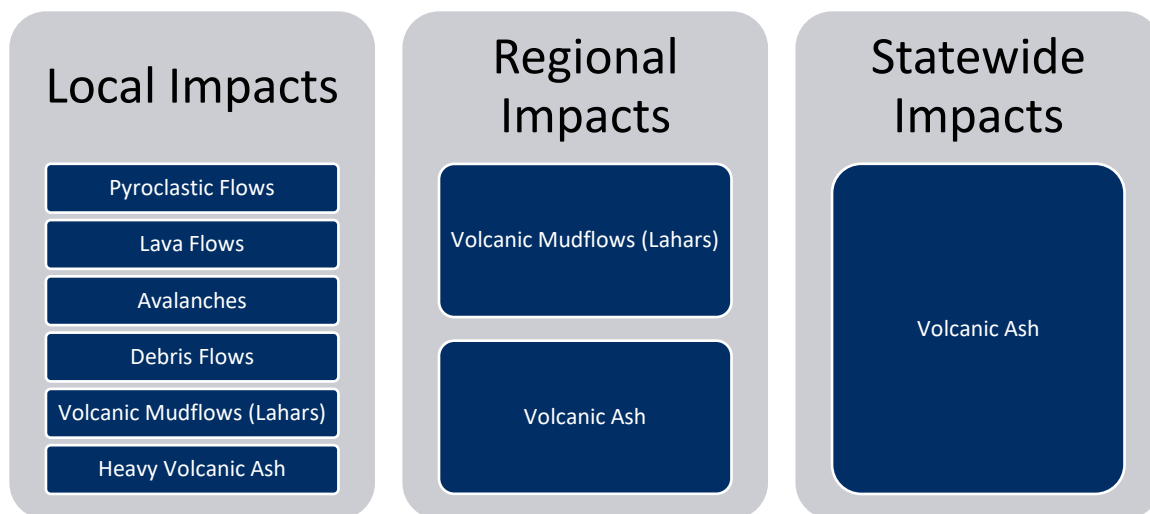


Figure 9 - Hierarchy of Expected Impacts

Mount St. Helens and Glacier peak are the two volcanos in Washington that produce significant ash. Aircraft that fly in the dense network of aviation routes across the Cascade Range carry nearly 200,000 people daily over the Cascade airspace. When it has settled on and near the ground, volcanic ash threatens the health of people and livestock, damages electronics and machinery, and interrupts power generation, water, transportation systems, and telecommunications.

Not all counties are likely to be impacted by lahars from volcanic eruptions in the state. The lahars are likely to follow the regional topography and flow toward the Puget Sound via regional drainage channels. 13 counties in the state are likely to be directly impacted by volcanic lahars or regional lava flows. These counties include Clark, Cowlitz, Island, King, Klickitat, Lewis, Pierce, Skagit, Skamania, Snohomish, Thurston, Whatcom and Yakima. Of



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these, Skamania, Clark (impacted by lava flows) and Skagit are at the highest risk from volcanic lahars or regional lava flows, followed by Klickitat, Cowlitz and Pierce Counties. King and Whatcom Counties are at medium risk from volcanic lahars.

Risk Summary

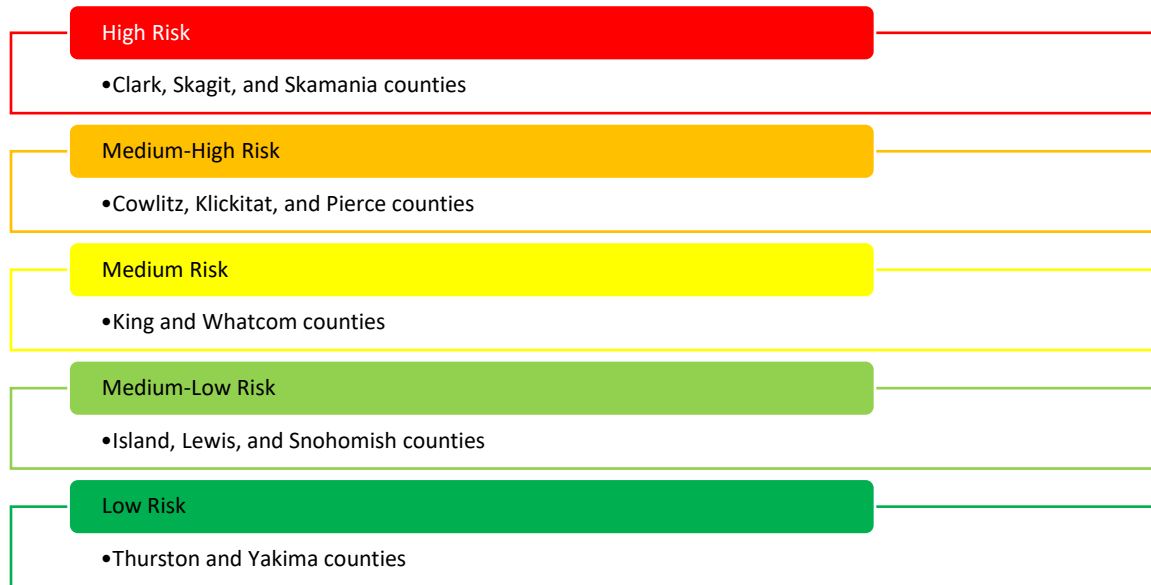


Figure 10 - Volcano Risk Summary by County

Incident-Specific Disasters

The following descriptions of hazard-specific hazards are snapshots from the Washington State Enhanced Mitigation Plan. Only information pertaining to the general description of the hazard and its risk is highlighted in this base document. For more detailed information concerning impacts and concerns, refer to the hazard’s specific appendix*.

**As the Catastrophic Incident Annex continues to be developed it will address additional incident-specific disasters in future updates.*

Cascadia Subduction Zone

Hazard Profile

The Cascadia Subduction Zone (CSZ) is Washington State’s hazard of greatest concern, representing both the highest risk, and "maximum-of-maximums" threat or hazard facing the State of Washington. The CSZ is an approximately 800-mile "megathrust" fault line stretching from the northern half of Vancouver Island in British Columbia to Cape Mendocino in Northern California; ranging between 50 to 80 miles off the coast of the Pacific Northwest. The CSZ fault is formed by the convergence of the Juan de Fuca Plate and North American Plate. Subduction



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occurs as one tectonic plate moves under another. The Juan de Fuca Plate is subsiding beneath the North American Plate, thereby creating the CSZ.

A full rupture of the CSZ fault line could generate an earthquake exceeding magnitude 9.0 that lasts for five minutes or longer, as well as subsequent aftershocks and local source tsunamis. Hundreds of thousands of people live on the outer coast near the Strait of Juan de Fuca and Puget Sound. These people are at risk of Cascadia derived tsunamis. In addition to the stable census population, Washington State experiences a massive flux during the summer tourism season with millions of additional people at risk.

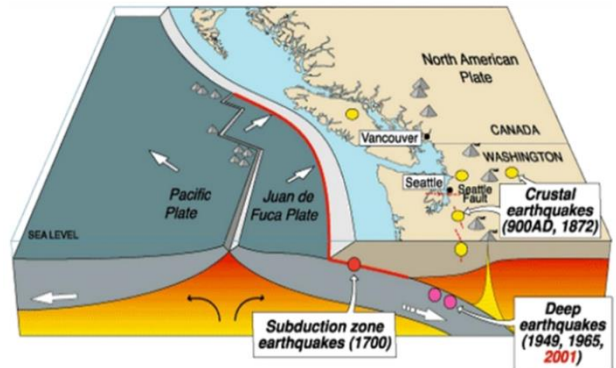


Figure 11 - Cascadia Subduction Zone Illustration

General Planning Assumptions for Catastrophic Incidents

Emergency planning for a catastrophic incident requires planners to make informed assumptions describing the affects and situations following the catastrophe. This Annex utilizes assumptions from a variety of sources that are the direct result from planning efforts centered around catastrophic planning. These assumptions include:

- Federal assistance is immediately needed as the initial response to a catastrophic incident is beyond the capabilities and capacities of the State of Washington to respond.
- There will be a Governor's Proclamation of a State of Emergency and a Presidential Major Disaster Declaration.
- Responding to the impacts of a statewide catastrophic incident becomes the first priority of Washington State government, until transition to response activities within the Comprehensive Emergency Management Plan (CEMP) and recovery begins.
- Regardless of where it is physically located, the Washington State Emergency Operations Center (SEOC) remains the statewide central coordination point for receiving incident-related information and requesting federal or state resources during catastrophic incidents impacting Washington State.⁵
- Response personnel (to include emergency workers and volunteers), first responders, and critical infrastructure staff may be personally affected by the incident and may not

⁵ Incidents which require the devolution of EMD operations and Mission Essential Functions will temporarily shift coordination to other state agencies according to the EMD Continuity of Operations Plan.



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be available to support response efforts due to family emergencies, death, and damage to transportation infrastructure and systems, etc.

