Catastrophic Incident Annex

Appendix 1:
Cascadia Subduction Zone

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Record of Changes

Change Number: YR-XXX	Date of Change: MM/YYYY	Change Summary/Sections Affected	Position Name/Initials
22-001	09/2022	Added Introduction section. Moved Purpose and added Scope section under Introduction. Edits for grammar and clarity throughout document. Removed planning assumptions and response considerations that were not specific to a CSZ incident.	Catastrophic Planner/SM

Introduction

Purpose

This appendix provides detailed information concerning a Cascadia Subduction Zone incident and subsequent response and reflects the catastrophic planning that has taken place across the state for its associated Critical Tasks.

Strategic Goals

Life Safety

Priority Routes

1. Identify the routes critical for response including routes to hospitals, emergency services, mass care shelters, CPODs, staging area, and points of entry including connections to adjacent communities, the states "Seismic Lifeline Routes" and air and water ports.
2. Coordinate the deployment of resources that can assist local jurisdictions with assessment and inspection of transportation infrastructure needed for response operations.
3. Coordinate debris clearance from priority routes needed for response operations.
4. Align routes used to move resources with Priority Route planning.

Priority Activities[1]

5. Provide assistance with local and Tribal sheltering needs through available state resources and facilities.
6. Provide assistance with feeding and hydration for local and Tribal needs through procurable resources[2].
7. Provide assistance with the bulk distribution of disaster supplies to impacted communities through existing government programs and services.
8. Facilitate the movement of mass care resources from donated, procured, and federal sources into local and Tribal staging areas.

Water Services

9. Provide sufficient and sustained support for water services to meet life-sustainment incident objectives.

[1] Priority Activities should emphasis those activities and locations which are along state and local Priority Routes.
[2] The state does not maintain these resources and would have to procure resources using contracts and private vendors to support impacted communities.

Water Systems

10. Assist local jurisdictions with the prioritization of water system restoration by those critical consumers who are needed to respond to and stabilize the incident.
11. Identify local jurisdiction resource needs for system restoration and assist to the extent possible under legal guidelines for providing resources to public and private entities.

Vertical Integration

12. Response operations involving some or all of the jurisdictions and Tribal partners in the state will require an extraordinary level of coordination. This coordination will require the vertical integration of all levels of government to effectively respond and stabilize from the results of a catastrophic incident.
13. Communicate with all levels of government during a catastrophic incident to effectively gain situational awareness through assessment and reporting.
14. Establish sufficient communication to enable timely and coordinated assistance to local jurisdictions.
15. Establish a shared situational awareness and understanding of the communications operating environment.
16. Integrate state-owned and private sector communications equipment with local jurisdictional communications systems to facilitate interoperable communications between the state and local response resources.

Horizontal Integration

17. Communicate key findings which directly threaten or affect life safety and sustainment across agencies and partners to inform overall response efforts and identify potential policy decisions.
18. Establish or reestablish communication systems between state agencies, private sector entities, critical infrastructure sectors, and other responding organizations to facilitate operational coordination.

Information Analysis

19. Facilitate a rapid assessment capability immediately following an incident and determine life-threatening situations and imminent hazards.
20. Facilitate the collection of information and other activities such as predictive modeling, remote sensing, and reconnaissance.

Evacuation

21. Provide resource support for local evacuations from heavily impacted areas and other areas which threaten life safety.

Incident Stabilization

Situational Awareness

22. Assess the condition of the transportation network starting with priority routes and situational requirements.
23. Determine resource shortfalls.
24. Determine effects to the Community Lifelines due to impacted transportation infrastructure.
25. Monitor shelter conditions across all activated shelters.
26. Monitor and assess sheltering shortfalls for capacity, personnel, equipment, supplies, accessibility, and specialty needs.
27. Continuously assess sheltering needs, food and hydration availability, and bulk distribution through local and Tribal situation reports, the shelter manager or the regional shelter manager/supervisor[3].
28. Monitor supply chain deficiencies for mass care resources (as reported by local and Tribal jurisdictions, vendors involved in state procurement, and federal logistics support).

Water Services

29. Sustain water resource assistance to protect life and safety of the Whole Community.

Water Systems

30. Assist local jurisdictions with mutual aid resource requests to restore the functionality of community systems.
31. Assist local jurisdictions with meeting approved water quality standards.
32. Assist local jurisdictions by addressing environmental impacts degrading water source impacts.

Direction, Control, and Coordination

33. Facilitate a coordinated response that encompasses federal, state, Tribes, local jurisdictions, the private sector and private non-profits through identified strategies and objectives.
34. Sustain the collection, analysis, and dissemination of essential elements of [assessment] information which support decision makers situational assessment to guide incident direction, control, and coordination.
35. Coordinate operational communications response planning among whole community partners.
36. Provide State Emergency Operations Center responders with mission-critical communications systems.

[3] This could include the Red Cross liaison or mass care lead at the local level.

37. Monitor for communications support requests aimed at providing support for essential services.
38. Identify infrastructure barriers preventing the reestablishment or sustainment of communications systems and functionality.
39. Establish primary, alternate, contingent, and emergency (PACE) backup communications capabilities and share the status of an agency's capabilities with partner organizations.

State Staging Areas

40. Establish and sustain State Staging Areas.
41. Establish connections with Federal Staging Areas and Local Staging Areas.

Resource Requests

42. Establish prioritization methodology for the distribution of limited and scarce resources.
43. Identify supply chain disruptions for requested resources.

Scope

Through the incorporation of the response considerations outlined throughout the Catastrophic Incident Annex and core capability Tabs[4], this appendix incorporates the unique assumptions, considerations, and actions that will be involved during this catastrophic incident.

[4] Statewide planning has not yet addressed the Public Health, Healthcare, and EMS; and Fatality Management Services core capabilities yet. These core capabilities will be integrated into this appendix when complete.

Situation Overview

General

The Cascadia Subduction Zone (CSZ) is an approximately 800-mile "megathrust" fault 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. 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.

The CSZ fault is formed by the convergence of the Juan de Fuca Plate and North American Plate. Subduction occurs as one tectonic plate moves under another. The Juan de Fuca Plate is subsiding beneath the North American Plate, as seen in Figure 1, thereby creating the CSZ (illustrated with a red line).

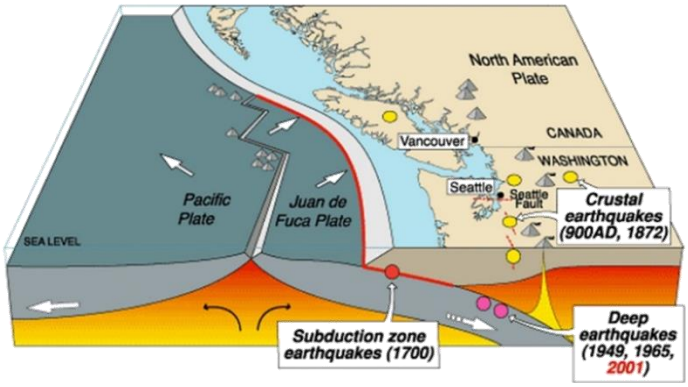

Figure 1 - Simplified Cross Section of the Earth's crust through Washington State titled "Cascadia earthquake source" (adopted from USGS)

Scientific research and consensus indicate an earthquake along the CSZ megathrust fault will occur with little or no advance notice. While analytical modeling of such an incident predicts devastating and disruptive affects throughout the entire state: both the western and eastern sides. Further, a full rupture of the CSZ has a national impact in terms of economic disruption and cessation of commercial supply chains.

Due to the extent and severity of damage anticipated, the CSZ is Washington State's hazard of greatest concern; representing both the highest risk, and "maximum-of-maximum" threat or hazard facing the State of Washington.

Geography

The diverse geography of Washington State compounds isolation and limited access problems during disasters, posing challenges to planning and response efforts. Mountain ranges act as natural barriers to ingress and egress from impacted areas. The most densely populated areas are found between the Cascade Mountains and the coastal regions. The Columbia River, the Pacific Ocean, and Puget Sound will create additional geographic obstacles due to the number of bridges which will be affected by the earthquake.

Isolated Communities
A CSZ incident will create isolated communities that are characterized by pockets of populations which have severely damaged transportation infrastructure and a degraded or non-operational public services which can provide lifesaving or life-sustaining support.

Estimated Impacts
This section serves as a placeholder until the latest HAZUS run has been completed.

Critical Transportation

A CSZ incident will cause the failure of transportation on the west side of the side in many places. Many communities will find themselves cut off from interior and exterior access due to damaged roads, bridges, train lines, ferries, and ports. These transportation impacts will degrade or prevent the movement of resources into impacted areas.

Due to the large area of the state that will be impacted, it is expected that this incident will exceed the capacity of state and local transportation resources and require a significant amount of time for response efforts to make progress. There will also be specialized resources that are either not available in significant quantities (temporary bridges) or require a systematic approach to conduct initial response (repairing one bridge to access another).

There will be an immediate need to prioritize and deconflict resource requests across the state to meet the immediate needs of life safety and sustainment operations taking place. State agencies, local jurisdictions, and Tribal partners will need to prioritize their transportation infrastructure assessment, inspection, repair, and restoration activities in relation to their immediately available resources. This initial focus will enable access along priority routes which connect to emergency services, critical infrastructure, mass care sites, logistical sites, and key access points in and out of jurisdictions.

Mass Care Services

Mass Care activities post-CSZ will be one of the greatest challenges facing the state, Tribal partners, and local jurisdictions. These challenges are centered on the following factors:

- Limited availability of durable and consumable goods post-incident
- Limited capacity to store and manage mass care resources (i.e., food, water, supplies) before an incident which will place a tremendous and unprecedented demand on these resource
    - Coordination with the private sector to procure mass care goods and services will require personnel, communications, and transportation resources which will likely be unavailable or severely limited during the initial days following the incident

- Limited internal personnel with training and experience to manage mass care incidents
    - Resources to provide just-in-time training for responders and volunteers may be scarce.
- Reliance on NGOs and VOADs to perform mass care functions
    - Traditional mass care providers and partners will be unavailable for many days and weeks as those located within impact areas will be victims themselves
        - All volunteer mass care resource types will take days to weeks to organize and move into affected areas
- Transportation impacts will degrade or prevent the movement of both internal and external resources into affected areas to provide and support mass care
- Specialized resources necessary to support AFN populations will have difficulty addressing the full need and accessing impacted areas
- Damage to communications will limit the ability to gather situational awareness and assess jurisdictional needs

A CSZ incident will very quickly exceed the capacity for impacted jurisdictions to respond and sustain mass care functions. Even with support from vertical partners and mutual aid, the need for services will outweigh the capabilities at all levels to support initial operations.

There will be an immediate need to conserve, prioritize, and deconflict resource requests across the state to both meet the immediate needs of life safety and sustainment operations taking place. Many requestors will be unaware of their reliance on the same resource vendors and will request assistance from the state for mass care activities very early after the occurrence of the incident.

Mass care sheltering activities require a specialized set of planning to identify multiple locations for:

- Sheltering
- Facilities capable of providing a wide range of services (e.g., AFN, service animals & pets, basic first aid, etc.)
- Trained staff that can be provided to support operations, communications support for facilities
- Infrastructure support (i.e., power and water)
- Fuel support for generators
- Transport access for both population access and resource support.

Mass care bulk distribution also require a specialized set of planning to identify multiple locations for setting up Community Points of Distribution (CPODs) and other sites where communities may need to access to receive food, water, and supplies. Larger sites such as

CPODs need to account for transportation access for both the population and for the resources moving into the area, which are in turn supported through either local staging access or state staging areas.

