

Puget Sound Region



STRUCTURAL COLLAPSE RESCUE ANNEX

July 2014



Regional Catastrophic Disaster Coordination Plan

Part 1: User Guide

Part 2: Annex

The above links will take you directly to the User Guide or the Annex.

Structural Collapse Rescue Annex

User Guide

Puget Sound
Region



STRUCTURAL
COLLAPSE
RESCUE ANNEX

July 2014



Regional Catastrophic Disaster
Coordination Plan

User Guide Purpose

This User Guide is designed to 1) provide an overview of the Structural Collapse Rescue Annex and to 2) be a practical, hands on mechanism for navigating regional coordination of resource management and logistics. The User Guide is not a replacement for the full text of the Annex.

How to Use this Guide

This document provides an overview and practical guide to using the Structural Collapse Rescue Annex. The full text of the Annex is contained in Part 2.

- Clicking on a blue box with page number (p. #) will bring you to relevant information within this User Guide and full Annex document.



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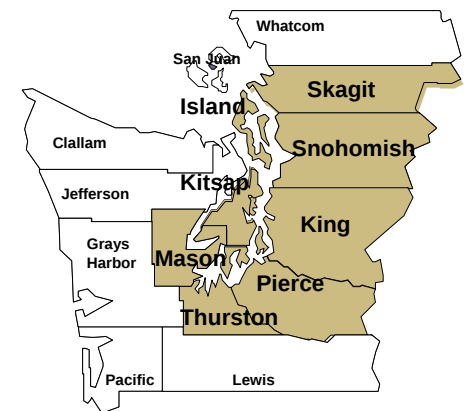


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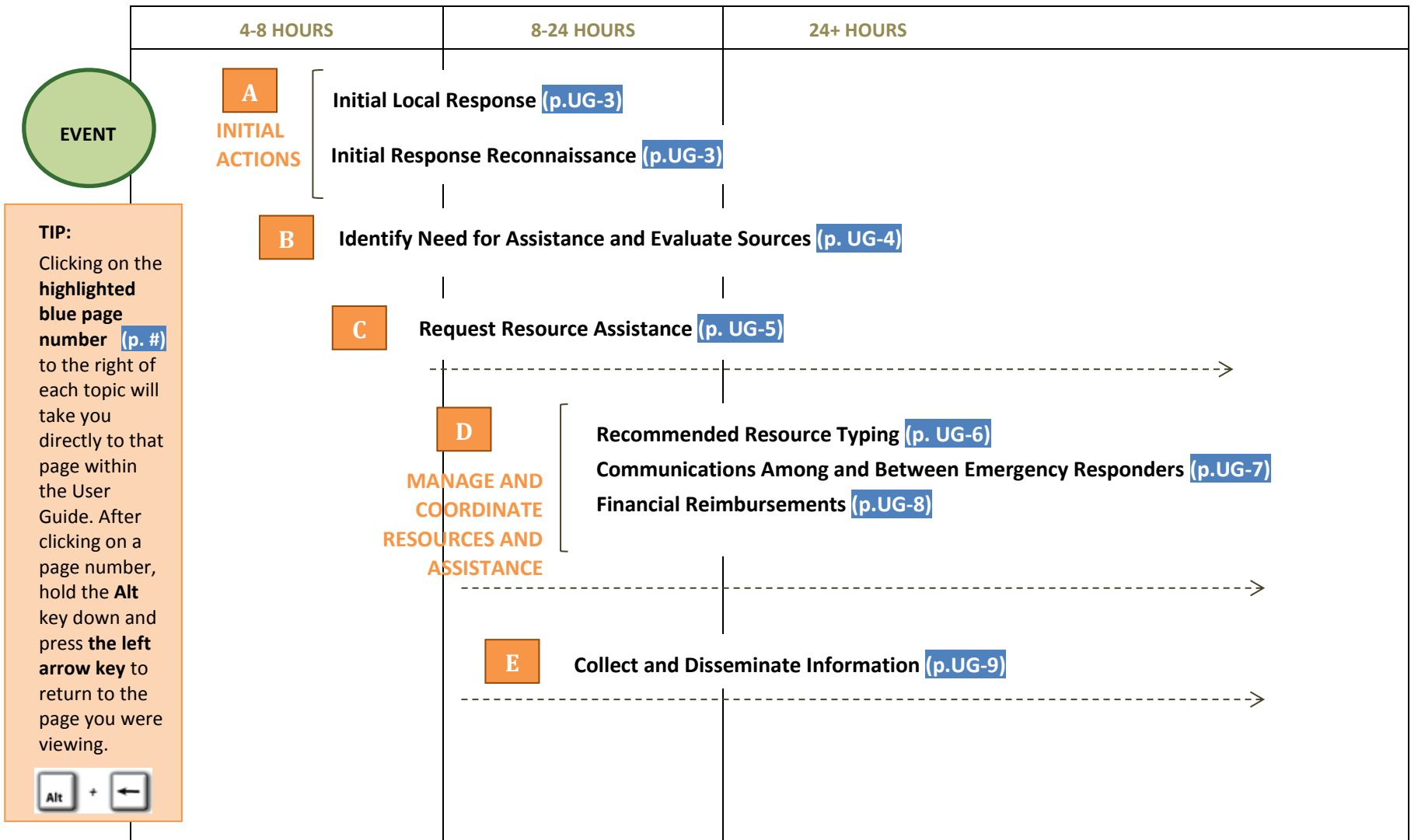
Context

The Regional Structural Collapse Rescue Annex provides a framework of procedures for regional coordination, decision-making and resource sharing among Puget Sound area emergency response agencies and other partners with structural collapse rescue capability. The Annex was developed to promote collaboration in the 8-county Puget Sound Regional Catastrophic Preparedness Grant Program (RCPGP): Island, King, Kitsap, Mason, Pierce, Skagit, Snohomish, and Thurston, and the tribal nations, cities and towns within these counties. The Annex supports the regional [Coordination Plan](#).



While the Annex is focused on the 8-county Puget Sound region, much of the information contained in the Annex and this User Guide is relevant and applicable to other areas in Washington State. Although designed to address a catastrophic incident, the information is also applicable to single site or local incidents where structural collapse rescue resources are needed to save lives.

The Annex does not supersede any individual jurisdiction's plan. It builds upon existing local and state emergency management and structural collapse rescue related plans.



Event → Initial Local Response

Initial Response (p. II-2)

When a structural collapse incident occurs in a jurisdiction, the initial response is done in accordance with normal local operations plans and protocols. Under Washington State Law, local law enforcement is responsible for search and rescue operations unless this has been delegated to another Authority Having Jurisdiction (AHJ), such as the Fire Department or Fire District.

An **Incident Commander** is designated and appropriate local resources are activated to respond to the situation. In most cases in the Puget Sound region, the Fire Department is the local incident command agency for structural collapse rescue, supported by law enforcement, emergency medical, public works and other local agencies.

For general descriptions of structural collapse rescue response in the eight-county RCPGP area, see:

- Island County (p. II-2)
- King County – zones 1 through 3 (p. II-3)
- Kitsap County (p. II-4)
- Mason County (p. II-5)
- Pierce County (p. II-5)
- Skagit County (p. II-6)
- Snohomish County (p. II-6)
- Thurston County (p. II-6)

Initial Response Reconnaissance (p. II-7)

A general rule is that no personnel shall enter a collapsed or damaged building to render patient care or extrication until a general survey and size up of damage is done. **Recommended Initial Actions Checklist** in Appendix D (p. D-1) describes suggested actions to be taken in the initial call out, initial response reconnaissance and subsequent stages of structural collapse rescue.

On-scene priorities may include, but are not limited to, the following:

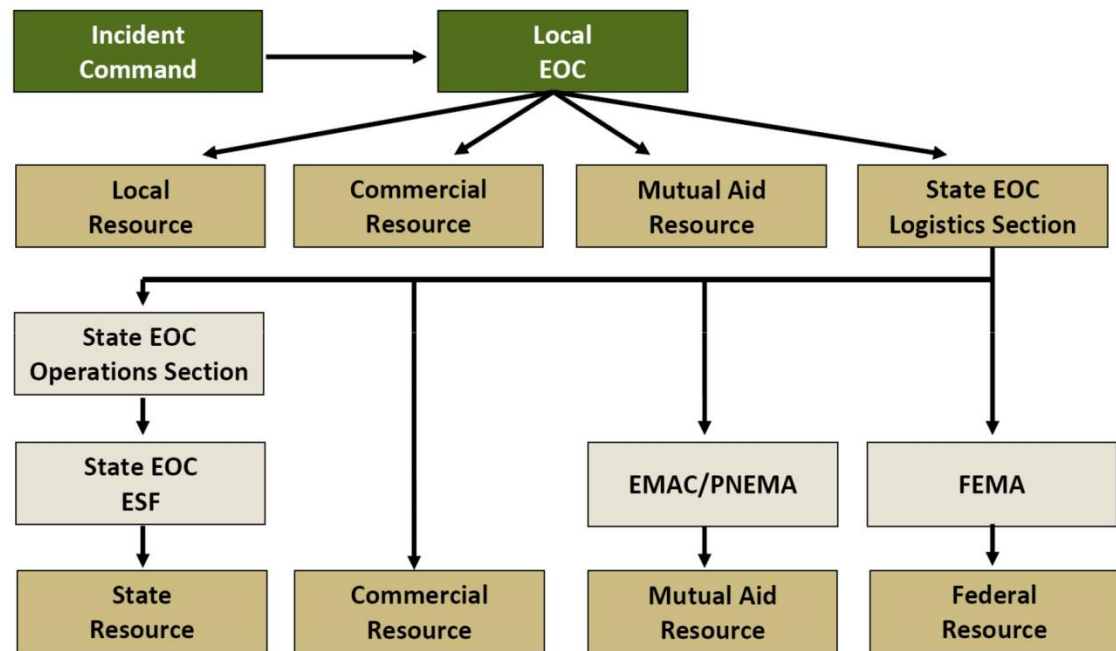
1. Situation Assessment
2. Develop incident objectives, action plans and priorities
3. Ensure safety issues are addressed
4. Request additional resources
5. Make contact with the Emergency Operations Center to provide incident information
6. Develop and transmit resource needs

Incident Action Plan (IAP)

If rescue operations continue for more than one operational period, the Incident Commander should establish a Planning Section with a Plans Section Chief as soon as possible to begin the development of a written Incident Action Plan (IAP). (p. IV-3)

Identify Need for Assistance and Evaluate Sources

Emergencies in Washington State are managed at the lowest possible level. When incidents go beyond a jurisdiction's capability, there is a tiered response for requesting outside assistance. (p. II-1)



Request Assistance

Request Assistance Locally

Section II, Attachment 1 (p. II-15) provides a general list of locally based structural collapse rescue resources organized by Homeland Security Region.

Request Assistance via Mutual Aid (p.II-8)

Jurisdictions often enter into agreements with other public and private agencies to share resources. As disasters unfold, local jurisdictions will need to determine the availability of these mutual aid resources. Mutual aid agreements also establish the basis for cost reimbursement.

There are county-wide mutual aid agreements in each of the eight counties. See Section VII, Attachment 1 (p. VII-5) for a summary of mutual aid agreements within the 8-county region.

Assistance from the Private Sector (p.II-8)

The Associated General Contractors of Washington (AGC) is the point of contact for initiating planning and training efforts and mobilizing equipment and supplies during response.

Appendix F (p. F-1) – model Memorandum of Understanding

Appendix G (p. G-1) - information checklist needed to activate AGC resources

Special Resources (p.II-7)

Structural collapse rescue situations may create the need for special resources such as specially trained search dogs, structural engineers or special equipment from the private sector that are not part of the Authority Having Jurisdiction (AHJ) or local jurisdictions resource capabilities.

Request Assistance through the State EOC

State Response

- [Washington State Fire Services Mobilization Plan](#) (p.II-9) and Section II, Attachment 3 (p. II-23))
- WA-TF-1 US&R Task Force support (p. II-9 and Section II, Attachment 2 (p. II-21))
- National Guard CBRNE Enhanced Response Force Packages (NG CERFP) (p. II-10 and Section II, Attachment 2 (p. II-21))

State-to-state Assistance

- [Emergency Management Assistance Compact](#) (EMAC) (p. II-10)
- Pacific Northwest Emergency Management Arrangement (PNEMA) (p.II-11)

Federal Assistance

FEMA's National Urban Search and Rescue (US&R) Response System is a network of 28 highly trained and well equipped Type 1 US&R Task Forces (p. II-11). Section II, Attachment 4 (p. II-27), a sample MOU between local officials and FEMA Incident Support Team)

Regardless from where additional outside resources come, the local Agency Having Jurisdiction (AHJ) maintains their authority for direction and control of rescue operations.

Recommended Resource Typing

Currently, structural collapse rescue resources are not uniformly typed in Washington State. The Annex recommends a typing system that would meet State and regional needs and be consistent with national standards and guidance from NIMS, FEMA, NFPA, and other sources.

Rescue Resources

The Annex recommends rescue resource typing - Appendix A [\(p. A-1\)](#)

- Task Force Typing
- Squad Typing

Equipment and Heavy Equipment

The Annex also recommends structural collapse rescue equipment and heavy equipment typing – Appendix B [\(p. B-1\)](#).

Recommended Marking Systems

Marking systems have been adopted by the National Urban Search and Rescue Response System to conspicuously denote information relating to the status of the structure, status of the search, hazards in a building and status of the victims. By utilizing these marking standards, arriving FEMA or other state structural collapse rescue resources will be able to understand what has been search already and not have to repeat search operations. See Appendix C [\(p. C-1\)](#) for more information on:

- Recommended Structural Evaluation Marking
- Recommended Search Marking
- Recommended Victim Marking

Communications Among and Between Emergency Responders [\(p.VI-1\)](#)

Within the Puget Sound Region, a variety of public safety radio systems are in use by police, EMS and fire agencies. These systems are not fully interoperable across the region. Specialized mutual aid channels are also not consistently available or reliable.

Priority is given when deploying or requesting resources to a structural collapse incident to ensure that:

- Deployed teams can communicate *internally*.
- Deployed team command personnel can *communicate with incident command on scene*.

Incident communications radio frequencies utilized at an incident are determined based on the agency responsible for incident command. If incident command is assumed by state or federal agencies, standard local operations frequencies may not be utilized.

On-Scene Communications

Tactical frequencies used by the fire service in structural collapse rescue response are listed by county in Section VI Attachment 1 [\(p. VI-5\)](#).

Incident Requiring Mutual Aid Response

One of the State or national emergency non-trunked channels/frequencies may be used for incident command (see Section VI Attachment 2 [\(p.VI-11\)](#) for a list of these channels).

Interoperability Frequencies

Incident command, as a first order of business, identifies and secures any necessary use authorizations for using a specified interoperable channel.

There are designated “national interoperability channels” for each type of radio frequency —e.g., a set of frequencies for both calling and operating on 800 MHz, 700 MHz, VHF, and UHF. They are outlined in the [National Interoperability Field Operations Guide](#) (NIFOG).

These channels are not trunked or digital, so anyone with a radio operating on the general frequency (e.g., 800 MHz) can access these channels, regardless of their home agency location—within the Puget Sound Region, the state, or the country. However, use of these frequencies may require authorization.

See Section VI Attachment 2 [\(p.VI-11\)](#) for a list of these national, state and regional channels.

Additional information about these interoperability channels and the state emergency radio communications network is in Section VI Attachment 3 [\(p.VI-13\)](#).

Financial Reimbursements

Mutual Aid [\(p.VII-1\)](#)

Very few mutual aid agreements currently in place provide for reimbursement of loaned resources. See Section VII, Attachment 1 [\(p. VII-5\)](#) for a summary of mutual aid agreements within the 8-county region, including high level information on whether agreements provide for reimbursement of loaned resources. For more detailed information, refer to specific agreements.

Fire Services Resources Mobilization Plan Reimbursement Procedures [\(p. VII-2\)](#)

Local fire jurisdictions responding to incidents outside their jurisdictional boundaries pursuant to the Fire Services Resources Mobilization Plan will be fully reimbursed for their eligible State Mobilization expenses, even if all costs associated with the State Mobilization incident are not eligible for federal reimbursement.

FEMA Reimbursement for Response Operations

Financial aid and assistance may be requested from FEMA through a request from the Governor to the President for a disaster or emergency declaration. This is coordinated after an incident by the Washington EMD. The key element for obtaining reimbursement is documentation. To be eligible, a jurisdiction must be able to document work and to separate day to day budgeted expenses (e.g. salaries), from extraordinary expenses that resulted from the disaster (e.g. overtime).

The work most often performed under this Annex is Emergency Work, containing two categories:

- Debris Clearance (Category A)
- Protective Measures (Category B)

See [\(p. VII-3\)](#) for information on types of work within these categories that may be eligible for reimbursement.

Collect and Disseminate Information

Information Collection [\(p. V-1\)](#)

Information collection is conducted in accordance with local jurisdiction protocols if at all possible. This involves the local incident commander providing routine/regular updates to the local EOC in the form required by local plans.

- **Situation Reports** (SitReps) may be developed every Operational period and forwarded to the local EOC (and state) due to the information demands accompanying federal disaster operations.
- A **public information officer** (PIO) may be identified for each major incident, reporting to incident command.

Information Dissemination to the Public

The Incident Commander is the primary official responsible for coordinating public information releases for individual/isolated incidents. In a larger incident involving multiple events, public information activities are coordinated from the local EOC and/or Joint Information Center (JIC).

State Information Collection and Dissemination

Through the State EOC and per ESF #5, Washington EMD's responsibilities include the collection, analysis, and sharing of information about potential or actual emergencies or disasters that could affect the structural collapse rescue incident.

Recommended Information Management Templates

Appendix E [\(p. E-1\)](#) provides templates for use as tools in gathering and reporting information following a structural collapse incident.

- **Template A** includes a list of basic structural collapse incident information items that should be gathered. This is a sample only and should not be deemed to cover all potentially relevant data necessary for response or public communication. [\(p. E-1\)](#)
- **Template B** is a building specific template. One Template B can be completed for each building impacted by an incident. This is a sample only and should not be deemed to cover all potentially relevant data necessary for response or public communication. [\(p. E-5\)](#)
- **Template C** is for recording incident public communications. [\(p. E-11\)](#)

Puget Sound Region



STRUCTURAL COLLAPSE RESCUE ANNEX

July 2014



Regional Catastrophic Disaster Coordination Plan

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I. Introduction and Overview

A. General Information

The Regional Structural Collapse Rescue Annex (Annex) supplements the Regional Catastrophic Coordination Plan (Coordination Plan). It provides recommended guidance and information for the effective response to structural collapse incidents that may occur as a result of a disaster in the Puget Sound Region which, for the purposes of this Annex, includes Island, King, Kitsap, Mason, Pierce, Skagit, Snohomish and Thurston Counties. It provides a framework of procedures for regional coordination, decision-making and resource sharing among Puget Sound area emergency response agencies and other partners with structural collapse rescue capability. This document is available to all public, private, tribal and non-profit entities with the RCPT region. It is also available to other communities statewide to provide guidance for potential solutions to structural collapse rescue issues.

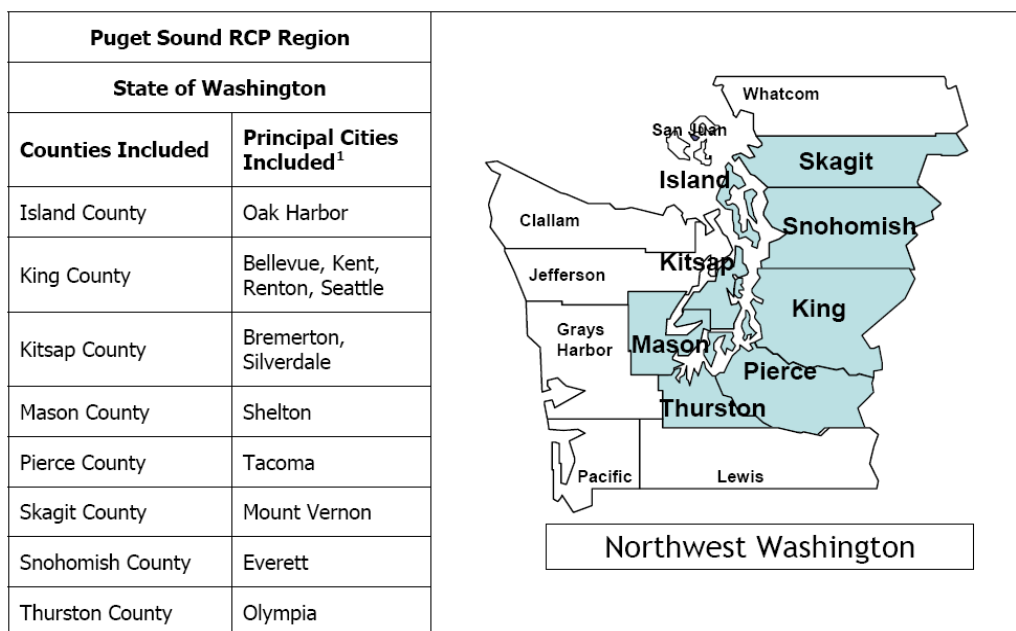


Figure I – 1: Puget Sound Regional Catastrophic Preparedness Grant Program (RCPGP) area

This Annex addresses structural collapse rescue after a major incident, such as a damaging earthquake, as well as to smaller incidents caused by other hazards where life saving structural collapse rescue resources are needed.

The Annex generally uses the term “structural collapse rescue” to refer to the rescue function in a collapsed structure environment and the term “urban search and rescue” in reference to the National Urban Search and Rescue (US&R) Response System.

B. Scope

This Annex provides an all-hazards framework for structural collapse rescue operations among local, state and federal entities and the private sector prior to, during and following major disaster that causes the need for structural collapse rescue in the Puget Sound Region. Although designed to address a catastrophic incident, the information is also applicable to single site or local incidents where structural collapse rescue resources are needed to save lives. The information in Sections I – IX are tactical in nature and are or can be put into use today. Section X and the Appendices provide

information on recommendations to improve structural collapse rescue response in the Puget Sound Region as well as statewide. The specific recommendations in the Appendices are as follows:

1. Appendix A – Recommended Structural Collapse Rescue Typing
2. Appendix B – Recommended Rescue Equipment Standards and Typing
3. Appendix C – Recommended Structural Evaluation, Search & Victim Marking Systems
4. Appendix D – Recommended Initial Actions Checklist
5. Appendix E – Recommended Information Management Tools
6. Appendix F – Recommended Model MOU with Associated General Contractors (AGC)
7. Appendix G – Recommended AGC Contact Procedures

C. Situation

Hazards associated with response to structural collapse rescue situations are primarily related to the types of building construction and the day-to-day use of damaged structures. According to the CREW research, recently constructed buildings on firm soils may survive with varying degrees of damage. Older structures that have not been retrofitted will probably sustain very heavy damage. Of particular concern are un-reinforced masonry (URM) and concrete tilt-up buildings, which are very common in the Puget Sound Region.

Most of the URM buildings were built before 1940 and have not been retrofitted. It is estimated that there are over 2,000 buildings of this type, with the largest concentration in areas of downtown Seattle. Unless they have been retrofitted, URM buildings near the fault rupture or on poor soils will have major damage or will collapse and cause injury, trapped victims and loss of life.

Most tilt-up reinforced concrete construction occurred after 1950 in the region. Structures constructed prior to code upgrades in 1973 do not perform well in earthquakes. These types of structures house many light industrial and manufacturing facilities, retail stores and warehouses. There is particular concern about such structures in river valleys due to the underlying soil types.

Extensive damage can be expected to structures that are close to the fault rupture or which are on poor soils. This is especially true for low- and mid-rise structures built before 1970, including pre-cast reinforced concrete parking structures. Damage to such structures will primarily be a function of their age, construction type, soil type, ground shaking and distance from the fault rupture. For a Seattle fault earthquake, damage is expected to be less in areas further away from the fault, such as Tacoma and Everett.

Residential areas will also experience damage, especially in un-retrofitted un-reinforced masonry buildings and buildings with large openings at the ground level. Unanchored structures will slide off foundations, chimneys will collapse and fall into homes and ground failure can damage foundations. These will present less hazardous rescue situations but will create additional demand for rescue resources. Non-structural damage such as broken gas mains, downed power lines and damaged water systems will add to rescue difficulties.

Information on types of structures that may be at risk of structural collapse in a jurisdiction can be used to develop specific response strategies or strategic plans for structural collapse rescue capability development. This information may be available from the county Assessor's office, the jurisdictions building and land use agency or from the local department or emergency management.

A major earthquake in the Puget Sound Region that occurs during the work day may trap many people in commercial, industrial and educational structures. If an earthquake occurs during the evening or night when many people are home, people would likely be trapped in homes, multi-family buildings, apartments and high-rise buildings. First response elements in the Puget Sound Region have developed a very robust structural collapse rescue capability, including one of FEMA's National Urban Search and Rescue Response System Task Forces (Washington Task Force 1, or WA-TF-1). However, a major earthquake resulting in collapse of several multi-story structures would quickly far exceed the capacity of this Task Force, as well as the capacity of local jurisdictions to respond. Outside assistance from the state, other states and the federal government would be needed.

D. What have we learned from experience?

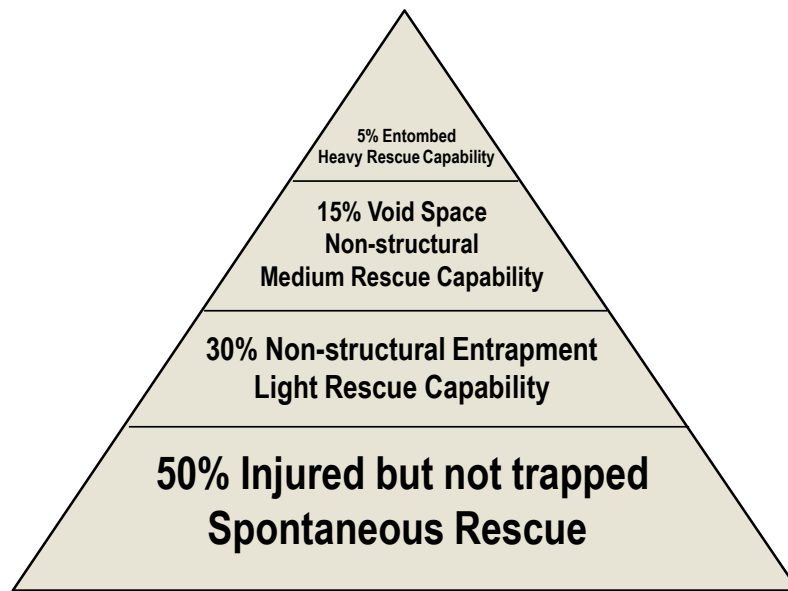


Figure I - 2: LA Fire Department “Pyramid of Life”, Source – Frank Borden

There is a sequence of rescue that usually occurs after a major disaster. In the immediate aftermath of an earthquake, for example, the efforts of those who just happened to be there at the time provide the initial rescue capability and offer aid to victims in collapsed structures. Known as the “spontaneous response,” this phase can account for assistance to up to 50% of the people who need help. This first phase helps the “walking wounded,” surface victims and victims that need just minimal assistance or first aid.

Rapidly, the spontaneous response starts to get organized, leading to a second phase in the response. Natural leaders and persons with some amount of training (volunteer firefighters, persons with military training, persons with Civilian Emergency Response Team (CERT) training, etc.) start organizing others to help those that are in situations of non-structural entrapment and who cannot help themselves. This sometimes involves the use of improvised hand tools and simple procedures. This effort can account for up to 30% of collapsed structure victims.

The next (third) rescue phase is when the local organized rescue elements from the fire service and other emergency services have the opportunity to respond and identify priority areas where their

equipment and expertise are needed, which are usually beyond the capability of the spontaneous responders. Depending upon the level of capability and training in a community, this effort usually assists people trapped in light frame construction and un-reinforced masonry buildings. Historically, this accounts for up to 15% of the victims in collapsed structure situations.

The final stage of collapsed structure rescue focuses on those who are deeply entombed in larger buildings with steel frame, heavy floor or heavy wall construction. The location and extrication of these victims requires special training and equipment including, but not limited to, search dogs, technical search and acoustical equipment, structural engineers and heavy equipment. This usually involves less than 5% of the collapsed structure victims, but often requires the most time and resources to carry out rescue.

E. Hazards

The most likely incident that would cause the need for a regional structural collapse rescue response would be a major earthquake. Other natural and man-made hazards and incidents could also cause the need for structural collapse rescue including, but not limited to, terrorism, flooding, explosion, heavy snow, landslides and high winds.

A major incident along the Seattle Fault or the Cascadia Subduction Zone would have a tremendous impact on the region. The magnitude earthquake envisioned in the scenario for the Regional Catastrophic Preparedness Program would not only cause the need for significant rescue efforts, but would cause disruption to the lives of individuals, families, government and the private sector for a long period of time.