- Transportation capabilities are essential to response efforts, including assessment, repair, people movement, and supply movement.
- There will be competing demand for limited communications assets.
- Cyber-attacks on electronic information technology (IT) and operational technology (OT) can result in the loss of critical communications with employees, customers, and process controls; the destruction of records and networks; and the theft of valuable utility and customer data.

Concept of Operations

General

This annex identifies five primary core capabilities as critical to the lifesaving and life-sustaining response operations in a catastrophic scenario. These capabilities include:

- Critical Transportation
- Mass Care Services
- Public Health, Healthcare, EMS
- Fatality Management
- Infrastructure Systems: focusing on Information and Communication Technologies (ICT); Energy – to include fuel; Water; and Wastewater.

In addition to the five primary core capabilities, four supporting core capabilities are employed in these plans to identify specific focus areas. These core capabilities are fundamental to all aspects of response and recovery and require integrated emergency planning statewide. These supporting core capabilities include:

- Operational Coordination
- Operational Communications
- Situational Assessment
- Logistics and Supply Chain Management

Response to a catastrophe is recognized as outside the scope of the current CEMP response plan. Within each of the core capabilities, the state's priorities and expected outcomes are described in the following sections.

Leaderships' Intent

Leaderships' Intent determines the focus areas of a response and creates strategic goals. These focus areas can then be analyzed to determine informational needs, operational objectives, and the resource requirements to accomplish tactical tasks.



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Senior leadership will be primarily focused on those actions and activities which lead to incident stabilization and protect lives. Actions and activities to achieve these operational objectives are viewed through the lens of Community Lifelines. The Community Lifelines are stabilized through the actions and activities that are outlined within a critical task of a core capability.

Property protection and environmental conservation should be incorporated into operational priorities when resource prioritization for incident stabilization and life-saving actions and activities will not be impacted.



Figure 12 - Response Planning Hierarchy

Primary Core Capabilities

Critical Transportation⁶

Objective:

Provide transportation (including infrastructure access and accessible transportation services) for response priority objectives, including the evacuation of people and animals, and the delivery of vital response personnel, equipment, and services to the affected area.

Expected Outcome:

To inspect and then enable access through those routes designated as a priority which facilitate the transportation of vital services and resources needed to save and sustain life after a catastrophic incident. Priority in this effort will be given to the WSDOT "Seismic Lifeline Corridor" and State Priority Routes⁷ pre-identified by individual jurisdictions.

Critical Tasks:

1. Establish physical access through appropriate transportation corridors and deliver required resources to save lives and to meet the needs of disaster survivors.

⁶ A more in depth look on this core capability can be found within Tab A: Critical Transportation.

⁷ Priority route identification for both the state and local transportation systems is a continuous process as routes may change over time due to a number of reasons.



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2. Ensure basic human needs are met, stabilize the incident, transition into recovery for an affected area, and restore basic services and community functionality.
3. Clear debris from any route type (i.e., road, rail, airfield, port facility, waterway) to facilitate response operations.

Mass Care Services

Objective:

Provide life-sustaining and human services to the affected population, to include hydration, feeding, sheltering, evacuee support, reunification, and distribution of emergency supplies.

Expected Outcome

To assist in resource coordination to provide life-sustaining and human services after a catastrophic incident. Priority services will focus on those that enable local jurisdictions to perform hydration, feeding, sheltering, and the bulk distribution of emergency supplies.

Critical Tasks:

1. Request, acquire, move and deliver resources and capabilities to meet the needs of disaster survivors, including individuals with Access and Functional Needs (AFN).

Strategic Goals:

Sheltering, Feeding, Hydration, and Bulk Resource Distribution

State actions taken to support sheltering will take place in the form of fulfilling resource requests, assisting in resource coordination, facilitating the movement of mass care resources, and maintaining situational awareness.

Public Health, Healthcare, and Emergency Medical Services⁸

Objective:

Provide lifesaving medical treatment via Emergency Medical Services and related operations and avoid additional disease and injury by providing targeted public health, medical, and behavioral health support and products to all affected populations.

Expected Outcome:

To coordinate targeted public health, medical, and behavioral health support and related operations to all affected populations, including those with access and function needs, following a catastrophic incident.

⁸ Statewide planning through the SCIPT has not yet addressed this Core Capability. The information presented here is general in nature and not specific to Washington state.



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Critical Tasks:

1. Deliver medical countermeasures to exposed populations.
2. Complete triage and initial stabilization of casualties and begin definitive care for those likely to survive their injuries and illnesses.

Strategic Goals:

Public Health

Mobilize and deploy personnel to assess public health and medical needs, including the needs of Access and Functional Needs populations. This function includes the assessment of the health care system/facility infrastructure.

Health Surveillance

Use existing surveillance systems to monitor the health and general medical needs of the population; carries out field studies and investigations; monitors injury and disease patterns and potential disease outbreaks, blood and blood product biovigilance, and blood supply levels.

Medical Surge

Respond appropriately to mass-casualty incidents, whether due to bioterrorism, natural disaster, or other public health emergencies. Health systems must deploy a disaster medical capability that is rapid, flexible, sustainable, integrated, and coordinated, and that can deliver appropriate treatment in the most ethical manner with the resources and capabilities available.

Patient Movement and Tracking⁹

Patient Movement is comprised of the following functions:

- Patient evacuation (to include patient reception and management)
- Medical regulating
- En-route medical care
- Patient tracking
- Re-entry

In the event of a mass casualty incident, local emergency responders will be faced with the challenge of identifying, categorizing, triaging, and tracking large numbers of patients. As the scale of the event increases, so does the need for expanded assistance—from the local, state, regional, and federal levels, including health care coalitions and other health systems. Organizing appropriate transport and matching appropriate patients to the transportation can

⁹ Information on this function was obtained from the Federal Patient Movement NDMS Definitive Care Program Fact Sheet.



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be challenging. Patient tracking takes a coordinated effort with all involved to identify a system that works in specific jurisdictions.

Behavioral Health Services

Following a disaster, it is common for individuals and families in and around the affected communities to experience distress and anxiety about safety, health, and recovery. Previous exposure to large scale events, such as a severe hurricane or flood, may place residents and responders who experience a new disaster at greater risk for adverse stress reactions.

Veterinary, Medical, and Public Health Services

Assess behavioral status and provide medical care for companion animals (including pets, service animals, and assistance animals), livestock (including food or fiber animals and domesticated equine species), wildlife animals, captive wildlife, zoo animals, and laboratory animals.

State actions taken to support this goal will be limited to addressing immediate public health concerns.

Fatality Management

Objective:

Provide fatality management services, including decedent remains recovery and victim identification, working with local, state, tribal, territorial, insular area, and Federal authorities to provide mortuary processes, temporary storage or permanent internment solutions, sharing information with mass care services for the purpose of reunifying family members and caregivers with missing persons/remains, and providing counseling to the bereaved.

Expected Outcome:

To activate public health fatality management operations and assist in the collection and dissemination of antemortem data, participate in survivor mental/behavioral health services, participate in fatality processing and storage operations, and assist with the reunification process.

Critical Tasks:

1. Establish and maintain operations to recover a significant number of fatalities over a geographically dispersed area.
2. Mitigate hazards from remains, facilitate care to survivors, and return remains for final disposition.



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*Strategic Goals:*¹⁰

Tracking of Human Remains

In a mass-fatality incident, medical examiners and coroners play pivotal roles that cannot be transferred to federal entities or expanded to untrained personnel. For example, the issuing of death certificates is not a federal capability or transferable authority.

Care of Human Remains after Death

Medical examiners are also responsible for the accurate and efficient identification of victims. They interact with surviving family members, providing them with information and support—often working through family assistance centers. The medical examiner is also responsible for the rapid return of the decedents' remains to their legal next of kin.

To carry out these responsibilities in a mass-fatality environment, surge support needs to be in place. Two critical needs are the ability to develop a victim manifest in an efficient manner and to communicate with the public quickly after a mass-fatality incident.

Post-mortem care is largely the province of the private sector. Once someone has died and their cause of death has been determined, they move out of the healthcare system and into the realm of funeral directors (under normal conditions this may occur over a week or more). This private industry deals not only with burial or cremation arrangements, but in many cases also provides grief counseling and support for families.

Funeral homes, cemeteries, crematories, and morgues and their suppliers should be included in any kind of priority for logistical or workforce support. These facilities need to be functioning and well supplied, especially if a quarantine situation arises.

Remains may have to be left in place to await the personnel from the medical examiner's office, or they may have to be carefully documented, tagged, tracked, and placed into a central morgue location in the region. Unless communications are completely down, local jurisdictions may be required to get approval from the medical examiner's office prior to moving bodies from the incident location.¹¹

¹⁰ Information outlined in Strategic Goals for the Fatality Management core capability referenced from the Institute of Medicine (US) Forum on Medical and Public Health Preparedness for Catastrophic Events. Medical Surge Capacity: Workshop Summary. Washington (DC): National Academies Press (US); 2010. Fatality Management Strategies. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK32851/>

¹¹ There is also temporary burial or temporary internment. This is an option for immediate storage where no other method is available or where longer term temporary storage is needed; however, this method should only be used in the most extreme settings, when no other resources are available.