The state does not maintain a supply of mass care food, water, or sheltering resources available to support local jurisdiction resource requests and if a request is made for these resources, a combination of private sector contracts, intrastate mutual aid through the Washington Intrastate Mutual Aid System (WAMAS), state to state mutual aid through the Emergency Management Assistance Compact (EMAC), and federal support (if a federally declared disaster) will need to be employed to meet the need. Acquiring and moving of these resources will take several days to reach disaster areas and will require that local jurisdictions to address immediate needs by utilizing every appropriate local resource in the surrounding areas.

Infrastructure Systems

Water

Water will be an immediate need following a CSZ incident. Utilities that have infrastructure components which are in liquifiable soils, river valleys, or utilize non-seismically retrofitted pipe bridges are highly vulnerable to disruption. Impacts experienced to water infrastructure may negatively impact other Critical Infrastructure and Lifeline Sectors involved in immediate response operations. Conversely, impacts to other Critical Infrastructure or Lifeline Sectors may adversely impact or impair the ability of water utilities to function. For example:

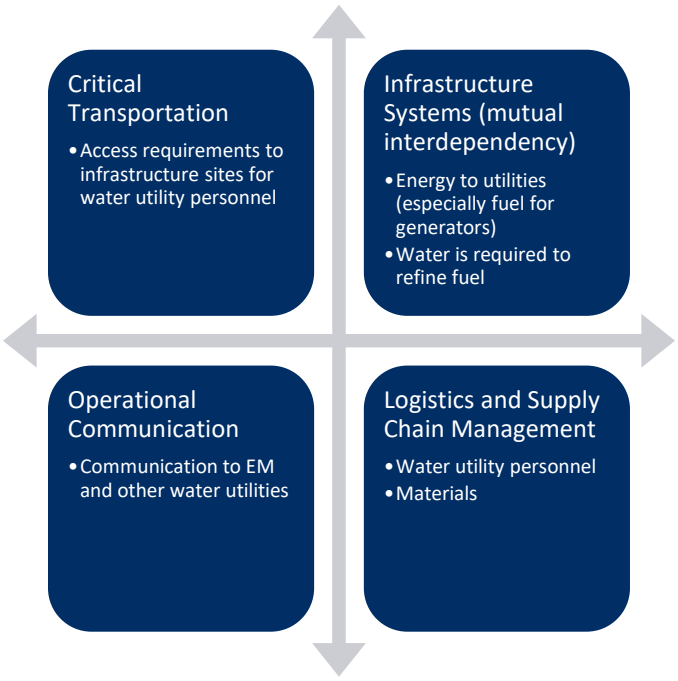

Figure 2 - Infrastructure Dependencies and Interdependencies

Public Health, Healthcare, and EMS

This core capability is part of long-term planning objectives for catastrophic and has not yet been addressed.

Fatality Management Services

This core capability is part of long-term planning objectives for catastrophic and has not yet been addressed.

Planning Assumptions and Response Considerations

Generalized assumptions concerning or applying to multiple catastrophic incidents are covered within each Core Capability Tab of this plan. This appendix addresses only those assumptions which are unique or most concerning for a CSZ incident.

General

- There will be limited to no capability for supporting out-of-region resources and staff; temporary billeting will be required immediately post-event for survivors and responders.
- Local and regional supply chains and infrastructure will be significantly disrupted, destroyed, or over-extended.

Roadways and Bridges[5]

- Potential impacts to transportation infrastructure are heightened along the coast, in the coastal mountains, and along the Interstate 5 (I-5) corridor due to ground shaking (liquefaction), and all types of slides.
    - If many road segments and bridges sustain damage, the potential for viable alternate routes exists, enabling some degree of movement, but with longer travel times and more congestion.
    - Some road systems will be impassable due to damage or secondary effects (e.g., landslides, liquefaction, subsidence, hazardous materials, flooding, etc.)
- Assessments are required for all transportation infrastructure in affected areas.
    - The extent of damage and debris limit access to conduct assessments and repair.
    - Assessment resources for transportation infrastructure will be insufficient, requiring prioritization of this resource type.
    - Repair times may not accurately reflect the situation when there are many segments in need of repair.

[5] See Tab A: Critical Transportation for a listing of all planning assumptions and response considerations.

  - The number of significantly damaged and blocked roads, railways, airports, and seaports may overwhelm the limited number of personnel available to conduct assessments and inspections.
- Local capabilities are likely inadequate to repair transportation infrastructure.
  - Any resources brought in to assist with temporary repair and restoration operations will need to be self-sufficient.
  - Fuel requirements for assessment and repair crews may exceed local capabilities.

Airports, Maritime, and Rail[6]

- Airports that can be used to move and deliver resources are limited to those that can accommodate larger aircraft, sustain limited damage, have useable and repairable connections to the ground transportation systems, and have the capacity for multiple large aircraft to be on the ground at one time.[7]
  - Airport functionality is dependent on the ability to provide necessary support and wraparound services (e.g., power, water, sanitation, fuel, and communications).
  - Helicopters will be needed to meet the transportation needs of isolated communities where landing areas are too small for fixed-wing aircraft. Compared to fixed-wing aircraft, helicopters carry fewer supplies, are slower, and have a shorter range.
- Seaports will sustain major or complete damage.
  - Maritime resource movement will be unavailable to many locations due to damage to ports, debris in the water, and changes to underwater topography.
  - Processes for re-establishing maritime routes will be entirely dependent on the state of the waterway and ports; and the specialized resources needed to make it navigable.
- Ferries are critical links between the east side of Puget Sound, to the Kitsap and Olympic Peninsulas, and the San Juan Islands.
  - Ferries and their supporting infrastructure will be unavailable for an unknown amount of time post-incident.
- If key rail bridges in Seattle, Tacoma, Vancouver, and Portland sustain significant damage, then rail transportation is not possible along the I-5 corridor or spurs to the west.

[6] See Tab A: Critical Transportation for a listing of all planning assumptions and response considerations.
[7] Although the qualification listed in this statement are the most desirable, there may instances of using other airfields if options are limited and life safety and sustainment is at risk.

- The majority of rail facilities in (train stations, dispatch facilities, and fuel facilities) are along the I-5 corridor and are on liquefiable soils.
- Rail lines coming from the east may be significantly impacted by landslides.

Mass Care[8]

- Pre-designated mass care sites may suffer damage and require cleaning and repairs before being utilized.
  - Major aftershocks may result in the need for additional building inspections or re-inspections before a facility can be used or continue operations
  - Some designated shelter facilities may be retrofitted and/or have emergency backup power.
  - Some sheltering locations (official and ad-hoc) which were ADA compliant, may not be compliant after sustaining damage from an incident.
- Fires or aftershocks may require the relocation of shelters that become threatened.
- There is the potential that disaster survivors will be afraid to seek shelter in buildings after a catastrophic earthquake.
  - It will be necessary to ensure the public knows the buildings have been inspected for structural integrity.
- The inability to get messages to the public about mass care resources and services; and communication between response stakeholders will decrease the ability for the state to perform mass care
- Tourists and visitors staying in hotels or other accommodations that become uninhabitable utilize evacuation centers until transportation systems can support their evacuations.

Feeding, Hydration, and Bulk Distribution[9][10]

- Mass care service providers will be challenged to acquire and receive food to serve shelter populations and to prepare it without continuous coordination and support. Additional challenges include:
- Disruption of water, power, communications, transportation and other critical infrastructure sectors will impact people's ability to move to sheltering locations and receive or go to goods and services.

[8] See Tab B: Mass Care Services for a listing of all planning assumptions and response considerations.
[9] See Tab B: Mass Care Services for a listing of all planning assumptions and response considerations.
[10] Bulk Distribution is also referred to as Commodities Distribution. Bulk distribution is a functional area within the MCS core capability, while Commodities Distribution is a federal LOE. For the purposes of this plan, they are complimentary.

- Resources to support household pets and service and assistance animals in the impacted area will be insufficient (e.g., appropriate vehicles, cages, food, and veterinary care).
- The scarcity of appropriate vehicles (e.g., ambulances, paratransit, canteens, box trucks, refrigerated trucks, passenger vans/buses) to provide mass care services will hamper the delivery of life-sustaining services and the coordination of response and recovery activities to disaster survivors.

Water/Wastewater[11]

- The resources available post-incident may be insufficient to concurrently provide services and restore systems.
  - Essential water utility personnel will likely not be available in sufficient numbers to operate, maintain, repair, and restore significant portions of the water system for the first few weeks of the incident.
  - There may be insufficient personnel, equipment, and materials (both specialized and general) to accomplish incident objectives due to resource competition with other response activities.
- Water systems in dense urban settings may be out of water within 24 hours if significant damage is experienced to the infrastructure.
- Communities that are located at the "end of line" or on peninsulas may need immediate assistance to provide outside or alternative water resources.
- Smaller utilities may be more vulnerable than larger utilities due to:
  - Fewer materials and equipment available on hand
  - Less seismic planning
  - Less seismic retrofits
- Water reservoirs may be quickly depleted of water following a significant incident that causes damage to the system.
- Inoperable pumps at a wastewater utility can lead to sewage overflows that damage the environment, wastewater treatment technologies and threaten public health.

Energy[12]

- Aftershocks will continue for months after the main incident, potentially degrading any repair work already done.
- Unrationed fuel use is expected to exceed supply (prioritized rationing required)
- Bulk fuel deliveries will require significant coordination to move throughout the regions
- Fuel Points of Distribution (F-POD) may be implemented to facilitate deliveries within local jurisdictions

[11] See Tab C: Infrastructure Systems for a listing of all planning assumptions and response considerations.
[12] See Tab C: Infrastructure System for a listing of all planning assumptions and response considerations.

- Initial system safe shutdowns (breakers tripping due to shorts) may cause statewide blackouts that could impact transmission throughout the region covered by the Western Electricity Coordinating Council
- Short term distributed generation (generators) will be required to provide energy to critical facilities
- Large scale above ground and underground storage can experience structural damages, impacting seasonal natural gas availability
- Pipelines may experience breaks and leaks, impacting product availability in the western US
- Restoration of fuel refinery operations will require both water and electricity (to include replacement of components)
- Damage to petroleum ports and rail may impact crude stock for refineries
- Damage to refined product pump stations will impact end consumers
- Fuel stations with generators are limited and consumers may not be able to easily access gasoline for evacuation or small generators[13]
- Damage to transportation corridors may reduce the overall demand for petroleum products, however fuel demand for response and recovery efforts will increase significantly and be a high priority for the first weeks and months of a catastrophic incident.

Information and Communications Technology[14][15]

- Movable and deployable resources capable of establishing and providing immediate communications infrastructure using ICT will be necessary to facilitate a response in which communications has become disrupted.
- Social media and communications applications available to the general public can become a primary source of information when situational awareness has become severely affected. These platforms can be utilized to allow community members to feed information to response personal to provide situational assessment.

Communications[16]

- Operational communications hub relay damage reduces Regional communications capabilities.

[13] There should also be secondary considerations made for impacts to payment systems as many individuals rely on electronic payment, which may be inoperable.
[14] Some information on this topic was retrieved from: Hu, Qian & Kapucu, Naim. (2014). Information Communication Technology Utilization for Effective Emergency Management Networks. Public Management Review. 18. 1-26. 10.1080/14719037.2014.969762.
[15] See Tab C: Infrastructure Systems for a listing of all planning assumptions and response considerations.
[16] See Tab I: Operational Communications for a listing of all planning assumptions and response considerations.

- Many tower-based systems fail or otherwise are unavailable post-incident due to misalignment, tower collapse (full or partial), interconnectivity failure, loss of redundant systems, power failures, loss of fuel supplies, or overutilization.
- The earthquake causes landslides and uncontrolled fires that damage wire and fiber along roads, railroads, and bridges and affect connections between repeaters.
- Wireline (copper and fiber) systems continue to be damaged by debris removal, cleanup, and repair operations; active communications links—both overhead and underground—get damaged or are severed

Safety and Security

- There will be significant populations that will have no law enforcement presence.
- Correctional facilities in the shake zone sustain significant damage and may require evacuation.