The Cascade Regional Earthquake Working Group (CREW) is a not-for-profit corporation of private and public representatives of Oregon, Washington, British Columbia, and California that works to improve the ability of communities to reduce the effects of earthquakes. (<http://www.crew.org/>) They have developed earthquake scenario information that provides an overview of the post- earthquake environment, from both a short term view, with respect to challenges in emergency response, and the long term view, with respect to issues of recovery.

Damage projections developed by CREW indicate that in a major earthquake in the Puget Sound Region collapsed buildings and falling debris will kill or injure many people and trap many others. Some estimates place these numbers in the hundreds. Hospitals and medical care facilities will be damaged and service capability will be reduced. Shelter space will be in demand due to damages to homes, apartment buildings and other residential dwellings. Utilities such as water, power and communications will be severely impacted and difficult to provide for days or weeks. The economic impact will depend upon how quickly the transportation system can be repaired and back in service.

F. Planning Assumptions

The development of this Annex is based on the following assumptions:

1. The Annex will be available to assist local, state and federal officials in preparing for and responding to structural collapse rescue situations.
2. The Annex applies to all emergencies and disasters, including natural and human-caused incidents that cause local or region-wide structure collapse rescue needs.
3. The Annex builds upon existing local and state emergency management and structural collapse rescue related plans.
4. Due to local response needs, resources may not be available to assist outside of their home jurisdictions.
5. Existing response systems and arrangements such as mutual aid and the State Fire Services Resources Mobilization Plan will be utilized as much as possible.
6. Planning and response partners will include public and private organizations.
7. Command and control is the responsibility of the local jurisdiction where the structural collapse incident(s) is occurring.
8. Local mutual aid resources may be overwhelmed.
9. Infrastructure damage and communications disruptions may inhibit efficient response and coordination.
10. Structural collapse rescue operations may impact other response and relief efforts.

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II. Concept of Operations

A. General Information

This section provides detail on the sequence of structural collapse response and information on structural collapse rescue resources. It covers the decision process of determining the need for assistance, who to call, what information is needed. It also covers information about the Fire Services Resources Mobilization Plan, assistance from the private sector, State to State mutual aid under the Emergency Management Assistance Compact (EMAC), and incoming Urban Search and Rescue (US&R) resources from the federal government.

B. Flow of Emergency Response

Emergencies in Washington State are managed at the lowest possible level. Under Chapter 38.52 of the Revised Code of Washington (RCW), local governments have primary responsibility for emergency response activities within their jurisdictions. When incidents go beyond a jurisdiction's capability, there is a tiered response for requesting outside assistance as outlined in Figure II – 1.

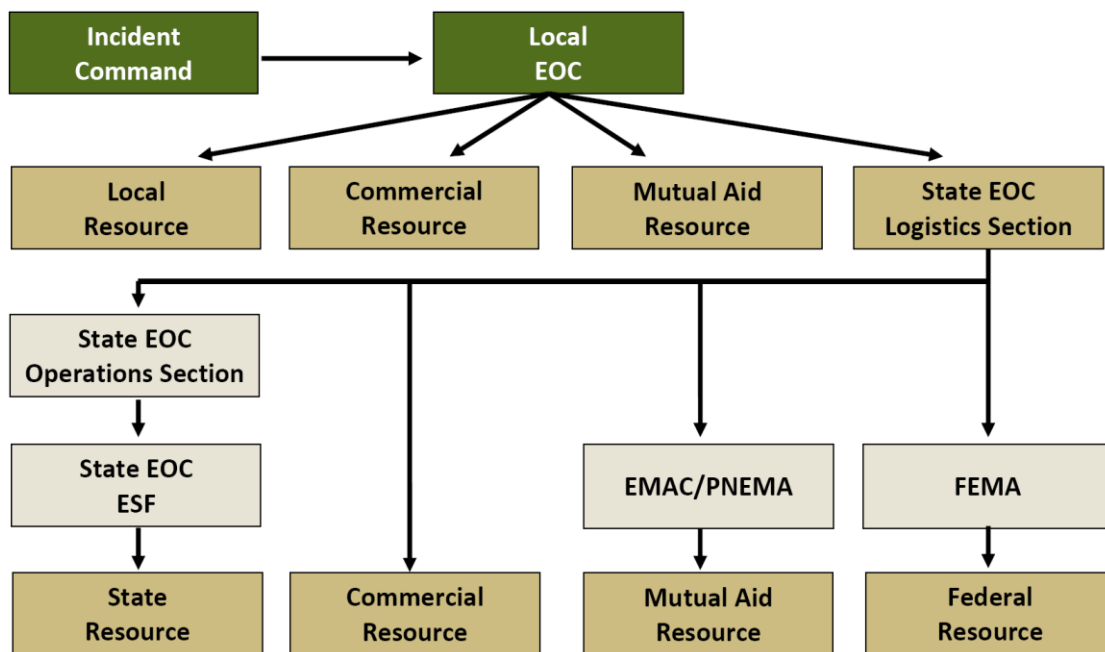


Figure II – 1: Outside Assistance Request Flow Diagram

When the Incident Commander needs resources beyond assigned resources he/she requests additional resources from the local jurisdiction. The local jurisdiction may assign other local resources, purchase or contract for additional resources or request mutual aid in order to meet the request. When a local jurisdiction emergency requirement exceeds resources (including mutual aid) the jurisdiction requests assistance from the county or state. The county goes through a similar process of assigning county resources, purchasing or contracting for the resource or requesting mutual aid on behalf of the local jurisdiction.

If resources needed by the Incident Commander can't be met at the local jurisdiction or county, the resource request is forwarded to the state through the Local EOC. The State EOC Logistics Section assigns the resource request to a state agency through the State EOC Operations Sector (this

includes utilization of the Fire Mobilization Plan), purchases or contracts for the resources, or determines that the resource is best filled through state level mutual aid (EMAC or PNEMA) or through Federal Government resources. Federal Government resources are requested through FEMA.

The Puget Sound Structural Collapse Rescue Annex is designed to provide guidance for effective and efficient response to structural collapse incidents that may occur as a result of a disaster in the Puget Sound Region, which includes Island, Skagit, Snohomish, King, Pierce, Thurston, Mason and Kitsap Counties. Most all of the incidents that would lead to a collapsed structure rescue, either as a single site incident (Oklahoma City Bombing) or a regional incident (major earthquake), will come without warning. Subsequently, leadership and response resources will need a mechanism to size up the situation as quickly as possible, call out and deploy appropriately trained and equipped rescue resources, and support them as they work to save lives. This may include moving resources from one jurisdiction to another.

C. Initial Local Response

When a structural collapse incident occurs in a jurisdiction, the initial response is done in accordance with normal local operations plans and protocols. An Incident Commander is designated and appropriate local resources are activated to respond to the situation. In most cases in the Puget Sound region, the Fire Department is the local incident command agency for structural collapse rescue, supported by law enforcement, emergency medical, public works and other local agencies.

Some departments and jurisdictions have developed their own special operations rescue teams that respond to all incidents, large or small, applying response protocols established by their respective governing and operations boards. Any request for the rescue team is usually communicated to the local or regional 9-1-1 Communications Center. The teams are usually dispatched using a tiered-response system. Initially all on-duty members are dispatched via their department (each member department is dispatched for the call and an on-duty Battalion Chief or other chief officer determines the location and number of on-duty team members needed).

The department or member departments sometimes automatically respond with rescue apparatus (heavy rescue and light rescue) to the scene. Usually the most senior arriving team member at the scene of the incident determines if there are enough on-duty personnel responding or if off-duty personnel will be needed, depending upon the needs of the incident. If off-duty personnel are needed, they are paged out using various notification systems.

The following is a general description of structural collapse rescue response in the eight counties in the Regional Catastrophic Planning Grant Program (RCPGP) Planning Area.

1. Island County:

Island County does not have any teams or squads for collapse rescue operations response. All fire is dispatch out of ICOM in Oak Harbor. A 911 call comes into ICOM and then the appropriate fire district, or the City of Oak Harbor, is dispatched to the scene. If it's a large fire, then more than one district, or Federal Fire on the Naval Air Station, may be dispatched as backup or to cover the responding District.

2. King County: King County response is organized into three Zones—Zone 1 (North and East County), Zone 3 (South County) and Zone 5 (City of Seattle).

a. King County Zone 1 (North and East King County):

The technical rescue team from King County Zone 1 responds to all incidents, large or small, through current response protocols established across the zone. Response to technical rescue incidents is dictated by Response Plans created by individual departments, with a coordinated understanding of a minimum number of technical rescue-capable units being assigned to any technical rescue incident in the zone. All Zone 1 technical rescue personnel are on-duty resources so there is no toning or paging required of off-duty technicians. There are usually about 24-32 rescue technicians on duty across the zone during any given 24-hour period.

Technicians generally respond on apparatus equipped with the appropriate specialized equipment. The first arriving rescue technician compares the incident needs with the responding resources. If the incident requires additional specialized personnel and/or resources, this rescue technician works through the incident commander to request and secure those resources. As the incident unfolds, the required incident command positions are identified and rescue technicians work within that established structure.

Any technical rescue response to a location outside of Zone 1 requires a “Task Force” type of response. This involves the Zone 1 fire dispatch agency, NorCom, assigning units as per established Response Plans. Those units meet at a pre-determined location and respond as a group from that location with a leader identified. Note that this Response Plan is currently under construction but is not yet a finished product.

b. King County Zone 3 (South King County):

The technical rescue team from King County Zone 3 draws resources from eight (8) different fire departments: Renton, Valley Regional Fire Authority (VRFA), Kent, South King County, Tukwila, SeaTac, Maple Valley and North Highline. Response to technical rescue incidents involves an initial call to ValleyCom who in turn contacts one of eight (8) Zone 3 Coordinators. Unless the request is for a specific single resource, a Type 2 Task Force is called out. Resource requests are spread among the eight departments so as not to deplete any one department of too many special rescue resources. When the Task Force is assembled, a determination is made of what resources specifically fill the request, and they respond with what is needed to the requesting agency.

All Zone 3 technical rescue personnel are on-duty so there is no toning or paging required of off-duty technicians. Zone 3 initially responds with 28-30 Rescue Technicians certified in Structural Collapse, Confined Space, High Angle Rope Rescue, Swift Water Rescue with Dive Capability and Trench Rescue, and a Safety Officer with FEMA Task Force Safety Officer Certification. The goal is to be able to respond within one hour. Zone 3 agrees to respond as mutual aid for one operational period of 12 hours for incidents not falling under the Washington State Fire Services Resources Mobilization Plan.

Zone 3 expects the requesting/receiving agency to activate a Type 3 Incident Management Team to support operations and to support the Zone 3 response with shelter, food and rehab after 12 hours.

c. King County Zone 5 (City of Seattle):

The Seattle Fire Department uses a layered response system to deliver Technical Rescue Services to its citizens. The entire staff of the Operations Division is trained to an “Operations” level in the basic technical rescue disciplines annually. This includes vehicle extrication, rope, confined space, structural collapse and trench and tunnel rescue. All truck companies carry a basic complement of rope rescue, air monitoring and auto extrication equipment allowing first arriving units to initially engage in low to moderate risk operations at these incidents until the arrival of the heavy rescue company.

The rescue company is composed of firefighters operating out of Fire Station 14 in the city’s industrial district just south of downtown. Five firefighters and one officer staff a BLS aid car, a straight frame aerial ladder truck and a heavy rescue truck. Of those six, a minimum of five must be assigned to the company as rescue technicians with a minimum of four also being designated as public safety divers. The ladder truck and heavy rescue truck respond together to all assigned fire and aid alarms as a two-piece, four-person company. If a technical rescue alarm is received, the members from the ladder truck move to the heavy rescue truck and respond to the alarm on a single apparatus. The aid car responds independently to assigned aid and fire responses. When dispatched on a rescue response the aid car and heavy rescue truck respond together.

Structural collapse incidents inside the city receive as a minimum a “heavy rescue” response, which includes local engine and truck companies and the heavy rescue truck, as well as supervisory staff, ALS, BLS and support units. If there is an indication from either the initial information or from first arriving units that the incident was precipitated by an explosion or other suspicious circumstance, the response is augmented to include the hazardous materials and decontaminations teams.

Additionally the Seattle Fire Department maintains a cache of equipment in an urban search and rescue semi trailer and a “Metro Medical Strike Team” cache trailer; both with dedicated tractors. In the event of a major incident the Seattle Fire department also has complete Type 1 Urban Search and Rescue Task Force, consistent with the FEMA model.

3. Kitsap County:

The Kitsap Technical Rescue Team is comprised of 34 members from seven agencies. They are Bainbridge Island Fire Department (BIFD), Poulsbo Fire Department (PFD), North Kitsap Fire & Rescue (NKF&R), Central Kitsap Fire & Rescue (CKF&R), Bremerton Fire Department (BFD), South Kitsap Fire & Rescue (SKF&R) and Navy Region North West-Bangor (NRNW). The BIFD is the lead agency for the team. The Kitsap team works in conjunction with Clallam County Fire Dist #3, and together comprises the Homeland Security Region Two Technical Rescue Team.

Apparatus capabilities include BIFD – TR21, which carries equipment for confined space rescue, US&R, trench and rope rescue, NRNW – R61, which is a pickup style truck with a large box that carries confined space and rope rescue gear, and CKFR - R51, which carries rope and US&R equipment. The Kitsap team is dispatched by Kitsap CENCOM and the current run card consists of the three apparatus and a medic unit. If the first unit on scene arrives and determines more resources are needed, they page out additional Kitsap Technical Rescue Team resources.

4. Mason County:

Mason County does not have any teams or squads for collapse rescue operations response. County emergency response resources are dispatched by MACECOM 911 and all Fire and ALS agencies are individually called to respond per agency policy and procedures. Dispatch to any incident in any jurisdiction would include engine, medic, rescue, and command. Depending on the size of the incident, and the abilities the Authority Having Jurisdiction (AHJ), would remain as Incident Command.

A response in Mason County would include at a minimum Mason District 5, Mason 2, Mason 3, Mason 11, Mason 13, Mason 4, Mason 6, and Mason County Medic One. These agencies are combination departments with paid staff. All other Fire Districts are volunteer and response would be as available. From there mutual aid response would include remaining Fire Districts and Mason County Sheriff's Office (MCSO). MCSO would then dispatch or advise the Mason County Department of Emergency Management which would contact Washington State DEM and request mutual aid from other counties (Thurston, Kitsap, and Pierce) for technical collapse rescue personnel and equipment. Mason County DEM could open Operations Center and support to the operation with logistics.

5. Pierce County:

There are several structural Collapse Rescue assets in Pierce County. The Pierce County Special Operations Response Team (PCSORT) is a consortium of several different fire departments that provide personnel and funding for equipment to sustain the team. PCSORT is activated by calling FireComm and requesting the resource.

The requesting agency is the Agency Having Jurisdiction (AHJ) and is responsible for establishing Incident Command. If the requesting agency is a member of PCSORT there is not a charge for the service. If the requesting agency is not a member of PCSORT then there is a contracted fee for service that is charged. The initial response by PCSORT is by on duty personnel only. Calls for additional personnel can be made once it is determined that existing on-call personnel are insufficient for the incident.

The City of Tacoma Technical Rescue Team (TRT) is an all-hazard on-duty-only team comprised of 30 members trained to the NFPA 1670 Technician level for structural collapse rescue. The Tacoma Fire Department (TFD) relies on mutual aid agreements and contract services from PCSORT for any incident that exceeds its resources. TFD dispatches TRT from a uniformed dispatch center operated by TFD personnel.

An initial Signal 1-11 response brings 30-35 members, including command and safety staff. The initial arriving officer determines the needs of the incident and calls for additional resources. TFD's Technical Rescue Team deploys four apparatus (1 heavy rescue, 1 Ladder Company, 1 Engine Company and 1 medic unit) out of one centralized fire station. A structural collapse dispatch places the 1-11 complement on the scene in approximately 7-10 minutes.

6. Skagit County:

Skagit County does not have any special operations teams. Resources are dispatched by Skagit 911 based on individual fire agency response policy and procedures. At a minimum, dispatch includes an engine &/or ladder, rescue (light), battalion and a medic unit.

The Skagit County Department of Emergency Management is dispatched or advised, depending on the scale of the incident. The Authority Having Jurisdiction (AHJ) remains as Incident Command, and from there general alarms for that agency, then mutual aid requests, and possibly the Washington State Fire Services Resources Mobilization Plan requests. The respective County or City Emergency Operations Center may be opened to support operations. Anacortes, Mount Vernon, Burlington, and Sedro-Woolley are combination fire departments that have career staff. All other jurisdictions are volunteer staff only.

7. Snohomish County Technical Rescue Team (SCTRT):

The SCTRT is comprised of approximately 115 Technicians from eight different departments. It was originally formed by combining the three existing teams that represented the four zones in the County (Zones 10 and 12 operated together and have since combined into Zone 12). SCTRT is trained to the NFPA 1670 Technical rescue level. SCTRT operates off four rescue apparatus, each stocked with a cache of US&R Equipment.

The team automatically responds throughout Snohomish County based upon a signed agreement of the Snohomish County Fire Chiefs, and is prepared to respond outside of the county when requested. The SCTRT is capable of operating in a Chemical, Biological, Radiological, Nuclear and high yield Explosive (CBRNE) environment.

The SCTRT responds to all requests for assistance per the current protocol set up by the team's Joint Operations Board. Requests are received through or relayed to the two active emergency dispatch centers in the county, SnoPac and SnoCom. Response is provided by four alarm levels. A First Alarm provides a local response, a Second Alarm gets a Zone response (closest units), a Third Alarm gets all Rescue Units and on duty technicians and a Fourth Alarm receives all off duty technicians on call back.

8. Thurston County:

The Thurston County Special Operations Rescue Team (SORT) responds to all incidents, large or small through the current response protocol established by the Thurston County Operations Board. Any request for the rescue team is communicated to the Thurston County 9-1-1 Communications Center (CAPCOM).

The team is dispatched using a tiered-response system. Initially all on-duty members are dispatched via their department (each member department is dispatched for the call and the on-duty Battalion Chief determines the location and number of on-duty SORT team members to call out). McLane/Black Lake Fire, the host of the SORT team, automatically responds the rescue apparatus (heavy rescue and light rescue) to the scene. The most senior arriving team member at the scene of the incident determines if there are enough on-duty personnel responding or if off-duty personnel are needed depending upon the needs of the incident. If off-duty personnel are needed, they are paged out using the WARN notification system.

Any incident outside of Thurston County within Central Region (Thurston, Lewis, Grays Harbor, and Pacific counties) is handled through CAPCOM. Any incident outside of the region is handled through the Washington State Fire Services Resources Mobilization Plan, in which the Central Region coordinator notifies the team of any request.

D. Initial Response Reconnaissance

Departments with Structural Collapse response capability usually develop general orders and operational procedures to guide the initial response. A general rule is that no personnel shall enter a collapsed or damaged building to render patient care or extrication until a general survey and size up of damage is done. This reconnaissance provides for a general survey of the area and is designed to determine the following information:

- What is the building's use?
- What is the number of occupants?
- How many victims are trapped and what is their probable location?
- Are rescue operations currently underway?
- Is there a presence of the following hazards:
 - Gas and utilities
 - Flammables
 - Electrical
 - Flooding from burst mains
 - Plumbing and sewer disruption
 - Structural stability of adjoining buildings
- Are rescue efforts already underway by untrained personnel and/or citizens? Is so, stop such efforts immediately.

See Appendix D for recommendations for initial actions at a structural collapse rescue incident and the stages of structural collapse rescue.

E. Local Resources

Attachment 1 to this section provides a general list of locally based structural collapse rescue resources organized by Homeland Security Regions in Washington State and respective contact numbers. For consistency, these resources are typed in accordance with the recommended typing found in Appendix A.

F. Special Resources

Structural collapse rescue situations may create the need for special resources such as specially trained search dogs, structural engineers or special equipment from the private sector that are not part of the Authority Having Jurisdiction (AHJ) or local jurisdictions resource capabilities. In this case the local AHJ should contact the Washington State Emergency Management Division (EMD) Duty Officer or the State EOC if it is activated to make the request. This will keep the request within the State Search and Rescue (SAR) system and help facilitate resource prioritization and distribution. Many special resources, such as search dogs, are coordinated and controlled by the local jurisdictions emergency management agency. Requesting and coordinating through the State EMD will ensure appropriate procedures are followed to assign a State Mission Number, which provides liability coverage and other benefits authorized under Chapter 38.52 RCW, the State Emergency Management Statute.

G. Mutual Aid

If the situation is beyond the jurisdictions' capability, either by the complexity of a single incident or due to numerous incidents caused by a disaster, the jurisdiction should request mutual aid from neighboring jurisdictions or from regional resources.

Fire agencies in the eight-county planning area are signatory to individual county-wide mutual aid agreements. These provide the authority and operational protocols for requesting, coordinating and, in some cases, reimbursing response to structural collapse rescue incidents within the respective counties. See Section 7, Attachment 1 for summary information on each of the county fire mutual aid agreements.

If a response to a structural collapse incident is beyond the capability of the AHJ, the next level of response is through mutual aid. Mutual aid requests are initiated by the local incident commander or local command authority and relayed first to the closest department or organization with which there is a mutual aid agreement with the AHJ. The request should include the specific assistance needed, where to report, to whom to report, designated communications channels for making contact and any special instructions with respect to scene access, safety or special equipment.

H. Assistance from the Private Sector

The private sector, especially in the general and construction contractor and skilled trades sectors, is a potential resource for supporting life saving structural collapse rescue operations. To ensure that support from the private sector is integrated into the regional structural collapse rescue response, relationships and agreements can be developed ahead of the time that might be used in an emergency. This effort involves integrating the contractors and skilled trades into local and regional emergency planning and exercises, developing and executing agreements that identify the scope of services, concept of operations and reimbursement, and developing procedures for notification, activation and response.

The Associated General Contractors of Washington (AGC) has developed and signed a Memorandum of Understanding (MOU) with the King County Fire Chiefs Association that creates a general framework for providing private sector lifesaving disaster aid, expertise and equipment. From this, a model Memorandum of Understanding has been developed for other jurisdictions to implement. (See Appendix F) This model MOU provides the basis for a model agreement that can be signed by each respective Fire Chief's Association in the Puget Sound Region and the Washington Chapter of the Associated General Contractors (AGC).

Under this Memorandum of Understanding, the fire service is responsible for utilizing the National Incident Management System (NIMS) for mitigating disasters, identifying specialized equipment that may be of assistance in structural collapse rescue, assisting in the development of training for construction industry personnel, and developing a mechanism by which these training personnel may be called upon in the life-rescue phase of an emergency.

The construction industry and skilled trades are responsible for assisting in the development of training programs, assisting with the development of a mechanism by which these training personnel may be called upon in the life-rescue phase of an emergency, assisting with the identification of equipment that may be used in rescue operations and assisting with the coordination of equipment and supplies that can be mobilized.

To expedite activation and engagement of AGC lifesaving resources, parties to the Memorandum of Understanding may voluntarily support needs arising in the life rescue phase of a disaster incident until contracts can be put into place by the purchasing department of a responding AHJ or through the Logistic Section in the EOC.

The AGC is the point of contact for initiating planning and training efforts and mobilizing equipment and supplies during response. An emergency contact roster for the AGC can be developed after a MOU is signed with a county Fire Chief's Association. An information checklist needed to activate AGC resources has been developed to facilitate and standardize contact and coordination with the AGC. (See Appendix G)

To facilitate coordination and understanding of AGC capabilities, equipment, terminology and operational protocols in an emergency, it is recommended that a Private Sector Liaison be added to the Command Staff of the Incident Commander. This position can assist the Incident Commander in requesting and utilizing private sector construction industry resources.

I. State Response

1. Washington State Fire Services Resources Mobilization Plan

If established mutual aid agreements and processes are not adequate to meet a jurisdiction's need for assistance with structural collapse rescue, the Washington State Fire Services Resources Mobilization Plan may be used to secure needed assistance. Under the Washington State Fire Services Resources Mobilization Plan, State Mobilization can be requested when a local fire jurisdiction expends or will expend all available:

- Local resources
- Mutual aid resources
- If a special resource is needed (trench rescue unit) and is not available through existing mutual aid agreements, this may be an extenuating circumstance where mutual aid is exhausted without having a response. This would be reviewed on a case by case basis.

The recipient agency must agree to comply with provisions of the Washington State Fire Services Resources Mobilization Plan. See Attachment 3 to this Section for detailed information.

2. WA-TF-1 US&R Task Force support.

WA-TF-1 US&R Task Force is one of the 28 FEMA US&R teams in the National Urban Search and Rescue Response System. It is sponsored by the Pierce County Department of Emergency Management. It can be activated by FEMA through activation orders under the authority of the Stafford Act or as a state asset. (See Section IX)

It is considered a State asset by FEMA policy for activation for in-State incidents. WA-TF- 1 US&R Task Force can be mobilized by Washington State as a state resource under the Washington State Fire Services Resources Mobilization Plan but each of the 27 participating agencies have to agree independently to allow their personnel to participate under State Mobilization guidelines as these State guidelines are not the same as Federal policy for portal to portal reimbursement. Many agencies participating in the Task Force have stated that their willingness to respond under State Mobilization rules and regulations will be based on the situation and whether or not it involves known live rescues.

3. National Guard CBRNE Enhanced Response Force Packages (NG CERFP)

Using existing Army and Air National Guard units and personnel, the Washington National Guard has organized, trained, and equipped a CBRNE Enhanced Response Force Packages (NG CERFP) to provide specialized capabilities the National Guard may be requested to perform by local, state, or federal authorities. This capability helps ensure the National Guard is ready to respond to support local rescue operations with specialized Chemical Biological Radiological Nuclear and High yield Explosive (CBRNE) support.

The NG CERFP is comprised of traditional National Guard Personnel who are task organized from existing National Guard units or organizations and trained and equipped to perform the functions of Casualty Decontamination, Medical Triage, and Casualty Search and Extraction. Specifically, the NG CERFP will support casualty decontamination operations, at or near a CBRNE incident scene and provide casualty search and extraction, emergency medical treatment, triage and patient stabilization when directed. Personnel attached to the NG CERFP elements will continue to maintain the skills necessary to perform their assigned unit's primary mission. Although specifically designed to support operations in a CBRNE environment, their resources can support non-CBRNE environment Structural collapse rescue operations.

These State resources are listed in Attachment 2 to this Section.

J. State to State Assistance

1. Emergency Management Assistance Compact (EMAC)

A structural collapse incident could exceed the ability of the local and state response but still not meet the threshold for a Presidential declaration of Emergency or Disaster. Subsequently, the state-to-state mutual aid principles could be utilized. Washington State is signatory to the national Emergency Management Assistance Compact (EMAC) agreement by which states can share state resources in an emergency. EMAC can be used for a variety of needs, including the sharing of structural collapse rescue resources.

EMAC is a congressionally ratified organization that provides a process and a structure for interstate mutual aid. Through EMAC, a state that is impacted by a major disaster can request and receive assistance from other member states quickly and efficiently. Through the written agreement among the states, EMAC resolves two of the key issues that hindered state-to-state assistance in the past—liability and reimbursement.

For EMAC to be utilized the Governor of the impacted state needs to have declared a State of Emergency. The State emergency management organization of the impacted state assesses three basic elements of information:

- What has happened?
- What can local and state resources do about it?
- What are specific unmet needs?

EMAC defines how an impacted state can make the request for assistance. States that have resources can provide them through the EMAC network.

EMAC can be implemented through a request from the AHJ, through the local emergency management network to the State Emergency Management Division (EMD), or the State EOC if activated.

2. Pacific Northwest Emergency Management Arrangement (PNEMA)

Washington State is signatory to the Pacific NW Emergency Management Arrangement along with the States of Alaska, Idaho and Oregon and the Province of British Columbia and the Yukon Territory. This agreement allows for the sharing of emergency resources across jurisdictional and international borders. The arrangement is applicable to search and rescue, as well as other needs, such as resource and donation management, medical response, damage assessment, debris clearance and other emergency functions. Under PNEMA, an emergency declaration by the governor is not needed and jurisdictions do not have to respond. Principles of the arrangement include not charging more than what one normally pays and the exchange of resource and contact lists. Assistance under the arrangement can be requested through the State Emergency Management Division (EMD).