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Communication with Families

A family assistance center is not a one-size-fits-all entity, and the scope and location of the incident dictates what types of services and staffing levels are needed and where they can be provided. They have the capacity to provide a large variety of services, including spiritual care, grief support, information hotlines, child-care/play space, and food and drinks.

Infrastructure Systems

Objective:

Stabilize critical infrastructure functions, minimize health and safety threats, and efficiently restore and revitalize systems and services.

Energy

Facilitate the strategic restoration of electrical grid and fuel resources to affected population, critical services, and critical infrastructure.

Water

Facilitate the strategic restoration of water supply and distribution systems to affected population, critical services, and critical infrastructure.

Wastewater

Facilitate the strategic restoration of wastewater collection and treatment systems to affected population, critical services, and critical infrastructure.

Information Communications Technology

Facilitate the strategic restoration of information communications technology systems to affected population, critical services, and critical infrastructure.

Expected Outcome:

Facilitate the coordinated effort of multiple dependent and interdependent critical infrastructure sectors to stabilize internal operations and system restoration.

Critical Tasks:

1. Decrease and stabilize immediate infrastructure threats to the affected population, to include survivors in the heavily damaged zone, nearby communities that may be affected by cascading effects, and mass care support facilities and evacuation processing centers with a focus on life-sustainment and congregate care services.
2. Re-establish critical infrastructure within the affected areas to support ongoing emergency response operations, life sustainment, community functionality, and a transition to recovery.
3. Provide for the clearance, removal, and disposal of debris.



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4. Formalize partnerships with governmental and private sector cyber incident or emergency response teams to accept, triage, and collaboratively respond to cascading impacts in an efficient manner.

Supporting Core Capabilities

Operational Coordination¹²

Objective:

Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.

Expected Outcome:

Facilitate a coordinated response that encompasses federal, state, Tribes, local jurisdictions, the private sector and private non-profits through identified strategies and objectives.

Critical Tasks:

1. Mobilize all critical resources and establish command, control, and coordination structures within the affected community, which may no longer be defined by established jurisdictional boundaries as needed throughout the duration of an incident.
2. Enhance and maintain command, control, and coordination structures (C3), consistent with the National Incident Management System (NIMS), to meet basic human needs, stabilize the incident, and facilitate the integration of restoration and recovery activities.

Operational Communication

Objective:

Ensure the capacity for timely communications in support of security, situational awareness, and operations by any and all means available, among and between affected communities in the impact area and all response forces.

Expected Outcome:

Reestablish stable and reliable wireless, wireline and broadcast communications networks for public information and warning, and first responders.

Critical Tasks:

1. Ensure the capacity to communicate with both the emergency response community and the affected populations and establish interoperable voice and data communications between the federal, tribal, state, and local levels through primary and redundant communications technology and protocols.

¹² Information on the implementation of a vertically integrated direction, control, and coordination system can be found within Tab F: Operational Coordination.



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2. Re-establish sufficient communications infrastructure within the affected areas to support ongoing life-sustaining activities, provide basic human needs, and facilitate the integration of recovery activities.
3. Re-establish critical information networks, including cybersecurity information sharing networks, to inform situational awareness, enable incident response, and support the resilience of key systems.

Strategic Goals:

Responder Communications

Provide and sustain the capabilities for responders to receive and send communications which enable initial and ongoing response operations.

911 and Dispatch

Public Safety Answering Points (PSAPs) serve as an essential node for information flow and coordinating response operations. Restoring this service is a necessary step to meet life safety and incident stabilization goals.

Situational Assessment¹³

Objective:

Provide all decision makers with decision-relevant information regarding the nature and extent of the hazard, any cascading effects, and the state of the response.

Expected Outcome:

Support and inform decision making through the organized and timely collection, processing, analysis, and dissemination of situational intelligence.

Critical Tasks:

1. Deliver information sufficient to inform decision making regarding immediate lifesaving and life-sustaining activities, and engage governmental, private, and civic sector resources within and outside of the affected area to meet basic human needs and stabilize the incident.
2. Deliver enhanced information to reinforce ongoing lifesaving and life-sustaining activities, cascading impacts, and engage governmental, private, and civic sector resources within and outside of the affected area to meet basic human needs, stabilize the incident, and facilitate the integration of recovery activities.

Strategic Goals:

Common Operating Picture and Situational Awareness

¹³ Information on the use of Community Lifelines can be found within Tab G: Situational Assessment.



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Community Lifelines are the mechanism that will be used and maintained to track incident impacts, inform incident objectives, and provide senior leadership, government officials, decision makers, and FEMA.

Logistics and Supply Chain Management¹⁴

Objective:

Deliver essential commodities, equipment, and services in support of impacted communities and survivors, to include emergency power and fuel support, as well as the coordination of access to community staples. Synchronize logistics capabilities and enable the restoration of impacted supply chains.

Expected Outcome:

Increase the ability to support lifesaving and life-sustaining operations with sustained and well-coordinated supply chain of resources so that the right personnel, equipment, supplies and support are in the right place, at the right time, and in the right quantities, in alignment with current priorities for response and recovery operations.

Critical Tasks:

1. Mobilize and deliver governmental, nongovernmental, and private sector resources within and outside of the affected area to save lives, sustain lives, meet basic human needs, stabilize the incident, and facilitate the integration of recovery efforts, to include moving and delivering resources and services to meet the needs of disaster survivors.
2. Enhance public and private resource and services support for an affected area.

Strategic Goals:

Resource Management

Resources managed by local, tribal, state, and federal partners to support and ensure effective and efficient response and recovery operations. Resource management provides visibility at all levels of the resource request process, reduces duplication, enhances capabilities, and establishes common terminology for resources.

Movement Control

Manage transportation resources efficiently and effectively utilizing air, land, and waterway to provide logistical support to response and recovery missions.

Movement Control will be a joint endeavor between the SEOC and FEMA. A Movement Coordination Center (MCC) will be established at a national level to manage flow into

¹⁴ Information on the locations and use of Federal and State Staging Areas is found within Tab H: Logistics and Supply Chain Management.



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and out of the state. A Movement Coordination Group will be established within the SEOC and will receive input from all Essential Support Functions, impacted jurisdictions, and the MCC. The UCG will set priorities and the MCG will manage movement of resources into and out of the impacted area.

Distribution Management

Manage delivery of resources via nodes operated by government, private and nonprofit partners required for timely and accurate distribution, reallocation, and redistribution to field sites and the general public. Distribution management is required at all levels of government; the system is managed individually yet coordinated through EOC/ECCs at all levels.

Any resource that is committed to the incident in Washington State will be moved from the ISB to a Federal Staging Area (FSA) or to the end user through the CPOD if it is feasible. If movement from the ISB to the CPOD is not feasible then the resource will transfer to the State at a State Staging Area (SSA). The transfer of resources will then be moved to a County Logistical Staging Area or to the local CPOD.

Joint federal and state planning has predetermined the locations listed in the figure below for Incident Support Bases (ISB), Federal Staging Areas (FSA), Aerial Points of Debarkation (APOD), and State Staging Areas (SSA):

Phases

Washington State's catastrophic plan aligns with FEMA Region 10's catastrophic response plan through the adoption of FEMA Phases. This approach involves three phases; however, Phase 2 is additionally broken down into three focus areas. Phase 1 is the preparedness-focused phase, while Phase 2 concentrates response and transitional recovery-related activities, leaving Phase 3 to emphasize long term recovery operations. These phases apply to catastrophic incident planning for government entities in FEMA Region 10 and do not extend vertically to the local levels.