Capability Targets[17]

Evacuation:

- Within (#) (time) notice of an incident, complete the evacuation of (#) people requiring evacuation, including (#) people with access and functional needs (requiring evacuation).

Debris Removal and Establishing Access:

- Within (#) (time) of an incident, clear (#) miles of road affected, to enable access for emergency responders, including private and non-profit.

Phase 2a (Initial Response)

- Within (X) (days) of an incident, provide emergency sheltering, food, and water for (XXX) people requiring shelter and (XXX) people requiring food and water, including (XXX) people with access and functional needs (requiring accessible shelter) and (XXX) people with access and functional needs (requiring food and water), and (XXX) animals requiring shelter, food, and water. Maintain for (XX) (days).

Phase 2c (Transition to Recovery)

- Within (#) (time) of an incident, move (#) people requiring temporary, non-congregate housing, including (#) people with access and functional needs (requiring accessible, temporary, non-congregate housing), from congregate care to temporary housing.

Situational Assessment

[17] The Capability Targets outlined within this section are FEMA's standardized targets. While certain activities listed within these sections may not apply to the actions and activities addressed within this plan, they are presented here to maintain a consistent connection with the Stakeholder Preparedness Review (SPR) and federal planning. For modified versions more applicable to catastrophic planning, refer to the Non-Standardized Targets below.

- Within (#) (time) of incident, and on a (#) (time) cycle thereafter, provide notification to leadership and (#) partner organizations involved in incident management of the current and projected situation. Maintain for (#) (time).

Communications

- Within (#) (time) of an incident, establish interoperable communications across (#) jurisdictions affected and with (#) partner organizations involved in incident management. Maintain for (#) (time).

Non-Standardized Targets

Route Assessment

- Within (#) (time) of an incident, assess and report the status of damage to the transportation system and critical infrastructure that may need physical access.
- Within (#) (time) of an incident assess and report on the damages sustained to priority routes
    - Within (time) of an incident implement a coordinated review and approval of the sequence of priority routes to repair and restore to enable access.
    - Within (#) (time) of an incident assess and report on the ongoing recovery efforts and alternatives planned or implemented by others to restore the priority routes.
- Within (#) (time) of an incident, identify temporary alternative transportation solutions to be implemented when primary systems or routes are unavailable or overwhelmed.
- Within (#) (time) of an incident, coordinate regulatory waivers and exemptions to allow safe and effective continuation of response
- Within (#) (time) of an incident, work with ESF 15 to maintain notification systems to support emergency/disaster response including evacuation orders, bridge and road closures, suspension of State construction or maintenance operations, contra-flow and the suspension of State tolls, as appropriate.

Route Clearance

- Within (#) (time) of an incident, prioritize the routes to be repaired/restored/cleared, and made transversable for incident response resources to gain access to demand points or critical infrastructure.
- Within (#) (time) of an incident, position equipment and resources for the response and recovery debris clearance and removal operations.
- Within (#) (time) of an incident, perform initial debris clearance activities to eliminate life and safety threats, facilitate search and rescue efforts, allow access to critical facilities, and to prevent tertiary effects (such as to prevent flooding).

Emergency Repairs

- Within (#) (time) of an incident, assign minimum and maximum restoration times to closed road segments and prioritize restoration based on operational priorities of life safety and life sustainment.
- Within (#) (time) of an incident, work with ESF 15 to distribute information and educate the population on the debris management operations and develop a process for answering the public's questions concerning debris removal.

Shelter

- Within (XXX) days of an incident, assess (XXX) pre-identified shelter facilities within each zone for survivability and potential shelter facility requirements, including minor facility repairs or unsuitability of use based on damage or resource shortfalls. After an earthquake, reassess after each aftershock greater than (XXX) Magnitude.
- Within (XXX) days of an incident, acquire (XXX) additional credentialed workers to staff the shelter; add (XXX) additional shifts; or provide temporary relief for (XXX) shelter workers for (XXX) shifts/weeks/rotations. Review staffing needs every (XXX) days/every (XXX) Operational Period.

Food and Water

- Within (XXX) days of an incident establish bulk distribution of emergency relief items for (xxx) people to meet urgent needs through POD sites established within the affected area(s). Maintain for (XXX) months.
- Within (XXX) hours/days of incident/(XXX) hours of shelter establishment, assess feeding needs at shelter, including cultural and age-appropriate meals for (XXX) sheltered. Reassess feeding needs every (XXX) days/operational period.
- Within (XXX) hours of shelter establishment procure the supplies necessary for shelter feeding using standard procurement practices.

Animal Response

- Within (XXX) days/hours of evacuation, register and track (XXX) household pets and animals and provide disaster welfare information. Maintain for (XXX) months.

Evacuation

- Within (XXX) days/hours of an incident assist jurisdictions in providing an organized, phased, and supervised withdrawal, dispersal, or removal of (XXXXX) disaster victims from dangerous or potentially dangerous areas. Reassess evacuation needs every (XXX) operational period or every (XXX) days.
- Within (XXX) days/hours of evacuation, register and track (XXX) evacuees and provide disaster welfare information. Maintain for (XXX) months.
- Within (XXX) days/hours of evacuation identify the location of (XXX) alternate fuel vehicle sites along mapped routes and communicate these alternative fuel sites as part

of the evacuation response. Review these sites every (XXX) operational period or every (XXX) days.

- Within (XXX) days/hours of evacuation perform an assessment of the evacuee population to identify specific individual or family group needs. Maintain an accurate population assessment every (XXX) operational period or every (XXX) days.

Reunification

- Within (XXX) days/hours of an incident assist (XXX) displaced disaster survivors, including (XXX) children, in voluntarily reestablishing contact with family and friends who have been separated. Maintain for duration of incident or until sheltering operations have ceased.

Disaster Assistance Programs

- Within (XXX) (months) of an incident, implement and offer disaster program services to (XXX) people including programs to repair or replace damaged personal property, assistance with disaster loans, food, cash, and medical assistance, crisis counseling, disaster unemployment, and disaster legal services support and to (XXX) people with access and functional needs. Maintain for duration of recovery or maintain for (XXX) months.

Rapid Assessment

- Within (#) (time) of an incident, perform a rapid assessment on the (7) Community Lifeline areas for life threatening situations and imminent hazards that may cause a break in the continuous operation of government functions and critical businesses that are essential to human health and safety.
- Within (#) (time) of an incident, work with the Logistics Section to determine requirements for critical resources needed to support emergency response activities and any obstacles to the effective delivery of supplemental resources using the information collected through the rapid assessment.

Data Analysis

- Within (#) (time) of an incident, collect essential elements of information from all available sources across the (7) community lifeline sectors.
- Within (#) (time) of an incident, analyze essential elements of information assessment data collected for the (7) Community Lifeline Sectors and develop actionable information to prioritize response actions based on the immediate lifesaving and life sustaining activities for each sector.

Information Sharing

- Within (#) (time) of an incident, deliver actionable information sufficient to inform decision making regarding immediate lifesaving and life sustaining activities to decision makers.

    - On a (#) (time) cycle, deliver enhanced information to reinforce ongoing lifesaving and life sustaining activities to decision makers for determination of strategic direction.
    - On a (#) (time) cycle, deliver identified gaps to information collection that pose a disruption to the decision-making process, or that present an unknown risk.
- Within (#) (time) of an incident, and in coordination with ESF 15, provide timely and accurate information based on comprehensive situational assessments to responders and survivors within the impacted area and deliver public messaging to meeting the immediate needs of responders and the general public.

<u>Communications</u>

- Within (#) (time) of an incident, assess the status of (#) state emergency operations center communication systems to receive and send information to (#) jurisdictions.
- Within (#) (time) of an incident, re-establish SEOC communication to external partners through utilization of the Primary, Alternate, Contingent, and Emergency systems, and relay the status of SEOC communication systems to (#) local jurisdictions.
- Within (#) (time) of an incident, gather assessment information on the status of jurisdiction communication systems to receive and send incident information.
    - Including contacting (#) Public Safety Answering Points if local jurisdiction EOCs are unreachable within (#) (time) of incident or loss of communication.
- Within (#) (time) of an incident, assist local jurisdictions in the establishment of two way communication between the SEOC and jurisdiction.

Concept of Operations[18]

General

This plan identifies five primary core capabilities as critical to the life-saving and life-sustaining response operations in a catastrophic scenario. Each capability includes specific tasks within the FEMA Region X Phases by state and local responsibility. These capabilities include:

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

In addition to the five primary core capabilities, four supporting core capabilities are used to identify essential considerations. These core capabilities are fundamental to all aspects of a catastrophic response and require integrated emergency planning statewide. These capabilities include:

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

Primary Core Capabilities

Critical Transportation

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.

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.
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.

[18] The Figures displayed within this section (WSDOT Seismic Lifeline, WSDOT Priority Routes, and Local Priority Routes are available for use in GIS.

A CSZ incident will cause widespread and significant damage to the transportation system and necessitate the prioritization of both local and state routes to facilitate a timely response with limited resources in a time sensitive environment. Response operations conducted by the state should utilize the Priority Routes that have been established during pre-incident planning to both gain situational awareness of local impacts but to also prioritize the assessment and repair of routes that enable access to impacted jurisdictions. When state or other outside resources are able to divert activities away from state infrastructure, they will begin to assist local jurisdictions in temporary repairs and other actions that aid in the reconnection of routes that allow the movement of resources and services into and out of the impacted areas.

CSZ Response Components:[19]

- WSDOT Seismic Lifeline
- WSDOT Regional Operations
- State Priority Routes
- Local Priority Routes

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).

A CSZ incident will cause significant damage to homes, communities-at-large, and limit/impair access to life-sustaining resources will necessitate the immediate coordination of state resources at all levels to prevent loss of life. At local levels, mass care resources will need to be assessed (public and private) and begin to be deployed to some degree within 24 hours to locations accessible to impacted populations. At the state level, agencies and departments will need to assess the availability of resources that have not been impacted by the incident and can be deployed to assist in local jurisdiction's operations. Federal resource located within the state will require time to deploy to disaster areas and establish operations. Federal resources

[19] For specific information and maps, refer to Tab A: Critical Transportation.

not located within the state are anticipated to take several days before they begin to arrive.[20] A CSZ incident is significant enough to require the establishment of Federal Staging Areas (FSA) and the immediate movement of pre-planned mass care resources[21]. Resource will flow from FSAs into State Staging Areas (SSA) before being sent to Local Staging Areas (LSA).

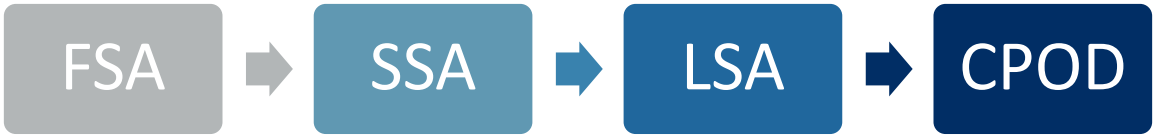

Figure 3 - Resource movement from Federal to Local

Any vertical movement of resources into local jurisdictions will require a high level of coordination and time, thus requiring local jurisdictions to provide the maximum level of support until outside resources begin to enter affected areas.

Many of the actions undertaken by state agencies and departments will represent an amplification of existing services that will require policy decisions to provide authorities, additional funding, and resource support to accomplish.