Other specific sections of the arrangement include the following:

- ◆ Article IV - “. . . the signatory rendering aid may withhold or recall resources to the extent necessary to provide reasonable protection for itself.”
- ◆ Article V - “. . . license, certificate, or other permit . . . such person is deemed to be licensed, certified, or permitted by the signatory requesting assistance . . .”
- ◆ Article VIII - “. . . signatory shall provide . . . for the payment of worker’s compensation and death benefits to injured members of the emergency forces of that signatory . . . in the same manner and on the same terms as if the injury were sustained within their own signatories.”
- ◆ Article IX - “. . . any signatory rendering aid . . . [will] be reimbursed by the signatory receiving such aid for any loss or damage to or expense incurred . . .”

PNEMA resources are requested by the State EOC utilizing the same process as EMAC with the determination on source made by the State EOC Logistics Section.

K. Federal Disaster Assistance

FEMA manages the National Urban Search and Rescue (US&R) Response System which is a network of 28 highly trained and well equipped Type 1 US&R Task Forces. FEMA can only respond to assist a local or state government after the Governor asks for assistance from the Federal government, certifying the incident is beyond local and state capability, and the President issues a disaster or emergency declaration. WATF 1 US&R Task Force participants are considered state assets first and foremost and cannot be activated under the Stafford Act for disasters within the state. (See Section IX)

Additional FEMA US&R assets can only be requested after the state certifies that it lacks the ability to perform search and rescue work itself with its existing resources. FEMA resources can be deployed to federal facilities in the vicinity of an incident to be ready to respond (such as pre-positioning in anticipation of the landfall of a hurricane), but they cannot engage until the President makes the declaration.

1. FEMA Response: When requested, FEMA will deploy the three closest task forces to an incident within six hours of the initial request from a State after a presidential declaration. Additional teams may be deployed as necessary. FEMA US&R task forces are to support state and local efforts to locate victims and manage structural collapse rescue operations. They do not take over an incident, but work under the direction of the local incident commander.

Each task force consists of two 31-person teams, four canines, and a comprehensive equipment cache. US&R task force members work in four areas of specialization: search, to find victims trapped after a disaster; rescue, which includes safely digging victims out of tons of collapsed concrete and metal; technical, made up of structural specialists who make rescues safe for the rescuers; and medical, which cares for the victims before and after a rescue.

These teams, comprised of firefighters, engineers, medical professionals, canine/handler teams and emergency managers with special training in urban search-and-rescue environments, serve as a national resource for disaster response. The task force is really a partnership between state and local fire departments, law enforcement agencies, federal and local governmental agencies and private companies. A task force is totally self-sufficient for the first 72 hours of a deployment.

2. Local Procedures for Requesting a Federal US&R Task Force: In order to request a Federal ESF-9 US&R Task force, the following information needs to be provided to the State Emergency Management Division (EMD) or the State EOC as part of the request:

- Identification of the local Incident Commander
- Location of the local Incident Command Post
- Contact information for Incident Commander or requesting agency
- Description of the mission.

3. Local Procedures for Receiving a Federal US&R Task Force: In order to receive a Federal ESF-9 Type 1 US&R Task Force, the local jurisdiction needs to prepare the following:

- Staging area/Base of operations capable of supporting the number of US&R task forces requested:
 - One Type 1 US&R task force brings 80 people, three Semi Tractor Trailers (52'), two buses, four support vehicles.
 - Each task force needs an area approximately 40,000 square feet (200 ft x 200 ft) in which to set up and operate.
- Be prepared to sign the Memorandum of Understanding (MOU) with the Incident Support Team (IST). See below and Attachment 4 to this Section.
- Support services such as fuel, food and water, sanitation and medical facilities need to be identified as follows:
 - Fuel after 24 hours
 - Food and water after 72 hours
 - Showers and sanitation after 72 hours
 - Gross Decontamination water
 - Advanced medical facilities for transfer of patients
 - Fatality collection teams to recover bodies extricated
 - Instructions for fatality handling
 - List of evidence collection protocols
 - Information on Points of Distribution of food and water to share with survivors
 - Information on sheltering to share with survivors
 - Local expertise in ordering local technical resources
 - Local cranes, heavy equipment and operators
 - Local security support

4. Federal Memorandum of Understanding (MOU)

As written in the Federal ESF#9 policies and procedures, the US&R Incident Support Team (IST) will cooperatively develop and submit for signature to the local Incident Commander a written Memorandum of Understanding (MOU). This document is required to assure that there is a complete understanding by all parties of the scope, nature and requirements of the assignment, and will include at minimum the following points:

- Duration of the mission
- Operational priorities, strategic goals, tactical objectives, and expected tasks
- Reporting process between the local agency and ESF-9 Leader
- Parties involved in the agreement
- Logistical support to be provided by the ESF-9 and the local agency
- Process for updating the agreement
- Specifics of who signs for each party
- Information flow
- Briefing and meeting schedule and who attends
- Method of contact for all parties

For additional information, please reference to sample Memorandum of Understanding (MOU) in Attachment 4 to this Section.

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Attachment 1 - Local SCR Resources by HS Region

Table II – 1: SCR Resources by Homeland Security Region

HS Region 1 –Whatcom, Skagit, Island, San Juan and Snohomish Counties				
County	Team/ Department	Resource Type 1 = Highest capability. See Appendix A	Point of Contact	Phone
Skagit	Sedro-Woolley FD	One (1) Type 4 Squad. Responders would be limited to one operational period without reimbursement and outside support. They will need support with rehab, food, water, berthing, etc. after 24 hours. At the time of mobilization, the Mayor has to approve the response to leave the jurisdiction. Resources are willing to respond under the State Fire Resources Mobilization Plan.	Skagit 911	360-428-3211
Skagit	Mount Vernon FD	One (1) Type 4 Squad. Responders would be limited to one operational period without reimbursement and outside support. They will need support with rehab, food, water, berthing, etc. after 24 hours. Resources are willing to respond under the State Fire Resources Mobilization Plan.	Skagit 911	360-428-3211
Skagit	Anacortes FD	One (1) Type 4 Squad. Responders would be limited to one operational period without reimbursement and outside support. They will need support with rehab, food, water, berthing, etc. after 24 hours. Resources are willing to respond under the State Fire Resources Mobilization Plan.	Skagit 911	360-428-3211
Snohomish	Snohomish County Technical Rescue Team (SCTRT)	One (1) Type 2 Task Force, or One (1) Type 3 Task Force, or One (1) Type 1 Squad, or Four (4) Type 2 Squads, or Four (4) Type 3 Squads, or Four (4) Type 4 Squads Resources are willing to respond under the State Fire Resources Mobilization Plan.	SNOPAC SNOCOMM	425-407-3930 425-774-3538
HS Region 2 - Clallam, Jefferson, & Kitsap Counties				

County	Team/ Department	Resource Type 1 = Highest capability. See Appendix A	Point of Contact	Phone
Kitsap	Bainbridge Island FD, Poulsbo FD, North Kitsap Fire & Rescue, Central Kitsap Fire & Rescue, Bremerton FD, South Kitsap Fire & Rescue, & Navy Region North West-Bangor	One (1) Type 2 Task Force Apparatus capabilities include BIFD – TR21, which carries equipment for confined space rescue, US&R, trench and rope rescue, NRNW – R61, which is a pickup style truck with a large box that carries confined space and rope rescue gear, and CKFR - R51, which carries rope and US&R equipment. Resources are willing to respond under the State Fire Resources Mobilization Plan.	Kitsap CENCOM	360-307-5800

HS Region 3 – Grays Harbor, Mason, Thurston and Pacific Counties

County	Team/ Department	Resource Type 1 = Highest capability. See Appendix A	Point of Contact	Phone
Thurston	McLane/Black Lake FD, Olympia FD, Lacey FD #3, West Thurston Fire Authority, Tumwater FD, & East Olympia FD #6	One (1) Type 3 Task Force, or Five (5) Type 3 Squads, or Five (5) Type 4 Squads The Thurston County Special Operations Rescue Team (SORT) is currently a “modified” Type 3 Structural Collapse team. The term modified is used in that they maintain some requirements for a Type 2 except: Level B Plus HazMat protection and extensive hoisting slings and shackles. Responders limited to one operational period without reimbursement or support. The SORT may also respond with a Type 3 Incident Management Team (IMT) Resources are willing to respond under the State Fire Resources Mobilization Plan.	Thurston CAPCOM	360-704-2745

HS Region 4 – Wahkiakum, Cowlitz, Clark and Skamania Counties				
County	Team/ Department	Resource Type 1 = Highest capability. See Appendix A	Point of Contact	Phone
Clark	City of Vancouver FD Clark Co. FD #6	Two (2) Type 1 Squads, or Three (3) Type 2 Squads, or Four (4) Type 3 Squads, or Four (4) Type 4 Squads, or The team consists of 35 Technicians, Team Leaders and Incident Management Staff. Not included in the manpower count are the HazMat Technicians provided by our Regional HazMat Team. In addition, the team also meets the NIMS Type I Swiftwater/Flood Rescue Team capabilities. Resources are willing to respond under the State Fire Resources Mobilization Plan.	Clark County Regional Emergency Services Agency	360-576-1195
HS Region 5 – Pierce County				
County	Team/ Department	Resource Type 1 = Highest capability. See Appendix A	Point of Contact	Phone
Pierce	PCSORT	One (1) Type 2 Task Force, or Four (4) Type 2 Squads Response under the State Fire Services Resources Mobilization Plan will depend upon the situation and arrangements made with the participating agencies at the time.	FIRECOMM	Non emergency 253-587-3888 Dispatcher 253-588-5217
Pierce	Tacoma FD	One (1) Type 2 Task Force The City of Tacoma Technical Rescue Team (TRT) is an all hazard on duty only team. The team is comprised of 30 members trained to the NFPA 1670 Technician level for structural collapse rescue. Resources are NOT willing to respond under the State Fire Resources Mobilization Plan.	Tacoma Fire Dispatch	Non- Emergency 253-591-5733 253-627-0151 Emergency only (911 ring-down)
HS Region 6 - King County				

County	Team/ Department	Resource Type 1 = Highest capability. See Appendix A	Point of Contact	Phone
King	Zone 1	One (1) Type 2 Task Force, or Two (2) Type 1 squads, or Four (4) Type 2 Squads, or Six (6) Type 3 Squads King County Fire Zone One can be self-sufficient for a period of 24 hours and then they will require logistical support from the host agency. Zone One assembly time is 30 minutes. Resources are NOT willing to respond under the State Fire Resources Mobilization Plan unless the mobilization is considered an "immediate need."	NORCOM	425-556-5700
King	Zone 3	One (1) Type 2 Task Force within one hour, or Four (4) Type 4 Squads Resources are NOT willing to respond under the State Fire Resources Mobilization Plan.	VALLEYCOM	253-852-2121 On duty supervisor 253-372-1490
King	Zone 5 (Seattle)	One (1) Type 1 US&R Task Force, or Four (4) Type 2 US&R Task Forces (24 person), or Eight (8) Type 3 US&R Task Forces (12 person), or Six (6) Type 1 Squads (8 members [CBRN/double house]), or Twelve (12) Type 2 Squads (8 members [double house]) Beyond the South Puget Sound Mutual Aid Agreement timeframe (12 hours), the Seattle Fire Department will require reimbursement per our contractual agreements. Structural collapse rescue resources from the Seattle Fire Department can be self-sufficient for 24-hours, and then they will require logistical support from the requesting agency. Staff rotations may be required if deployment exceeds 72-hours. Resources are NOT willing to respond under the State Fire Resources Mobilization Plan.	Seattle Fire Alarm Center	206-386-1498

HS Region 7 – Okanogan, Chelan, Douglas, Kittitas and Grant Counties

County	Team/	Resource	Point of	Phone
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	Department	Type 1 = Highest capability. See Appendix A	Contact	
There are currently no typed Structural Collapse Rescue resources in Homeland Security Region 7				
HS Region 8 - Yakima, Klickitat, Benton, Franklin, & Walla Walla Counties				
County	Team/ Department	Resource Type 1 = Highest capability. See Appendix A	Point of Contact	Phone
Benton	Kennewick FD Pasco FD	One (1) Type 3 Task Force, or Three (3) Type 3 Squads	Benton Co. Dispatch	509-628-0333 or 509-628-2623
Franklin	Richland FD	A local Type 3 Incident Management Team (IMT) will be deployed with the Task Force Resources are willing to respond under the State Fire Resources Mobilization Plan.		
HS Region 9 - Ferry, Stevens, Lincoln, Spokane, Adams, Whitman, Columbia, & Garfield Co.				
County	Team/ Department	Resource Type 1 = Highest capability. See Appendix A	Point of Contact	Phone
Spokane	Spokane FD Spokane FD 9	One (1) Type 2 Task Force A Spokane County Type 3 Incident Management Team (IMT) will be deployed with the Task Force Resources are willing to respond under the State Fire Resources Mobilization Plan.	Spokane Combined Comm. Center	509-532-8900

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Attachment 2 - State SCR Resources

Table II - 2: State Structural Collapse Rescue Resources

Washington State Collapse Structure Resources				
Resource	Team/ Department	Resource Type 1 = Highest capability. See Appendix A	Point of Contact	Phone
WA-TF-1	PCDEM	One (1) Type 1 Task Force (WA-TF -1) WATF 1 pulls its personnel from 27 different agencies located throughout Pierce and King Counties and the City of Seattle and City of Tacoma Fire Departments. Many of these individuals are part of the King County response teams, Pierce County PSORT, and the Tacoma Fire and Seattle Fire Technical Rescue teams. Response under the State Fire Services Resources Mobilization Plan will depend upon the situation and arrangements made with the participating agencies at the time.	State EMD Duty Officer PC DEM Duty Officer	253-512-5990 or 800-258-5990 253-798-7470
National Guard CBRNE Enhanced Response Force Packages (NG CERFP)	Washington National Guard	The NG CERFP is comprised of traditional National Guard Personnel who are task organized from existing National Guard units or organizations and trained and equipped to perform the functions of Casualty Decontamination, Medical Triage, Casualty Search and Extraction and Fatalities Search and Recovery. Specifically, the NG CERFP will support casualty decontamination operations, at or near a CBRNE incident scene and provide casualty search and extraction, emergency medical treatment, triage and patient stabilization when directed. Personnel attached to the NG CERFP elements will continue to maintain the skills necessary to perform their assigned unit's primary mission. Search and Extraction Element Responsibilities: Safely conduct light (e.g. wooden structure) and medium (e.g. heavy wall) structure extraction operations in open space, confined space and/or collapsed structure(s) that may involve the release of a chemical, biological, or radiological agent. Medical Element Responsibilities: Medical support to JTF WANGCERFP team; Site setup; Triage, medical support/care to patients as needed; Emergency Medical Treatment; Staging for Civilian Evacuation; Medical support to patient decontamination; and Medical support to search and extraction.	State EMD Duty Officer	253-512-5990 or 800-258-5990

Washington State Collapse Structure Resources (con't)

Resource	Team/ Department	Resource Type 1 = Highest capability. See Appendix A	Point of Contact	Phone
		Decontamination Element Responsibilities: Perform patient decontamination operations, Site setup, and Zone monitoring/detection equipment operation. Fatalities Search and Recovery Team Provide specialized and readily available operational support to local, state and federal agencies while assisting in the prompt recovery of fatalities during and after a disaster or mass casualty incident. Trained to maintain the dignity of the deceased and their loved ones.		

Attachment 3 - Fire Services Resources Mobilization Plan

A. General Requirements

If established mutual aid agreements and processes are not adequate to meet a jurisdiction's need for assistance with structural collapse rescue, the Washington State Fire Services Resources Mobilization Plan may be used to secure needed assistance. When a local fire jurisdiction expends or will expend all available local resources, mutual aid resources or if a special resource is needed (trench rescue unit) and is not available through existing mutual aid agreements (this may be an extenuating circumstance where mutual aid is exhausted without having a response and would be reviewed on a case by case basis), the recipient agency must agree to comply with provisions of the Washington State Fire Services Resources Mobilization Plan.

1. Conditions for Requesting Mobilization

When attempting to manage structural collapse rescue situations, disasters or other incidents that jeopardize the ability to provide for the protection of life and property, the Washington State Fire Services Resources Mobilization Plan may be implemented provided that:

- The disaster is within the boundaries of the jurisdiction requesting assistance and is imminently threatening the jurisdiction or citizens within.
- Local and mutual aid resources have been exhausted.
- Trigger points outlined in the Plan are established and reached.

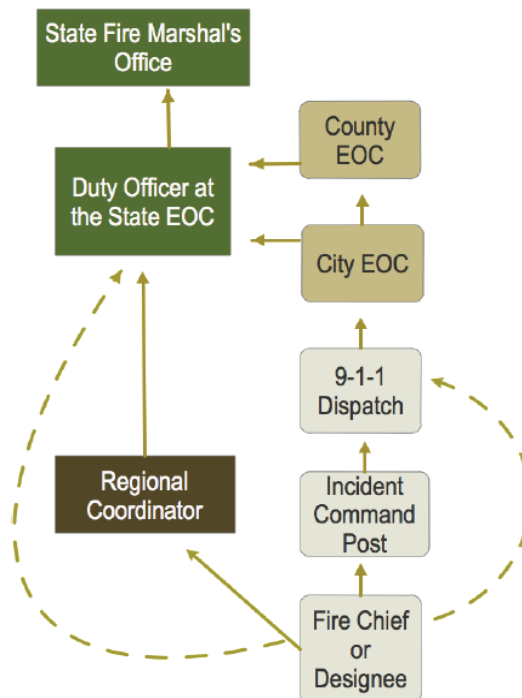


Figure II - 2: Process for requesting Fire Mobilization from the State

2. Procedures

If the conditions listed in Section A.1 above are met, a request for assistance through the Washington State Fire Services Resources Mobilization Plan can be made by the Chief of the local fire jurisdiction needing mobilization (it should not be made by the Emergency Management Department). The request needs to go to the State Emergency Management Division Duty Officer:

- ☐ Fax: (253) 512-7203
- ☐ E-mail: Dutyofficer@emd.wa.gov
- ☐ Phone (1-800-258-5990)

If the requesting jurisdiction faxes or e-mails the request, they should call the Duty Officer to verify receipt of the said request.

In summary, the local Fire Chief or his designee makes the decision to call for Fire Mobilization, contacts the Regional (Zone) Coordinator for assistance, or calls directly to the Duty Officer at the State Emergency Management Division (EMD) or the State EOC if activated.

Once a request for assistance is approved by the State EOC, the requesting jurisdiction receives a phone call or other communication to verify the initial order of resources that are identified on the Mobilization Request form and to review the Incident Complexity Analysis.

The phone call or communication is to answer the following questions:

Does the requesting jurisdiction have the resources to support the incoming Mobilization resources logistically? (Parking/Staging, Base Camp, Food/Water/Sanitation, etc.)

Does the requesting jurisdiction have the overhead capacity to manage the incident, or will an Incident Management Team need to be ordered?

Have routes been identified to reach the incident scene?

Has a plan be developed to hand off rescued victims to local medical care?

Are there transportation needs to get victims to medical care?

Are there special medical needs? (Crush injury, burns/)

Are there special populations' needs? (Non-English speaking, children, the elderly?)

For those jurisdictions wanting Mobilization resources, the Chief or Agency Administrator may need to sign a Delegation of Authority (DOA). There is a great deal of information the incoming resources and Incident Management Teams need. The best way to convey all of this information to the Incident Management Team and incoming Mobilization Resources is to record this in the (DOA). Rather than having several different DOA, those jurisdictions that share a common risk with collapsed structure rescue should start developing a generic DOA, and then add jurisdiction specific information attachments.

Fire Service jurisdictions facing collapsed structure rescue risks should develop a plan that identifies trigger points for local response, mutual aid and State Mobilization. Once this collapse structure rescue plan is activated, the first requesting Fire Chief is requesting for all of the other agencies in that county. This way as more incidents are identified, other requests will not be required.

3. Normal Fire Service Duties

The following are normal fire service duties for day-to-day operations:

- Response to accidents and rescue incidents
- Emergency Medical Service (EMS)
- Fire fighting
- Normal 911 calls
- Assistance in evacuation of facilities

The following are duties that may be performed under the Washington State Fire Services Resources Mobilization Plan:

- Structural Collapse and Technical Rescue
- Water Rescue
- Fire fighting in the operational area
- Assistance in evacuation – EMS
- Medical Triage
- Decontamination

Additional fire service duties not covered under the Washington State Fire Services Resources Mobilization Plan include the following:

- Manning of checkpoints or traffic control
- Filling of sandbags
- Wilderness Search and Rescue
- Roadway clearance that's necessary to get to the site

4. Washington State Fire Services Resources Mobilization Plan Reimbursement Policies

Equipment - Equipment reimbursement is paid according to the Washington Fire Chiefs Association Rate Schedule. (See Appendix B)

Personnel - Firefighters are compensated by their home agency. They are paid for all regularly scheduled hours and overtime pay for hours worked outside of the regularly scheduled hours.

The fire agency will be reimbursed the overtime premium differential for positions that require replacement staff (backfill) for those personnel assigned to mobilization. Only regularly scheduled hours are eligible for backfill consideration.

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Attachment 4 - FEMA/Local Memorandum of Understanding (MOU)

The information below is an example of the Memorandum of Understanding (MOU) executed between the local officials and the FEMA Incident Support Team (IST) when FEMA US&R Task Forces are assigned to assist local structural collapse rescue response.

FEDERAL EMERGENCY MANAGEMENT AGENCY
Emergency Support Function-9 – Incident Support Team
National Urban Search and Rescue Response System
IST Memorandum of Understanding

The Incident Support Team (IST) will cooperatively develop and submit for signature to the local Incident Commander a written Memorandum of Understanding (MOU). This document is required to assure that there is a complete understanding by all parties of the scope, nature and requirements of the assignment, and will include at minimum the following points:

- Duration of the mission
- Operational priorities, strategic goals, tactical objectives, and expected tasks
- Reporting process between the local agency and ESF-9 Leader
- Parties involved in the agreement
- Logistical support to be provided by the ESF-9 and the local agency
- Process for updating the agreement
- Specifics of who signs for each party
- Information flow
- Briefing and meeting schedule and who attends
- Method of contact for all parties

Example FEMA/Local MOU for Memorandum of Understanding (MOU)

FEDERAL EMERGENCY MANAGEMENT AGENCY
Emergency Support Function–9 – Incident Support Team
National Urban Search and Rescue Response System

MEMORANDUM OF UNDERSTANDING (Example)

The purpose of this Memorandum of Understanding is to outline the mission and objectives for the Federal Emergency Management Agency's Urban Search and Rescue (FEMA-ESF-9) resources assigned to the incident located _____ *(use exact address)*.

FEMA ESF-9 MISSION

Provision of technical expertise to state and local governments in the acquisition and utilization of FEMA ESF-9 resources through advice, incident command assistance, management and coordination of FEMA ESF-9 resources, and logistical support. This may include assistance with the location, medical stabilization, and extrication of victims of structural collapse.

OBJECTIVES

1. Locate and rescue victims that survived the (Specific address or location) incident in coordination with the responsible local officials while providing for the safety of assigned rescue personnel.
2. Continually assess the probability of rescue success against the risks to rescue personnel in formulating and conducting operational activities.
3. Follow established local protocols and practices concerning the rescue and recovery of victims.
4. In coordination with local officials, develop written IST Action Plans (AP) for each operational period. The APs will support the priorities established by the local jurisdiction and contain the strategic goals for assigned ESF-9 resources to accomplish during each operational period.
5. Provide copies of APs and Situation Reports to (responsible local/state official).
6. Coordinate all media relations with the FEMA PAO and the (responsible local/state official).
7. In coordination with the local Incident Commander, integrate local resources and FEMA ESF-9 personnel into the rescue effort in a safe manner.

FEDERAL EMERGENCY MANAGEMENT AGENCY
Emergency Support Function–9 - Incident Support Team
National Urban Search and Rescue Response System

Memorandum of Understanding Page 2

1. FEMA ESF-9 resources will follow established FEMA procedure in providing medical care to rescued persons. Injured victims will be transferred for definitive care in the manner prescribed by the local authority. Similarly, procedures for transferring deceased victims established by the Medical Examiner's Office (or appropriate local authority) will be followed.
2. Operational briefings will be held at (hour and location) and attended by (name and organization represented).
3. Planning meetings will be held at (hour and location) and attended by (name and organization represented).
4. This agreement may be updated or changed by mutual consent and approval of the signatories to this MOU.

Throughout this mission, the (responsible local jurisdiction) shall retain command and control of the incident. The FEMA ESF-9 resources assigned to the incident will be managed by the Incident Support Team (IST) who will coordinate all operations with (name or designation of the responsible local/state official).

The duration of the mission will be determined by the (responsible local/state official) in conjunction with the FEMA ESF-9 Leader.

Signed this _____ day of _____, _____ year _____.

(Local, Area, Region, State Official)

(FEMA ESF-9 Leader)

RELEASE AND RETURN TO HOME UNIT

It is mutually agreed by the local incident jurisdiction and the ESF-9 Leader that the FEMA ESF-9 resources assigned to the incident have accomplished the stated mission and objectives and have been approved for release to their home unit effective this _____ day of _____, @ _____ hours.

(Local, Area, Region, State Official)

(FEMA ESF-9 Leader)

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III. Organization and Responsibilities

A. General Information

This section outlines the general organizational structure for structural collapse rescue operations and responsibilities of agencies involved. Local command, control and coordination or disaster response and recovery are accomplished through the local incident command and unified commands (See Section IV – Direction and Control) supported by their respective local Emergency Operations Centers (EOCs) and/or Emergency Coordination Centers (ECCs).

Law enforcement agencies generally provide maintenance of law and order, protection of life and property, maintenance of the security perimeter, traffic control and evacuation assistance. Under Washington State Law (RCW 38.52.010), search and rescue is defined as “...the acts of searching for, rescuing, or recovering by means of ground, marine, or air activity any person who becomes lost, injured, or is killed while outdoors or as a result of a natural, technological, or human caused disaster....”

State law further provides: “*The chief law enforcement officer of each political subdivision shall be responsible for local search and rescue activities. Operation of search and rescue activities shall be in accordance with state and local operations plans adopted by the elected governing body of each local political subdivision. These state and local plans must specify the use of the incident command system for multiagency/multi-jurisdiction search and rescue operations...*” (RCW 38.52.400, emphasis added).

Although the law designates law enforcement as the responsible agency, local operations plans as adopted by the governing body of a county, city or town may assign the lead for structural collapse rescue to another response agency, such as the fire service. Local governments have authority to develop a structure that works for them that is consistent with state law requirements. One generic model is presented in Figure III - 1: Sample Local Emergency Organization.

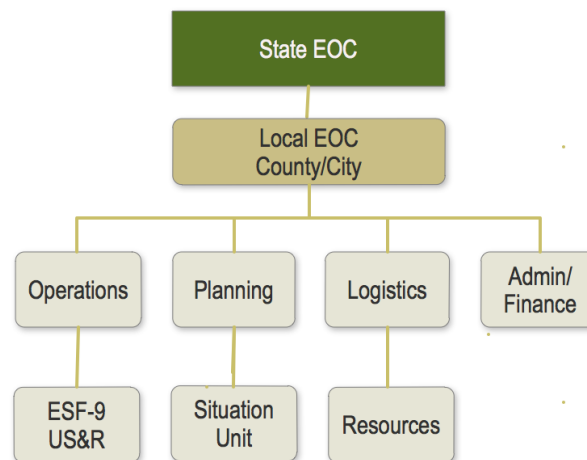


Figure III – 1: Sample Local Emergency Organization

The make-up of the local jurisdictional organization is dependent upon the structure of the local Emergency Management organization. It could be a single jurisdiction, multiple jurisdictions that work together on a contract for services basis, or multiple jurisdictions that have formed a joint organization as established under the authority of State Statute (Chapter 38.52 RCW).

In some cases, especially in larger jurisdictions, overall coordination and policy development occur in the EOC or ECC itself, and actual command and control of field activities is accomplished on scene under the Incident Command System (ICS) Unified Command Concept.

Consistent with the National Response Framework and the Washington State Comprehensive Emergency Management Plan (CEMP), local structural collapse rescue operations fall under Emergency Support Function (ESF) 9. This is normally found in the Operations Section of a local EOC/ECC if the local concept of operations is structured in an ICS format. If not, structural collapse operations fall under the Agency Having Jurisdiction (AHJ), usually fire, but sometimes law enforcement.

B. Local On-Scene Organization

On scene response organizations follow the principles of the Incident Command System (ICS). The AHJ will establish incident command and work in a Unified Command structure to provide incident management. In structural collapse rescue situations, the Operations Section is managed by a Section Chief qualified in Technical Rescue. The Safety Officer is also qualified in Technical Rescue operations.

C. State Coordination Organization

The State EOC supports state agency, local jurisdiction and tribal nation operations in response to emergency incidents. When requested, representatives from state agencies respond to the EOC to coordinate their respective agency's response. The tactical command and control of many state agency operations and resources are done through departmental operations centers at their headquarters or from their respective regions, districts or areas. Depending upon the situation, liaison officers from local government or other authorities may report to the State EOC.