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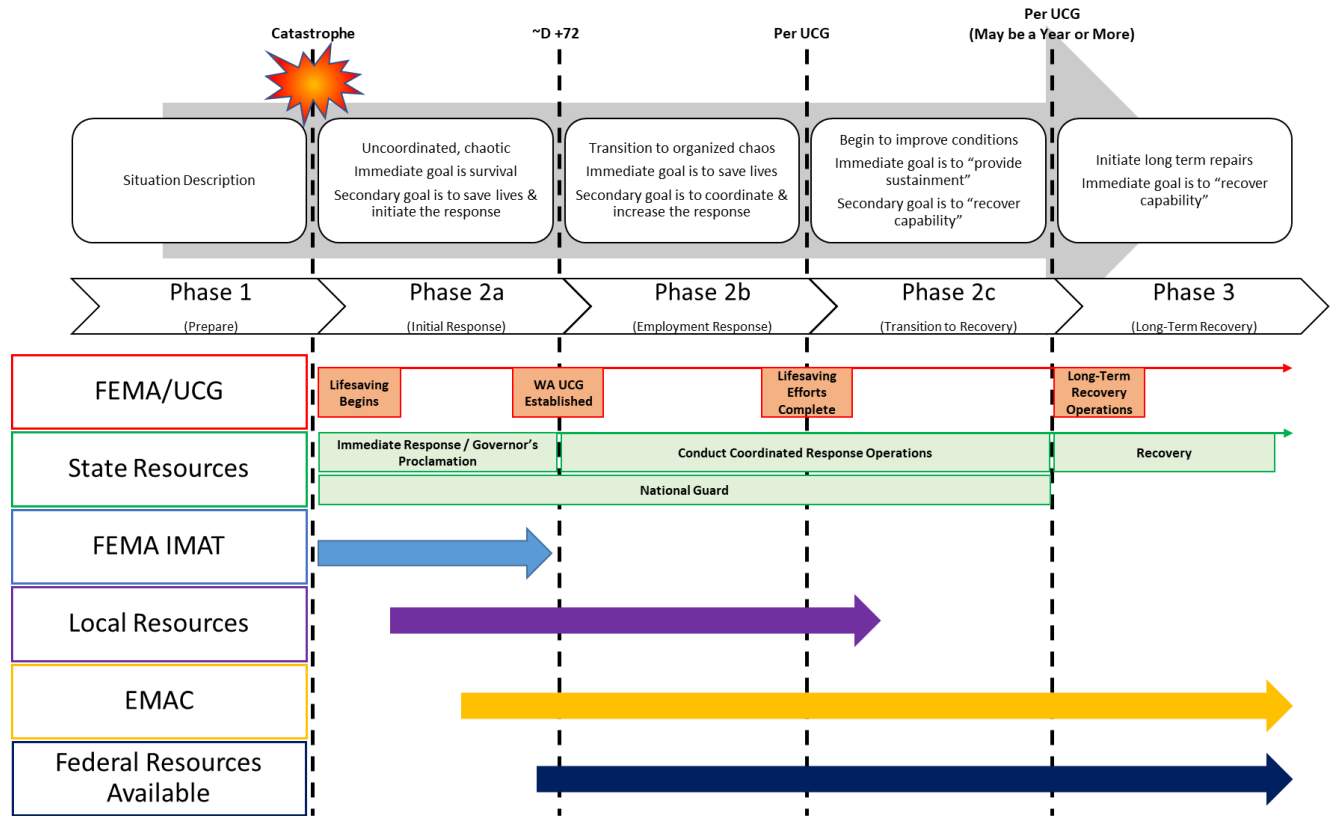


Figure 13 - Catastrophic Phases

Phase 1 (Prepare)

Phase 1 begins pre-incident, when private, nonprofit, local, state, tribal, and federal stakeholders coordinate to prepare for a catastrophic incident. Priorities of effort for this phase include socializing a catastrophic scenario to develop a common operating picture, plus planning, organizing, training, equipping, exercising, evaluating, and implementing corrective actions to prepare for a rapid response. This phase includes all the preparatory actions necessary for response operations once the incident occurs.



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Activities

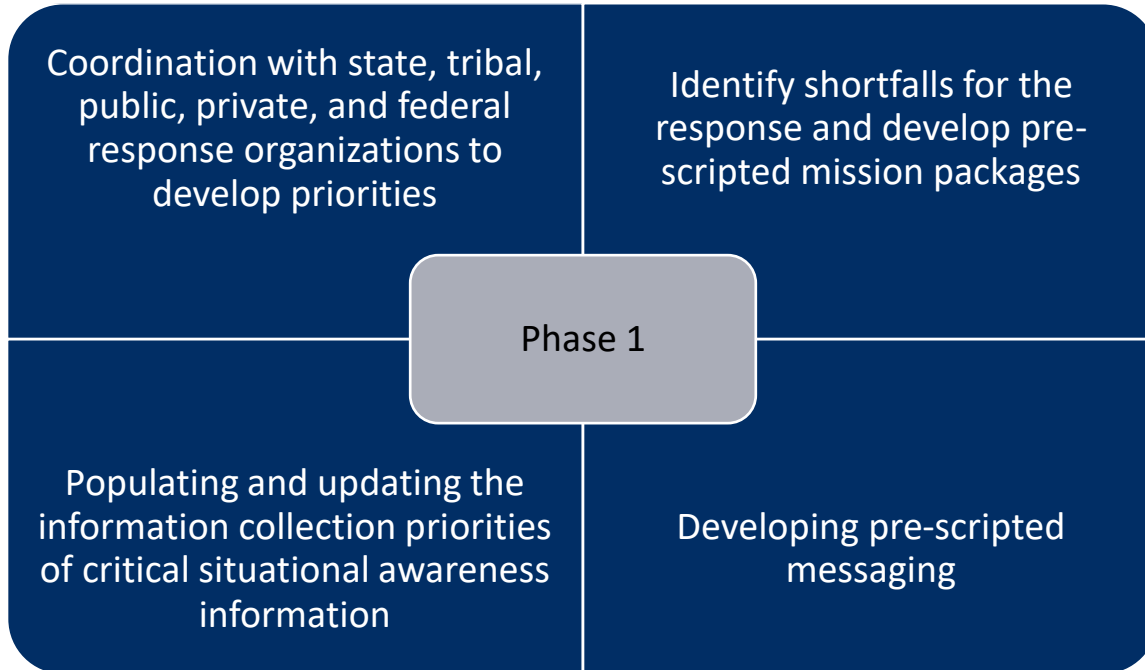


Figure 14 - Phase 1 Activities

Phase 2a (Initial Response)

Phase 2a begins at the time of the incident in conjunction with notification that an incident has occurred. In many cases, the magnitude of the incident itself may initiate the beginning of this phase. Phase 2a ends when the Unified Coordination Group (UCG) in Washington are established. The following traits characterize this phase:

- Attempting to establish coordination and unity of effort
- Focus on personnel accountability and family welfare status
- Incident goals are centered on initiating the response and saving lives



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Activities

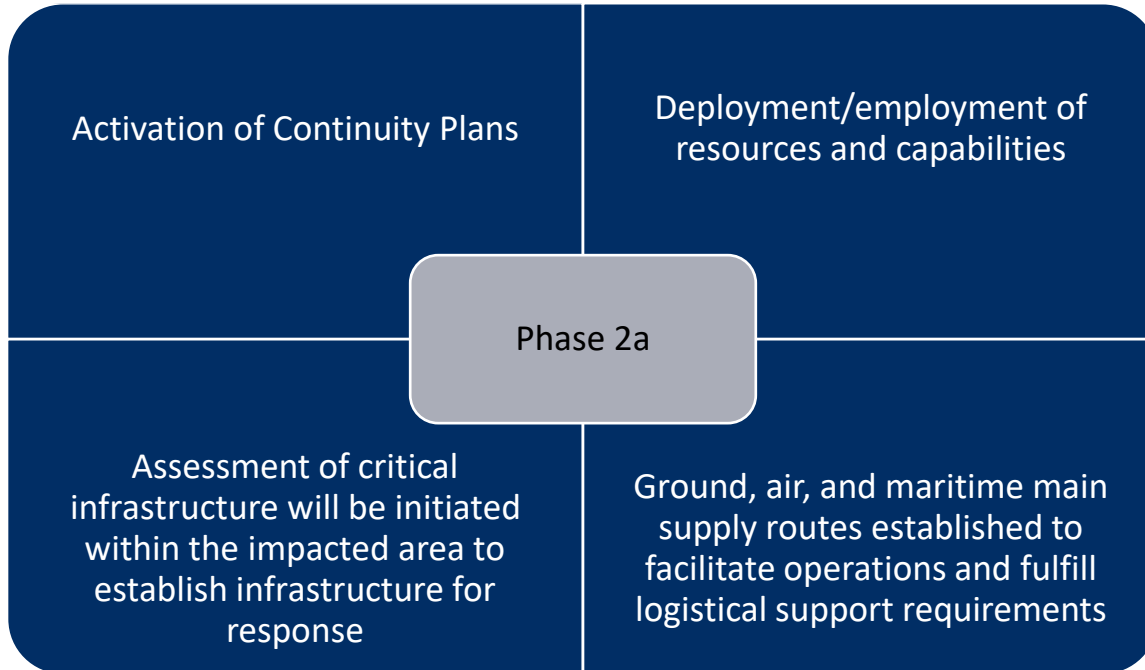


Figure 15 - Phase 2a Activities

Phase 2b (Employment Response)

Phase 2b begins with the establishment of a UCG. Phase 2b ends when lifesaving activities have been completed. The following traits characterize this phase:

- Initial transition into “organized chaos”
- Immediate goal is to save and sustain lives
- Secondary goal is to coordinate and increase the response