CSZ Response Components:[22]

- Priority Functions of Mass Care for Life Sustainment
- American Red Cross National Shelter System Database
- WebEOC Shelter Status Dashboard

[20] Whether or not the resources are located in the state or not, there is no assumption that a non-state resource is available for deployment until they have been released to the state. This process is outlined within Tab H: Logistics and Supply Chain Management and within the ESF 7 Annex to the CEMP.
[21] Information related to federal pre-planning for a CSZ incident can be found within FEMA Region 10's Cascadia Subduction Zone (CSZ) Earthquake and Tsunami Plan.
[22] For specific information, refer to Tab B: Mass Care Services.

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.
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.

A CSZ incident will result in a significant disruption to all infrastructure system and will presenting life safety issues which exceed the capabilities of local response and the typical coordination used through activated ESFs to deploy resources and services. Response personnel will need to perform the following actions within the initial response:

- Coordinate with impacted jurisdictions and the appropriate activated Sections to coordinate the delivery of resources and services
- Identify state resource gaps in meeting resource requests
- Identify barriers and limitations in deploying state resources
- Provide information on impact effects over time to assist in the identification of sustainment or degradation in Community Lifelines.

Water

For the purposes of this plan, water infrastructure is comprised of 2 elements: water systems and water services. Water systems include treatment facilities, distribution pipelines, transmission pipelines, storage facilities and locations, dams (as a component of a reservoir/water supply), and source water. Water Services include providing water to the public, providing water for critical infrastructure, providing water for emergency services, and providing water for Mass Care Services.

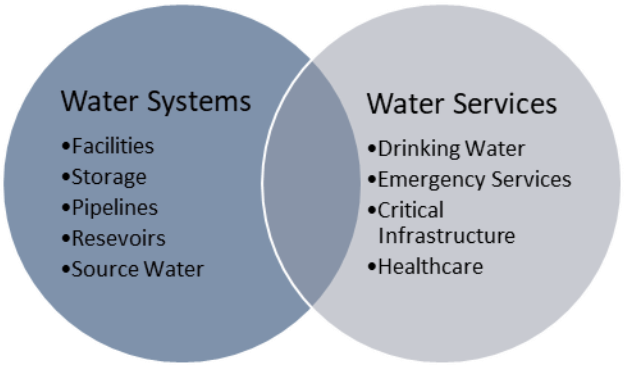

Figure 4 - The components of water system which enable essential services and functions.

The commitment of resources to one response objective will diminish the capabilities to meet other response objectives that utilize like resources. Incident objectives that include both water restoration and providing water services will compete for similar resources. Early incident objectives should focus on providing water services until operations have been established and similar/conflicting resources can be redirected towards restoration.

Fuel prioritization must include water utilities that are essential in providing services to large populations or that do not have access to alternative water services. Fuel prioritization should also reflect the assessment of evacuation potential based on water availability as fuel may not be required for areas that are [temporarily] deemed unable to support life based on other planning factors (i.e., availability of resources and essential services.

Response Objectives

Short-Term	Provide potable water to impacted jurisdictions which meet immediate life safety needs.
Incident Stabilization	Coordinate the restoration of water quality to approved standards
	Provide potable water to impacted juridictions which address life sustainment gaps
Long-Term Response	Identify long-term solutions for jurisidictions anticipating extended outages in service
	Coordinate and faciliate mutual aid for the restoration of systems
	Monitor for and address supply chain disruptions
Transition to Recovery	Identify triggers and other conditions needed for a transfer to a Recovery Support Function.
End State	Provide sufficient and sustained water services to meet life-sustainment incident objectives.

CSZ Response Components:[23]

- Water Systems
- Water Services
- WARN
- Debris Clearance and Removal

Supporting Core Capabilities

Operational Coordination

Objective:

The National Preparedness Goal defines operational coordination as the ability to establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.

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.

[23] For specific information and maps, refer to Tab C: Infrastructure Systems.

Following a CSZ incident, the SEOC will be activated at Level 1 Full Activation. This incident will trigger the automatic implementation of federal plans and necessitate the need for a structure of multi-level coordination to be established to facilitate response operations spanning large geographical areas. When the determination is made to establish geographic branches and divisions to coordinate statewide efforts alongside federal efforts, then this part of the plan will be in effect.

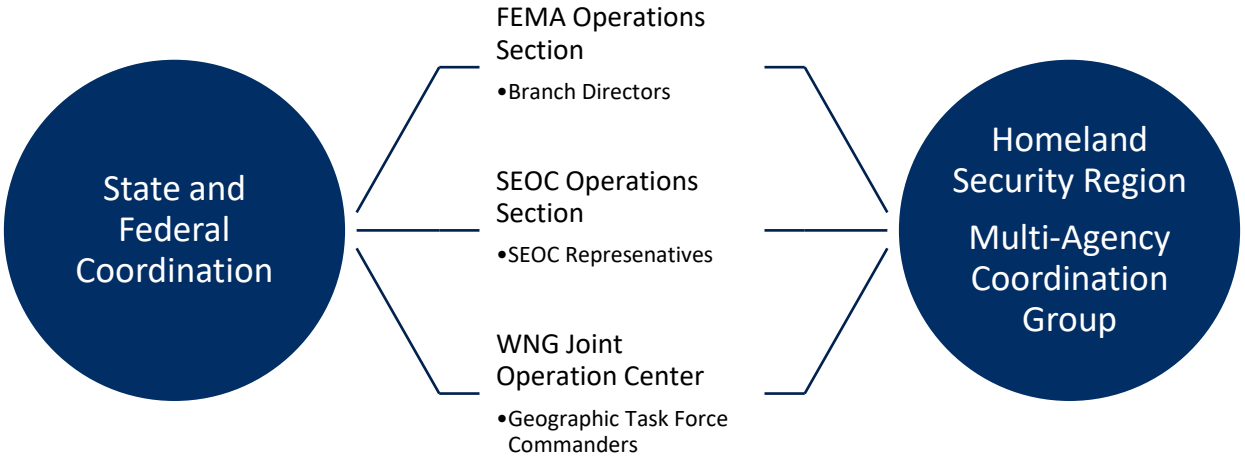

Figure 5 - Coordination Structure for Federal-State-Tribal-Local Response

CSZ Response Components:[24]

- Washington EMD
- Washington National Guard
- FEMA Region 10

Situational Assessment

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.

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.

[24] For specific information and how coordination is established, refer to Tab F: Operational Coordination.

The Situational Assessment phase in a catastrophic incident follows immediately after activation. Assessment of an incident is critical within the first hours to deploy time-sensitive services and resources. Reassessment of the initial conditions throughout the incident is essential in determining changes in conditions, the identification of new threats and hazards, the status of and need for resources. Information gathered immediately after the occurrence of an incident establishes the initial activation environment and deployment of resources to sustain and protect life and stabilize the incident.

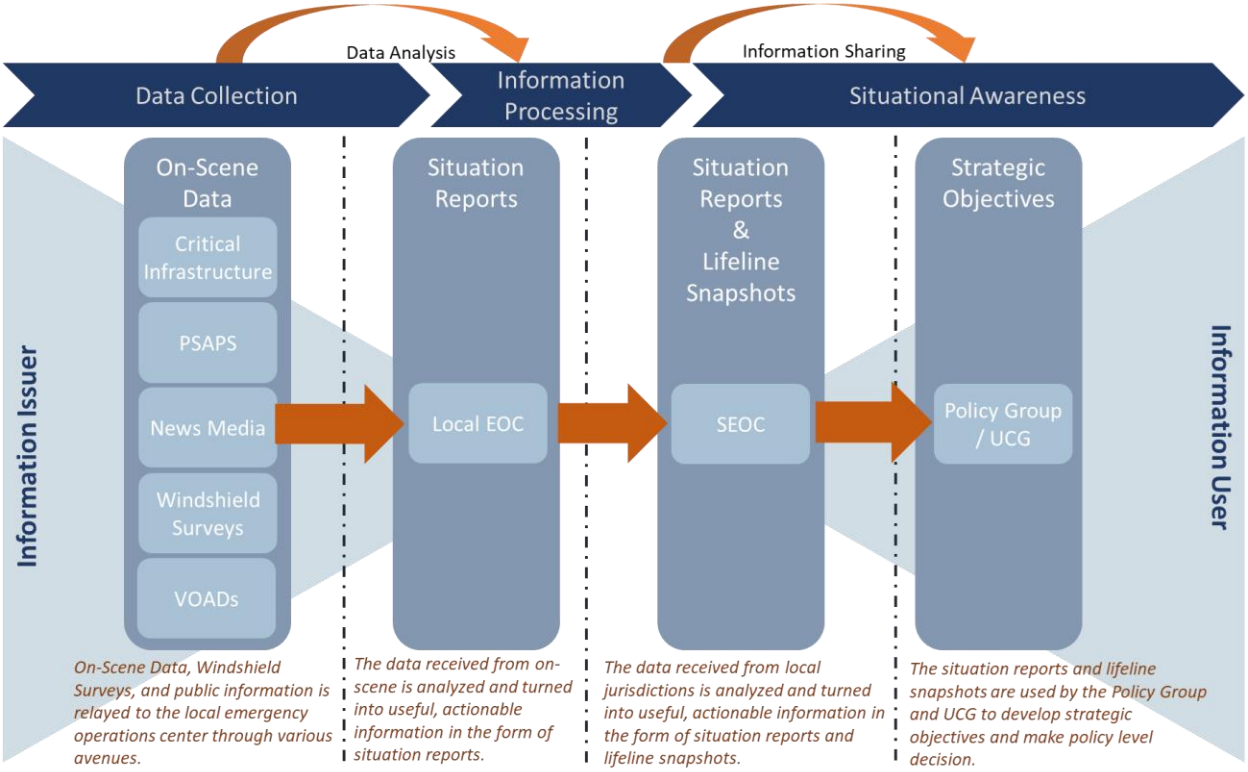

Figure 6 - Information Sharing Process

CSZ Response Components:[25]

- Situational Awareness
- Information Sharing
- Community Lifelines

[25] For specific information and information products, refer to Tab G: Situational Assessment.

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.

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.
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.

As mentioned in the Situation Overview portion of this Tab, an organization's PACE or their Primary, Alternate, Contingent, and Emergency communication systems or methodologies are essential to the continuity of operations during a catastrophic response. It is necessary for local, state, federal, Tribal, critical infrastructure, and private sector and business organizations to develop a robust communications continuity plan. Communication continuity will be necessary for all other aspects of response, especially Operational Coordination, Situational Assessment, and Logistics and Supply Chain Management. Every Core Capability relies on consistent, reliable communication.

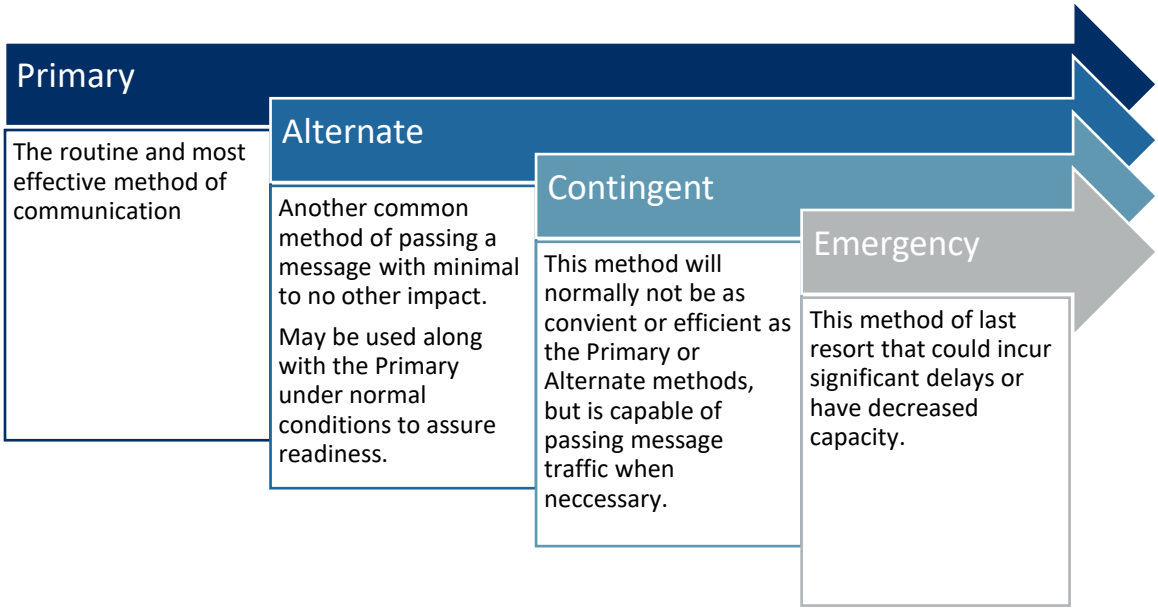

Figure 7 - Primary, Alternate, Contingency, and Emergency Communications Process

CSZ Response Components:[26]

- PACE and Communications COOP
- Local Integration into PACE

Logistics and Supply Chain Management

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.