The lead responsibility for directing structural collapse rescue operations rests with local government. The two agencies with primary responsibilities in supporting structural collapse rescue operations at the state level are the Emergency Management Division (EMD) and the Washington State Patrol (WSP) through their Fire Mobilization responsibilities. These agencies provide support to and coordination of outside resources beyond mutual aid requests that are requested by local incident commanders.

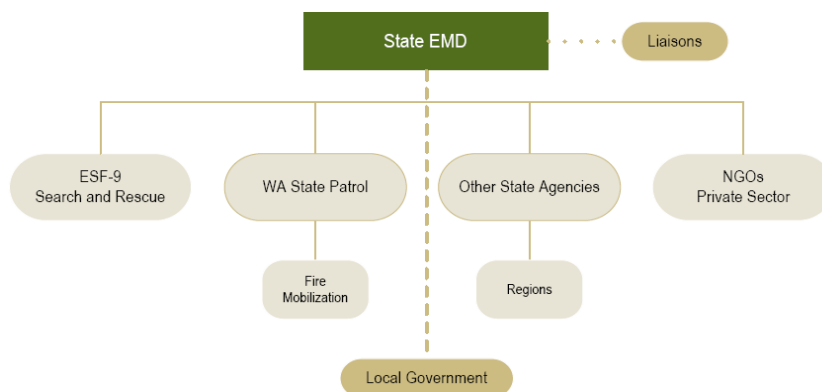


Figure III – 2: General Washington State Emergency Organization

D. Federal Coordination Organization

When a catastrophe occurs, and a Presidential Declaration of Emergency or Disaster occurs or is imminent, the federal government activates the National Response Coordination Center (NRCC) and respective Regional Response Coordination Centers (RRCC) in accordance with the National Response Framework and specific Federal agency plans. Emergency Response Teams (ERT) and a National Incident Management Assistance Team (IMAT) will be dispatched to the affected state. These teams follow the structures outlined in the National Incident Management System (NIMS) and set up coordinated operations with the state. Federal agencies with ESF-9 (Search and Rescue) responsibilities, such as FEMA, the US Coast Guard and the Department of Defense, respond to requests from the state to support rescue operations. Note: National Urban Search & Rescue Assets may be prepositioned for anticipated incidents such as hurricanes.

The Federal Government establishes a Joint Field Office (JFO) to coordinate federal/state recovery operations. The JFO remains open as long as the JFO organization is needed to support search and rescue operations. The general organization of the JFO and ESF-9 is outlined in Figure III - 3.

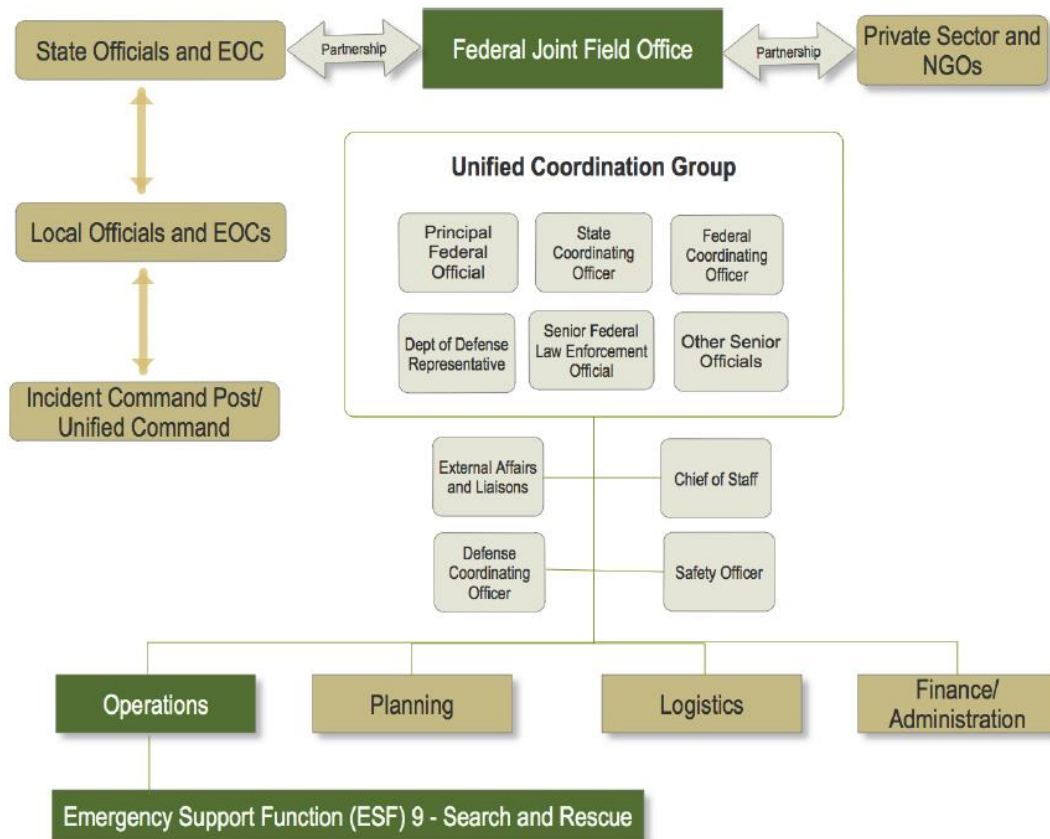


Figure III – 3: Joint Field Office (JFO) Organization (From the National Response Framework [NRF])

E. Local Agency Responsibilities

1. Executive Heads of Local Jurisdictions

- Ensure that local emergency plans take into account an appropriate level of structural collapse rescue capabilities and issues.
- Establish strong working relationships with other jurisdictional leaders and with core private sector and non-governmental organization (NGO) leaders.
- Lead and encourage community and private sector leaders to focus on structural collapse rescue planning.
- Provide direction and control during disaster response and recovery operations.
- Execute the “Delegation of Authority” letter required under the Washington State Fire Resources Mobilization Plan as appropriate to incident commanders.

2. Emergency Management Agencies

- Coordinate preparedness, response, recovery and mitigation. Structural collapse rescue (ESF-9) planning activities including incident action, current and future operations planning.
- Provide coordination for response and recovery activities.
- Share information among public and private sector entities concerning structural collapse rescue capabilities.
- Coordinate the assessment of and response to structural collapse rescue incidents.

3. Law Enforcement Agencies

- Provide criminal investigation.
- Perform death investigation.
- Provide or participate on Incident Management Teams (IMTs) to support structural collapse rescue operations.
- Provide situational awareness and assessments of structural collapse rescue incidents.
- Provide security.
- Provide traffic and crowd control.
- Provide control of access to restricted areas.

4. Fire Departments and Districts

- Respond to structural collapse rescue situations.
- Execute the “Delegation of Authority” letter under the State Fire Resources Mobilization Plan when appropriate.
- Provide or participate on Incident Management Teams (IMTs) to support structural collapse rescue operations.
- Provide situational awareness and assessments for structural collapse rescue needs.
- Disseminate information concerning structural collapse rescue operations.

- Direct and control on-scene structural collapse rescue operations.

5. Emergency Medical Services Agencies

- Provide situational awareness and assessments for structural collapse rescue needs.
- Disseminate information concerning structural collapse rescue operations.
- Provide medical care for structural collapse rescue victims.
- Transport victims to hospitals or alternate treatment facilities.

6. Public Works Agencies and Utilities

- Provide heavy equipment and operators to support rescue and recovery operations.
- Provide emergency debris clearance to open roads and other transportation corridors.
- Provide emergency stabilization or demolition of damaged structures.
- Maintain lists of and contracts with qualified private contractors.
- Provide structural inspection of damaged buildings and infrastructure.
- Compile and evaluate damage assessments from State and local agencies.
- Provide physical assets such as barricades, road signs and pavement markings.
- Turn off and reconnecting utility services to damaged structures.

7. Local Building Departments

- Maintain records of building design, blueprints, ownership and management contacts.

8. Hospitals

- Provide treatment for structural collapse rescue victims.
- Initiate and conduct patient tracking.

9. Other Supporting Agencies and Organizations

Supporting Agencies include various departments and agencies, including the private sector, volunteer organizations and nongovernmental organizations (NGOs). They may provide additional resources, information and situational awareness, communications, damage assessments and other resources and information to support structural collapse rescue efforts. In general, they may support emergency preparedness and response with the following:

- Heavy equipment, construction and demolition resources.
- Special resources such as search canines.
- Planning and communications capabilities.
- Private-sector coordination.
- Public affairs and tribal relations.

F. State Agencies

State agency structural collapse rescue related responsibilities are covered in detail in the State of Washington Comprehensive Emergency Management Plan and specific agency plans and procedures. A brief summary of general responsibilities follows.

1. Washington State Emergency Management Division

- Provide coordination of response activities from the State Emergency Operations Center.
- Maintain and operate “Comprehensive Emergency Management Network (CEMNET), a dedicated two-way Very High Frequency (VHF) low-band radio system providing direction and control capability for state and local jurisdictions during an emergency or disaster.
- Operate the “Emergency Alert System (EAS) – enabling authorities to disseminate emergency information to the public via the Commercial Broadcast System.
- Provide liability coverage and indemnification to registered emergency workers of local jurisdictions operating in a good faith attempt to protect lives, property, and the environment in accordance with RCW 38.52.180.
- Coordinate local requests for assistance beyond mutual aid.
- Coordinate requests for inter-state and federal structural collapse rescue resources.
- Coordinate deployment of out of state and federal structural collapse rescue resources.
- Prioritize requests for SAR Resources from the Rescue Coordination Center (RCC) at the State EOC, as necessary.
- Facilitate logistics supply efforts.

2. Washington State Patrol

- Support local requests for structural collapse rescue assistance through the State Fire Resources Mobilization Plan.
- Task Incident Management Teams (IMT) as appropriate to support rescue operations.
- Work with State EMD from the Rescue Coordination Center (RCC) at the State EOC to prioritize requested structural collapse rescue resources, as necessary.
- Provide traffic control and law enforcement on the State transportation network.
- Conduct aerial reconnaissance and photographic missions.

3. Washington National Guard

- Provide limited air and land transportation of personnel and equipment.
- Assist in establishing roadblocks, and directing traffic.
- Provide medium search and rescue, medical, decontamination, and recovery of remains through CERFP capabilities.

G. Federal Agencies

Federal collapse structure rescue capability and operations are covered in the Emergency Support Function #9 (ESF-9) of the National Response Framework. This capability deploys components of the Federal Search and Rescue (US&R) Response System to provide specialized lifesaving assistance to State, tribal and local governments when activated by a presidential disaster declaration. FEMA is the ESF-9 Coordinating Agency and the Primary Agency for structure collapse search and rescue.

Federal US&R response provides assistance and augments local and state collapsed structure US&R capabilities. These agencies may provide direct support to the state or, in some cases, directly to local jurisdictions. Federal structural collapse rescue responsibilities are covered in detail in the ESF-9 Annex to the National Response Framework, the National Search and Rescue Plan, the US National Search and Rescue Supplement and other supporting Annexes and specific agency plans and procedures. A brief summary of general responsibilities follows.

1. Federal Emergency Management Agency

- Maintain the National US&R Response System made up of US&R Task Forces, Incident Support Teams and technical specialists.
- Maintain appropriate policies and procedures outlined in the US&R Operations System Description.
- Respond to support state and local US&R efforts.
- Deploy Incident Support Teams (ISTs) to the affected area(s).
- Provide logistical support to US&R Task Forces in the field.
- Provide administrative support to US&R Task Force Medical Teams.
- Provide patient evacuation and continuing care when state and local medical resources are overwhelmed.
- Provide reimbursement for eligible costs associated with response to federally declared disasters.

2. Department of Health and Human Services

- Provide medical support through the National Disaster Medical System (NDMS) and the deployment of Disaster Medical Assistance Teams (DMAT).

3. Department of Defense

- Provide military support through Defense Support to Civil Authority (DSCA).

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IV. Direction and Control

A. General Information

This section provides an overview of who is in charge of on scene structural collapse rescue operations, and options the law allows for local authorities to establish their own command and control policies and procedures. It will describe how local, regional (multi-organizational) and state coordination is accomplished, and how additional resources and support are requested. This section also describes how local and state priorities are currently established when response needs are greater than available resources during the time before outside resources and federal response resources can arrive and assist.

On-scene direction and control in the Puget Sound Region uses the principles of the Incident Command System (ICS) as defined by the National Incident Management System (NIMS). The Incident Commander on scene is responsible for the direction and control at the site of structural collapse rescue operations.

Due to the complexity of structural collapse rescue incidents and the potential number of authorities involved, the ICS principles of Unified Command are also used. In a major catastrophe, there may be many rescue sites in an area requiring more complex ICS organizations and coordination.

Direction and control involves the management of resources, analyzing information and making decisions. Under the principles of ICS, the Incident Commander (IC) is responsible for the on-scene management of the incident, for tactical planning and execution, for determining whether outside assistance is needed and for relaying requests for internal resources or outside assistance through the respective dispatch center or Emergency Operations Center (EOC).

The Incident Commander (IC) must have the capability and authority to:

1. Assume command.
2. Assess the situation.
3. Implement the emergency management plan.
4. Determine response strategies.
5. Activate resources.
6. Order evacuation.
7. Oversee all incident response activities.
8. Declare that the incident is "over".

The Emergency Operations Center (EOC) or Emergency Coordination Center (ECC) serves as a centralized management center for emergency operations. It is responsible for supporting the Incident Commander (IC) by the coordination of resources, providing information to the public through coordinating with the media, the community, outside response agencies and regulatory agencies. Decisions at the EOC are made based upon information from the field.

B. Initial ICS Response Organization

Under Washington State Law, local law enforcement is responsible for search and rescue operations unless this has been delegated to another Authority Having Jurisdiction (AHJ), such as the Fire Department or Fire District. These responsibilities and relationships are outlined in local Comprehensive Emergency Management Plans and are often found in the sections for Emergency Support Function (ESF) 9 – Search and Rescue.

The first arriving public safety officer assumes the position of Incident Commander and manages initial response resources, including all command and general staff functions and responsibilities. The flexibility of the Incident Command System provides numerous ways that structural collapse rescue resources can be organized and managed. Decisions by the Incident Commander (IC) may be based on the resources that are available, existing emergency conditions and local or community incident objectives.

If the potential for escalation is low, then specific ICS functional positions may not need to be established. If the incident requires an upgraded response, the Incident Commander establishes ICS positions depending upon the functional needs and priorities. On-scene priorities may include, but not be limited to, the following:

1. Situation Assessment
2. Develop incident objectives, action plans and priorities
3. Ensure safety issues are addressed
4. Request additional resources
5. Make contact with the Emergency Operations Center to provide incident information
6. Develop and transmit resource needs

A recommended checklist of initial call-out of structural collapse rescue resources and initial on scene actions is found in Appendix D to this Annex.

C. Further Development of the Response Organization

As more law enforcement, fire service and medical resources arrive, the Incident Commander (IC) may form a Unified Command with the senior ranking officials from other public safety services. A Safety Officer should also be established to assure personnel safety. If there is a large media presence, or if there is likely to be significant media interest and inquiry, a Public Information Officer may be assigned.

An Operations Section is established to manage the tactical assignments and responsibilities. A Staging Area is established to check in arriving resources. Further geographic and functional organizations, such as for rescue or debris clearance, may be established depending upon the complexity of the incident.

If there are a number of assisting agencies, a Liaison Officer may be needed in the Command Staff to coordinate assisting agencies' participation. A Planning and Logistics Section may be added, with consideration given to assigning a Rescue Technical Specialist who understands the unique complexities and resource requirements at US&R incidents to assist the Planning Section.

If there is a large volume of diverse resources needed at the incident, the Operations Section may further develop and establish Groups and Divisions to better coordinate these assets. The Incident

Commander needs to consider assigning a Finance/Administration Section to track costs and time records.

D. Incident Action Plan (IAP)

An operational period is a period of time scheduled for the execution of a given set of operational actions that are specified by the Incident Commander. Most day-to-day emergency response operations for fire and law enforcement services do not last more than one operational period. As a result, written Incident Action Plans are rarely developed in urban settings.

The complexities and support needs of a major structural collapse incident or disaster structural collapse rescue operations require that written Incident Action Plans be developed following ICS planning principles. If rescue operations continue for more than one operational period, the Incident Commander should establish a Planning Section with a Plans Section Chief as soon as possible to begin the development of a written Incident Action Plan (IAP).

E. Multiple Incidents – Disaster Response

A large disaster may cause numerous structural collapse rescue situations in a community. If this is the case, there initially may not be enough trained and qualified resources to carry out rescue operations. Priorities will have to be set to do the most good for the most people until properly trained and equipped rescue resources arrive. This could involve the following actions:

1. Divide the community into manageable units.
2. Assign spontaneous volunteers to trained firefighters and rescue specialists.
3. Provide responders with basic personal protective equipment (hard hat, eye protection, gloves, etc.).
4. Provide assistance to surface victims and those that can be rescued with a reasonable level of safety to the rescuers.

This effort might also involve locating victims through audible search and interviews with survivors as to who is missing and marking the locations accordingly, which can speed the time of rescue when appropriate rescue capability arrives.

F. Resource Prioritization

Prioritization of available structural collapse rescue resources follows the general principles of doing the most good for the most people. Agencies Having Jurisdiction (AHJ) and local communities are in charge of their own resources. The Incident Commander is in charge of resources that have been assigned to that incident and are checked in at local incident staging areas. The local EOC can assist local incident commanders with resource prioritization if there are multiple sites in a jurisdiction that need additional resources. The local EOC may assist local incident commanders with prioritization of local resources. The State EOC may assist local governments in prioritizing outside resources if there are multiple local jurisdictions that need additional resources.

G. Outside Resources

A disaster may cause the need for structural collapse rescue resources from outside the jurisdiction. These may include resources requested through mutual aid from neighboring jurisdictions or from other states through state to state mutual aid or national structural collapse rescue capabilities through FEMA.

Regardless from where additional outside resources come, the local Agency Having Jurisdiction (AHJ) maintains their authority for direction and control of rescue operations.

A Delegation of Authority (DOA) Memorandum of Understanding may be executed with outside resources to assure the following:

1. There is understanding by all parties of the scope, nature and requirements of the assignments given to these outside resources, including, but not limited to operational priorities, strategic goals, tactical objectives, and expected tasks.
2. Expected duration of the assignments.
3. Reporting processes between the local AHJ and responding resources.
4. Needed logistical support.
5. Required documentation.
6. Scheduled meetings.

V. Information Collection and Dissemination

A. General Information

The purpose of this section is to describe how the information concerning capabilities and resources is disseminated to appropriate response and coordinating entities. This section also describes how information developed for an on-scene incident action plan concerning current and projected operational status is relayed to appropriate authorities.

B. Information Collection

Information collection is conducted in accordance with local jurisdiction protocols if at all possible. This involves the local incident commander providing routine/regular updates to the local EOC in the form required by local plans. Due to the unique circumstances (and infrequent nature) of a structural collapse incident, additional information is gathered, especially if federal and/or state resources are supporting the operation. This information is used for both situational awareness and for developing media information releases to the public.

Situation Reports (SitReps) are developed every Operational period and forwarded to the local EOC (and state) due to the information demands accompanying federal disaster operations. When Federal teams are involved, an Incident Support Team (IST) accompanies the deployment and facilitates the development of ongoing SitReps and other reports.

All public communications issues are coordinated through incident command. A public information officer (PIO) is identified for each major incident, reporting to incident command. The PIO secures approval from incident command before releasing information to the public. All unit command staff is informed as to how to contact the PIO. No personnel responding to an incident issues or provides information to the public without prior clearance from the PIO.

C. Information Dissemination to the Public

Incident information is gathered and reported to incident command, where a decision is made regarding the appropriateness of the release of information. The Incident Commander is the primary official responsible for coordinating public information releases for individual/isolated incidents. In a larger incident involving multiple incidents, public information activities are coordinated from the local EOC and/or Joint Information Center (JIC). It is anticipated in these conditions that Federal and state PIO's will also be involved in accordance with Federal and State plans and procedures.

D. State Information Collection and Dissemination

Through the State EOC and per ESF #5, Washington EMD's responsibilities include the collection, analysis, and sharing of information about potential or actual emergencies or disasters that could affect the structural collapse rescue incident. Their additional responsibilities include:

1. Collects and displays the information provided to the EOC staff.
2. Analyzes the information provided and shares with the appropriate EOC representatives.
3. Analyzes the information provided and develops and recommend action strategies.
4. Coordinates and prepares periodic SitReps.
5. Requests special information from local jurisdictions, volunteer organizations, and field representatives as necessary.

6. Prepares the Governor's Proclamation of Emergency or any Federal Proclamation and any amendments as necessary.

E. Information Management Templates

Recommendations for three sample templates are provided in Appendix E as tools for ease of reference in gathering and reporting information following a structural collapse incident. They are as follows:

1. **Template A** includes a list of basic structural collapse incident information items that should be gathered. This is a sample only and should not be deemed to cover all potentially relevant data necessary for response or public communication.
2. **Template B** is a building specific template. One Template B can be completed for each building impacted by an incident. This is a sample only and should not be deemed to cover all potentially relevant data necessary for response or public communication.
3. **Template C** is for recording incident public communications.

Templates A and B are specific to a structural collapse incident and are in addition to any general communications protocols that an agency may have in effect.

VI. Communications

General Information

This section addresses issues related to ensuring communications among and between emergency responders at a structural collapse incident, and public information efforts. It provides information on current communications capabilities and protocols for call out, tactical operations and coordination with local, regional (multi-organizational) and state response agencies and coordinating entities including interoperability and frequency discipline and management. It also provides information on crisis communication and gives direction to assist in effectively managing and communicating during a structural collapse response and recovery incident.

Within the Puget Sound Region, a variety of public safety radio systems are in use by police, EMS and fire agencies. These systems are not fully interoperable across the region. Specialized mutual aid channels are also not consistently available or reliable.

Priority is given when deploying / requesting resources to a structural collapse incident to ensure that:

1. Deployed teams can communicate *internally*.
2. Deployed team command personnel can *communicate with incident command on scene*.

Incident communications radio frequencies utilized at an incident are determined based on the agency responsible for incident command. If incident command is assumed by state or federal agencies, standard local operations frequencies may not be utilized.

Any given local agency within the eight-county region is unlikely to have capacity to communicate over *all* radio frequencies in use by public safety and emergency responders within the entire eight-county region. That is, local incident command may be unable to communicate with responding mutual aid providers over its normal radio frequencies.

If an incident is of a magnitude requiring mutual aid response, one of the state or national emergency non-trunked channels/frequencies may be used for incident command, so that multiple responding agencies are able to communicate on scene. For a list of these channels, see Section VI Attachment 1.

Requests for Mutual Aid

Requests for mutual aid should identify the frequency/channel (but not just the channel name, since these may not be unique across the region) to be used for incident command. Agencies requesting assistance of US&R resources and personnel should be prepared to:

1. Identify the incident command frequency being used (not simply the channel name).
2. Provide portable communications radios for squad/strike team command personnel in the event these personnel are not equipped with radios using the same frequency (e.g., if responders are regularly on VHF but the incident command agency uses 800 MHz).

Mutual Aid Responders--Internal Team Communications

All responding squads or strike teams have the capacity to communicate internally—i.e., within the squad/team. In addition, at a minimum, the squad/strike team commander has the capacity for radio communications with the incident command team on whatever frequency the incident command is using.

Structural Collapse Rescue resources include in their equipment cache a sufficient number of portable communications radios to ensure *non-uniform personnel* (e.g. dog handlers, medical staff, equipment handlers that are not Fire/EMS personnel) that are members of the Task Force can appropriately communicate at the scene with other members of the Task Force.

Incident Communications

Emergency response and dispatch agencies maintain equipment caches with portable radio equipment to be utilized in the event of multiple agency response or if mutual aid responders cannot communicate on the same frequency that is being used for incident command and a patch between frequencies cannot be installed.

Per the State of Washington, ESF #9, communications with the state Emergency Operations Center (EOC) from the incident command post, the Rescue Coordination Center, and/or from the local jurisdictions EOC will be through the normal radio and telephone capabilities, augmented by back-up direction and control systems, and by resources provided by the Washington National Guard, federal military organizations, and/or FEMA, as appropriate.

On-Scene Communications

Tactical frequencies used by the fire service in structural collapse rescue response are listed by county in Section VI Attachment 1.

Interoperability Frequencies

Communications at a major incident scene with multiple responders is a recurring challenge. For this reason, there have been established national, statewide and some regional channels for common use by responders at an incident, which allow any responder with a given system radio (800 Hz, 700 MHz, VHF or UHF) to talk to others—even if that responder is not part of the agency in command of the incident.

Structural collapse incidents are likely to involve multiple mutual aid responders. A recognized interoperable channel is used for incident response. Incident command, as a first order of business, identifies and secures any necessary use authorizations for using a specified interoperable channel

There are designated “national interoperability channels” for each type of radio frequency —e.g., a set of frequencies for both calling and operating on 800 MHz, 700 MHz, VHF, and UHF. They are outlined in the National Interoperability Field Operations Guide (NIFOG). (<http://www.npstc.org/documents/NIFOG%20v1.2%204-14-2008.pdf>) The NIFOG is a reference guide that assists in the identification of Land Mobile Radio (LMR) frequencies that are often used in a disaster or other incidents where radio interoperability is required. It is based on the “Nation Interoperability Guide”(www.npstc.org).

As “national” channels, these are the same across the county. There is also a set of statewide channels (LERN, OSCCAR, MEDNET, etc.) with similar capacities. There are a few regional interoperability channels within the Puget Sound region as well.

A list of these national, state and regional channels is attached in Section VI Attachment 2 (Excerpted from 2008 Washington Statewide Communications Interoperability Plan).

Additional information about these interoperability channels and the state emergency radio communications network is attached in Section VI Attachment 3.

Every dispatch operation and public safety agency should know and have programmed the respective interoperability channels for their radio system into all their radios. These channels are not trunked or digital, so anyone with a radio operating on the general frequency (e.g., 800 MHz) can access these channels, regardless of their home agency location—within the Puget Sound Region, the state, or the country. However, use of these frequencies may require authorization.

These channels are frequency specific, that is, the 800 MHz channel cannot be heard or talked on by those using VHF systems, and vice versa. Within individual counties and across the eight-county region, multiple systems are in use: adjacent jurisdictions are utilizing different systems, and without compatible equipment, cannot communicate in an emergency.

Cross-system patches are not typically in place, but can be hardwired in during emergency incidents. Special equipment is available that can talk across all radio frequencies but it is unclear who, if anyone, in the eight-county region has acquired this equipment.

Amateur (Ham) radios can also communicate across frequencies and Ham radio operators can be used to pass messages between systems (but should not be used for incident communications between responders).

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Attachment 1 - On-Scene Communications

1. Island County

Below are listed the specific frequencies used by the Island County Fire Service for Tactical Operations, including Structural Collapse Rescue response.

Table VI – 1: Island County Communication

Name	Use	Transmit	Tone NAC	Receive	Tone NAC
<i>Fire 1</i>	<i>Dispatch</i>	<i>154.34</i>	<i>100</i>	<i>154.34</i>	<i>100</i>
<i>TAC 2</i>	<i>Tactical Command</i>	153.755	100	153.755	100
<i>TAC 3</i>	<i>Tactical Command</i>	154.175	100	154.175	100
<i>TAC 4</i>	<i>Tactical Command</i>	154.295	100	154.295	100
<i>TAC 5</i>	<i>Tactical Command</i>	154.355	100	154.355	100
<i>TAC 6</i>	<i>Tactical Command</i>	154.43	100	154.43	100
<i>TAC 7</i>	<i>Tactical Command</i>	154.295	100	159.195	100
<i>TAC 8</i>	<i>Tactical Command</i>	154.295	100	159.195	127.3
<i>Camano North</i>	<i>Tactical Command</i>	154.295	100	159.195	100
<i>Camano South</i>	<i>Tactical Command</i>	154.295	100	159.195	127.3
<i>Red Net</i>		153.83	136.5	153.83	
<i>HEAR WGH</i>		155.34	156.7	155.34	156.7
<i>Utility 1</i>	<i>Traffic Control/Fire to Fire</i>	153.935		153.935	100
<i>Utility 2</i>	<i>Traffic Control/Fire to Fire</i>	154.13		154.13	100
<i>WA. LERN</i>		155.37		155.37	100
<i>US LERN</i>		155.475		155.475	
<i>OSCCR</i>		156.135		156.135	

2. Seattle Urban Area (Snohomish, King and Pierce Counties)

The Seattle Urban Area, which includes King, Snohomish and portions of Pierce County that are serviced by an 800 MHz radio system, has established the Tri-Regional Interoperable System (TRIS).