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Activities

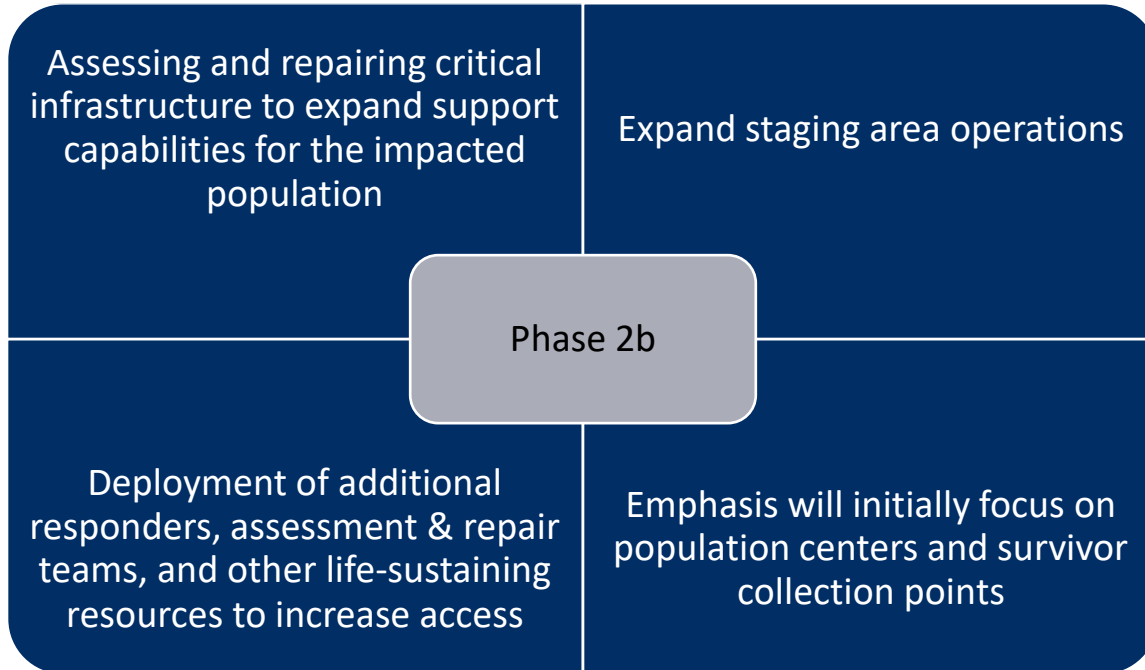


Figure 16 - Phase 2b Activities

Phase 2c (Transition to Recovery)¹⁵

Phase 2c begins with the completion of lifesaving operations. Essential public services will expand, including the provision of food, water, power, fuel, communications, transportation routes, transportation modes, relocation, and long-term shelter options for those displaced by the incident. In this phase, temporary and permanent restoration efforts will expand, as will the continued stabilization of critical infrastructure. Phase 2c ends when all response operations have been completed and the conditions are set for the transition to long-term recovery. The following traits characterize this phase:

- General improvement of conditions
- Immediate goal is to “provide sustainment”
- Secondary goal is to “recover capability”

¹⁵ Phase 2c marks the first phase in which All-Hazards plans can be transitioned back into as the capabilities and resources begin to become sufficient to continue the response. This may become evident through decreased activation levels and the need to continue ICS staffing at extended and expanded levels.



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Activities

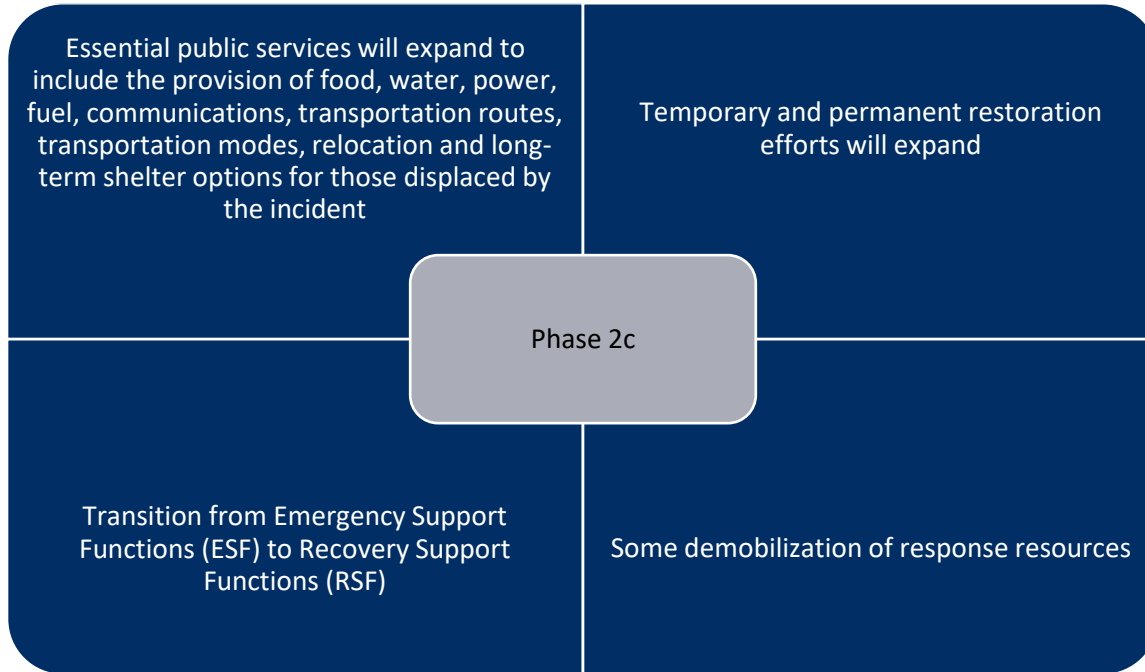


Figure 17 - Phase 2c Activities

Phase 3 (Long-Term Recovery)

Phase 3 begins with support for the private sector and local, state, and tribal jurisdictions in which federal actions are engaged to restore services, continue governmental operations, and promote economic recovery. All lifesaving activities will be completed, and the groundwork will be laid to support long-term recovery by assisting individuals, restoring critical infrastructure and essential governmental and commercial services.

- Initiate long term repairs
- Immediate goal is to “recovery capability”

Activities

This phase was included in this plan to provide continuity for the preceding phases only. Nearly all activities in this phase should consist of those found within All-Hazards plans and the Washington Restoration Framework (WRF).

Organization

Statewide Catastrophic Incident Planning Team (SCIPT)

The mission of the SCIPT is to facilitate collaborative engagement between states, state agencies, tribes, and local jurisdictions, together with the communities they serve, in developing emergency plans to prepare for, respond to, and recover from catastrophic



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incidents. The SCIPT supports catastrophic incident planning conducted by, or between, emergency management organizations in Washington State, initiates catastrophic incident planning efforts where presently absent, and provides guidance to all emergency managers in Washington State. SCIPT functions represent those found in Phase 1 activities.

Homeland Security Regions

Due to both the geographic expanse of Washington State, and number of established emergency management organizations, statewide coordination of response and recovery activities following a catastrophe requires a region-based structure. For this structure, the Framework will use the boundaries of the Homeland Security Regions for planning purposes. Operational coordination for these regions is a state government-led effort, wherein no tribal nation or local government would assume any operational responsibility for or on behalf of another tribal nation or local government, respectively.