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.

[26] For specific information and how coordination is established, refer to Tab I: Operational Communications.

The state resource request process is sufficient to handle All-Hazards incidents which involve incident types that are routinely experienced in Washington State (e.g., seasonal weather, flooding, localized fires, etc.); however, a CSZ incident will require resource support beyond the traditional methods typically employed (i.e., EMAC, minor agency-to-agency coordination, etc.). CSZ will not only present extreme resource requirements but will also likely have an huge impact on the ability to move resources. This situation necessitates a more complex level of coordination from internal SEOC operations, state agency partners, and local jurisdictions to effectively provide the right resources at the right time to the right locations.

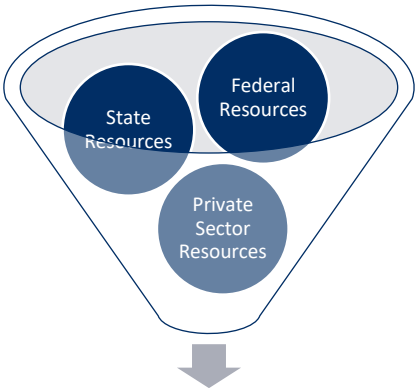

Figure 8 - Logistics Coordination and Movement

CSZ Response Components:[27]

- Priority Routes
- WebEOC
- Contracts
- Federal Request Process
- Staging Areas

Organization

Mobilization

Following a CSZ incident the SEOC Alert and Warning Center will issue immediate recall of all EMD staff. This recall will heavily rely on the operability of communications system and both the A&WC ability to transmit and staff ability to receive. Due to the frequent training and education around this incident, EMD staff will likely assume a recall would be in effect without the confirmation of a recall notice. While it is an assumption, it is assumed with a high confidence that the first actions any staff member would take is to conduct welfare checks on family and loved ones before becoming available for duty. If staff or their families are injured or require care, it may be likely that they will not be able to report for duty. This assumption will apply to all staff who serve in any position (to include those in leadership positions and SEOC

[27] For specific information and how coordination is established, refer to Tab I: Operational Communications.

Command Staff positions). The condition of the transportation will prevent many staff from being able to quickly reach the SEOC or may prevent them altogether due to impassable obstacles. The condition of the SEOC will also affect the ability to initiate response operations and require the activation of the EMD COOP plan to begin Devolution to other state agencies and Reconstitution to offsite locations accordioning to current plans[28].

Staff availability, the condition of the transportation system, and the condition of the SEOC will determine the initial composition of response operations. It is highly likely due to the scope and impact of this disaster that several days will pass before SEOC operations are able to be effective. This situation will likely be the same throughout state and local governments whose staff and facilities are within significantly affected areas. Those filling initial response roles within Command and General staff positions may not be those with the training and experience who would typically be in those positions and plan review and Just-in-Time training will need to occur to establish command and control and to facilitate mobilization.

Critical Transportation
The Washington Department of Transportation holds significant authorities and responsibilities for the activities that will occur under the Critical Transportation core capability. Following the occurrence of a catastrophic incident it will become necessary to coordinate activities through each of the WSDOT regions depicted in Figure 6. These regions will be required to marshal scattered (and potentially) cut-off resources to work towards accomplishing the incident objectives and priorities established through the UCG. Resource may be required to accomplish secondary tasks in order to accomplish primary tasks.

Mass Care Services
Following an incident in which it is determined that mass care functions will need to be coordinated, the SEOC Supervisor will activate ESF 6 in accordance with the established ESF 6 Annex and SOP. Should the need exceed the standard operating procedures, then this portion of the CEMP should be employed to reduce loss of life and sustain impacted communities which are experiencing degraded or damaged mass care response capabilities.

Unlike many other emergency management functions, there is no one state agency that is responsible for, or has the capability to, lead all tactical level operations and activities associated with mass care. Rather, there are agencies and departments which can lead the operational coordination of activities for those participating.

[28] Further information on Devolution and Evolution is contained within the EMD and WMD COOP Plans.

Accomplishing the tasks and functions outlined in this section of the plan will require that the Human Services Branch of the Operations Section be activated to manage the activities taking place across multiple ESFs.

Infrastructure Systems

Water

Upon notification of an incident significant enough to disrupt an infrastructure system capable of presenting life safety issues that exceed the capabilities of local response and the typical coordination used through activated ESFs to deploy resources and services, then the Operations Section will establish the Business and Infrastructure Branch. These activated ESFs will:

- Coordinate with impacted jurisdictions and the appropriate activated Sections to coordinate the delivery of resources and services
- Identify state resource gaps in meeting resource requests
- Identify barriers and limitations in deploying state resources
- Provide information on impact effects over time to assist in the identification of sustainment or degradation in Community Lifelines.

Structure

The activation structure following a CSZ incident should focus on staffing the Command staff positions to establish initial operations with limited available personnel. General staff positions should be highly concentrated on positions which establish Situational Assessment[29].

As situational awareness and communications are established, positions should be filled as needed to conserve limited staff and allow for the flexibility to shift General Staff resources to those positions which are needed most for an operational period. Refer to each respective Tab's Structure section and the SEOC SOP for additional information.

[29] An initial staffing of other positions within the SEOC will highly concentrate those tasked with coordinating tactical operations before the situational awareness is established and result in a delay in eventually providing support, coordination, and resource deployment.

Critical Transportation

The response structure typically employed for incidents involving transportation will need to be expanded beyond the standard ESF 1 structure to include additional ESFs and logistical functions involving the request for federal resources. This includes the activation of operational branches under the SEOC Operations Section for each mode of transportation, to include Air Operations. The structure below depicts one possible configuration, although the inclusion of the Business and Infrastructure Branch may be insufficient to accommodate the complete needs of multiple functions within ESF 1. In which case, additional Branches may be established to coordinate the efforts of these functions (i.e., Rail, Ferries, Bridges, etc.).

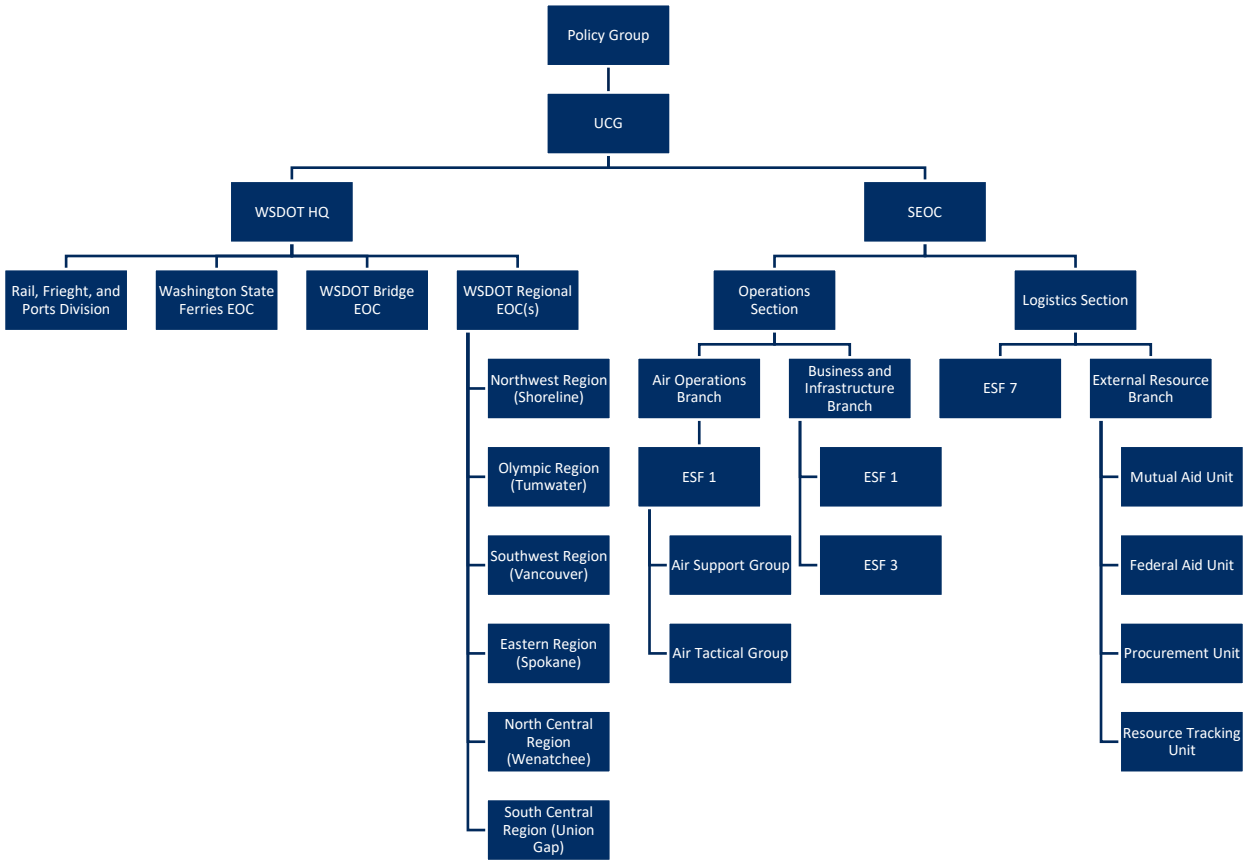

Figure 9 - ICS structure depicting an expanded activation of ESFs supporting Critical Transportation

Mass Care

Mass Care Services is a collection of functions that directly influences and supports community health and wellbeing. The success of mass care operations relies on the coordination of many public and private organizations and partners. The organizational structure displayed in the Mass Care Services Tab shows at a high level where this structure begins, but as situational awareness is established and sustained, it will change to reflect the current conditions of communities. While the figure below does not display the coordination with the other ESFs and response sections, this coordination is essential to the accomplishment of incident objectives, as mass care activities can occur under many conditions and during a catastrophic incident will likely require the collaboration with every ESF at some point.