TRIS establishes an Interoperable Communication capability and procedure that allow dispatch centers throughout the Tri-County region the capability of patching radio communications infrastructure during an incident or disaster. The communications unit leader (COML) or incident commander (IC) can request through the local dispatch center, radio patches base off the incident communications plan “ICS 205”.

The Tri-County region has also developed the Tactical Interoperability Communications Plan (TICP) for coordinating multi-agency communications. The TICP establishes an Interoperable Communications Plan that is intended to document what regional interoperable communication resources are available, who controls each resource, rules of use, operational procedures, and the activation and deactivation of each resource. Due to security reasons, this plan is not available to the general public. Agencies responding to an incident can request interoperable resources through the incident communications unit leader (COML), or through the Dispatch agency assisting with the incident.

The 800MHz system within the region is only accessible if radios are in the fleet list. Every radio that is authorized to talk into the regional 800 MHz has a special code that allows the radio to authenticate to the master site “Core”. Without that code, no radio can be used in the 800 MHz regional system. It is recommended that the ICALL channel be used to contact a Public Safety Answering Point (PSAP) and a patch to the regional network be established. The list established in the TICP is as follows:

Table VI – 2: Tactical Interoperability Communications Plan (TICP) Channels

Primary Use	Name	Description	Frequency	CTCSS
National Interoperability	ICALL	NPSPAC Calling Channel	821.0125/866.0125	156.7
	ITAC-1	NPSPAC Tactical 1	821.5125/866.5125	156.7
	ITAC-2	NPSPAC Tactical 2	822.0125/867.0125	156.7
	ITAC-3	NPSPAC Tactical 3	822.5125/867.5125	156.7
	ITAC-4	NPSPAC Tactical 4	823.0125/868.0125	156.7

2a. King County Zone 1

All King County Zone 1 departments, with the exception of Snoqualmie Pass Fire & Rescue, and the Skykomish Fire Department, utilize the trunked 800 MHz radio system. Communicating among team members is done over one or more tactical talk-groups on this radio system. If radio signals are having trouble going through the repeaters, Zone 1 has a simplex option via STATE-OPS or I-TAC talk-groups.

Outside of Zone 1 there are radio communications difficulties. If the 800 MHz system coverage is available in the area of an incident, responders can use that system. If it is unavailable, communications are significantly more challenging. Responding resources should be able to use the simplex talk-groups STATE-OPS and I-TAC; but, that would only work for units operating in close proximity to one another. One possible communications tool might be old VHF radios that some departments have retained as back-ups to the 800 MHz system. This may be significantly problematic because not all departments have maintained these radios, most are mounted mobile radios, and there are very few portable VHF in existence.

2b. King County Zone 2 (See Sub-section 2 above)

3. Kitsap County

Below are listed the specific frequencies used by the Kitsap County Fire Service for Tactical Operations, including Structural Collapse Rescue response.

Table VI – 3: Kitsap County Communications

Name	Use / Type	Transmit	Tx PL	Receive	Rx PL
Fire 1	Dispatch / Smplx	154.370	None	154.370	None
Fire 2	Response / Rptr	155.025	82.5	159.015	162.2
Fire 3	Tactical / Smplx	155.775	91.5	155.775	91.5
Fire 4	Tactical / Smplx	153.770	91.5	153.770	91.5
Fire 5	Tactical / Smplx	154.415	146.2	154.415	146.2
REDNET		153.83	None	153.83	None
<u>Shared Tactical Channel Pool (LE & Fire)</u>					
TAC 7	Tactical / Repeater	155.925	82.5	154.145	162.2
TAC 8	Tactical / Simplex	155.250	162.2	155.250	162.2
TAC 9	Tactical / Simplex	159.465	162.2	159.465	162.2
TAC 10	Tactical / Simplex	153.815	162.2	153.815	162.2
<u>Shared Special Operations (LE & Fire)</u>					
SP OPS 11	Bremerton PubWk / Rptr	155.895	110.9	154.890	110.9
SP OPS 12	Poulsbo / Simplex	156.015	110.9	156.015	110.9
SP OPS 13	OSCCR / Simplex	156.135	203.5	156.135	203.5
SP OPS 14	Bainbridge Is. PD / Simplex	155.670	110.9	155.670	110.9
SP OPS 15	Suquamish PD / Simplex	158.730	110.9	158.730	110.9

4. Mason County

Below are listed the specific frequencies used by the Mason County Fire Service for Tactical Operations.

Table VI – 4: Mason County Communications

Name	Use	Transmit	Receive	Private line
Fire Macecom	Fire Dispatch	154.190	154.190	110.9
Macecom LGS	Fire Logistics	155.145	155.145	110.9
Mason Dist. 2	Mason 2 Fire	153.740	158.955	110.9
RedNet	Tactical	153.830	158.955	110.9
MaTac	Macecom Tactical	156.105	156.105	110.9

5. Pierce County (See Sub-section 2 above)

6. Skagit County

Below are listed the specific frequencies used by the Skagit County Fire Service for Tactical Operations, including Structural Collapse Rescue response.

Table VI – 5: Skagit County Communications

Name	Use	Transmit	Tone NAC	Receive	Tone NAC
Fire 1	Dispatch	154.430	136.5	154.430	136.5
TAC 2	Tactical Command	154.265	136.5	154.265	136.5
TAC 3	Tactical Command	154.8225	110.9	155.685	136.5
TAC 4	Tactical Command-Travel	154.235	136.5	154.235	136.5
TAC 5	Tactical Command	159.015	110.9	155.805	136.5
TAC 6	Tactical Command	154.9475	151.4	154.150	151.4
TAC 7	Tactical Command	158.9925	110.9	155.7675	136.5
TAC 8	Tactical Command	154.650	151.4	153.785	151.4
TAC 9	Tactical Command-Travel	154.710	151.4	155.6325	151.4
HEAR	Medical	155.340	136.5	155.340	136.5
AIR/TAC	Air/Ground Support	155.1375	136.5	155.1375	136.5

Frequency Notes:

- TAC 3 – Limited to 12.5 watts effective radiated power by FCC rule.
- AIT/TAC – Portable radio use only. Limited to 5 watts radiated power by FCC rule.

- HEAR – To be used for intra-facility transfers. May be used as MED/TAC in upper valley area.

7. Snohomish County (See Sub-section2 above)

8. Thurston County

Below are listed the specific frequencies used by the Thurston County Special Operations Rescue Team for response and tactical operations. In addition to these frequencies, they have the potential to use State Chiefs or the Thurston County EOC channel. (To be developed)

Table VI – 6: Thurston County Communications

Name	Use	Transmit	Receive	Private Line
Fire 1	County	154.430	154.430	88.5
Fire 2	Olympia Fire	154.370	154.370	88.5
Fire 3	Tumwater Fire	153.800	153.800	88.5
Fire 5 Simplex	County Tactical	154.010	154.010	88.5
Fire 5 Repeater	County Tactical	150.775	154.010	88.5
Fire 6 Simplex	County Tactical	154.175	154.175	88.5
Fire 6 Repeater	County Tactical	150.805	154.175	88.5
County EOC	EOC	155.415	155.145	CSQ

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Attachment 2 - State/Regional Interoperability Channels

Table VI – 7: Interoperability Channels from 2008 WA Statewide Communications Interoperability Plan.

<i>Channels</i>	<i>TX Frequency</i>	<i>RX Frequency</i>	<i>Statewide/ Regional</i>
<i>Law Enforcement Radio Network (LERN)</i>	<i>155.370 MHz</i>	<i>155.370 MHz</i>	<i>Statewide</i>
<i>National Law Enforcement Network (NLEC)</i>	<i>155.475 MHz</i>	<i>155.475 MHz</i>	<i>Statewide</i>
<i>On-Scene Command and Control Radio (OSCCR)</i>	<i>156.135 MHz</i>	<i>156.135 MHz</i>	<i>Statewide</i>
<i>Comprehensive Emergency Management Network (CEMNET)</i>	<i>F1 - 45.20 MHz F2 - 45.36 MHz F3 - 45.48 MHz</i>	<i>F1 - 45.20 MHz F2 - 45.36 MHz F3 - 45.48 MHz</i>	<i>Statewide</i>
<i>FIRECOM / REDNET</i>	<i>153.830 MHz</i>		<i>Statewide</i>
<i>DNR Common</i>	<i>151.415 MHz</i>		<i>Statewide</i>
<i>Search and Rescue (SAR)</i>	<i>155.160 MHz</i>		<i>Statewide</i>
<i>VCALL</i>	<i>155.7525 MHz</i>	<i>155.7525 MHz</i>	
<i>VTAC</i>	<i>VTAC1 151.1375 VTAC2 154.4525 VTAC3 158.7375 VTAC4 159.4725</i>	<i>VTAC1 151.1375 VTAC2 154.4525 VTAC3 158.7375 VTAC4 159.4725</i>	
<i>National Calling Channel (ICALL):</i>	<i>821.0125 MHz</i>	<i>866.0125 MHz</i>	<i>National</i>
<i>National Working Channel (ITAC-1):</i>	<i>821.5125 MHz</i>	<i>866.5125 MHz</i>	<i>National</i>
<i>National Working Channel (ITAC-2):</i>	<i>822.0125 MHz</i>	<i>867.0125 MHz</i>	<i>National</i>
<i>National Working Channel (ITAC-3)</i>	<i>822.5125 MHz</i>	<i>867.5125 MHz</i>	<i>National</i>
<i>National Working Channel (ITAC-4):</i>	<i>823.0125 MHz</i>	<i>868.0125 MHz</i>	<i>National</i>
<i>STATEOPS-1 – Fire/EMS</i>	<i>822.5375 MHz</i>	<i>867.5375 MHz</i>	<i>Statewide</i>

Channels	TX Frequency	RX Frequency	Statewide/ Regional
STATEOPS-4 – Fire/EMS	822.6125 MHz	867.6125 MHz	Statewide
STATEOPS-2 – Law Enforcement	822.5625 MHz	867.5625 MHz	Statewide
STATEOPS-5 – Law Enforcement	822.6375 MHz	867.6375 MHz	Statewide
STATEOPS-3 – General Government	822.5875 MHz	867.5875 MHz	Statewide
King County Mutual Aid Radio System (KC MARS) repeater system-- VHF	155.190 MHz for repeater output	154.650 MHz for repeater input	Regional
King County Mutual Aid Radio System (KCMARS) repeater system- UHF	460.550 MHz repeater output	465.550 MHz for repeater input	Regional
MEDCOM Network Channels Med 1- Med 10	462.950 through 468.175 MHz	468.0 - 468.175 MHz	Statewide
Hospital Emergency Administrative Radio (HEAR)	155.340 and 155.280		Statewide
Organized Crime Drug Enforcement Task Force (Repeated)	168.8625	164.5500	nationwide
Organized Crime Drug Enforcement Task Force (Simplex)	164.5500	164.5500	nationwide
Organized Crime Drug Enforcement Task Force Treasury (Simplex)	166.46.25	166.4625	nationwide
DOE/DCIS	163.1000	163.1000	nationwide
EMS Medical Coordination (MED-1)	463.0000	463.0000	Regional
EMS Medical Coordination (MED-2)	463.0250	463.0250	Regional

Attachment 3 - Comprehensive Emergency Management Network (CEMNET)

From Washington State Emergency Management Division: Telecommunications Website

A. General Information

The Emergency Management Division (EMD) operates a statewide, very high frequency (VHF) low-band radio system, as the primary backup communication link between the state EOC and local EOC's throughout the state. It also serves as a link to other agencies such as the Department of Ecology, Department of Health, University of Washington Seismology Lab, National Weather Service, and Harborview Medical Center.

The following map depicts the location of the twelve mountaintop base stations that comprise the backbone of the network. The CEMNET base stations are controlled from the state EOC through the Washington State Patrol microwave system.

CEMNET operates primarily on three (3) frequencies, designated for accountability purposes as F1- 45.200 MHz, F2 - 45.360 MHz, and F3- 45.480 MHz. In radios set up primarily for CEMNET use, this will usually correspond to channels 1, 2, and 3.

Washington State Comprehensive Emergency Management Radio Network (CEMNET)

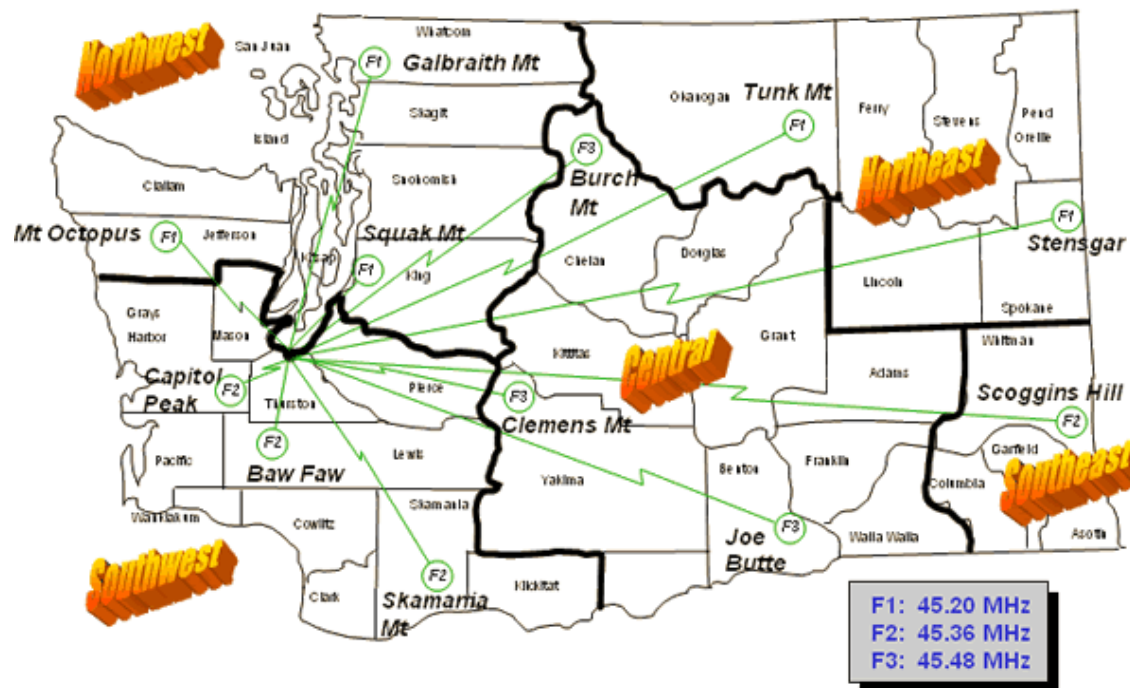


Figure VI – 1 Comprehensive Emergency Management Network (CEMNET)

The State Emergency Operations Officer (SEOO) located within the state EOC monitors the network on a 24-hour basis. For operational purposes, the state has been divided into five regions (see table below), with a channel designated for use within that region. The State Emergency Operations Officer (SEOO) will monitor the designated channel (frequency) for both routine and emergency traffic and

respond accordingly. Should traffic build-up cause a problem within the network, the State EOC will act as Net Control.

CEMNET is tested weekly with local emergency management jurisdictions on the following schedule:

- Western Washington stations: Tuesday, 0900 hours.
- Central Washington stations: Wednesday, 0900 hours.
- Eastern Washington stations: Thursday, 0900 hours.

Local emergency management jurisdictions are authorized to use the designated CEMNET region channel for local operations.

Table VI – 8: CEMNET Regions

NORTHWEST	SOUTHWEST	CENTRAL	NORTHEAST	SOUTHEAST
F1 (45.20 MHz)	F2 (45.36 MHz)	F3 (45.48 MHz)	F1 (45.20 MHz)	F2 (45.36 MHz)
Clallam	Clark	Adams	Ferry	Asotin
Island	Cowlitz	Benton	Lincoln	Columbia
Jefferson	Grays Harbor	Chelan	Okanogan	Garfield
King	Lewis	Douglas	Pend Oreille	Whitman
Kitsap	Mason	Grant	Spokane	
San Juan	Pacific	Franklin	Stevens	
Skagit	Pierce	Kittitas		
Snohomish	Skamania	Klickitat		
Whatcom	Thurston	Yakima		
Bellevue	Wahkiakum	Walla Walla		
Kent	Tacoma			
SW Snohomish	Lacey			
Seattle	Shelton			
Auburn	Puyallup			
Kirkland				
Snoqualmie				
Port Angeles				
Redmond				

Local jurisdictions should use the region channel assignment as identified in the preceding table for local "base station" to mobile/portable communications in support of local day-to-day and emergency needs. Each local jurisdiction is authorized at least five (5) mobiles per license. Additionally, MAST

helicopters from Fort Lewis and/or Army National Guard may communicate on Channel F1 on their FM systems.

B. Other Radio Systems Used by Washington State EMD

1. Mobile Emergency Response System (MERS)

The Federal Emergency Management Agency's (FEMA) Operations Net, a VHF high-band system primarily used by FEMA MERS for communicating with FEMA personnel. For EMD purposes, this net is used as a secondary capability for communicating with FEMA Region X and MERS Operations located in Bothell, Washington.

2. FEMA National Radio System (FNARS)

FNARS is an HF system primarily used by FEMA for inter and intra-state communications between FEMA Headquarters, FEMA regions and the States during national and/or regional emergencies, particularly when land line systems are impaired or restricted. An FNARS HF transmitter/receiver, a 1000 Watt Collins radio, was installed by FEMA in the State EOC.

3. State Area Command (STARC) net

STARC net is an HF system primarily used by the Washington National Guard for intra-state emergency communications between Headquarters, STARC in Camp Murray and each Army/Air National Guard armory/station. It is also used by the guard for interstate communications with other National Guard units. For EMD purposes, this net is to be used as a secondary capability for communicating with local jurisdictions and deployed National Guard units. The Emergency Management Division also has access for emergency purposes, to VHF systems operated by the Washington State Patrol (WSP) and Washington Department of Natural Resources (DNR).

4. On Scene Command and Control Radio (OSCCR)

Primarily used by public-safety agencies, "on-scene" at an incident, for command and coordination of activities between agencies. OSCCR can only be employed in the simplex mode via mobile and/or handheld equipment. For further information and/or obtain authorization for its use contact the EMD Telecommunications Section at (253) 512-7034.

5. Search and Rescue

Primarily used by Search and Rescue organizations for coordinating operations between SAR units. This frequency can only be employed in the simplex mode via mobile and/or handheld equipment. For further information and/or obtain authorization for its use contact the EMD Telecommunications Section at (253) 512-7034.

6. REDNET/FIRECOM

Primarily used by fire departments and districts for coordinating operations between firefighting units. For further information and/or obtain authorization for its use contact the Washington State Association of Fire Chiefs (WSAFC).

7. National Law Enforcement Channel (NLEC)

Primarily used by law enforcement agencies for mutual operations. Also used by EMD for activation of the Emergency Alert System (EAS) relay network. For information and/or obtain authorization for its use contact the Washington State Patrol (WSP).

8. Hospital Emergency Administrative Radio (HEAR)

Primarily used by ambulance services for administrative communications with hospitals.

9. Medical Emergency Delivery Network (MEDNET)

Primarily used by ambulance services for communicating medical operations with hospitals while en route.

Table VI – 9: Other State frequencies utilized for emergency communications

USE	FREQUENCY	APPROVAL/AUTHORIZATION
On-Scene Command and Coordination (OSCCR)	156.135 MHz	Washington State Emergency Management Division (EMD)
Search and Rescue (SAR)	155.160 MHz	Washington State Emergency Management Division (EMD)
State Fire Control Channel - REDNET/FIRECOM	153.830 MHz	Washington State Fire Chiefs Association (WSFCA)
National Law Enforcement Emergency Channel (NLEEC)	155.475 MHz	Washington State Patrol (WSP)
Hospital Emergency Administrative Radio (HEAR)	155.340 MHz or 155.280 MHz	Federal Communications Commission (FCC)
Medical Emergency Delivery Network (MEDNET)	462.950 MHz and 468.175 MHz	Federal Communications Commission (FCC)

C. Emergency Management Radio Systems Operations SECURE – HF

The **Operations SECURE** (State Emergency Communications Using Radio Effectively) high frequency (HF) net (also known as *CEMNET II*) is a secondary emergency back-up communications capability for intra- and inter-state use. Operating on eight discrete frequencies, point-to-point long-range communications between the state EOC and fixed or mobile HF stations can be established as needed. Currently, in addition to the state EOC, fixed HF stations are located in each Washington State Patrol (WSP) district communications center.

The HF frequencies assigned are:

1. 2.326 MHz (Upper Sideband (USB))
2. 2.411 MHz (USB)
3. 2.414 MHz (USB)
4. 2.587 MHz (USB)
5. 2.801 MHz (USB)
6. 5.192 MHz (USB)
7. 7.801 MHz (USB)
8. 7.935 MHz (USB)

D. Radio Amateur Civil Emergency Services (RACES)

Radio Amateur Civil Emergency Services (RACES) is a special part of the amateur operation sponsored by the Federal Emergency Management Agency (FEMA). The RACES was primarily created to provide emergency communications for civil defense preparedness agencies and is governed in FCC Rules and Regulations, Part 97, Subpart E, Section 97.407.

Today, as in the past, RACES is utilized during a variety of emergency/disaster situations where normal governmental communications systems have sustained damage or when additional communications are required. Situations that RACES can be used include, but are not limited to, natural disasters, technological disasters, terrorist incidents, civil disorder, and nuclear/chemical incidents or attack.

RACES is an organization of dedicated licensed amateur radio volunteers who provide radio communications in support of state and local government agencies during times of an emergency/disaster. The RACES program provides essential communications and warning links to supplement state and local government assets during these emergencies/disasters. The State RACES Officer, the State EOC RACES Station Manager and other volunteers work within the state EMD Telecommunications Section during exercises and emergencies.

They not only operate the amateur band radio systems in the station W7EMD, but assist with other radios systems within the EOC and at mobile locations as needed. Regional RACES Officers and other RACES volunteers work at the local government level to provide services as needed and requested.

The Amateur Radio Emergency Services (ARES) is the Amateur Radio Relay League (ARRL)'s public service arm for providing and supporting emergency communications, where needed, when an emergency/disaster strikes. For purposes within this plan, ARES organizations are identified as primarily providing support for non-government agencies during an emergency or disaster.

ARES organizations/operators, during emergencies/disasters may be used if RACES resources are depleted or do not exist. If called upon to support government needs the ARES organization/operators will be considered as operating under RACES and will be registered as an emergency worker in accordance with RCW 38.52 and WAC 118.04.

It should be noted that RACES and ARES licensed operators can hold dual registration in RACES and ARES. Further, it is encouraged by the ARRL that licensed amateur radio operators be registered and

certified as both and that cooperative efforts between RACES and ARES organizations be established and maintained.

The State RACES plan can be found at: http://emd.wa.gov/plans/documents/races_plan.doc

E. OSCCR Authorizations Now Available

On-Scene Command and Coordination Radio (OSCCR) authorization letters are now available from the EMD Telecommunication Section for the use of the frequency 156.135 Mhz. Letters of authorization issued prior to August 29, 2005 will not be valid after Dec 31st, 2005.

EMD will issue a login and password to a secure website upon receipt of a signed OSCCR Agreement (see form in OSCCR plan). Mail, fax or email a scanned copy of the signed agreement, with the name of the local EM OSCCR delegated designee, including their email address, to Don Miller at either of the addresses below. An EMD signed OSCCR agreement will then be returned to the respective EM Director/Designee, via email.

Local Emergency Managers, or their written designee, must submit OSCCR Authorization requests for each of their local agencies, i.e. Fire Departments, Police Departments, EMS, etc. The process is expedited via a secure website, where local OSCCR authorizations can be viewed, added, edited or deleted by the Local Emergency Managers/Designee. Instructions for use of the website will be sent with the EMD signed OSCCR agreement.

After approval of an OSCCR request; a copy of the signed OSCCR Agreement, an OSCCR Frequency Authorization Letter, and a copy of the FCC license will be emailed to only the Agency. Local agencies must have these documents available if requested by the FCC.

Local EM Directors will get a copy of the signed OSCCR Agreement via email.

Requestors need to be sure to complete a request for their local EM office if they have VHF radios. Make sure you provide the agency email address. It is not necessary to fill out the USE Application Form on page 11, because it has been transferred to the on-line website. EM Directors, or their written designee, will be able to view the status of all requests and approvals online at any time.

The OSCCR plan has not materially changed. The terms and conditions remain the same for the use of the frequency. Additional information on other available interoperability channels has been provided in this version. This plan was updated by both EMD and WSDOT with assistance from the SIEC State Advisory Group and its sub-committee the Frequency Operational Planning Interoperability Committee (FOPIC).

VII. Administration, Finance and Logistics

A. General Information

This section provides information on reimbursement funding options and procedures and documentation requirements for response under the Fire Services Resources Mobilization Plan and after a presidential declaration of disaster. It provides sources for training requirements for developing and maintaining required knowledge, and skills and abilities to meet existing federal and state standards. It also includes a summary of mutual aid agreements in the eight-county planning region.

According to the *Washington State Fire Services Resources Mobilization Plan (Fire Mob Plan) 2009*, mutual aid agreements provide for rapid assistance from neighboring fire jurisdictions to meet the immediate requirements of an emergency situation demanding resources beyond those available from the local jurisdiction.

Mutual aid is an essential element of local fire protection. All local fire protection jurisdictions are encouraged to participate in mutual aid agreements. Regional mutual aid agreements are also encouraged. (Refer to Fire Mob Plan, Section 5: "Mutual Aid Requirements" for additional information.)

B. Mutual aid

The majority of structural collapse rescue capability in the region is found within the fire services, and in most plans the fire service is designated as the incident command agency for on-scene structural collapse rescue operations. There are county-wide mutual aid agreements in each of the eight counties in the planning area. Most of the agreements are focused on fire response, but some accommodate structural collapse rescue and other special operations. More specific information and a summary of the contents of the mutual aid agreements are found in Section VII of this Annex.

Many existing mutual aid agreements and fire mutual aid agreements are in place within the Puget Sound Region. Some provisions in these agreements are included in all individual agreements in the region, including:

1. The decision to lend resources is voluntary.
2. There is no liability for a decision not to lend resources.
3. Incident command remains with the agency requesting resources to assist in incident response.
4. Command of loaned staff remains with the lending agency's command staff on scene.

Very few mutual aid agreements currently in place provide for reimbursement of loaned resources. Although several of the agreements allow for jurisdictions in the adjacent county to sign on, it is unknown at this time the extent to which this has occurred. In the development of this annex, very few mutual aid agreements covering across county borders were located, the exception being agreements between agencies bordering South Snohomish County and North King County.

There is an Inter-county Mutual Aid Agreement Omnibus Agreement (2009) between all counties in Washington, Oregon and Idaho. However, counties at least in Washington State do not operate fire apparatus that would typically be needed to respond to a structural collapse incident. Also, as of December 2010, 15 of the 39 counties have signed the Omnibus Mutual Aid Agreement.

A table listing all of these Mutual Aid Agreements that were reviewed is included in Attachment 1 to this section. Note that there may be additional agreements in place in addition to these agreements. (Refer to Fire Mob Plan, Appendix M: "Forms" for more information and specific mobilization forms.)

C. Fire Services Resources Mobilization Plan Reimbursement Procedures

Local fire jurisdictions responding to incidents outside their jurisdictional boundaries pursuant to the Fire Services Resources Mobilization Plan will be fully reimbursed for their eligible State Mobilization expenses, even if all costs associated with the State Mobilization incident are not eligible for federal reimbursement. The number and type of apparatus and personnel mobilized and tasked to a major emergency incident will be reasonable and necessary as determined by the Incident Commander in discussion with the Mobilization Coordinator of the Washington State Patrol, and Fire Protection Bureau, and will be mobilized according to the Mobilization Plan. (Refer to Fire Mob Plan, Appendix M: “Forms” for more information and specific reimbursement forms.)

1. Criteria for Payment

The Fire Services Resources Mobilization Plan and its enabling law, Title 43.43 RCW, provide for reimbursement of costs to “fire jurisdictions” only. Support of state mobilization resources is an inherent requirement of state mobilization and its procurement is deemed to be within and essential to state mobilization. The cost of necessary support is therefore reimbursable as state mobilization costs. (Refer to Fire Mob Plan, Section 16: “Compensation Principles” for additional information.)

2. Private Contract Fire Resources

Private contract fire resources may enter into an agreement with a local fire protection jurisdiction and under the terms and conditions of that agreement, become a resource of that jurisdiction. These private contract resources may then be mobilized as fire protection jurisdiction resources. In such a case, the contracted resource is seen and identified as a resource from the local fire protection jurisdiction. The State Fire Services Resources Mobilization Plan governs all practices, payment conditions, and rates, just as it does for all other state mobilization resources. (Refer to Fire Mob Plan, Sections 16 – 20: “Compensation Principles”, “Mobilization Costs”, and “Reimbursement of Cost Incurred” for additional information.)