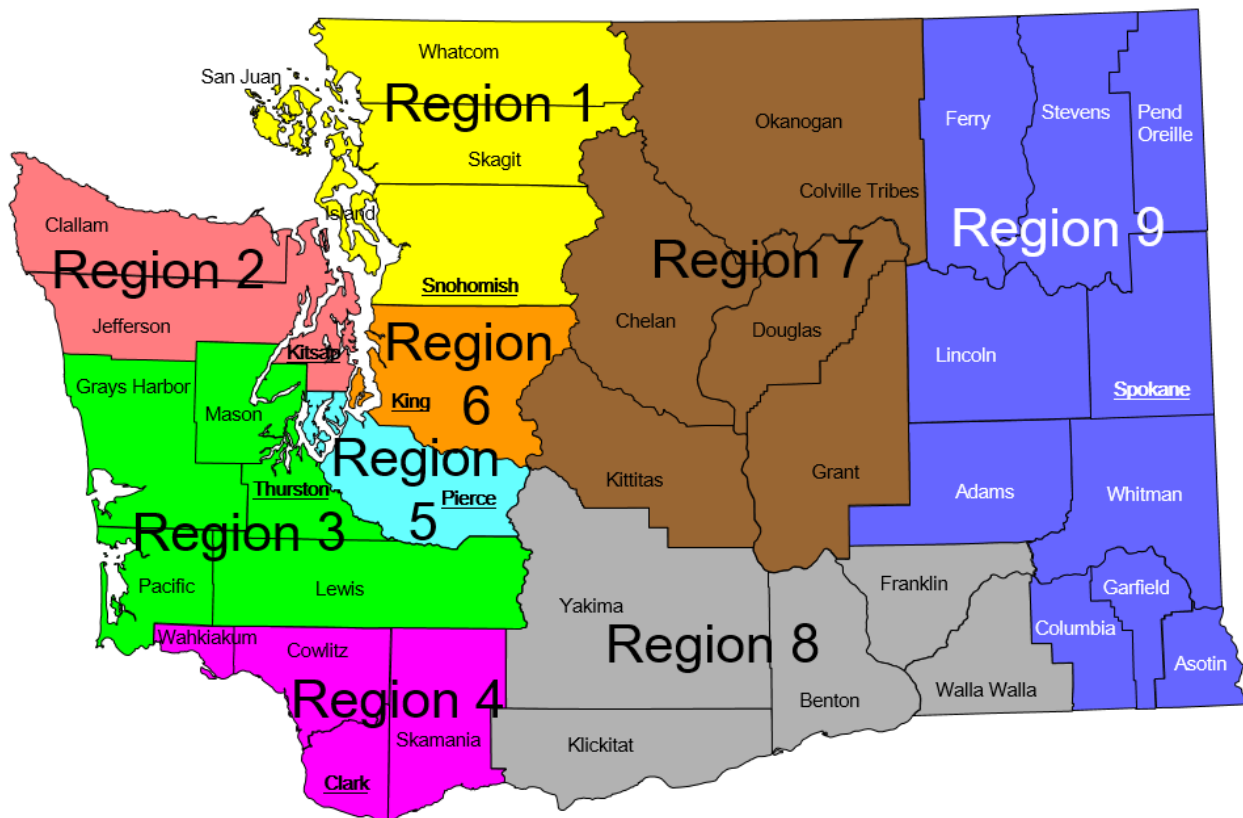


Figure 18: Washington Homeland Security Regions



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Unified Coordination Group

Despite the unique and widespread characteristics of a catastrophe, emergency management of a catastrophic incident impacting Washington State follows established national doctrine; that is, overall statewide strategic emergency management coordination responsibility residing with the Unified Coordination Group (UCG). As described in the *National Response Framework*, the membership of the UCG comprises "senior leaders representing state, tribal, and federal interests and, in certain circumstances, local jurisdictions, the private sector, and NGOs. UCG members must have significant jurisdictional responsibility and authority."¹⁶ In the circumstance of a catastrophe affecting Washington State, the UCG membership includes representation from impacted tribal nations and local governments. Furthermore, state and federal partners establish a UCG in every impacted state receiving federal assistance.

Under the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), once the governor of a state, including the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands, requests federal assistance, the requesting governor appoints a State Coordinating Officer (SCO) to oversee state-level response and recovery efforts.

A Federal Coordinating Officer (FCO), appointed by the President in a Stafford Act declaration, coordinates federal activities in support of the state requesting assistance. The SCO and FCO co-lead the UCG, and the UCG provides leadership within the JFO see figure below for an illustration of the UCG organizational structure within the JFO (NOTE: Consider "Unified Coordination Staff" synonymous with the JFO in this instance).

¹⁶ U.S. Department of Homeland Security. (2019). *National Response Framework, Fourth Edition* (p. 19). Washington, DC: U.S. Government Publishing Office.



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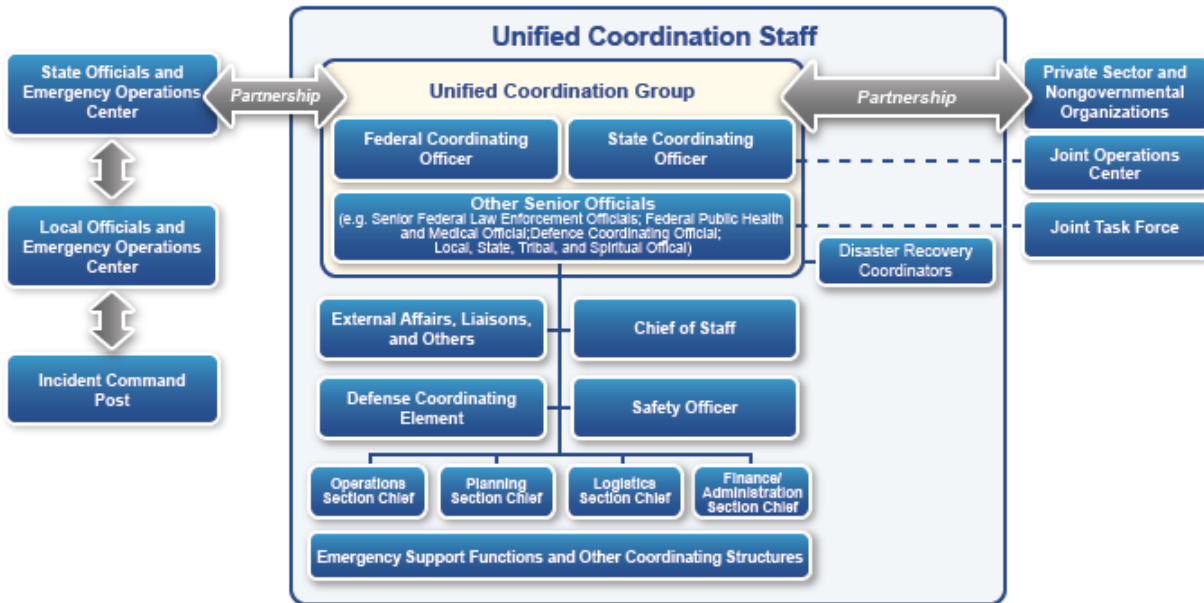


Figure 19: Organization chart titled "Unified Coordination"

Mobilization

Mobilization of response resources following a catastrophe vary depending on the nature and magnitude of the incident. In many cases, the catastrophic incident will be of such severity that it inherently initiates the response itself. For example, the CSZ earthquake will be of such a great magnitude that responders immediately begin mobilizing as soon as it is safe to do so.

State Staging Areas

State Staging Areas are located at various airports across the state and are often co-located with Federal Staging Areas (SSA), Incident Support Bases (ISB), and Aerial Points of Debarkation (APOD). Co-locating staging areas within proximity to federal operations allows for a more rapid transition of resources.

External Resource Branch

The External Resource Branch, part of the SEOC Logistics Section, oversees and coordinates all mutual aid requests, federal requests, procurement or contracting of resources and the tracking of all resources provided.



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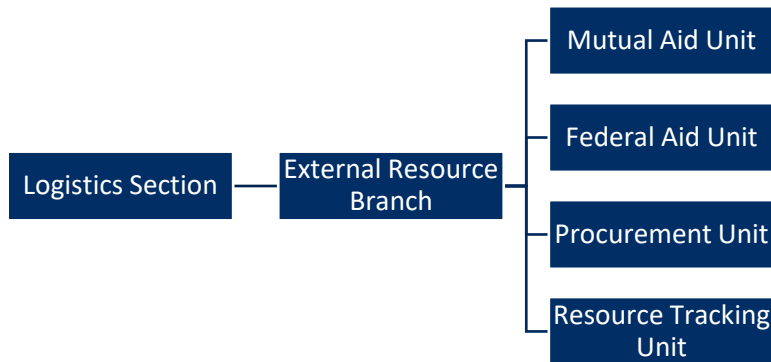


Figure 20 - SEOC External Resource Branch

Structure

Once activated to Level 1 (Full Activation), the SEOC is staffed with the subject matter experts needed to support and [in the instance of a catastrophic incident] direct response and recovery operations. As assisting federal personnel arrive, the SEOC becomes an Initial Operating Facility (IOF). Superseding the IOF is the Joint Field Office (JFO), which may or may not reside at the same physical location as the IOF. The JFO is a temporary facility that provides a central location for coordination of response efforts by the private sector, NGOs, and all levels of government. The personnel that staff the JFO are sometimes called the "Unified Coordinating Staff," and the JFO itself is sometimes referred to as an [or using an] "unified coordinating structure." Once state and federal partners establish a JFO in response to a catastrophic incident, the SEOC remains physically integrated in partnership with the JFO, while maintaining its own organizational structure.

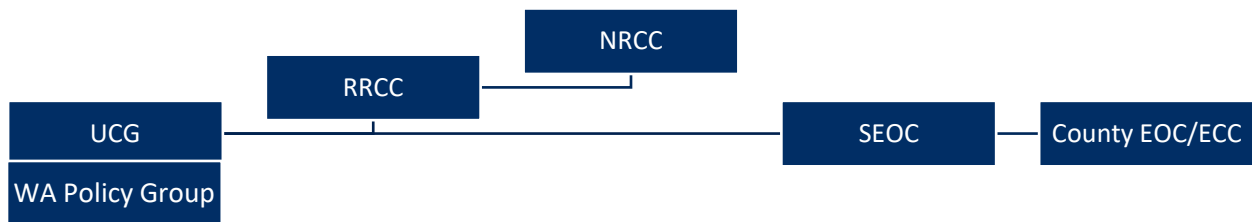


Figure 21 – Catastrophic Organizational Structure

There are a number of scenarios based on notice and no-notice incidents and their current impacts that will determine the initial structure of the SEOC activation.

SCENARIO 1: The initial structure of the SEOC will comprise a limited ICS structure due to staff availability. A limited ICS structure will comprise of an SEOC Supervisor and Command and



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General Staff. If the catastrophic incident is an escalation of already occurring incident with limited to no transportation impacts in a roughly 20-mile radius of Camp Murray, then staffing can be easily expanded.

SCENARIO 2: The initial structure of the SEOC will comprise a limited ICS structure due to staff availability. A limited ICS structure will comprise of an SEOC Supervisor and Command and General Staff. If the catastrophic incident is an escalation of already occurring incident with moderate to significant impacts (bridge failures and interstate/highway damage) in a roughly 20-mile radius of Camp Murray, then staffing cannot be easily expanded. This will result minimal staffing for 24-48 hours¹⁷.