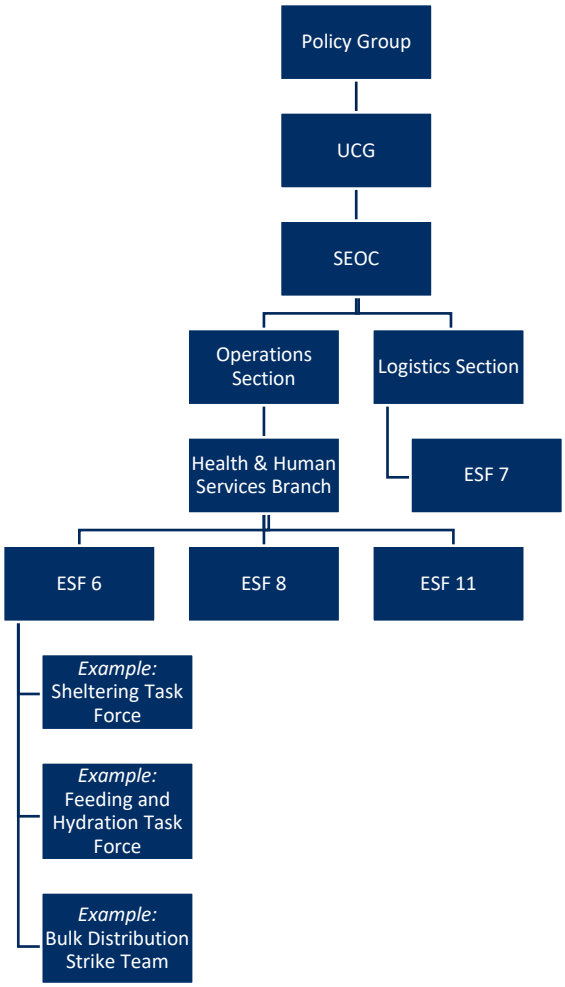

Figure 10 - ICS structure depicting an activation of ESFs supporting Mass Care Services

Infrastructure Systems

Water

Infrastructure Systems response operations fall within the Business and Infrastructure Branch of the Operations Section. The appropriate ESFs should be activated based on all-hazards response and should also include and make space for the local groups and organizations who possess resources or offer unique collaboration.

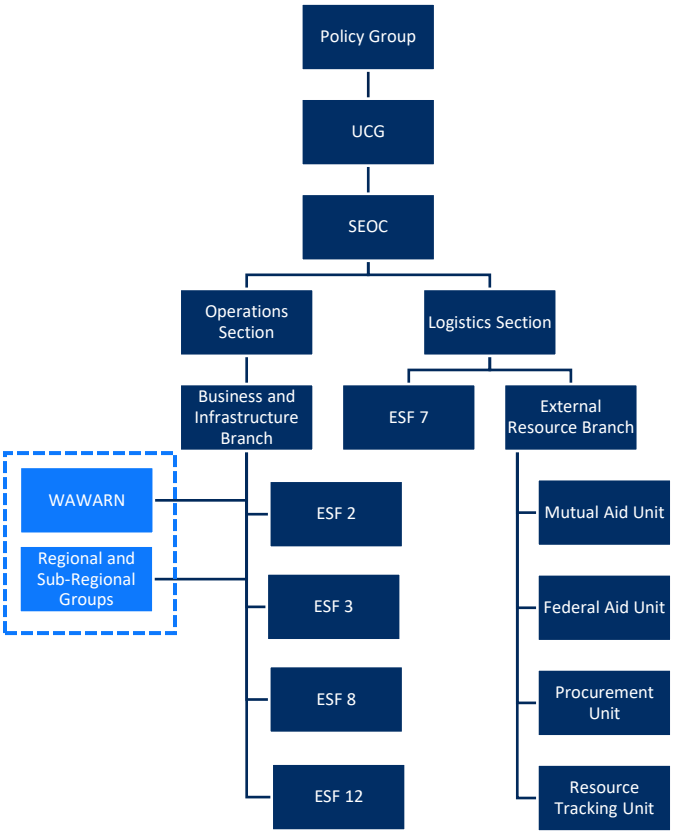

Figure 11 - ICS structure depicting an activation of ESFs supporting Infrastructure Systems

Direction, Control & Coordination

General

A CSZ incident will have dramatic impacts and effects on the entirety of state's transportation system.

Policy Group and the Unified Coordination Group

During the initial stages of a catastrophic incident, it will become necessary to establish a mechanisms 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 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.

Critical Transportation

Many hazard and incident types pose great risk to the transportation system and will greatly reduce the ability to move resources and potentially conduct evacuations out of impacted areas. As out-of-state resources begin moving into state, transportation will represent the first barrier to responding to an incident and beginning lifesaving and sustaining activities. The barrier or challenge will then be to identify how resources can begin to move into staging areas at all levels to initiate the response. Once the resources are able to move into these staging areas, they will require direction in order to proceed to their areas of operation.

Mass Care Services

Any hazard and incident types can put communities at risk and present the opportunity for loss of life beyond the initial impact of the hazard itself. State-led mass care operations will rely heavily on coordination between other agencies and departments, as well as federal resource support.

The primary concern for mass care operations is the time delay that will occur from the occurrence of the incident to when outside aid can meaningfully enter the affected areas to offer support and provide mass care resources. Resources on-hand, gathered or procured by the state, may take several days before they are able to enter impacted areas. Other outside resources may take longer.

As resources become available, the challenge at all levels will be to maintain situational awareness to address resource needs for shelters, feeding and hydration, and bulk distribution. CPODs and shelters are the appropriate mechanism at local levels to directly provide assistance to the public, but local emergency management may require assistance with establishing and maintaining the operational coordination required to ensure they are able to continuously operate with the appropriate resources.

Infrastructure Systems

Water Infrastructure

Vertical and horizontal coordination for infrastructure will present challenges for emergency response due to the jurisdictional levels it is located within, the ownership of the infrastructure (i.e., public vs. private), the type of assistance required, and the level of responsibilities and resources the state can use to assist. Catastrophic incidents impacting the critical infrastructure

sectors addressed in this plan will rely heavily on private sector participation and federal resource assistance to stabilize the incident.

Coordination between local emergency management will be essential in providing the input for a restoration plan following a significant disruption to water infrastructure. Water infrastructure must be repaired to not only meet incident stabilization goals but the primary driver for coordination should center in the fact that a disruption also presents a constant threat to the life safety and sustainment of impacted communities.

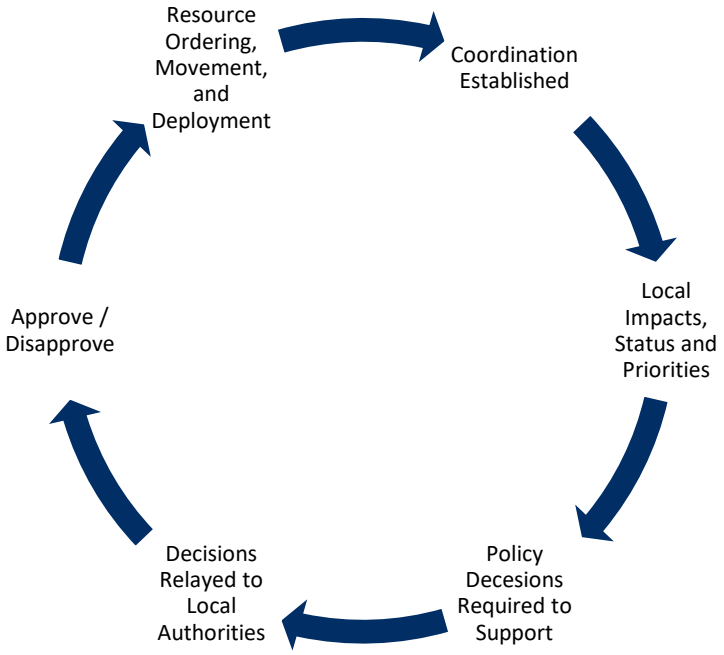

Figure 12 - Coordination process involving water infrastructure requesting assistance.

Through the information collection of local emergency management, WAWARN, and regional groups the UCG and Policy Group can be presented with the policy decisions necessary to allow restoration and support options to proceed. This information will then need to flow back down through local levels for approval on any direct support being provided.

Utility Ownership Structures

There are many different ownership structures for water providers across the state. Communities may not be provided water directly from the jurisdiction they reside in. Structures may fall into several categories:

- Water District
- Special purpose district
- Non-profits/For Profit
- Tribal
- Municipal
- Counties
- Public Utility Districts
- Government/Non-government

Logistics and Supply Chain Management

Staging Areas

In partnership with FEMA Region 10, the following list of sites will be utilized to receive resources into the state following a CSZ incident. Once resources are received through federal sites, they will be transferred to state sites and then moved into local jurisdictions to support incident resource requirements and requests.

Incident Support Base (ISB)	Grant County International Airport Ephrata Municipal Aiport
Federal Staging Areas (FSA)	Joint Base Lewis McChord (JBLM) William R. Fairchild International Airport
Aerial Point of Debarkation (APOD)	Bellingham International Airport Fairchild AFB Paine Field Airport Sanderson Field Tri Cities Airport
State Staging Areas (SSA)	Arlington Municipal Airport Bellingham International Airport Bremerton National Airport Bowerman Airport Clark County Fairgrounds Olympia Regional Airport Paine Field Airport Sanderson Field Southwest Washington Regional Airport William R. Fairchild International Airport
Joint FSA/SSA	William R. Fairchild International Airport
Joint APOD/SSA	Bellingham International Airport Paine Field Airport Sanderson Field

Federal Lines of Effort[30]

Line of Effort	Purpose	End State
Airfield Opening	Provide federal assistance to open major and secondary airfields impacted by the event.	All major airfields are open; majority of secondary airfields are operational, and tertiary airfields are supported, as identified.
Commodities Distribution	Coordinate support for the distribution of resources at appropriate sites (State Staging Areas [SSAs], points of distribution [PODs], etc.)	Commodity distribution is no longer required; private sector distribution systems are re-established
Damage Assessment	State or tribal governments request joint Preliminary Damage Assessments (PDAs).	Decision is made as to whether to request a disaster declaration.
Debris Removal	Provide federal assistance to support clearance, removal, and disposal of debris that impacts the emergency response and community functionality.	Debris no longer poses an immediate threat to lives, public health, or safety; the immediate threat of significant damage to public or private property has been eliminated; debris does not impact the economic recovery of affected areas.
Emergency Repairs or Augmentation to Infrastructure	Provide federal assistance for the temporary support of eligible critical facilities that are degraded and where alternative sites are insufficient.	Temporary repairs or alternate approaches are in place, stabilizing critical infrastructure and providing minimum required functionality; a plan for permanent repairs is in place.
Emergency Route Clearance	Provide federal assistance for immediate clearance of routes and access points to prioritized logistical nodes supporting ground routes and impacted communities.	Primary routes and access points for logistics nodes and impacted communities are opened to allow for lifesaving and life-sustaining support.
Evacuation, Reception, Re-Entry, and Return	Assist individuals in need of general evacuation support in departing the disaster area through whole-of-government coordination.	Safe evacuation and subsequent re-entry of survivors are complete, and federal resources are no longer required

[30] Federal Lines of Effort are presented here to provide a linkage between state response activities and federal response activities. The listed LOEs are those identified in FEMA Region 10's Cascadia Subduction Zone Earthquake and Tsunami Plan.