D. Equipment

Only those fire agency apparatus utilized in state mobilization, including structural firefighting units, require support units, and command vehicles will be compensated. Costs of privately owned vehicles are not a fire agency expense and are not eligible for reimbursement. (Refer to Fire Mob Plan, Section 18: “Apparatus Compensation” for specific information.)

E. Liability

Fire services mobilization under Chapter 43.43 RCW is considered part of the local jurisdiction’s emergency management program under Chapter 38.52 RCW, and subject to that chapter’s liability and indemnification provisions. (Refer to Fire Mob Plan, Section 22: “Liability Coverage” for specific information.)

F. Training

Firefighter training credentials and qualifications are maintained by their local governing board and should be updated and recertified according to the schedule set by the local jurisdiction and/or State of Washington Fire Training Academy. Training Standards for agency having jurisdiction (AHJ) are found in the NFPA 1670 Standard. Training standards for individual personnel are found in the NFPA 1006 Standard. (See Section IX) The home jurisdiction is ultimately responsible for review of training, certification and credentialing of its participating employees. Mobilization Awareness Training is

required for all personnel who may be called to respond to a mobilization incident. (Refer to Fire Mob Plan, Appendix E: Mobilization Awareness Training” for specific information.)

G. FEMA Reimbursement for Response Operations

The impact of major or catastrophic emergencies can exceed local financial resources. Financial aid and assistance may be requested from FEMA through a request from the Governor to the President for a disaster or emergency declaration. This is coordinated after an incident by the Washington EMD.

When damages are so extensive that the combined local and state resources are not sufficient, the governor submits a request for an emergency or major disaster declaration to the President through FEMA. A joint FEMA, state and local team will conduct a Preliminary Damage Assessment to determine if there is a need for federal assistance. If federal assistance is justified, the President issues an emergency or major disaster declaration and various emergency or disaster programs are made available. Federal assistance is on a shared cost basis with 75% federal funds and 25% non-federal funds.

1. Categories of Work

The work most often performed under this Annex is Emergency Work. This work is performed immediately to save lives, to protect property, for public health and safety, and/or to avert or lessen the threat of a major disaster. Emergency Work contains two categories: Debris Clearance (Category A) and Protective Measures (Category B).

a. Category A: Debris Removal

Debris Removal is the clearance, removal, and/or disposal of items such as trees, woody debris, sand, mud, silt, gravel, building components, wreckage, vehicles, and personal property.

For debris removal to be eligible, the work must be necessary to:

- Eliminate an immediate threat to lives, public health and safety.
- Eliminate immediate threats of significant damage to improved public or private property.
- Ensure the economic recovery of the affected community to the benefit of the community-at-large.
- Mitigate the risk to life and property by removing substantially damaged structures and associated appurtenances as needed to convert property acquired through a FEMA hazard mitigation program to uses compatible with open space, recreation, or wetlands management practices.

Examples of eligible debris removal activities relevant to this Annex include:

- Debris removal from a street or highway to allow the safe passage of emergency vehicles.
- Debris removal from public property to eliminate health and safety hazards.

b. Category B: Emergency Protective Measures

Emergency Protective Measures are actions taken by Applicants before, during, and after a disaster to save lives, protect public health and safety, and prevent damage to improved public and private property. Emergency communications, emergency access and emergency public transportation costs may also be eligible.

Examples of eligible emergency protective measures are:

- Warning devices (barricades, signs, and announcements).
- Search and rescue.
- Security forces (police and guards).
- Construction of temporary levees.
- Provision of shelters or emergency care.
- Sandbagging.
- Bracing/shoring damaged structures.
- Provision of food, water, ice and other essential needs.
- Emergency repairs.
- Emergency demolition.
- Removal of health and safety hazards.

A key element in obtaining reimbursement for eligible costs under the Stafford Act and a Presidential declaration is documentation. To be eligible, a jurisdiction must be able to document work and to separate day to day budgeted expenses, such as salaries, from extraordinary expenses that resulted from the disaster, such as overtime.

(For additional reimbursement information, refer to Appendix M (Fire Mob Plan) –For specific reimbursement form.)

Attachment 1 - Summary of Mutual Aid Agreements—8 County Region

Many existing mutual aid agreements and fire mutual aid agreements are in place within the Puget Sound Region. Some provisions in these agreements are included in all individual agreements in the region, including:

- The decision to lend resources is voluntary.
- There is no liability for a decision not to lend resources.
- Incident command remains with the agency requesting resources to assist in incident response.
- Command of loaned staff remains with the lending agency's command staff on scene.

Table VII – 1: Summary of Mutual Aid Agreements

County	Agreement Title (Year adopted); Parties Authorized to Sign	Scope: 1. Types of Incidents Covered 2.Services/ Resources Addressed	Does Agreement provide for reimbursement of loaned resources?	Indemnification, Insurance, <i>Termination, Other Issues</i>
King	Omnibus Legal and Financial Agreement for Organizations Participating in the Regional Disaster Plan for Public and Private Organizations in King County (2004) Any public or private organization in or bordering King County that chooses to sign onto the "Basic Plan Package" of the Regional Disaster Plan for Public and Private Organizations in King County.	1. Emergency: Any incident causing or threatening injury to person or property –broad definition. 2. Emergency Assistance: any employees, services, equipment, materials or supplies offered by lending agency (Lender) and accepted by borrowing agency (Borrower) "to assist in maintaining or restoring normal services" disrupted by emergency.	YES. Personnel: Borrower pays Lenders' full costs, including overtime, benefits, overhead. Employees remain employees of Lender. Employees returned as soon as possible upon request of Lender. Equipment: borrower pays based on industry standard rates unless Lender has its own rates. Borrower to supply all fuel lubrication and maintenance; Borrower responsible for damage/replacement. Transit to and from site is chargeable to Borrower. Equipment must be returned upon request, target w/in 24 hrs. Materials and Supplies: Paid in kind or at replacement cost for anything consumed or non-returnable. Lender is an independent contractor to Borrower. Lender tracks its expenses. Borrower must pay within 60 days of invoice.	Borrower indemnifies Lenders, other signatories to Agreement. No liability by any entity for actions by other's employees/ officers/agents that act in bad faith/beyond scope of duties. Lender not liable if its loaned employees slow down work or stop work the employees judge to be unsafe. No liability for delay / failure to respond. No insurance requirements. <i>Termination by a party effective upon receipt of written notice by King County Emergency Management Advisory Committee.</i> <i>Does not supersede prior existing mutual aid agreements. Where scope of this agreement is broader, it governs.</i> <i>May be amended upon 2/3 vote of parties.</i> <i>No dedication of facilities, no partnership, no third</i>

County	Agreement Title (Year adopted); Parties Authorized to Sign	Scope: 1. Types of Incidents Covered 2.Services/ Resources Addressed	Does Agreement provide for reimbursement of loaned resources?	Indemnification, Insurance, <i>Termination, Other Issues</i>
			in-kind payment acceptable at Lender's option. <i>[terms very similar to Inter-county omnibus agreement]</i>	<i>party beneficiaries</i> <i>Mediation and Arbitration of disputes.</i>
King	Interlocal Agreement Technical Rescue Response (2009) Cities and Fire districts (no limitation for parties outside King County)	Scope: Mutual aid in provision of technical rescue services. Another purpose of agreement is to establish consistent guidelines relative to the provision of technical rescue services (which includes rescues for: trench, confined space, rope, water, structural collapse.) "Each party will [subject to appropriation] attempt compliance with the guidelines" Joint Board created (1 representative per party); meets quarterly to establish budgets, and develop policies, procedures, and hold property. Administering agency to be selected.	NO. Parties may jointly agree to locate equipment caches, but unless otherwise specified, property remains separately owned by contributing entity. If cached equipment is damaged when used, the using party will repair or replace it.	Each party responsible for liabilities arising out of actions of its own personnel; indemnify others for same. No insurance requirements. <i>Termination or withdrawal by a party upon 30 days written notice.</i> <i>Agreement does not bar other mutual aid agreements between the parties.</i>
King	King County Washington Mutual Assistance and Inter- Local Governmental Agreement (1984) "including without limitation: Cities, towns, Fire Protection Districts; the Port of Seattle, King County Governmental Divisions and other special districts which may have or develop an interest in the control of fire, fire prevention, emergency medical services and/or other emergency support."	1. Emergency incidents including "a major fire, disaster or other emergency" 2. Emergency response to include "supplemental fire suppression, emergency medical service equipment and personnel, and or other emergency support."	NO.	Agency in command at scene is liable for and holds all others harmless for liabilities arising out of command decisions. But each party assumes liability for actions of its own employees. Parties will maintain insurance. <i>Termination on 30 days prior written notice.</i> <i>Shared purchasing efforts authorized when a party issues bids for supplies or materials.</i> <i>Parties may participate in pre-incident planning.</i> <i>Agreement not exclusive of other agreements.</i>

County	Agreement Title (Year adopted); Parties Authorized to Sign	Scope: 1. Types of Incidents Covered 2.Services/ Resources Addressed	Does Agreement provide for reimbursement of loaned resources?	Indemnification, Insurance, <i>Termination, Other Issues</i>
King/ Snohomish	Mutual Aid Agreement (1979) City of Bothell and Snohomish County Fire District No. 7	1. Any fire, disaster or other emergency. 2. Apparatus and personnel	NO.	Each party shall maintain its own public liability and property damage insurance. Each party will indemnify and hold harmless the other from acts or omissions of their respective personnel. No coverage provided to the other Party's staff per Ch 41.26 RCW. <i>Parties agree to visit each other's departments to familiarize each other with local security requirements and will as feasible conduct pre-fire planning inspections and drills.</i> <i>Parties may draft detailed plans and procedures to implement the Agreement.</i> <i>Agreement is perpetual in duration unless terminated by a Party giving the other 30 days notice of cancellation.</i>
King/ Snohomish	Mutual Aid and Automatic Response Agreement (1988) City of Bothell and Snohomish County Fire District No. 1	1. Each Party will respond on a first response, automatic basis to all fire calls within the other Party's jurisdiction. If not an automatic aid situation, Parties can request assistance for any fire, disaster or other emergency. 2. Apparatus and personnel	NO.	Each party shall maintain its own public liability and property damage insurance. Each party will indemnify, defend and hold harmless the other from acts or omissions of their respective personnel. Neither party will be responsible to provide the other's employees with coverage required under Ch. 41.26 RCW. <i>Parties agree to visit each other's departments to familiarize each other with local security requirements and will as feasible conduct pre-fire planning inspections and drills.</i> <i>Parties' commanding officers may draft detailed plans and procedures to implement the Agreement.</i> <i>Agreement is perpetual in duration unless terminated by a party giving the other 30 days notice of cancellation.</i> <i>No third party beneficiaries.</i> <i>Supersedes prior agreements.</i>

County	Agreement Title (Year adopted); Parties Authorized to Sign	Scope: 1. Types of Incidents Covered 2.Services/ Resources Addressed	Does Agreement provide for reimbursement of loaned resources?	Indemnification, Insurance, <i>Termination, Other Issues</i>
King / Snohomish	Mutual Assistance Agreement (1989) King County Fire District #4 (Shoreline) Snohomish County Fire District #1, City of Mountlake Terrace, City of Edmonds and City of Lynnwood. Snohomish County Medic 7 is a signatory though not named in the list of parties in the preamble.	1.A major fire, disaster or other emergency 2. Equipment and personnel	NO.	Each party assumes liability for their own command decisions or judgments. Subject to that, each party assumes responsibility for actions of their own personnel and holds the others harmless therefrom. Each party will maintain “adequate insurance coverage for its own equipment and personnel.” <i>Agreement remains in effect unless terminated: any party can terminate upon 30 days notice but this does not affect the agreement as to the non-terminating parties.</i> <i>Agreement is not exclusive.</i> <i>Parties may establish pre-incident plans.</i>
King / Snohomish	Mutual Aid and Automatic Response Agreement (1993) Snohomish County Fire District #1, King County Fire District #4 (Shoreline)	1. Each party is on a first response, automatic basis for all fire calls within the jurisdiction of the other party. Parties may also request mutual aid assistance “at any fire, disaster, EMS or other emergency” 2. Apparatus and Personnel.	NO.	Each party shall maintain its own public liability and property damage insurance, and will indemnify, defend and hold the other harmless for claims for damage due to acts or omission of the parties or their personnel. No party is responsible to provide the other’s personnel with coverage under Ch. 41.26 RCW. <i>Parties agree to visit each other’s departments to familiarize each other with local security requirements and will as feasible conduct pre-fire planning inspections and drills.</i> <i>Parties’ commanding officers may draft detailed plans and procedures to implement the Agreement.</i> <i>Agreement is perpetual in duration unless terminated by a Party giving the other 30 days notice of cancellation.</i>
King / Snohomish	Mutual Aid and Automatic Response Agreement (1993)	1. Each party is on a first response, automatic basis for all fire calls within the jurisdiction of the other party. Parties may also request	NO.	Each party shall maintain its own public liability and property damage insurance, and will indemnify, defend and hold the other harmless for claims for damage due to acts or omission of the parties or their

County	Agreement Title (Year adopted); Parties Authorized to Sign	Scope: 1. Types of Incidents Covered 2.Services/ Resources Addressed	Does Agreement provide for reimbursement of loaned resources?	Indemnification, Insurance, <i>Termination, Other Issues</i>
	City of Edmonds and King County Fire District #4 (Shoreline)	mutual aid assistance "at any fire, disaster, EMS or other emergency" 2. Apparatus and Personnel.		personnel. No party is responsible to provide the other's personnel with coverage under Ch. 41.26 RCW. <i>Parties agree to visit each other's departments to familiarize each other with local security requirements and will as feasible conduct pre-fire planning inspections and drills.</i> <i>Parties' commanding officers may draft detailed plans and procedures to implement the Agreement.</i> <i>Agreement is perpetual in duration unless terminated by a Party giving the other 30 days notice of cancellation.</i>
Pierce	Mutual Aid Agreement (1993) "including but not limited to all Pierce County Fire districts and city and town fire departments.	1. Fire suppression, EMS or "other hazardous conditions," "situations/ events" 2. Equipment and personnel	NO.	Each party responsible for liabilities arising out of actions of its own employees and will indemnify other parties for these. Each party agrees to maintain insurance. <i>Termination upon 30 days prior written notice.</i> <i>Parties agree to participate in pre-emergency planning</i> <i>This agreement doesn't preclude parties entering into other mutual aid agreements. Entry into other agreements doesn't terminate responsibility under this agreement.</i>
Thurston	Interlocal Agreement for Mutual Aid for Firefighting and Emergency Medical Services (2005) "including but not limited to" Thurston County Fire Districts and city and town fire departments within Thurston	1. Emergency: any situation having potential to cause property damage, injury or death or that may overwhelm local resources. 2. Resources addressed: fire department employees/ officers.	NO. Consumable supplies (fuel, oil, "and other consumables") will be provided by requesting agency "to the extent of available	Each party responsible for actions of its own employees. Notice and cooperation in any lawsuits arising from incidents. Parties required to maintain certain insurance.

County	Agreement Title (Year adopted); Parties Authorized to Sign	Scope: 1. Types of Incidents Covered 2.Services/ Resources Addressed	Does Agreement provide for reimbursement of loaned resources?	Indemnification, Insurance, <i>Termination, Other Issues</i>
	County"		supplies." Each agency responding is responsible for care, custody and repair of its own personnel and equipment.	<i>Termination upon 60 days prior written notice.</i> <i>Parties agree to participate in pre-emergency planning.</i> <i>No joint property acquisition.</i> <i>Cooperative purchasing agreement provisions included.</i>
Thurston, Mason, Pacific, Lewis, Grays Harbor	Region 3 Mutual Aid Agreement Omnibus Agreement. (2007?) The five counties and any political subdivision within these 5 counties (cities, school districts, ports, etc.) plus include tribes. (Note: no information provided to confirm whether this agreement was ever signed.)	1. Emergency: Any event causing or threatening injury to person or property, human suffering or financial loss –broad definition. 2. Assistance: any employees, services, equipment, materials or supplies offered by lending agency (Lender) and accepted by borrowing agency (Borrower) "to assist in maintaining or restoring normal services" disrupted by emergency.	YES—for assistance provided extending beyond the first 8 hours, and only if parties agree to reimbursement. Borrow and Lender determine whether reimbursement will be requested, and the payment terms and conditions. Ideally these are negotiated at time of request, otherwise w/in 30 days of request. Personnel: Employees remain employees of Lender. Lender not liable for cessation or slowdown if its employees judge tasks unsafe. Borrow remains responsible for its decision/consequences. Licenses/certifications/permit of Lender employees may be recognized by Borrower. Lender must ensure loaned staff has abilities necessary to perform required work. Equipment: Borrower to supply all "consumable supplies" needed for operation unless mutually agreed otherwise. Equipment is provided "as is." Borrower responsible for damage/replacement. Transit to and from site is chargeable to Borrower.	Borrower releases and indemnifies/holds harmless/defends each Lender its officer employees from all costs/claims/judgments in connection with providing assistance. Members responsible for any bad faith or activities beyond scope of their officers/agents/employees. No liability for delay or failure to respond. Borrower indemnifies/holds harmless/defends other parties to Agreement not otherwise involved in incident response. No settlement of claims w/o prior consent of Borrower. Borrower waives rights of subrogation against Lender. Lender reserves such rights against Borrower. No dedication of facilities. No partnership. No third party beneficiary. No assignment. Non-exclusive agreement; Prior inconsistent agreements supersede this agreement. Amendment by consent of 2/3 of parties. <i>Term is 9/12/07 through 12/31/12; thereafter extended in 5 year increments by approval of</i>

County	Agreement Title (Year adopted); Parties Authorized to Sign	Scope: 1. Types of Incidents Covered 2.Services/ Resources Addressed	Does Agreement provide for reimbursement of loaned resources?	Indemnification, Insurance, <i>Termination, Other Issues</i>
			Equipment must be returned upon request, target w/in 24 hrs. Materials and Supplies: Paid in kind or at replacement cost for anything consumed or non-returnable. Lender is an independent contractor to Borrower. Lender tracks its expenses. Borrower must pay within 60 days of invoice; may request extension.	<i>Members.</i> <i>Termination upon receipt of written notice to all Members.</i>
Snohomish	Interlocal Agreement for Automatic First Response and Mutual Assistance (2008) No limitations.	1. Not defined. 2. Fire suppression, emergency medical services, and “specialized services including but not limited to Hazardous Materials Response, Technical Rescue and Fire Investigation.” NOTE: this agreement includes terms that the “first on scene” unit commander is incident commander until the agency with jurisdiction arrives on scene (and they so request).	No. Parties may agree to compensation by separate agreement. Parties seeking help will require financial assistance from state and federal agencies. Temporary loans of equipment are provided for (no cost;; borrower responsible for maintenance while in borrower’s custody. May enter into agreements re: insurance for borrowed equipment.	Agreement includes Automatic Aid provisions Parties indemnify one another for third party lawsuits caused by Party negligence or willful misconduct. Parties cross indemnify one another as well. Parties agree to maintain public liability and property damage insurance or be self insured. <i>Agreement for 10 years duration; automatically extended unless terminated.</i> <i>Any party may withdraw at any time upon written notice.</i> <i>Any “specialized Team” shall have “Standard Operational Procedures or Guidelines”</i> <i>Option for participating in joint training classes of various types.</i> <i>Agreement non exclusive.</i> <i>Joint purchasing facilitated.</i> <i>No third party beneficiaries.</i> <i>No joint property ownership contemplated.</i>
Snohomish/ King/Pierce	Fire Resource Mutual Aid Master Agreements (1991)	The Mutual Aid Master Agreements call for development of an operation plan to address mobilization of	“If appropriate” as determined by the drafters of the Mutual Aid Fire Resources Plan	Agreements not exclusive.

County	Agreement Title (Year adopted); Parties Authorized to Sign	Scope: 1. Types of Incidents Covered 2.Services/ Resources Addressed	Does Agreement provide for reimbursement of loaned resources?	Indemnification, Insurance, <i>Termination, Other Issues</i>
	Southwest Snohomish County Emergency Services Coordinating Agency (ESCA) has entered into three parallel "Mutual Aid Master Agreements" with: Snohomish County Dept. of Emergency Management (DEM), King County DEM, and Pierce County DEM ESCA has done so on behalf of the following Cities/Fire districts which have delegated authority to ESCA to execute these three Fire Resources Mutual Aid Master Agreements including: Cities of Lynnwood, Edmonds, Mountlake Terrace, Bothell, Snohomish County Fire District #1, MEDIC 7. (Southwest Snohomish County) Additional Parties are contemplated—other cities or fire districts, in any of the three counties, may join by delegating authority to their County DEM to sign the Agreement on their behalf; addition of any party must be approved by both DEMs' party to that particular Master Agreement. There is no evidence of participation by cities or other local jurisdictions in King and Pierce County.	resources necessary to respond to emergency/disaster situations, including identifying resources, personnel and services available, and document the amount and manner of payment and/or compensation for utilization of personnel, resources and services, "if appropriate." Compensation must comply with the Fair Labor Standards Act and is subject to annual budget approvals. (This FLSA provision is not in the King County agreement). The "Mutual Aid Fire Resources Plan" referenced is not attached to the agreements, and the drafters of this document were unable to confirm whether it had ever been developed. The Mutual Aid Master Agreements included no timeline or budget for preparation of this Plan.	(unknown if this Plan was ever drafted). Each party agrees to furnish personnel resources and services as out lined in the Mutual Aid Fire Resources Plan. Unless the adopted Mutual Aid Fire Resources Plan or other supplemental agreement specify otherwise, all [personnel/ equipment] are furnished and/or supplied voluntarily and at the discretion of the furnishing agency.	Parties (the DEMs and ESCA, per the Snohomish and Pierce parallel agreements—but not King) agree to maintain certain minimum insurance coverage. Parties hold all other parties harmless from liabilities arising out of command decisions or judgments at fire incidents. Subject to this, Parties assume responsibility for actions of their own personnel. Cities/Fire districts authorizing ESCA to sign the Mutual Aid Master Agreements hold ESCA harmless from any expense arising from execution or action pursuant to the Agreements. <i>These authorizations may be terminated or revoked by either party 30 days after receipt of written notice.</i> <i>The Master Agreements calling for planning are to be effective upon filing with the Washington State Dept. of Community Development, and binding until terminated. Termination is effective upon 30 days advance written notice to both parties and Washington Dept. of Community Development.</i>
Kitsap	Mutual Aid Emergency Response	1. Fires, control and containment of	No.	Other than release and waiver, no indemnification.

County	Agreement Title (Year adopted); Parties Authorized to Sign	Scope: 1. Types of Incidents Covered 2.Services/ Resources Addressed	Does Agreement provide for reimbursement of loaned resources?	Indemnification, Insurance, Termination, Other Issues
	Agreement (2001) No limitations. Agreement has been signed by Navy Region Northwest and six fire departments (and presumably Bremerton, signature page not available)	hazardous materials and or other emergencies exceeding a jurisdiction's resources. 2. Rescue, fire protection and suppression, handling of hazardous materials and medical services. Requests for aid must come "through established communication channels." First on scene is in command until the agency with jurisdiction arrives (unless it requests the first responder to remain in charge).	Release and waiver as between all parties for any compensation, claims, loss, damage, injury—except that any of the local cities/districts may seek reimbursement under federal law for expenses and losses incurred in fire fighting on federal property. Patients transported to medical facilities will be billed for transport services at the rate then in place for the local fire department with jurisdiction for the service.	No insurance requirements. <i>Any party may terminate participation on 90 days written notice.</i> <i>Review of agreement every 2 years.</i> <i>No separate legal entity created. No joint ownership of property.</i> <i>Parties directed to draft detailed plans for mutual aid operation necessary to implement the Agreement. Appendix to Agreement includes summary terms of service offered with respect to 13 different types of services (different capacities noted for the Navy (Puget Sound Federal Fire Department) and the local agencies. Includes terms for Specialized Rescue ("high angle, confined space and heavy urban rescue").</i> <i>Prior mutual aid agreements terminated.</i>
Skagit	Interlocal Agreement By and Between Skagit County Jurisdictions for Mutual Aid for Fire and Emergency Services (2008) All cities and fire districts in Skagit County "Neighboring fire districts or cities from adjacent counties" may also become a party.	1. Emergency incidents could include "any fire, disaster, EMS or other emergency" 2. Resources: apparatus, personnel, equipment available (fire suppression, EMS, "and other emergency services") No separate entity or joint board created. No separate funds created. Parties will meet annually to review and discuss the agreement.	NO, "unless expressly agreed to between the Requesting Agency and Responding Agency." No property will be acquired as a result of this agreement, separately or jointly.	Requesting Agencies not obligated to pay responding agency for any damage or destruction to loaned equipment. Such losses should be covered by insurance of owners. Each party responsible for liability to third parties for wrongful acts of its employees/agents. Each Party indemnifies each other for wrongful actions of its employees/agents. Parties shall maintain insurance. <i>Withdrawal upon 90 days written notice.</i> <i>This agreement is distinct from any "automatic aid" agreements.</i> <i>"The fire fighter safety standards for the state of Washington, Ch. 296-305 WAC, shall apply to the</i>

County	Agreement Title (Year adopted); Parties Authorized to Sign	Scope: 1. Types of Incidents Covered 2.Services/ Resources Addressed	Does Agreement provide for reimbursement of loaned resources?	Indemnification, Insurance, <i>Termination, Other Issues</i>
				<i>provision of Mutual Aid under this Agreement.”</i> <i>No third party beneficiaries.</i> <i>No preclusion of other agreements.</i>
Mason	Mutual Fire, Aid & First Response Agreement (1989) No limitations. The agreement was signed by at least 15 fire districts and the City of Shelton	1. Emergency incidents 2."Supplemental fire suppression, emergency medical services and/or other emergency support."	No. However, parties receiving assistance "shall attempt to obtain financial assistance from federal and state agencies where...available"	Each party liable for acts of its personnel. Each party to carry property and liability insurance for its personnel and equipment. No indemnification clause. <i>A party may withdraw upon 60 days written notice to other parties.</i> <i>No joint board/agency created.</i> <i>Agreement not exclusive.</i> <i>Includes Automatic Aid provisions.</i> <i>Parties may participate in pre-emergency planning and cooperative purchasing efforts.</i> <i>Agreement not exclusive.</i>
Island	Mutual Aid Agreement Between Public Agencies (1996) Cities of Oak Harbor, Coupeville and Langley; Island County, the Island County Sheriff, Island County Fire Protection Districts 1-3, Central Whidbey Island Fire & Rescue and Whidbey General Hospital	1. "Fire calls, emergency calls and other services normally performed by the [signatory agencies]" 2. manpower and equipment Each agency vests with its "officer in charge at the time the request is made" the authority to immediately dispatch requested equipment or call for aid.	NO. However, parties receiving assistance "shall attempt to obtain financial assistance from federal and state agencies where...available" to reimburse responding agencies Agreement provides for "loans" of manpower and equipment" but these are uncompensated.	Parties assume liability for performance of their own personnel and indemnify others from cost/expenses arising out of acts or omissions of their employees relating to the Agreement. Each party "agrees to maintain adequate insurance coverage for the operations of its own equipment and personnel. <i>Agreement by its terms appears to have expired in 2002.</i> <i>Parties allowed to withdraw at any time after the first year.</i>

County	Agreement Title (Year adopted); Parties Authorized to Sign	Scope: 1. Types of Incidents Covered 2.Services/ Resources Addressed	Does Agreement provide for reimbursement of loaned resources?	Indemnification, Insurance, <i>Termination, Other Issues</i>
				<i>No joint board created; no jointly owned property</i>
Inter-County	Inter-county Mutual Aid Agreement Omnibus Agreement (2009) “All signatory Counties in Oregon, Washington and Idaho. “ Note: As of December 2010, 15 of the 39 counties have signed the Omnibus Mutual Aid Agreement.	1. Emergencies covered are broadly defined to include human or natural caused event, causing or threatening environmental damage, injury to person or property etc. 2. Emergency assistance is broadly defined, but the application of these resources is somewhat narrow: “employees, services, equipment, materials or supplies offered...and accepted...to assist in maintaining or restoring normal county government services” disrupted by an emergency. <i>(Emphasis added)</i>.	YES. Borrowing agency shall pay Lending agency for all invoiced costs within 60 days of receipt of invoice. Lender may accept in kind or cash recovery. Lender operates as an independent contractor of Borrower. Employees of Lender are not to be considered Borrowers employees. Lender can withdraw its resources at any time w/o liability. First 8 hours of equipment loaned is without cost. After that, reimbursed to Lender at its “current equipment rates,” or if none published, at “industry standard publication” rates. Equipment must be returned w/in 24 hours of requested. Borrower provides all fuel, lubrication and maintenance. Equipment is loaned “as is.” Cost of transporting equipment is chargeable to Borrower and not included in the first 8 hours of use. Borrower must reimburse for damage to equipment, and replace if necessary to affect timely return to Lender. Materials and supplies reimbursed at replacement cost, for anything partially consumed or non-returnable. Personnel loaned without cost for first 8 hours of service, thereafter pay Lender’s full costs including benefits, overhead, etc. Costs of feeding and housing personnel are chargeable to Borrower. Borrower to	Borrower indemnifies Lenders for damages or claims arising in connection with providing emergency assistance. No party to agreement is required to indemnify anyone else for damages from a party’s employees acting in bad faith or beyond scope. No damages for delay or failure to perform (except to make payments). Borrower waives rights of subrogation against Lender. No insurance requirements. <i>Termination effective upon receipt of written notice.</i> <i>2/3 vote to amend agreement.</i> <i>Agreement not exclusive.</i> <i>Prior agreements inconsistent with this agreement supersede this newer agreement until inconsistencies reconciled.</i> <i>No dedication of facilities to other parties implied by lending facilities or assets.</i> <i>No third party beneficiaries.</i> <i>No partnership created.</i> <i>Where parties are in different states, laws of the state in which the emergency occurs applies.</i>

County	Agreement Title (Year adopted); Parties Authorized to Sign	Scope: 1. Types of Incidents Covered 2.Services/ Resources Addressed	Does Agreement provide for reimbursement of loaned resources?	Indemnification, Insurance, <i>Termination, Other Issues</i>
			provide arrangements for housing/meals/transport. Lender not liable for cessation or slowdown if its employees decline to perform due to concerns about safety of tasks. Borrower can recognize licenses from other states. Lender provides records for house worked, equipment and materials used or provided	

Note: This table incorporates summaries of all mutual aid agreements which were provided to the Annex's authors. There is no known comprehensive list of mutual aid agreements. Some agreements likely exist which are not summarized here. Note also that the Annex's authors were unable to confirm which authorized parties have in fact signed agreements or which may have terminated their participation in same.