SCENARIO 3: The incident has not occurred yet, but there is a warning time of several hours before impacts are experienced (e.g., distant-sourced tsunami, some nuclear incidents, etc.).

SCENARIO 4: An incident has already been occurring and is now elevated to a catastrophe based on increased impacts (e.g., wildfire, flooding, pandemic, etc.). Additional staffing can be easily expanded as needed to fill a more robust ICS structure.

Regardless of the incident type, all catastrophic incidents will require the activation of state employees that are not regular participants in emergency management programs to fill the multitude of required positions and provide for a rotation of personnel over multiple operational periods (to include considerations for day and night shifts). To compound this, many experienced emergency management personnel may be required to provide support to their Department Operations Centers (DOCs) to facilitate internal mobilization of resources, accomplish objectives outside of the scope the SEOC activation, and to support their Mission Essential Functions (MEFs).

¹⁷ This is a planning assumption, as the actual recall time of staff for a full activation of SEOC positions has never occurred with an impacted transportation system; however, as staff make contact with the local EOCs within their home areas and as the transportation system recovers enough to enable access, it is assumed that staff will be able to either drive to the SEOC or arrangements can be made to transport staff.



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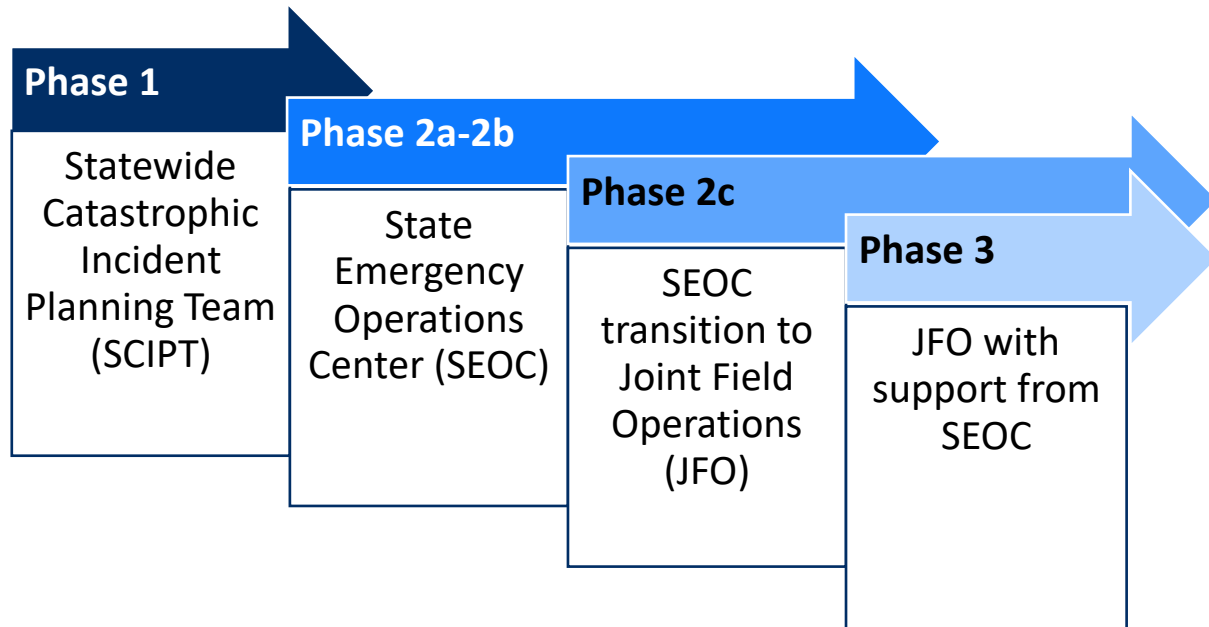


Figure 22 - Organizational Associations by Phase

Direction, Control & Coordination

Policy Group and the Unified Coordination Group

During the initial stages of a catastrophic incident, it will become necessary to establish a mechanism for senior leadership to provide guidance and direction (Leadership's Intent) for the activities taking place. As the response becomes more organized it will be necessary to move through the various coordination structures to integrate response personnel from across state government and establish unity of effort. Washington EMD maintains the use of a UCG for incident response and a Policy Group who advises them and acts to determine policy guidance and resource allocation and distribution. State emergency operations and structures will integrate into the federal UCG model when it is established, but still maintain the use of the Policy group to advise the state participants within the UCG.

Unified Coordination Group (UCG)

The Unified Coordination Group (UCG) will have oversight and coordination responsibility for actions throughout the State of Washington.

Initial federal operational coordination will be accomplished at the National Response Coordination Center (NRCC). The Regional Response Coordination Center (RRCC) at FEMA Region 10 provides operational support for field-deployed resources to ensure the synchronization of federal response and recovery operations, and to resolve regional resource requirements. The RRCC is responsible for coordinating and maintaining awareness of federal



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field activities, including those of the deployed Incident Management Assistance Teams (IMAT). The IMAT then assumes direction and control of the interagency federal response and recovery effort in support of the state requesting federal assistance.

“When catastrophic incidents put a premium on the restoration of complex supply chains (especially for essential products and services needed for response efforts and stabilizing the economy), private sector coordination and assets are vital for public health and safety, the economy, and national security. The private sector can also help government agencies prioritize support missions (e.g., debris removal) to facilitate business and infrastructure response operations.” (NRF, 2019).

State Agencies and Departments

Following a catastrophic incident, agencies will first implement their Continuity of Operations Plans to assess their resource impacts, reestablish command and control, and determine the effects on Mission Essential Functions. Before these entities can turn to the task of supporting the SEOC, they will need to reestablish an effective organizational posture. For an effective response to occur following severe impacts it is required that plans are coordinated and implemented at all levels of government.

Information Collection, Analysis, & Dissemination

Information management is a continuous process of intelligence collection, analysis, and dissemination to inform those responsible for decision making. Throughout the process, leadership and stakeholders provide guidance to ensure that information outputs describe situations, provide predictions, or recommend decisions.¹⁸

Information Collection

Information is collected by core capability for the impacted community lifeline(s) associated with the core capability. Community Lifelines are the most fundamental services in the community that, when stabilized, enable all other aspects of society to function. FEMA developed the Community Lifelines construct to increase effectiveness in disaster operations and better respond to catastrophic incidents by allowing emergency managers to characterize the incident and identify the root causes of priority issue areas and distinguish the highest priorities, and most complex issues, from other incident information. While response processes do not necessarily change, framing the incident around Community Lifelines creates solutions that address root causes and better stabilize the incident impacts.

¹⁸ Additional information on this subject can be found within the FEMA Incident Stabilization Guide, Appendix D: Lifelines Information Management and Planning.



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Essential Elements of Information (EIs)

A baseline list of information should be collected to inform the common operating picture and meet decision making needs. Please refer to each Core Capability’s Tab for specific Core Capability to Community Lifeline and EEI for a list of EEs or see table below for a quick reference tool. Tabs may not include all relevant EEs, as the impact of a given disaster may require unique information collection needs, and not every incident will impact all of the lifelines’ EEs.

Primary Core Capability	Community Lifeline
Critical Transportation	<i>Transportation</i>
Mass Care Services	<i>Safety and Security</i>
	<i>Health and Medical</i>
	<i>Food, Water, Sheltering</i>
Public Health, Healthcare, EMS	<i>Health and Medical</i>
Fatality Management	<i>Health and Medical</i>
Infrastructure Systems	<i>Safety and Security</i>
	<i>Food, Water, Sheltering</i>
	<i>Hazardous Material</i>
	<i>Energy</i>

Figure 23 - Abbreviated Primary Core Capability to Community Lifeline Matrix



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Information Analysis

The following graphics illustrates the relationship between core capabilities and the ESFs who both provide EEIs and also require information feedback and analysis from the other associated ESFs.