Fatality Management	Provide decedent remains recovery, processing, and temporary storage as well as victim identification and counseling to the bereaved.	All disaster-related fatalities are recovered, identified, and provided temporary mortuary solutions; information to reunify family members and caregivers with decedents is shared; counseling is provided to the bereaved
Hazardous Waste	Provide federal assistance to oil or HAZMAT discharges or releases that pose a threat to human health, safety, or the environment.	Oil and HAZMAT cleanup operations are complete; debris is segregated and disposed of properly.
Healthcare Systems Support	Provide federal assistance to support healthcare systems that are unable to provide patient services.	Healthcare delivery systems are able to meet community patient care needs without the support of federal resources.
Housing Solutions	Provide temporary housing solutions to eligible survivors.	All eligible survivors are provided relocation assistance and/or interim housing solutions.
Mass Care – Food and Water	Support food and water operations for the impacted populations.	Federal assistance is no longer required to support food and water distribution.
Medical Transportation	Provide federal assistance for the support of Emergency Medical Services (EMS) transport.	Medical system can meet patient transportation requirements without federal support
Natural and Cultural Resource Protection and Restoration	Ensure compliance with pertinent laws, regulations, and executive orders.	Natural and cultural resources and historic properties are evaluated, protected, and/or restored
Operational Communications	Establish interoperable communications among federal, SLTT, and private sector partners while reestablishing public information and warning infrastructure.	Responders have capacity to communicate within the impact area, and survivors are receiving updates about the incident.
Port Opening	Provide federal assistance to support the repair and restoration of critical ports.	Critical ports are capable of sustained operations.
Private Sector Coordination	Provide federal assistance in support of private sector operations; help infrastructure owners and operators,	Private sector is supporting survivor-centric requirements without federal intervention; collaboration and information sharing is established

	businesses, and their government partners coordinate cross-sector operations.	with the private sector, allowing for business-led restoration and long-term recovery efforts
Public Information and Warning	Share coordinated, timely, precise, and actionable information with survivors and partners.	Federal assistance is no longer required to support states and/or tribes in informing the public.
Resource Staging	Coordinate support for the sourcing and staging of federal resources at Federal Staging Areas (FSAs) and Incident Support Bases (ISBs).	Resources are sourced and positioned in staging areas; commodities are ready for distribution.
Responder Security and Protection	Provide temporary federal support to ensure the safety and security of federal responders.	Federal capabilities are no longer required to provide a safe and secure environment for responders.
Restoration of Public Infrastructure	Provide federal assistance to support the repair and restoration of critical infrastructure.	Permanent repairs to critical infrastructure have begun and estimated completion dates are established.
Search and Rescue	Provide federal assistance to support search and rescue (SAR) operations.	Survivors in impacted areas are located, rescued, and transported to medical facilities, shelters, or safe areas.
Sheltering Operations	Support sheltering operations for impacted populations.	Federal assistance is no longer required to support sheltering.
Temporary Emergency Power	Implement temporary emergency power generation to support mission-essential operations and critical facilities.	Utility power and/or facility generation has been restored to critical infrastructure; systems and services are available to the community; emergency spot power generation is no longer needed

Information Collection, Analysis, & Dissemination

The following section outlines the Essential Elements of Information (EEI) needed to determine the effects on Community Lifeline subcomponents. The status of lifeline subcomponents directly affects the condition of the main lifeline. After the lifeline conditions are assessed, they can be used to inform activated ESFs to determine impacts and develop courses of action for an operational period's objectives. The conditions of the lifelines can also be developed into Senior Leadership Briefs (Tiers 1 & 2) to inform response personnel and senior leadership/decision-makers.

Figure 13 - Information Collection and Dissemination

Information Collection & Analysis

Specific details on Information Collection and Analysis are discussed within each core capability Tab.

Information Dissemination

Information analysis will result in contributions to the Tier 1: Disaster Summary, Senior Leadership Brief (SLB) provided to the UCG. Additionally, the more detailed information not necessary for executive level response decision making will be supplied for the creation of the Tier 2: Lifeline Overview SLB for use in tracking conditions and informing response personnel.

Responsibilities

The table below outlines the responsibilities of the entities involved with this Appendix. These actions are tied to executing the Critical Tasks noted in the Concept of Operations section, which contribute to the primary and supporting Core Capabilities. This appendix only focuses on the Phase 2a (Initial Response) and Phase 2b (Employment of Resources). Both Phase 1 (Prepare) and Phase 2c (Transition to Recovery) [31]are discussed within each core capability Tab to focus this plan on the response phases which are most applicable to when this plan will be in effect.

Phase 2a (Initial Response)

Phase 2a	
Critical Transportation	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 into the affected areas.
Operational Coordination	

• Establish contact between WSDOT HQ and the SEOC
• Determine transportation-related ICS positions needed for staffing of ESF 1
• Receive situation reports from WSDOT HQ concerning regional conditions to include damage status and available capabilities
• Identify routes that are being assessed and their priority/sequence of assessment
• Coordinate with ESF 6 for evacuation routes that will be needed
• Identify temporary bypasses to impacted infrastructure
• UCG outlines response goals based on conditions, damage, and available resources on-hand
  ○ SEOC/ESF 1 develops response objectives based on UCG goals for:
  ▪ Tracking deployment and status of assessment teams, repair teams, and debris clearance teams
  ▪ Repair priorities (to include temporary bypasses)
  ▪ Evacuation route conditions
  ▪ Evacuation transportation resources
  ▪ Establishing access for movement of resources into affected areas
• Coordinate with local emergency management and public works to determine if state transportation resources can be used to support the establishment of local priority routes which support objectives	

[31] Transition to Recovery activities are only generally discussed within the core capability Tabs, as more applicable and appropriate plans exist within the CEMP to address this phase (e.g., ESF 14 & the Washington Restoration Framework).

Operational Communications
• Ensure the capability to communicate with WSDOT HQ • Ensure that WSDOT HQ can communicate with regional offices and other field operations • Establish the ability to provide communications to SSAs • Determine capabilities needed to support communications with private airports, maritime, and rail partners which may be used during the response • Ensure the capability to communicate with local and Tribal partners for transportation response • Ensure the capability to communicate with FEMA Region 10
Logistics and Supply Chain Management
• Determine initial resource deficiencies for debris clearance and highway/bridge assessments • Push initial mission ready packages to support previously identified resource gaps • Determine initial capabilities needed to meet debris clearance operations and assessments • Determine composition of EMAC and federal requests needed for debris clearance and assessment resources • Stand-up and staff SSAs • Make preparations for resource coordination between SSAs, FSAs, APODs, and the ISB • Support requests for evacuation resources
Situational Assessment

• Map impacted state routes (roadways and bridges) into GIS using Priority Routes layer
  ○ Determine nature of impact (e.g., landslide, bridge collapse, etc.)
  ○ Map impacted local priority routes into GIS using Priority Routes layer
• Map impacted WSDOT Ferry terminals into GIS using Priority Routes layer
• Map impacted maritime ports into GIS using Priority Routes layer
• Map impacted airports into GIS using Priority Routes layer
  ○ Identify airports with impacted access that are designated as SSAs, APODs, and FSAs
• Map impacted rail lines into GIS using Priority Routes layer
• Identify areas that are inaccessible or cut-off due to damaged state routes
• Determine impacts status of Transportation Community Lifeline

Phase 2a	
Mass Care Services	Provide life-sustaining and human services to the affected population, to include hydration, feeding, sheltering, temporary housing, evacuee support, reunification, and distribution of emergency supplies.
Operational Coordination	
• Establish contact with impacted jurisdictions to identify shelters in use ○ Identify shelter types	

- Identify sheltering staff shortfalls
- Identify shelter resource deficiencies

- Identify mass care-related ICS positions needed to staff the Human Services Branch and ESF 6 based on sheltering needs identified by local jurisdictions
- Alert and notify all mass care response partners in accordance with procedures
- Receive situation reports from activated ESFs participating in mass care activities concerning the condition and availability of their resources
- In coordination with ESF 1 and other Critical Transportation partners, determine the status of routes which align with Priority Routes
  - Assess the ability of resources to access shelters and inform local jurisdictions
- In coordination with ESF 8, identify medical support capabilities for shelters
- In coordination with ESF 12, identify energy infrastructure impacts which affect sheltering operations
- In coordination with ESF 15, assist local jurisdictions in providing or amplifying public information and warning to impacted communities
- In coordination with ESF 20, provide personnel to support local mass care operations

Operational Communications

- Assess and establish communications ability with all mass care response partners
- Assess and establish communications ability with all impacted jurisdiction's mass care operations
- In coordination with ESF 2, identify any communications barriers with state, Tribal, and local mass care operations and begin identifying solutions
- In coordination with ESF 15, monitor for community-based communications concerning mass care

Logistics and Supply Chain Management

- Coordinate with local emergency management logistics to identify anticipated resource shortfalls and needs
- Assist local jurisdictions in identifying vendors for resource requests
- Compile resource needs and identify trends to provide to policy group for resource request funding
- Identify scarce resources
- Begin to develop prioritization methodology in coordination with UCG and policy group
- Identify vendors in non-impacted areas who have water and shelf stable food inventories on-hand

Situational Assessment

- Monitor WebEOC Shelter Status Dashboard
- Conduct ongoing assessment of mass care needs
- Estimate initial mass care needs by type and capability

- Provide quantitative mass care services data to Planning and Logistics Sections, and other ESFs that require accurate data for response logistics
- Implement a daily counting and reporting system for sheltering, feeding, and bulk distribution items delivered
- Identify initial conditions of the Food, Water, Shelter & Health and Medical community lifelines

Phase 2a	
Infrastructure Systems	Stabilize critical infrastructure functions, minimize health and safety threats, and efficiently restore and revitalize systems and services to support a viable, resilient community.
Operational Coordination	
Water Systems and Services • In coordination with the SEOC Operations Section and the Business and Infrastructure Group, establish coordination between infrastructure partners who share dependencies with impacted systems (water systems require fuel/electricity; transportation repairs may require water; fuel refinement requires potable water)	
Operational Communications	
Water Systems and Services • In coordination with ESF 15, ensure the capability to provide the public with timely warning and emergency information concerning water resources.	
Logistics and Supply Chain Management	
Water Systems and Services • In coordination with the SEOC Logistics Section, identify additional water resources available to support local resources to meet needs (bottled water, RUPUs, water trailers, etc.)	
Situational Assessment	
Water Systems and Services • In coordination with ESF 1, identify impacts to the transportation system delaying or preventing the movement of water resources. • In coordination with ESF 5 and ESF 6, identify local CPODs requiring water resources	

Phase 2b (Employment Resources)

Phase 2b	
Critical Transportation	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 into the affected areas.

Operational Coordination

- Develop a time-based plan to restore operation of lifeline routes, or alternate routes if the lifeline routes are severely damaged, and ports of entry
- Coordinate assessment of debris clearance/removal and repair efforts through WSDOT regional EOCs
  - Begin debris removal and emergency repairs necessary to reestablish transportation corridors for increased capacities[32]
- Determine repair requirements for maritime infrastructure
  - Assess the viability and requirements for establishing minimal operations
- UCG updates response goals based on conditions, damage, and available resources on-hand
  - SEOC/ESF 1 updates response objectives based on UCG goals for:
  - Tracking deployment and status of assessment teams, repair teams, and debris clearance teams
  - Repair priorities (to include temporary bypasses)
  - Evacuation route conditions
  - Evacuation transportation resources
  - Establishing access for movement of resources into affected areas
- Coordinate with Federal ESF 1 on response needs

Operational Communications

- Sustain the capability to communicate with WSDOT HQ
- Sustain communications between WSDOT HQ and regional offices and other field operations
- Sustain the ability to communication with SSAs
- Ensure the capability to communicate with Local Staging Areas
- Sustain capabilities to support communications with private airports, maritime, and rail partners which may be used during the response
- Sustain communications with FEMA Region 10

[32] Phase 2a activities concerning debris clearance and removal will likely only be concerned with establishing initial access for a single lane. This phase may allow for available resources to establish access for additional capacity.