VIII. Annex Development and Maintenance

A. General Information

The Puget Sound Structural Collapse Rescue Annex (Annex) was developed by the City of Bellevue Fire Department with the assistance of a Core Planning Team (CPT) made up of subject matter experts in Structural Collapse Rescue from fire departments and emergency management agencies from the Puget Sound Region. CPT members are listed in Table VIII-1.

Table VIII – 1: Core Planning Team Members

	Name	County	Department
1	Bill Larson	King	Bellevue FD
2	Casey Sobol	Thurston	McLean FD
3	Chris Flores	King	Tukwila FD
4	Dave VanValkenburg	King	Bothell FD
5	Frank Brennan	King	Seattle FD
6	Greg Hartman	King	Renton Fire
7	Todd Ward	Mason	Mason Co FD #6
8	John Bird	Skagit	Anacortes FD
9	Luke Carpenter	Kitsap	Bainbridge Island FD
10	Mike Lingrey	Snohomish	Everett FD
11	Mike Ryan	King	Bellevue FD
12	Randy Hart	King	Bellevue FD
13	Roger Anderson	King	North Highline FD
14	Smokey Simpson	King	Seattle FD
15	Steve Heitman	King	Mercer Island FD
16	Steve Ness	Snohomish	Edmonds FD
17	Tom Miner	Pierce	PC DEM
18	Will Aho	King	Renton Fire
19	Keith Wright	Pierce	Central Pierce
20	Todd Magliocca	Pierce	Tacoma Fire
21	Joe Kupferling	King	King Co. FD #2
22	Larry Peabody	King	Kirkland FD

The effort was coordinated by a consultant who facilitated input from relevant stakeholders throughout the region. A continued effort will be made to solicit input from the same parties involved during the planning process to ensure this annex remains current with the most up to date information as it relates to structural collapse planning, response and recovery.

B. Capability and Annex Maintenance

Structural collapse rescue incidents have occurred infrequently in Washington State. Subsequently, this Annex will need to be used at every opportunity in disaster training, drills and exercises to ensure the fire service and other stakeholders are familiar with its contents and it can be periodically discussed and updated.

Structural collapse rescue components could be added to the ongoing local government, fire service and emergency management training programs including drills, discussion seminars, tabletop exercises, functional and full scale exercises. Annex updates and improvements should come from the regular after action review and maintenance procedures of local emergency management and fire service agencies.

C. Annex Maintenance Responsibility

The project Core Planning Team (CPT) will be responsible for maintaining the Puget Sound Structural Collapse Rescue Annex unless this responsibility is assumed by another group or standing committee.

D. Annex Maintenance Procedures

The Puget Sound Structural Collapse Rescue Annex (Annex), including any contact lists and website addresses will be reviewed and updated at least annually along with the other plans included in the overall Regional Catastrophic Planning effort. Ongoing review and testing of emergency operations shall occur throughout the year.

Each fiscal year, the project's Core Planning Team (CPT) or other group as designated will provide written notice to all member counties, fire departments and local government fire and rescue partners that they are conducting an annual review of Annex. The CPT or other group will compile all comments received through the comment period and schedule a planning session with the county representatives to review the comments, updates and recommendations.

Any required changes approved by the CPT members or members of another designated group will be incorporated into associated Annex. These changes will then be included in the next change to this Annex. The CPT or other designated group will ensure that all approved changes are incorporated into the Annex and updates distributed to all member counties, departments and entities on respective distribution lists.

IX. Authorities and References

A. General Information

This section provides an overview of local, state and federal statutes, regulations and standards that relate to structural collapse rescue response operations.

B. Federal Statutes

1. Public Law 93-288: The Disaster Relief Act of 1974, as amended by Public Law 100-707, the Robert T. Stafford Disaster Relief and Emergency Assistance Act: Authorizes the Federal government to respond to disasters and emergencies in order to provide assistance to save lives and protect public health, safety, and property; authorizes the President to establish a program of disaster preparedness that uses services of all appropriate agencies, make grants to states for the development of plans and programs for disaster preparedness and prevention, and ensures that all appropriate Federal agencies are prepared to issue warnings of disasters to state and local officials; provides the authority for the National Urban Search and Rescue Response System.

(<http://www.fema.gov/about/stafact.shtm>)

2. Public Law 105-381 – November 12, 1998- Pacific Northwest Emergency Management Arrangement: Authorizes the sharing of emergency resources between the government of the States of Alaska, the government of the State of Idaho, the government of the State of Oregon, the government of the State of Washington, the government of the State of the Providence of British Columbia, and the government of Yukon Territory.

www.emd.wa.gov/plans/documents/SAL-PNEMA-1-28-09.ppt

C. Federal Regulations

1. 44 CFR Part 205 – Emergency Management and Assistance: Describes the formation and policies of FEMA including the regulations for reimbursement for eligible costs incurred during a presidentially declared disaster.

(http://www.access.gpo.gov/nara/cfr/waisidx_00/44cfrv1_00.html)

2. 44 CFR Part 208 – National Urban Search and Rescue Response System: Prescribes policies and procedures pertaining to the DHS National Urban Search and Rescue Response System. It applies to Sponsoring Agencies and other participants in the National Urban Search and Rescue Response System that have executed agreements governed by this part.

<http://law.justia.com/us/cfr/title44/44-1.0.1.4.59.html>

D. Federal Plans and Other References

1. National Response Framework (2008): Provides guidance on how the Nation conducts all-hazards response, built upon scalable, flexible and adaptable coordinating structures to align key roles and responsibilities across the Nation, and to link all levels of government, nongovernmental organizations, and the private sector.

(<http://www.fema.gov/pdf/emergency/nrf/nrf-core.pdf>)

2. US&R Program Directive 2007-012 – Task Force Activation within an Affected State

Conclusion: Pursuant to the Stafford Act, the National US&R System is only activated when it is necessary to supplement State resources, including the in-State US&R Task Forces, with additional Federal resources. State assets are properly reimbursed for in-State activities through the Public Assistance program. As US&R Task Force participants are in-State assets first and foremost, they may not be activated into the National US&R System for in-State deployments.

<http://213.174.143.38/download/2007-usr-program-directives-index-6-doc-3579786.html>

E. Washington State Statutes

1. RCW 43.43.961 - State fire service mobilization — Legislative declaration and intent - Because of the possibility of the occurrence of disastrous fires or other disasters of unprecedented size and destructiveness, the need to insure that the state is adequately prepared to respond to such a fire or disaster, the need to establish a mechanism and a procedure to provide for reimbursement to state agencies and local firefighting agencies that respond to help others in time of need or to a host fire district that experiences expenses beyond the resources of the fire district, and generally to protect the public peace, health, safety, lives, and property of the people of Washington, it is hereby declared necessary to: (1) Provide the policy and organizational structure for large scale mobilization of firefighting resources in the state through creation of the Washington state fire services mobilization plan; (2) Confer upon the chief the powers provided herein; (3) Provide a means for reimbursement to state agencies and local fire jurisdictions that incur expenses when mobilized by the chief under the Washington state fire services mobilization plan; and (4) Provide for reimbursement of the host fire department or fire protection district when it has: (a) Exhausted all of its resources; and (b) invoked its local mutual aid network and exhausted those resources. Upon implementation of state fire mobilization, the host district resources shall become state fire mobilization resources consistent with the fire mobilization plan.

<http://apps.leg.wa.gov/rcw/default.aspx?cite=43.43.961>

2. RCW 43.43.970 - Law enforcement mobilization - Legislative declaration and intent -- 2003 c 405: "(1) Because of the possibility of a disaster of unprecedented size and destruction, including acts of domestic terrorism and civil unrest, that requires law enforcement response for the protection of persons or property and preservation of the peace, the need exists to ensure that the state is adequately prepared to respond to such an incident. There is a need to (a) establish a mechanism and a procedure to provide for reimbursement to law enforcement agencies that respond to help others in time of need, and to host law enforcement agencies that experience expenses beyond the resources of the agencies; and (b) generally to protect the public safety, peace, health, lives, and property of the people of Washington.

<http://apps.leg.wa.gov/rcw/default.aspx?cite=43.43.970>

3. Chapter 38.52 RCW - Emergency Management: Authorizes the State to create local organizations for emergency management in the political subdivisions of the state, and to provide for mutual aid among the political subdivisions and with other states; to cooperate with the federal government in carrying out emergency management functions; describes the conditions for using existing services and facilities and impressing citizens in an emergency situation; provides a means of compensating emergency management workers who suffer injury or death, who suffer economic harm including personal property damage or loss, or who incur expenses for transportation, telephone or other methods of communication, and the use of

personal supplies as a result of participation in emergency management activities; and provides programs, to educate and train the public to be prepared for emergencies.

(<http://apps.leg.wa.gov/rcw/default.aspx?cite=38.52>)

4. Title 52 RCW - Governing fire protection districts: Details the formation, governance and dissolution of fire protection districts in emergency situations.

5. Chapter 10.93 RCW Washington Mutual Aid Peace Officers Powers Act: Details laws around establishing mutual aid agreements for emergency situations.

6. Chapter 43.43 RCW Washington State Patrol: Details the roles and responsibilities of the Washington State Patrol. (<http://apps.leg.wa.gov/Rcw/default.aspx?cite=43.43>)

F. Washington State Administrative Codes

1. WAC 296-62 - General occupational health standards: Provides standards for all workers under the jurisdiction of the department of Labor & Industries, with guidance for both labor and management and methods for updating standards; includes occupational medicine with its specialized techniques for examination, diagnosis, and treatment; calls attention to the need for close cooperation between government and industry, labor and management, and all the health sciences.

(<http://www.lni.wa.gov/wisha/rules/generaloccupationalhealth/default.htm>)

2. WAC 118-30 - Local emergency management/services organizations plans and programs: Establishes criteria for evaluating local emergency management/services organizations, plans and programs to ensure consistency with the state comprehensive emergency management plan and program.

(<http://apps.leg.wa.gov/WAC/default.aspx?cite=118-30&full=true>)

G. Washington State Plans and other References

1. National Emergency Management Assistance Compact (EMAC): Establishes national interstate mutual aid agreement that enables states to share resources during times of disaster. (<http://www.emacweb.org/>)

2. Omnibus Inter-county Mutual Aid Agreement: Provides template for inter-county agreements.

<http://www.wsema.org/>

3. Washington State Comprehensive Emergency Management Plan: Provides comprehensive plan for statewide mitigation, preparedness, response, and recovery activities; establishes emergency management functions and the responsibilities of the Washington State Military Department, Emergency Management Division (EMD), state agencies, commissions, boards, and councils to minimize the impacts of emergencies and disasters on the people, property, environment, and economy of Washington State. <http://emd.wa.gov/>

4. Washington State Fire Mobilization Plan: Provides a mechanism for fire service resources to respond to fires, disasters, or other incidents that meet the intent of the Mobilization Plan Legislation (RCW 43.43.961); serves as living document with eight updates completed as a result of lessons learned by the fire service involvement primarily in wildland/urban interface fires. (<http://www.docstoc.com/docs/2946020/InterCounty-Mutual-aid-Agreement>)

5. WA State Law Enforcement Mobilization Plan (in development)

H. NFPA Standards

1. NFPA – 1006 – Standard for Technical Rescuer Professional Qualifications: Establishes the minimum job performance requirements necessary for fire service and other emergency response personnel who perform technical rescue operations.

(<http://www.nfpa.org/aboutthecodes/AboutTheCodes.asp?DocNum=1006>)

2. NFPA 1561 - Standard on Emergency Services Incident Management System: Contains the minimum requirements for an incident management system to be used by emergency services to manage all emergency incidents.

(<http://www.nfpa.org/aboutthecodes/AboutTheCodes.asp?DocNum=1561>)

3. NFPA 1600 - Standard on Disaster/Emergency Management and Business Continuity Programs: Identifies prevention as a distinct aspect of program, in addition to mitigation, preparedness, response, and recovery (as focus of previous editions) for disasters resulting from natural, human or technological incidents.

(<http://www.nfpa.org/aboutthecodes/AboutTheCodes.asp?DocNum=1600>)

4. NFPA 1620 - Recommended Practice for Pre-Incident Planning: Provides criteria to develop a pre-incident plan that should be used by responding personnel to manage fires and other emergencies using the available resources.

(<http://www.nfpa.org/aboutthecodes/AboutTheCodes.asp?DocNum=1620>)

5. NFPA 1670 - Standard on Operation and Training for Technical Search and Rescue Incidents: Identifies and establishes levels of functional capability for conducting operations at technical search and rescue incidents while minimizing threats to rescuers; defines necessary levels of preparation and operational capability to manage an incident efficiently and effectively, maximize personnel safety, and bring about the successful rescue of victims.

(<http://www.nfpa.org/aboutthecodes/AboutTheCodes.asp?DocNum=1670>)

6. NFPA 1710 and NFPA 1720: Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments: Contains minimum requirements relating to the organization and deployment of fire suppression operations, emergency medical operations, and special operations to the public by career fire departments, addressing functions and objectives of fire department emergency service delivery, response capabilities, and resources.

(<http://www.nfpa.org/aboutthecodes/AboutTheCodes.asp?DocNum=1720>)

7. NFPA 1936 - Standard on Powered Rescue Tools: Specifies the minimum requirements for the design, performance, testing, and certification of powered rescue tool systems and the individual components of spreaders, rams, cutters, combination tools, power units, and power

transmission cables, conduit, or hose.; applies to the design, manufacturing, and certification of newly manufactured powered rescue tool systems.

(<http://www.nfpa.org/aboutthecodes/AboutTheCodes.asp?DocNum=1936>)

8. NFPA 1951 - Standard on Protective Ensembles for Technical Rescue Incidents:

Specifies the minimum design, performance, testing, and certification requirements for utility technical rescue, rescue and recovery technical rescue, and chemicals, biological agents, and radiological particulate [also known as chemical, biological, radiological, and nuclear (CBRN) technical rescue] protective ensembles for use by emergency services personnel during technical rescue incidents.

(<http://www.nfpa.org/aboutthecodes/AboutTheCodes.asp?DocNum=1951>)

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X. Recommendations

A. General Information

The development of the Regional Structural Collapse Rescue Annex involved two phases. One was the development of a tactical plan based upon the concept of “if it happens tomorrow” listing tactical issues, including, but not limited to, operational policy and concepts, resources, communications procedures, frequencies and contact information that are in common use or available now for structural collapse rescue response.

The second phase involved identifying gaps and developing recommendations that may serve to improve local and regional capabilities for structural collapse rescue in the Puget Sound Region as well as statewide. These recommendations are included in this section. These include general recommendations that are listed in the body of this section and specific recommendations that are included in the Appendices to this Annex.

B. Recommendation 1

It is recommended that Washington State Fire Services adopt typing for structural collapse rescue resources.

Currently, structural collapse rescue resources are not uniformly typed in Washington State. Departments that have typed their resources base it on typing standards from other states, such as Florida or California. It is recommended that the typing system for Task Forces and Squads presented in **Appendix A** be adopted. It is further recommended that implementation of the typing be phased in over time to ensure consistency in use and application.

C. Recommendation 2

It is recommended that Washington State Fire Services adopt the FEMA Urban Search and Rescue Response System Cache List as the equipment standards for structural collapse rescue resources.

The Washington State Fire Marshal's office recommended that a state standard be established for structural collapse resources equipment for reimbursement when appropriate through the Fire Services Resources Mobilization Plan. It is recommended to adopt the FEMA Cache list for this purpose. This will help standardize response and the sharing of equipment in response operations. This list could also be used for strategic planning and budget development for future purchases and capability development. See **Appendix B** for web links and information.

D. Recommendation 3

It is recommended that Washington State Fire Marshal's Office continue to work with the Fire Service and the Associated General Contractors (AGC) to type heavy equipment, specifically cranes and that typing and cost information be added to the WAGE & EQUIPMENT RATES FOR THE WASHINGTON STATE FIRE SERVICE for use with Fire Mobilization.

Currently the WAGE & EQUIPMENT RATES FOR THE WASHINGTON STATE FIRE SERVICE does not include cranes. **Appendix B** has information about work completed so far. It is recommended that the State Fire Marshal's Office continue to work with the fire service and the AGC to complete this typing and cost determination for work after the life-rescue phase.

E. Recommendation 4

It is recommended that Washington State Fire Services adopt the national standards for structural evaluation, search and victim marking.

Information about these systems is provided in **Appendix C**. These marking systems are generally used by the structural collapse rescue resources in Washington State, but they have not been formally adopted as a state standard.

F. Recommendation 5

It is recommended that standardized procedures be used in the callout and initial actions for structural collapse rescue incidents.

An Initial Actions Checklist has been developed for actions to be taken in the initial call out, initial response reconnaissance and subsequent stages of structural collapse rescue and is provided in **Appendix D**. This was developed from existing policy and procedures of structural collapse rescue resources in the region. It is recommended that this checklist be used as a starting point for developing response procedures to help guide consistent response policy and procedures for structural collapse rescue response. Departments with structural collapse rescue capabilities should continually coordinate and improve upon this checklist from exercises and lessons learned during actual response with the strategic goal of standardizing structural collapse rescue response in Washington State.

G. Recommendation 6

It is recommended that the fire service adopt a consistent format to gather structural collapse rescue incident information for dissemination to the Emergency Operations Center (EOC) and the general public.

Appendix E provides three templates that can be used as tools for ease of reference in gathering and reporting information following a structural collapse incident. **Template A** includes a list of basic structural collapse incident information items that should be gathered. This is a sample only and should not be deemed to cover all potentially relevant data necessary for response or public communication. **Template B** is a building specific template. One Template B can be completed for each building impacted by an incident. This is a sample only and should not be deemed to cover all potentially relevant data necessary for response or public communication. **Template C** is for recording incident public communications. Templates A and B are specific to a structural collapse incident and are in addition to any general communications protocols that an agency may have in effect.

H. Recommendation 7

It is recommended that county Fire Chief's Associations follow the lead of the King County Fire Chief's Association and develop a standard Memorandum of Understanding (MOU) with the Associated General Contractors (AGC) for the use of private sector resources and expertise during the life-rescue phase of a significant incident.

Structural collapse rescue situations often require the equipment and expertise of the private sector, especially the construction industry. **Appendix F** is a model Memorandum of Understanding that is based upon the MOU developed between the Associated General Contractors of Washington (AGC) and the King County Fire Chiefs Association. It creates a general framework for providing private sector lifesaving disaster aid, expertise and equipment. This model MOU provides the basis for an agreement that can be signed by each respective Fire Chief's Association in the Puget Sound Region and the Washington Chapter of the Associated General Contractors (AGC).

Under this Memorandum of Understanding, the fire service is responsible for utilizing the National Incident Management System (NIMS) for mitigating disasters, identifying specialized equipment that may be of assistance in structural collapse rescue, assisting in the development of training for construction industry personnel, and developing a mechanism by which these training personnel may be called upon in the life-rescue phase of an emergency.

The construction industry and skilled trades are responsible for assisting in the development of training programs, assisting with the development of a mechanism by which these training personnel may be called upon in the life-rescue phase of an emergency, assisting with the identification of equipment that may be used in rescue operations and assisting with the coordination of equipment and supplies that can be mobilized.

I. Recommendation 8

It is recommended that ongoing relationships be maintained with the Associated General Contractors (AGC) of Washington to keep contact information and call out procedures up to date for the use of private sector resources and expertise in structural collapse rescue response and other significant incidents, including the use of a Private Sector Liaison as an advisor to the Incident Commander.

The AGC has offered to be the 24/7 contact for initiating planning and training efforts and mobilizing equipment, expertise and supplies during response. **Appendix G** is a recommended emergency contact procedure for the AGC and information needed to activate AGC. Specific contact information will be provided when a county Fire Chief's Association signs the MOU with the AGC. To facilitate coordination and understanding of AGC capabilities, equipment, terminology and operational protocols in an emergency, it is also recommended to utilize a Private Sector Liaison as part of the Command Staff of the Incident Commander at an incident. This position can assist the Incident Commander in requesting and utilizing private sector construction industry resources.

J. Recommendation 9

It is recommended that an ongoing relationship be maintained with the Washington State Fire Mobilization Staff concerning structural collapse rescue operations.

If a collapse rescue situation goes beyond the capabilities of a jurisdiction and their existing mutual aid resources, the State Fire Services Resource Mobilization Plan could be activated to bring in additional structural collapse rescue resource to assist. As structural collapse rescue incidents of this magnitude have happened infrequently in Washington State, the use of this Annex will be rare. Subsequently, an ongoing dialogue with State Fire Mobilization staff and the use of this plan in training and exercises will be necessary to ensure the contents and guidance provided in the Annex remains consistent with and operationally compatible with Fire Mobilization policy and Procedures.

K. Recommendation 10

It is recommended that information in this Annex be used in local, regional and state disaster training, drills and exercises.

With the infrequent nature of structural collapse rescue incidents, the Annex will need to be used at every opportunity in disaster training, drills and exercises to ensure the fire service and other stakeholders are familiar with its contents and it can be periodically discussed and updated.

L. Recommendation 11

It is recommended that the Washington State EMD and the State Fire Mobilization Plan should develop agreements with any Type 1 Task Force (FEMA Type 1 US&R Task Force) or equivalent in Washington State to facilitate the activation of such resources as a state resource in a lifesaving emergency.

Although incidents that require structural collapse rescue resources are historically rare in Washington State, and there are many existing highly capable structural collapse rescue resources developed in the state, a situation could develop where the skilled members of the task force and/or their specialized equipment are needed to save lives. A written agreement between the state and Type 1 Task Forces outlining operational and reimbursement policy and procedures would help ensure there were no delays in these resources being able to respond. It is further recommended that the terms of the agreement be the same as the agreement the WA-TF-1 has with FEMA.

M. Recommendation 12

It is recommended that the County Fire Chief's Associations review their countywide mutual aid agreement and any agreements with neighboring counties and jurisdictions to ensure they are up to date with respect to structural collapse rescue.

In the development of this annex, very few mutual aid agreements covering across county borders were located, the exception being agreements between agencies bordering South Snohomish County and North King County. Very few mutual aid agreements currently in place that were reviewed provide for reimbursement of loaned resources. Although several of the agreements allow for jurisdictions in the adjacent county to sign on, it is unknown at this time the extent to which this has occurred.

As structural collapse rescue incidents may last longer than one operational period and may also be part of an incident that is declared a federal disaster by the President, consideration should be given to reviewing both intra- and inter-county mutual aid agreements to ensure they anticipate funding and reimbursement requirements.

APPENDIX A: Recommended Task Force and Squad Typing

Currently, structural collapse rescue resources are not uniformly typed in Washington State. The Core Planning Team worked on a typing system that would meet the state's and region's needs and be consistent with national standards and guidance from NIMS, FEMA, NFPA and other sources. For consistency, structural collapse rescue resource information presented in Section II Attachment 1 uses the typing recommended below. Three levels of typing are recommended for Task Force capability (Table A - 1) and four levels of are recommended for Squad capability (Table A - 2), the rescue component of a Task Force.

Table A – 1: Task Force Typing

Task Force Typing Recommendation	
Type 3 Task Force - Dedicated leader(s): 10-12 Persons	
2	Rescue Squads meeting Type 3 Capability
	Capable of operating multiple operational shifts with logistical support from the on-scene incident command structure.
	ALS capability to support the Task Force
2	HazMat Technicians
1	Dedicated Safety Officer
	Includes non- technical search capability only.
1	Structural Specialist (consistent with FEMA standard)
	Logistical support: Can operate unsupported for 12 hours to include equipment transport, lodging for personnel and communications internal operations. Will still require support for planning and communications from the on-scene incident command structure.
Type 2 Task Force - Dedicated leader(s): 20-24 Persons	
4	Rescue Squads meeting Type 2 Capability
	Capable of operating multiple operational shifts with logistical support from the on-scene incident command structure.
	ALS medical capability to support the Task Force
2	HazMat Technicians
1	Dedicated Safety Officer
	Includes technical search capability
	Structural Specialist (consistent with FEMA standard)
	Logistical support: Can operate unsupported for 12 hours to include equipment transport, lodging for personnel and communications internal operations. Will still require support for planning and communications from the on-scene incident command structure.
Type 1 Task Force	
	Equal to FEMA Type 1 US&R Task Force
	Include all functions and positions meeting Type 1 capabilities
	Brings its own management structure including Command, Search, Rescue, Plans, HM, Logistics and Medical.

Table A – 2: Squad Typing

Squad Typing Recommendation	
Type 4 Squad	
Number	5 persons--a leader and four Rescue Team Members
Training	Trained to NFPA 472-HazMat Awareness Level. Firefighter 1 & 2 or equivalent.
Specialization	Trained for Surface Rescue and non-structural entrapment in non-collapsed structures consistent with NFPA 1670 Awareness Level.
Operations	Carry out basic operations for 3-6 hours
PPE	Helmet, gloves, eye and hearing protection, dust masks, steel toe boots, basic abrasion protection and clothing appropriate for the climate.
Rescue	Assorted basic hand tools and other equipment they are trained to use.
Medical	Basic first aid equipment to support team operations
Communications	Not required (needs to be provided)
Logistics	Hydration needs of the Squad for 6 hour period
Type 3 Squad	
	Meet all of Type 4 requirements
Number	5 persons, Leader and four Rescue Team Members
Training	NFPA 472-HazMat Operations Level, NFPA 1006-Complies with Operations Level (Level 1) for Structural Collapse for Rescue Personnel including all pre-requisites
Specialization	Trained for light frame and Unreinforced Masonry (URM) construction consistent with NFPA 1670 Operations Level.
Operations	Carry out basic operations for 12 hours.
PPE	Helmet, gloves, eye and hearing protection, dust masks, steel toe boots. Basic protection from elements, Self Contained Breathing Apparatus (SCBA) or equivalent with a positive pressure system
Rescue	Provides capability to breach and break typical light frame and URM construction and construct appropriate shoring. Equipment includes, but is not limited to, a shoring assortment; rebar cutters; demolition hammers; rotary hammers; reciprocating saws; hydraulic vehicle rescue system; hammer drill; chain saw; nail gun; cutting torch; assorted hand tools; generator; lights; extensions cords; basic hoisting slings and shackles, and air bags.
Medical	Medical aid equipment including backboards, stokes stretchers or basic patient packaging equipment for Basic Life Support (BLS) capability.
Technical	Equipped with basic rope equipment (Kernmantle and lifeline rope), ascenders and descenders, pulleys, tripod hauling system, carabineers, 4-gas meter. Includes the ability to monitor and ventilate atmosphere.
Communications	Portable radios for internal team communications
Logistics	Includes fuel, batteries and other accessories to support their equipment and personnel rehab for a 12 hour operational period.