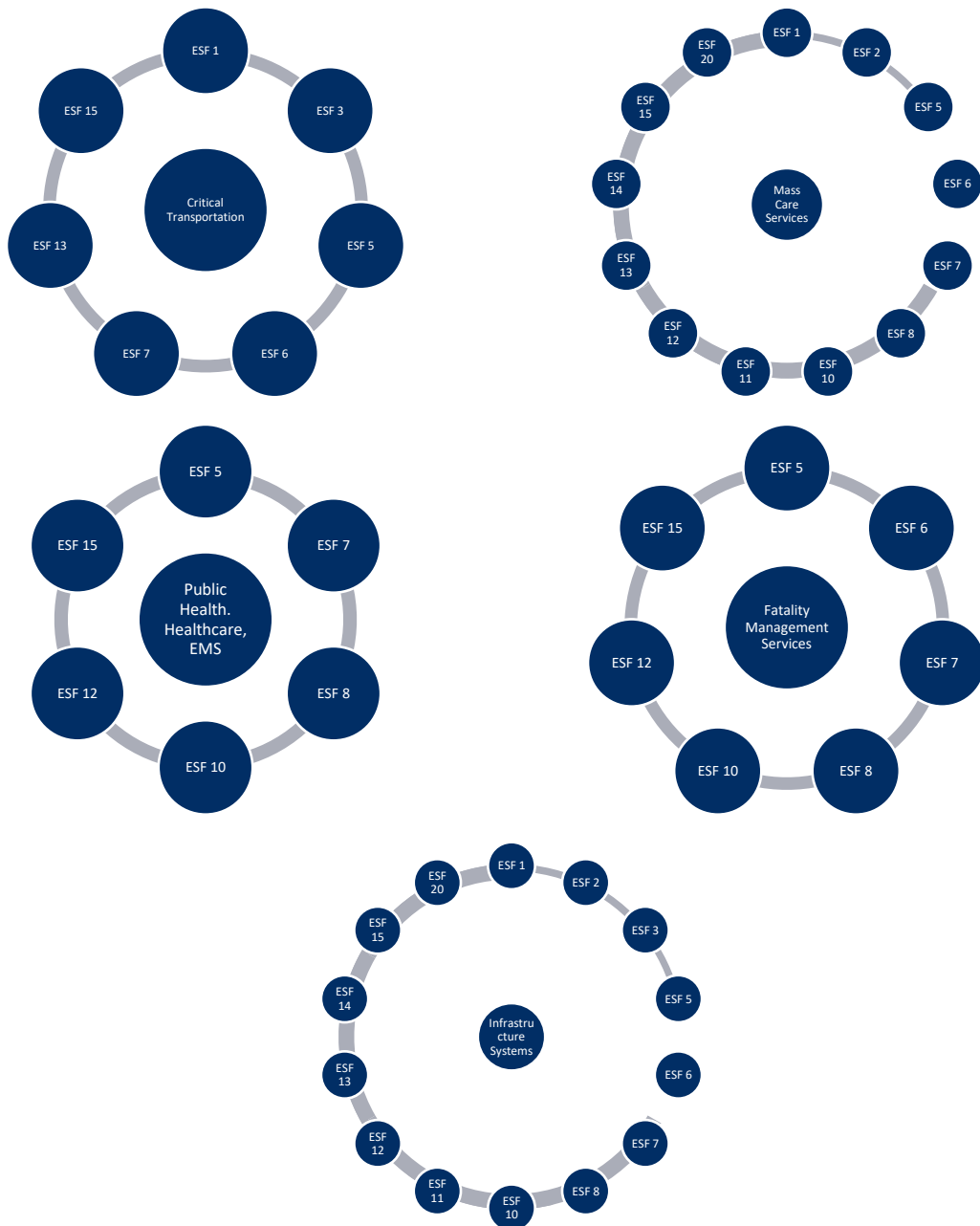


Figure 24 - Core Capability Relationship to Emergency Support Function



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Information Dissemination

By implementing the Community Lifelines during response, the Senior Leadership Briefing (SLB) format for communicating Community Lifeline status can be utilized. This format can be used to effectively communicate the conditions and needs of the response and anticipated timelines associated with ongoing activities. This format can be effective in communicating macro conditions in the response that require policy modifications or implementation; redirection and reassignment of state-owned resources; and can be used to inform the media. Tier I Disaster Summaries consist of the following:

- Executive Summary
- Significant impacts, limiting factors, and actions to address lifeline services
- Reported only at the Lifeline level (no subcomponents)

While the Tier I SLB is appropriate for briefing senior leadership and elected officials, it does not address the micro-level needs of response personnel. Additionally, some information that is beneficial to response personnel may not be present in the SLB due to the high chance that this information could be easily misinterpreted by those not active in operational and tactical level activities.

The more appropriate informational product to share with response personnel within the SEOC, DOCs, and local emergency management organization is the Tier II: Lifeline Overview. This product provides the following:

- Assessment report on lifeline and component condition
- Analysis of component condition, impacts, actions, limiting factors, estimated time to change in condition/current status, with consideration to reestablishment requirements

To inform response personnel throughout operational periods in between the production of Tier II reports, Tier III reporting methods can be utilized, which include:

- GIS products
- Internal and external dashboards
- Charts, graphs, and other supplemental materials



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References and Supporting Guidance

State Seismic Safety Committee

The Washington State Seismic Safety Committee (SSC) initiated a project to study and prepare a policy paper with the purpose of providing a framework for improving Washington’s resilience when earthquakes occur. Such a framework includes more effective seismic mitigation policies and recommendations for legislation and policy changes to improve and enhance statewide seismic safety. The document will be used to facilitate long-term implementation of seismic risk reduction policies across the state with the goal of making the state resilient in a 50-year time frame.”

Resilient Washington State: Final Workshop Report

In 2012, the Washington State Seismic Safety Committee published the Resilient Washington State: Final Workshop Report which provides the framework for improving Washington’s resilience when earthquakes occur by proactively reducing critical vulnerabilities. Following that framework, WSDOT established a vision to refine its Phase three tier and create an interconnected lifeline of highways with built in redundancy to provide alternate routes if a segment of highway becomes impassable after an earthquake.

Regional Catastrophic Preparedness Grant Program (RCPGP)

This program is a group of 10 cities that have come together to think differently about planning and preparedness for catastrophes. The sites have developed a number of products – plans, tools, trainings, and exercises – that bolster the ability of their communities to respond to and recover from catastrophic emergencies.

Supply Chain Project

The main objectives of the project were to develop a supply chain resilience working group consisting of transportation and supply chain stakeholders across the 8 county RCPGP. A series of workshops conducted by the working group researched the designation of community points of distribution (CPODs), identification of alternate means of delivery, and transition plan from government to private sector.”

Washington State Coast Resilience Assessment – Final Report

The majority of participants listed earthquake and tsunami as the top hazard for the coast and frequently talked about the potential devastating impact of a Cascadia Subduction Zone Earthquake (CSZE). This 9.0+M earthquake would cause a number of other potentially catastrophic incidents, including a large tsunami, landslides and liquefaction (a phenomenon in which soil loses its strength and ability to support structures and buildings). In addition to the challenges and opportunities that are brought on by changing conditions there is a sobering reality that the coastal communities and environment face potentially catastrophic impacts



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from a Cascadia earthquake and tsunami. To prepare for and to mitigate against these life-threatening hazards will be a critical component of coastal resilience efforts.

Resiliency Assessment - Washington State Transportation Systems

The Washington State Transportation Systems project assessed the resilience of Washington State's surface transportation systems to a Cascadia Subduction Zone (CSZ) earthquake, and the ability of those systems to support post-disaster response and recovery activities. Also referred to as the Transportation RRAP.

Terms and Definitions

Capability Target

The level of capability that the community plans to achieve over time in order to manage the threats and hazards it faces. Each core capability will have one or more capability target(s) based on the desired level of capability.

Cascadia Subduction Zone

A 1,000 km long dipping fault that stretches from northern Vancouver Island to Cape Mendocino California. It separates the Juan de Fuca plate and North America plates.

Catastrophic Incident

Any natural or manmade incident, including terrorism, which results in extraordinary levels of mass casualties, damage, or disruption severely affecting the population, infrastructure, environment, economy, national morale, and/or government functions.

Community Lifeline

Priority issue areas that provide indispensable service that enable the continuous operation of critical business and government functions, and is critical to human health and safety, or economic security.

Core Capability

32 activities that address the greatest risks to the nation first identified and defined in the National Preparedness Goal. Each Core capability will further create capability targets based on the desired level of capability.

Critical Task

Activities that must be performed for a wide variety of threats and hazards and are based on the activities that emergency managers plan for. Each Capability Target describes a critical task, that when completed, helps communities successfully manage a threat or hazard.

Hanford Site



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A 560 square mile complex, located north of the city of Richland, Washington, under the direction of the U.S. Department of Energy.

Information and Communication Technology

An extensional term for information technology that stresses the role of unified communications and the integration of telecommunications (telephone lines and wireless signals) and computers, as well as necessary enterprise software, middleware, storage, and audiovisual systems, which enable users to access, store, transmit, and manipulate information.

Seismic Lifeline Corridor

The Pacific Northwest section of I-5, the I-5 Urban Corridor, extends from Eugene, Oregon to the Vancouver, Canada. The State, county and cities in the Puget Sound area have a 10-year plan for seismic retrofitting for emergency response and economic recovery to build a usable route around the I-5 section through downtown Seattle via SR 99 and I-405.

Shadow Evacuation

An evacuation of a person or family in an area outside the 10-mile emergency planning zone, who evacuate out of fear or lack of information.



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Primary and Supporting Core Capability Tabs

Tab A: Critical Transportation

Tab B: Mass Care Services

Tab C: Infrastructure Systems

Tab D: [Reserved] Public Health, Healthcare, EMS

Tab E: [Reserved] Fatality Management Services

Tab F: Operational Coordination

Tab G: Situational Assessment

Tab H: Logistics and Supply Chain Management

Tab I: Operational Communication

Appendix 1: Cascadia Subduction Zone

Appendix 2: Executive Summary