Logistics and Supply Chain Management
• Support resource requests for transportation resources • Identify external resources that can support response objectives • Track mutual aid and federal resources employed by the state • Identify barriers for the movement of resources • Identify alternative methods for the movement for resources
Situational Assessment
• Maintain map of impacted state routes (roadways and bridges) in the GIS Priority Routes layer • Assess if available priority routes are connecting staging areas, points of distribution, points of entry, hospitals, and emergency services including police and fire. • Identify areas that are inaccessible or cut-off due to damaged state routes • Determine impacts status of Transportation Community Lifeline   ○ Identify if response conditions are improving or worsening • Assist in the assessments of non-priorities routes

Phase 2b	
Mass Care Services	Provide life-sustaining and human services to the affected population, to include hydration, feeding, sheltering, temporary housing, evacuee support, reunification, and distribution of emergency supplies.
Operational Coordination	

• Integrate with external support operations that are participating in mass care operations
  ○ Identify active external mass care participants to include in the SEOC ICS structure (to include the Private Sector)
• Assist and support local jurisdictions in coordinating safe, secure, and effective feeding and sheltering operations
• In coordination with ESF 1, prioritize assessment and repair resources which align with mass care operations and Priority Routes
• In coordination with ESF 3, identify government facilities that can be utilized for mass care activities
• In coordination with ESF 4, identify personnel resources that can be utilized to fill local mass care operations (as appropriate and feasible)
• In coordination with ESF 5,
  ○ Request resource support from mutual aid and federal sources
  ○ Ensure that meaningful reporting is occurring from local sources to aid in mass care support (i.e., EEI or Community Lifeline reporting)
• In coordination with SEOC Logistics and ESF 7, identify and procure (if approved) resources to support local mass care operations	

- In coordination with ESF 11
    - Identify feeding support available for local communities
    - Provide nutrition assistance
    - Ensure the safety of food supplies
    - Provide for the safety and well-being of pets during emergency response operations and evacuations.
- In coordination with ESF 13, identify resources available to protect mass care operations (as needed based on credible concerns)

Operational Communications

- Sustain communications ability with all mass care response partners
- Sustain communications ability with all impacted jurisdiction's mass care operations
- In coordination with ESF 2,
    - Identify communications solutions to address barriers with state, Tribal, and local mass care operations.
    - Identify available resources that can help support local jurisdiction's mass care field operations
- In coordination with ESF 15, monitor for community-based communications concerning mass care

Logistics and Supply Chain Management

- Integrate resources deployment for delivery of key supplies and response personnel alongside related activities
- Coordinate with appropriate agencies to determine bulk distribution needs of affected population
- Conduct ongoing assessment of mass care needs
- Provide quantitative mass care services data to Planning and Logistics Sections, and other ESFs that require accurate data for response logistics
- Re-evaluate system established for daily counting and reporting system for sheltering, feeding, and bulk distribution items delivered
- In coordination with ESF 1 and ESF 7, identify barriers and limitations in moving resources through transportation corridors which support mass care operations
- In coordination with ESF 7,
    - Identify state contracts for requested resources
    - Identify resources for bulk purchases that support mass care
    - Prepare to receive donations which are needed for bulk distribution
    - Support local jurisdictions with coordination and delivery of water and shelf stable food to meet immediate needs (pre-CPOD deployment)
- In coordination with ESF 11, identify needs to provide emergency supplies for pets and service animals
    - Coordinate with agencies receiving donations for service and companion animals

- In coordination with ESF 12,
  - Identify fuel support for power generation at shelters and other mass care delivery sites
  - Identify fuel support for evacuation operations
- In coordination with ESF 15, establish messaging for donations (wanted and unwanted)

Situational Assessment

- Conduct ongoing assessment of mass care needs
  - Analyze mass care operational reports for regional impacts and trends
  - Share summary information with partners both vertically and horizontally
  - Identify unmet needs
  - Identify resource deficiencies in AFN support
- Monitor on-going conditions of the Food, Water, Shelter & Health and Medical community lifelines
  - Identify impacted areas where life safety or sustainment present significant challenges and require additional actions to occur
- Sustain sheltering awareness through the WebEOC Shelter Status Dashboard
- Sustain quantitative mass care services data for the Planning and Logistics Sections, and other ESFs that require accurate data for response logistics
- Sustain a daily counting and reporting system for sheltering, feeding, and bulk distribution items delivered
  - Move to weekly reporting as appropriate

Phase 2b	
Infrastructure Systems	Stabilize critical infrastructure functions, minimize health and safety threats, and efficiently restore and revitalize systems and services to support a viable, resilient community.

Operational Coordination

Water Systems and Services

- In coordination with the SEOC Operations Section and the Business and Infrastructure Group, establish response objectives that reflect the coordination between infrastructure partners who share dependencies with impacted systems (water systems require fuel/electricity; transportation repairs may require water; fuel refinement requires potable water)
- In coordination with the Business and Infrastructure Group, Policy Group, and UCG, coordinate regulatory waivers and exemptions.
- In coordination with ESF 1, assist local jurisdictions with accessing water infrastructure sites which have experienced damage to transportation access (to include aerial support)

Operational Communications
Water Systems and Services • In coordination with ESF 2, partner with private sector providers to restore commercial voice and data communications capabilities in support of water infrastructure and water services • In coordination with ESF 2 and ESF 15, assist local jurisdictions with communications capabilities to inform the public regarding the status of water systems, available resources, and public health notices (e.g., boil water advisories, etc.)
Logistics and Supply Chain Management
Water Systems and Services • In coordination with the Business and Infrastructure Group, Policy Group, and UCG, consider waiving certification requirements for select personnel with expired(ing) credentials in order to address resource gaps or the inability to recertify • In coordination with the SEOC Logistics Section and ESF 6, identify local CPODs and staging areas which require water resource support • In coordination with ESF 12, identify and coordinate fuel needs for water infrastructure (i.e., on-site generators) • In coordination with the SEOC Logistics Section, ESF 7, and ESF 6, procure, coordinate, and request additional water resources to support local resources to meet needs (bottled water, RUPUs, water trailers, etc.) • In coordination with ESF 7, identify state contracts that can utilized to support local water system repair or to supply water services over an extended timeframe
Situational Assessment
Water Systems and Services • In coordination with ESF 3 and ESF 8, monitor and report the status of and damage to major water and wastewater providers covering large populations • In coordination with SEOC Logistics and ESF 6, monitor for portable generator requirements for sites providing water to impacted communities • In coordination with the Business and Infrastructure Group, ESF 3, and ESF 7, identify supply chain deficiencies and shortfalls in supporting water infrastructure repair (based on local feedback of supply chain bottlenecks) • In coordination with ESF 11, identify water resource needed for agriculture and livestock

Phase 2a, 2b	
Situational Assessment	Preliminary information about the incident has been collected from all available sources. An initial situational assessment of the incident has been performed.
Critical Infrastructure, Private Partners, VOADs, PSAPs, News Media	
• Provide information through appropriate state agencies, local partners, or the SEOC to inform response conditions (e.g., damage reports, 911 calls, Windshield Survey's, Field Reports, and Witness Information)	
Local EOC	
• Provide updated local response information through the SEOC Representative • Identify Community Lifeline status and barriers or limitations for reestablishment • Establish and sustain local jurisdiction situation reports to the SEOC	
Situation Unit	
• Collect data from local jurisdictions and state agency partners • Analyze data from local jurisdictions and interpret Community Lifeline status (if not already completed) • Include Community Lifeline status and analysis in Situation Report • Provide Community Lifeline analysis to the Geographic Information Unit.	
Geographic Information Unit	
• Display data that is relevant for Community Lifeline statuses to aid in situational awareness and decision making • Spotlight areas with significant disruption to Community Lifelines • Display HLS Regional damage and impact assessments • Display significant resource deployments • Inquire about non-standard GIS needs	
SEOC	
• Collation of information into the Community Lifeline Senior Leadership Briefs. • Sharing and dissemination of information to local jurisdictions, state agency partners, federal partners, and the Unified Coordination Group and Policy Group • In coordination with ESF 15, translate Community Lifeline statuses and updates for public consumption	

Phase 2a, 2b	
Logistics and Supply Chain Management	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.
Phase 2a	
• Activate any applicable memorandums of understanding (MOUs)/memorandums of agreement (MOAs) for chosen logistics sites • Initiate assessment of logistics sites • Establish and staff all logistics sites	
Phase 2b	
• Provide a joint expeditionary capability to rapidly assess, establish, repair, and operate SSAs within and outside the affected area • In coordination with the UCG and the Policy Group establish objectives and priorities for resource allocation • In coordination with ESF 13 and ESF 20, determine need for and request security for movement and staging of resources • In coordination with ESF 7, maintain coordination with the private sector to identify logistics shortfalls which the private sector can fill. • Site managers continue to maintain food, water, dumpsters, hand-washing stations, portable toilets, and fuel distribution sites at ISBs, FSAs, and RSCs. • In coordination with ESF 1, ESF 6, ESF 7, ESF 11, and ESF 20, identify resource requirements and support the transportation resource requirements for the evacuation of people, service animals, and household pets.	

Phase 2a, 2b	
Operational Communications	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 impacted area and all response forces.

SEOC

- Identify communications requirements for internal and external stakeholders, local jurisdictions, and other response partners across the whole community.
- Rebuild and/or reestablish EMD networks post-incident.
- Restore EMD system data from established backups.
- Restore communication for the SEOC with established or backup network providers.
- Coordinate the assessment of local jurisdiction communication status.
- Deliver information on the current status of SEOC communication systems to local jurisdictions
  - If direct communication to the local jurisdiction EOC is unavailable, assess the utilization of Public Safety Answering Points as a relay for communications.
- Provide communications capabilities for SEOC Representatives and other Field Forces.
- Prepare demobilization and transition plan to ensure restoration efforts continue.

Alert & Warning Center

- If necessary, relay the status of the SEOC PACE communications status to the local, regional, or city PSAPs so interoperable communication can occur.

ESF 2

- Setup and test portable network devices to provide communications between sections and ESF partners, policy group and elected officials.
- Assess potential field personnel and facility communications requirements
- Source mobile communications capability for isolated communities and other state identified priorities.

Terms and Definitions

Ad-Hoc Shelters
Unplanned or independent congregate facilities established, without coordination with local emergency management, by groups who historically have not participated in community disaster congregate care planning and/or who have not previously held a traditional disaster sheltering role. These shelters may provide surge capacity for large-scale disasters and as public accommodations must comply with applicable laws

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.

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.

Congregate Shelter
Generally provided in large open settings that provide little to no privacy in facilities that normally serve other purposes such as schools, churches, community centers, and armories.

Critical Consumers
A person or organization that produces a commodity or enables a service vital to a community's safety, security, and public health.

Critical Infrastructure
Critical infrastructure includes those assets, systems, networks, and functions—physical or virtual—so vital to the State that their incapacitation or destruction would have a debilitating impact on security, economic security, public health or safety, or any combination of those matters.

Incident Stabilization
The state where critical lifeline services necessary to alleviate immediate threats to life and property are available to support the needs of survivors and responders.

Non-Congregate Shelter
Provides alternatives for incidents when conventional congregate sheltering methods are unavailable or overwhelmed, or longer term temporary sheltering is required. Typically, facilities that are used provide a higher level of privacy than conventional congregate shelters, hotels, and cruise ships, other facilities with private sleeping spaces but possibly shared

bathroom /cooking facilities, dormitories, and/or converted buildings, or staying with friends/family.

Reunification Services
Services that provide mechanisms to help displaced disaster survivors, including children, reestablish contact with family and friends.

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.

Senior Leadership Brief (SLB)
A situational awareness product that discusses lifelines and the interdependencies between them. The goal of the SLB is to allow users at all levels to interact with each other to share and digest the most authoritative information on an incident.

Situational Assessment
The process used to collect, process, and organize ongoing situation information; prepare situation summaries; and develop projections and forecasts of future events.

Situational Awareness
The ability to identify, process, and comprehend the critical information about an incident. This requires continuous monitoring of relevant sources of information regarding actual incidents and developing hazards.

Shortfall
Resource-specific limitations which can be determined by identifying the total requirement and subtracting available (organic, mutual aid, and external support) resources from that total requirement.

EMAC
The Emergency Management Assistance Compact (EMAC) is an Inter-State mutual aid construct that can be used between members after a Governor's Proclamation of Emergency has been declared.

WAMAS
The Washington Mutual Aid System (WAMAS) is an Intra-State mutual aid mechanism, which all local jurisdictions are members. The State is not a member to this construct however it is a legal means for local emergency management to share and reimburse for resources.