Type 2 Squad	
	Meet all Type 3 requirements
Number	5 persons, leader and four Rescue Team Members
Training	NFPA 472-HazMat Operations Level. NFPA 1006-Complies with Technician Level (Level 2) for Structural Collapse for Rescue Personnel including all pre-requisites
Areas of Specialization	Trained for light frame, URM, heavy floor, heavy wall and steel frame construction consistent with NFPA 1670 Technician Level.
Operations	Carry out basic operations for 12 hours.
PPE	Helmet, gloves, eye protection, hearing protection, dust masks, steel toe boots. Basic protection from elements, Positive Pressure SCBA, other protection consistent with environment.
Rescue	Provides capability to breach and break typical light frame, URM, heavy floor, heavy wall and steel frame construction and to construct appropriate shoring. Equipment includes, but is not limited to, a shoring assortment; rebar cutters; demolition hammers; rotary hammers; reciprocating saws; hydraulic vehicle rescue system; hammer drill; chain saw; nail gun; cutting torch; assorted hand tools; generator; lights; extensions cords; rigging equipment, hoisting slings and shackles, air bags, pneumatic power tools, electric power tools, hydraulic power tools and heavy rigging equipment.
Medical	Medical aid equipment including backboards, stokes stretchers or basic patient packaging equipment for BLS medical capability.
Technical	Equipped with basic rope equipment (Kernmantle and lifeline rope), ascenders and descenders, pulleys, tripod hauling system, carabineers, 4-gas meter. Includes the ability to monitor and ventilate atmosphere. Technical search equipment such as Search Cams, acoustical listening, and thermal imaging cameras.
Communications	Portable radios for internal team communications
Logistics	Includes fuel, batteries and other accessories to support their equipment and personnel rehab for a 12 hour operational period.
Type 1 Squad	
	Meet all type 2 requirements
Areas of Specialization	Capable of operating in a Chemical, Biological, Radiological, Nuclear and High Yield Explosive (CBRNE) environment utilizing Level B protection at a minimum
Logistics	Capability to decontaminate the squad

Note: The difference in a Type 1 Squad and a Type 2 Squad is the capability of operating in a confirmed CBRNE environment.

Additional information needs to be provided by departments with typed structural collapse rescue capabilities to clarify any special conditions or limitations that will be involved in response. This information is as follows:

Limitations:

1. Are there limitations to the length of time you can respond? (Examples would include such issues as being able to respond for only one operational period without reimbursement.)

2. Are there limitations to the support you can provide your resources when you deploy them to assist? (Examples would include such issues as department resources are self sufficient for 24 hours and then they will need rehab, food, water, etc. from the requesting jurisdiction.)

3. Are you willing to respond under the current authority and policies of the State All-Hazard Mobilization Plan? Yes _____ No _____

(As the State All-Hazard Mobilization Plan has specific guidance for reimbursement, some departments have chosen not to deploy resources under this plan due to conflicts with employee contracts. The concept of the Structural Collapse Rescue Annex is not to call for resources from departments that do not respond under the current reimbursement policies)

4. Other Limitations or conditions? (This question provides the opportunity for departments covered under the Structural Collapse Rescue Annex to provide any other limitations a department needs to document in pre-planning)

APPENDIX B:

Recommended Equipment and Heavy Equipment Typing

A. . Equipment List Recommendations

The Core Planning Team (CPT) that is the coordinating group for the development of the Regional Catastrophic Structural Collapse Rescue Annex has made three recommendations with respect to structural collapse rescue equipment.

1. The FEMA US&R Cache List of equipment approved for the National US&R Response System be used as the guide for equipment for structural collapse rescue team development in the Puget Sound Region. It can be found at the following web link:
<http://www.fema.gov/emergency/usr/equipment.shtm>

This will help provide a consistent base for types and costs of equipment for both developing capability and reimbursement through various state and federal reimbursement mechanisms.

2. The WAGE & EQUIPMENT RATES FOR THE WASHINGTON STATE FIRE SERVICE is used for reimbursement of equipment and vehicle use for any structural collapse rescue operations performed under the authority of the Fire Resources Mobilization Plan. It can be found at the following web link:

http://www.dnr.wa.gov/publications/rp_fire_2010_state_mobilization_rates.pdf

3. The WAGE & EQUIPMENT RATES FOR THE WASHINGTON STATE FIRE SERVICE is expanded to include rates and typing for certain private sector heavy equipment, such as cranes.

The FEMA 2008 Approved Task Force Equipment Cache List (the List) is the latest version and is recommended for use in Washington State as the equipment standard, with necessary modification for local needs. The list is periodically reviewed and updated by FEMA to reflect changes in national mission parameters, operational concepts and technologic advances.

Using this List as a state standard will help with standardized, interoperable equipment among regional resources and result in enhanced readiness and operational effectiveness. Fire departments with structural collapse rescue resources are responsible for the regular inventory, exercise and preventive maintenance of all cache tools, equipment and supplies.

At the time the 2008 Task Force Equipment Cache List was published, some items had yet to be approved. In such cases, the individual cache items appear in gray and are not approved for procurement by FEMA teams using federal cooperative agreement funds. Gray shading will be removed by FEMA for these items when the next revision of the List is published.

All equipment must meet nationally recognized safety standards such as ANSI, SI, CGA347, or NEMA, as specified for the item.

The FEMA Approved Task Force Equipment Cache List includes unit and total cost information for each item or group of items. In general, the cost for individual cache items is limited to the published manufactures suggested retail price (MSRP). The costs included on the List do not include tax, delivery, shipping, and handling charges that may be incurred.

Any equipment listed is not intended to endorse any specific brand(s) but are included for illustrative and clarification purposes. In general, "industrial quality" items should be procured when filling tools or equipment or specialty items in the cache due to their use under disaster response, emergency operations conditions.

The List is organized into eight sections; rescue, medical, technical, communications, logistics, planning, and two new sub-sections Hazmat WMD and water (personal protective equipment).

Some items on the List may be beyond the scope of structural collapse rescue operations as outlined in this Annex. Also, quantities of items on the List are designed for FEMA Type I and Type III Task Forces and may not be applicable for squads, teams and task forces in Washington and should be considered accordingly.

Rescue Equipment Section - The tools and equipment specified in the Rescue Equipment Section have been selected with the considerations of size, weight, maneuverability, and adaptability to a variety of rescue functions. The majority of rescue tools have been selected for the express purpose of penetrating reinforced concrete structures.

Medical Equipment Section - The Medical Equipment Section is based upon providing sophisticated medical treatment for victims entrapped in collapsed structures, as well as responders, including limited treatment of disaster search canines.

Technical Equipment Section - All listed electric technical equipment must be capable of battery operation using rechargeable batteries, or have an adequate supply of disposable batteries. All equipment must be capable of field repair, calibration and adjustment, and should be user-friendly and easy to operate.

Communications Equipment Section - The Communications Equipment Section is based upon supporting the overall communications requirements to support communications between identified team members, from the team leaders to local authorities, replacement of radios that malfunction or other unexpected occurrences and long-haul communications to home command and coordination centers.

Logistics Equipment Section - The Logistics Equipment Section is based upon supporting any of the dietary, shelter, personal protection, administrative or other requirements not listed in the preceding task force cache Section listings.

Hazmat Equipment Section - This section was developed to allow for the capability to operate safely within an HAZMAT WMD environment, including presumptive site characterization; performance of reconnaissance (recon), search, and rescue within a contaminated environment; and decontamination (decon) of personnel and a limited number of victims.

Defensive Water PPE Section - The section was developed to provide PPE for safe operations in or around a water hazard environment. The PPE specified in this section have been selected with the considerations of size, weight, maneuverability, and adaptability to a variety of rescue functions.

B. Recommended Common Heavy Equipment Typing

The WAGE & EQUIPMENT RATES FOR THE WASHINGTON STATE FIRE SERVICE lists most all of the types and associated costs of heavy equipment that might be used at a structural collapse rescue incident including bulldozers, backhoes and other heavy equipment. It does not include any typing or cost provisions for cranes.

The Core Planning Team (CPT) recommends that the Fire Service and the Associated General Contractors (AGC) work with the state Fire Mobilization staff to add cranes to the WAGE & EQUIPMENT RATES FOR THE WASHINGTON STATE FIRE SERVICE. Some initial work that was started during this planning process is included in this Appendix as a resource for this effort.

Part 1: DRAFT Equipment Typing Developed by the Seattle Fire Department

This information was developed by the Seattle Fire Department in cooperation with the Associated General Contractors, skilled trades and others.

Part 2: DRAFT Equipment Typing Developed by the California FIREScope as part of the California ICS-120-1

This information was developed by the California FIREScope program and may be used as a resource for developing typing for cranes.

Part 1 – Information developed by the Seattle Fire Department and others.**Resource Typing Template**

Resource: All Terrain Hydraulic Cranes**Category:**

Transportation (ESF-1)	Communications (ESF-2)	x	Pub Wks/Engineering (ESF 3)
Firefighting (ESF 4)	Info and Planning (ESF 5)		Mass Care (ESF 6)
Resource Mgt (ESF 7)	Health and Medical (ESF 8)	x	Search and Rescue (ESF 9)
Haz-Mat (ESF 10)	Food and Water (ESF 11)		Energy (ESF 12)
Law Enforcement	Military Support		Public Information
Animals and Agriculture	Volunteers and Donations		Other

Kind:

Team	x	Equipment		Supplies		Other
Aircraft	x	Personnel	x	Vehicle		

Components and Capabilities

Component	Metric(s)	Type 1	Type 2	Type 3	Type 4
Equipment and personnel	Tons	175-210 tons. Example: Grove cranes type with boom reach of 170 feet. With jib reaches to approx. 280 feet. Self propelled, driven over the road. Operator furnished. Minimal set-up time. Jib and counterweight are transported by two tractor-trailers.	120-150 tons. Example: Grove crane type with boom reach of 150 feet. With jib reaches approximately 250 feet. Self propelled, driven over the road. Operator furnished. Minimal set-up time. Jib and counterweight are transported by two tractor-trailers.	90-110 tons. Example: Grove crane type with boom reach of 192 feet. With jib reaches approximately 220 feet. Self propelled, driven over the road. Operator furnished. Minimal set-up time. Jib and counterweight are transported by two tractor-trailers.	22.5 tons. Example: Grove crane type with boom reach of 90 feet. With jib reaches approximately 120 feet. Self propelled, driven over the road. Operator furnished. Minimal set-up time.
Examples					
Cost					

Resource Typing Template

Resource: Dozer



Category:

Transportation (ESF-1)	Communications (ESF-2)	x	Pub Wks/Engineering (ESF 3)
Firefighting (ESF 4)	Info and Planning (ESF 5)		Mass Care (ESF 6)
Resource Mgt (ESF 7)	Health and Medical (ESF 8)	x	Search and Rescue (ESF 9)
Ha-Mat (ESF 10)	Food and Water (ESF 11)		Energy (ESF 12)
Law Enforcement	Military Support		Public Information
Animals and Agriculture	Volunteers and Donations		Other

Kind:

Team	x	Equipment		Supplies		Other
Aircraft	x	Personnel	x	Vehicle		

Components and Capabilities

Component	Metric(s)	Type 1	Type 2	Type 3	Type 4
Equipment and personnel	Tons	Example: Cat D-8, D-9, D-10 with metal tracks. Blade span of 14-20 feet wide. Operator furnished. Requires three (3) tractor trailers to mobilize and demobilize. Eight (8) hours assembly required.	Example: Cat D-5 to D-7 with metal tracks. Blade span of 9-14 feet wide. Operator furnished. Requires one (1) tractor trailer to mobilize and demobilize.	Example: Cat D-4 and under with metal tracks. Blade span of up to 9 feet wide. Operator furnished. Requires one (1) tractor trailer to mobilize and demobilize.	
Examples		CAT D8R, D8K, D8L, D9 John Deere 1050 Terex 82-30	Case 1850, CAT D6R, D6HY, D7F John Deere 850	Case 350, 450, 550, 650 CAT D3, D4, D5C, D5G John Deere 350, 450, 550, 650	
Cost					

Resource Typing Template

Resource: Skid Steer



Category:

Transportation (ESF-1)	Communications (ESF-2)	x	Pub Wks/Engineering (ESF 3)
Firefighting (ESF 4)	Info and Planning (ESF 5)		Mass Care (ESF 6)
Resource Mgt (ESF 7)	Health and Medical (ESF 8)	x	Search and Rescue (ESF 9)
HazMat (ESF 10)	Food and Water (ESF 11)		Energy (ESF 12)
Law Enforcement	Military Support		Public Information
Animals and Agriculture	Volunteers and Donations		Other

Kind:

Team	x	Equipment		Supplies		Other
Aircraft	x	Personnel	x	Vehicle		

Components and Capabilities

Component	Metric(s)	Type 1	Type 2	Type 3	Type 4
Equipment and personnel	Tons	Example: John Deer 325, capacity 2500 lbs. Dump reach of 41 inches. Self propelled for short distances. Requires one (1) tractor trailer to mobilize and demobilize for longer distances	Example: John Deer 320, capacity 1950 lbs. Dump reach of 35 inches. Self propelled for short distances. Requires one (1) tractor trailer to mobilize and demobilize for longer distances	Example: John Deer 317, capacity 1750 lbs. Dump reach of 36 inches. Self propelled for short distances. Requires one (1) tractor trailer to mobilize and demobilize for longer distances	
Examples					
Cost					

Resource Typing Template

Resource: Backhoe



Category:

Transportation (ESF-1)		Communications (ESF-2)	x	Pub Wks/Engineering (ESF 3)
Firefighting (ESF 4)		Info and Planning (ESF 5)		Mass Care (ESF 6)
Resource Mgt (ESF 7)		Health and Medical (ESF 8)	x	Search and Rescue (ESF 9)
HazMat (ESF 10)		Food and Water (ESF 11)		Energy (ESF 12)
Law Enforcement		Military Support		Public Information
Animals and Agriculture		Volunteers and Donations		Other

Kind:

Team	x	Equipment		Supplies		Other
Aircraft	x	Personnel	x	Vehicle		

Components and Capabilities

Component	Metric(s)	Type 1	Type 2	Type 3	Type 4
Equipment and personnel	Tons	Example: Cat 426C; 1 ¼ yard front bucket, loading height 8 feet, 1/8 yard rear bucket, horizontal reach 19.82 feet, digging depth 15.5 feet. Operator furnished, rubber tire, self propelled for short distances. Requires one (1) tractor trailer to mobilize and demobilize for longer distances.	Example: Cat 416D; 1 yard front bucket, loading height 8 feet, 1/8 yard rear bucket, horizontal reach 18 feet, digging depth 14 feet. Operator furnished, rubber tire, self propelled for short distances. Requires one (1) tractor trailer to mobilize and demobilize for longer distances.		
Examples					
Cost					

Part 2: DRAFT Equipment Typing Developed by the California FIREScope (California ICS-120-1)

Resource Typing Template

Resource: Hydraulic Truck Cranes



Category:

Transportation (ESF-1)	Communications (ESF-2)	x	Pub Wks/Engineering (ESF 3)
Firefighting (ESF 4)	Info and Planning (ESF 5)		Mass Care (ESF 6)
Resource Mgt (ESF 7)	Health and Medical (ESF 8)	x	Search and Rescue (ESF 9)
HazMat (ESF 10)	Food and Water (ESF 11)		Energy (ESF 12)
Law Enforcement	Military Support		Public Information
Animals and Agriculture	Volunteers and Donations		Other

Kind:

Team	x	Equipment		Supplies		Other
Aircraft	x	Personnel	x	Vehicle		

Components and Capabilities

Component	Metric(s)	Type 1	Type 2	Type 3	Type 4
Equipment and personnel	Tons	100 ton +	50-100 ton	Up to 50 ton	
	Radius	Up to 275 feet	Up to 200 feet	Up to 150 feet	
Examples					
Cost					

Resource Typing Template

Resource: Hydraulic Rough Terrain Cranes



Category:

Transportation (ESF-1)		Communications (ESF-2)	x	Pub Wks/Engineering (ESF 3)
Firefighting (ESF 4)		Info and Planning (ESF 5)		Mass Care (ESF 6)
Resource Mgt (ESF 7)		Health and Medical (ESF 8)	x	Search and Rescue (ESF 9)
HazMat (ESF 10)		Food and Water (ESF 11)		Energy (ESF 12)
Law Enforcement		Military Support		Public Information
Animals and Agriculture		Volunteers and Donations		Other

Kind:

Team	x	Equipment		Supplies		Other
Aircraft	x	Personnel	x	Vehicle		

Components and Capabilities

Component	Metric(s)	Type 1	Type 2	Type 3	Type 4
Equipment and personnel	Tons	Up to 50 ton			
	Radius	Up to 100 feet			
Examples					
Cost					

Resource Typing Template

Resource: Conventional Truck Cranes



Category:

Transportation (ESF-1)	Communications (ESF-2)	x	Pub Wks/Engineering (ESF 3)
Firefighting (ESF 4)	Info and Planning (ESF 5)		Mass Care (ESF 6)
Resource Mgt (ESF 7)	Health and Medical (ESF 8)	x	Search and Rescue (ESF 9)
HazMat (ESF 10)	Food and Water (ESF 11)		Energy (ESF 12)
Law Enforcement	Military Support		Public Information
Animals and Agriculture	Volunteers and Donations		Other

Kind:

Team	x	Equipment		Supplies		Other
Aircraft	x	Personnel	x	Vehicle		

Components and Capabilities

Component	Metric(s)	Type 1	Type 2	Type 3	Type 4
Equipment and personnel	Tons	150 ton +	75-150 ton	Up to 75 ton	
	Radius	Up to 300 feet	Up to 250 feet	Up to 150 feet	
Examples					
Cost					

Resource Typing Template

Resource: Conventional Crawler Crane



Category:

Transportation (ESF-1)	Communications (ESF-2)	x	Pub Wks/Engineering (ESF 3)
Firefighting (ESF 4)	Info and Planning (ESF 5)		Mass Care (ESF 6)
Resource Mgt (ESF 7)	Health and Medical (ESF 8)	x	Search and Rescue (ESF 9)
HazMat (ESF 10)	Food and Water (ESF 11)		Energy (ESF 12)
Law Enforcement	Military Support		Public Information
Animals and Agriculture	Volunteers and Donations		Other

Kind:

Team	x	Equipment		Supplies		Other
Aircraft	x	Personnel	x	Vehicle		

Components and Capabilities

Component	Metric(s)	Type 1	Type 2	Type 3	Type 4
Equipment and personnel	Tons	350 ton +	100 - 350 ton	Up to 100 ton	
	Radius	Up to 350+ feet	Up to 275 feet	Up to 160 feet	
Examples					
Cost					

Resource Typing Template

Resource: Excavator Crawler



Category:

Transportation (ESF-1)	Communications (ESF-2)	x	Pub Wks/Engineering (ESF 3)
Firefighting (ESF 4)	Info and Planning (ESF 5)		Mass Care (ESF 6)
Resource Mgt (ESF 7)	Health and Medical (ESF 8)	x	Search and Rescue (ESF 9)
HazMat (ESF 10)	Food and Water (ESF 11)		Energy (ESF 12)
Law Enforcement	Military Support		Public Information
Animals and Agriculture	Volunteers and Donations		Other

Kind:

Team	x	Equipment		Supplies		Other
Aircraft	x	Personnel	x	Vehicle		

Components and Capabilities

Component	Metric(s)	Type 1	Type 2	Type 3	Type 4
Equipment and personnel	Tons	80k lbs. +	40k – 80k lbs.	Up to 40k lbs.	Mini
	Radius	Up to 70 feet	Up to 50 feet	Up to 40 feet	
Examples		Case CS330, CX460, CX 800, 9050B, 9060B, CAT 330CL, 345BL, 345BL II, 350L 365L, 375 John Deere 330C LC, 330lc, 370, 370C, 450LC	Case CX240, CX290, 9040B, 9045B, CAT 322CL, 325BL, 325CL, 330BL John Deere 230LC, 230C LC, 270 LC	Case CX210, CX225, CAT320C, 320CL, 322BL John Deere 200C LC, 200LC, 225C LC	
Cost					

Resource Typing Template

Resource: Loader Rubber Tire



Category:

Transportation (ESF-1)		Communications (ESF-2)	x	Pub Wks/Engineering (ESF 3)
Firefighting (ESF 4)		Info and Planning (ESF 5)		Mass Care (ESF 6)
Resource Mgt (ESF 7)		Health and Medical (ESF 8)	x	Search and Rescue (ESF 9)
HazMat (ESF 10)		Food and Water (ESF 11)		Energy (ESF 12)
Law Enforcement		Military Support		Public Information
Animals and Agriculture		Volunteers and Donations		Other

Kind:

Team	x	Equipment		Supplies		Other
Aircraft	x	Personnel	x	Vehicle		

Components and Capabilities

Component	Metric(s)	Type 1	Type 2	Type 3	Type 4
Equipment and personnel	Cubic Yards	5 Cubic Yards	3-5 Cubic Yards	1-3 Cubic Yards	Backhoe Skid Steer Mini
Examples					
Cost					

Resource Typing Template

Resource: Forklift Conventional



Category:

Transportation (ESF-1)		Communications (ESF-2)	x	Pub Wks/Engineering (ESF 3)
Firefighting (ESF 4)		Info and Planning (ESF 5)		Mass Care (ESF 6)
Resource Mgt (ESF 7)		Health and Medical (ESF 8)	x	Search and Rescue (ESF 9)
HazMat (ESF 10)		Food and Water (ESF 11)		Energy (ESF 12)
Law Enforcement		Military Support		Public Information
Animals and Agriculture		Volunteers and Donations		Other

Kind:

Team	x	Equipment		Supplies		Other
Aircraft	x	Personnel	x	Vehicle		

Components and Capabilities

Component	Metric(s)	Type 1	Type 2	Type 3	Type 4
Equipment and personnel	Tons	25 tons +	10 – 25 tons	5 – 10 tons	
Examples					
Cost					

Resource Typing Template

Resource: Forklift All-terrain Extendable



Category:

Transportation (ESF-1)		Communications (ESF-2)	x	Pub Wks/Engineering (ESF 3)
Firefighting (ESF 4)		Info and Planning (ESF 5)		Mass Care (ESF 6)
Resource Mgt (ESF 7)		Health and Medical (ESF 8)	x	Search and Rescue (ESF 9)
HazMat (ESF 10)		Food and Water (ESF 11)		Energy (ESF 12)
Law Enforcement		Military Support		Public Information
Animals and Agriculture		Volunteers and Donations		Other

Kind:

Team	x	Equipment		Supplies		Other
Aircraft	x	Personnel	x	Vehicle		

Components and Capabilities

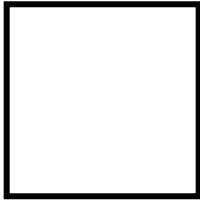
Component	Metric(s)	Type 1	Type 2	Type 3	Type 4
Equipment and personnel	Pounds	3 – 6 tons 6k – 12K pounds			
Examples					
Cost					

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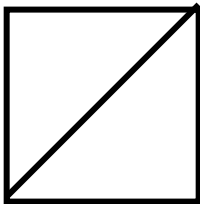
APPENDIX C: Recommended Marking Systems

Marking systems have been adopted by the National Urban Search and Rescue Response System to conspicuously denote information relating to the status of the structure, status of the search, hazards in a building and status of the victims. By utilizing these marking standards, arriving FEMA or other state structural collapse rescue resources will be able to understand what has been search already and not have to repeat search operations.

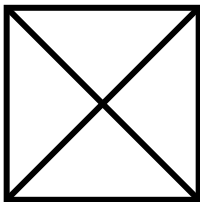
A. Structural Evaluation Marking



A 2' x 2' square indicates that a structure is safe to enter.



A 2' x 2' square with a single slash indicates that the structure is significantly damaged, but limited entry is possible after bracing, shoring or eliminating falling hazards.



A 2' x 2' square with an "X" inside indicates that the structure is not safe. **DO NOT ENTER**



An arrow is used to give direction to the entry point.

HM

The letters "HM" are used to indicate the presence of hazardous materials.

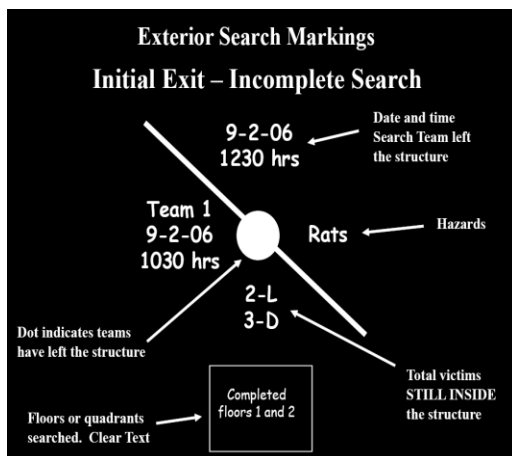
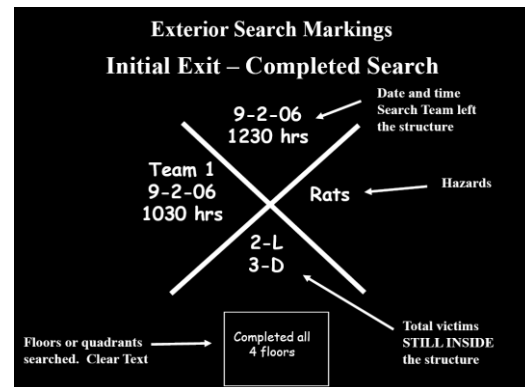
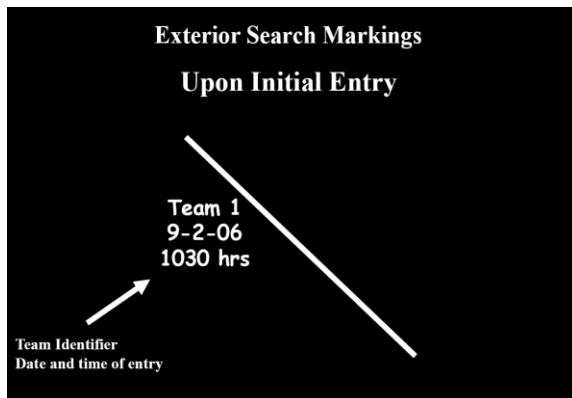
B. Search Marking:

The end result is an "X" where each quadrant is used for specific information.

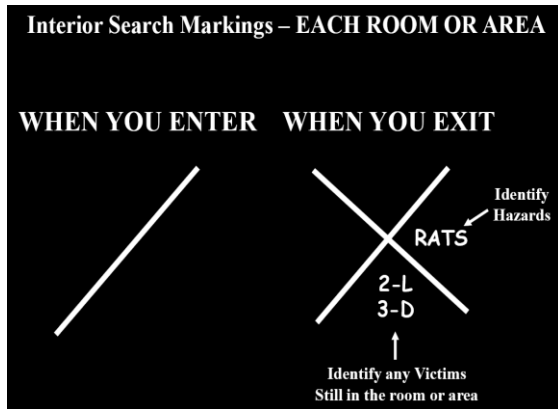
1. **LEFT QUADRANT**- Search team identifier and time and date of entry.
2. **TOP QUADRANT**- Time and date that the search personnel left the structure.
3. **RIGHT QUADRANT**- Any hazards found.
4. **BOTTOM QUADRANT**- The number of live and deceased victims still inside the structure. A small "x" is placed if there are no victims.

A BOX at the bottom is used if there are multiple floors, listing specific information, in clear text, of search activities.

A single slash drawn upon entry to a structure indicates search operations under way. The Team designation, date and time are documented on the left. If known, search personnel should mark the area of any possible victim location in addition to the entry markings. When the search of the structure is complete, a crossing slash is drawn upon exit from the structure, forming an "X". Distinct markings should be made in the remaining quadrants to denote the search status and findings at the time of this assessment. If there are multiple floors, a box is drawn at the bottom of the "X" and any specific information needed is written here, in plain text. (No codes or symbols)



If the searcher did not completely finish searching the structure, the second slash making the "X" is not done. A round dot is placed on the slash and specific information is placed where the quadrants would be. Details of what was completed are put in the box below. If the information needs to be updated, simply cross out the earlier information and write in the new information. For example, when all of the live victims are removed by rescue efforts the information should be changed to read "0 live".



While inside a structure, search teams should mark any specific rooms or areas. A large single slash is drawn at the entry point of the room or area. After the room or area is searched, a second large slash is made to form an “X”. Team and time information is not placed on interior search markings. The only additional information placed in any of the quadrants for interior markings should pertain to significant hazards or the number of LIVE or DEAD victims.

The National US&R Response System has developed a template for SEARCH LABELS that can be printed on peel and stick labels and attached to a structure to be searched. These labels may also be distributed to other search elements to help maintain consistency in search marking.

Date of Exit

Time of Exit

Task Force

Date of Entry

Time of Entry

Hazards

-L
-D

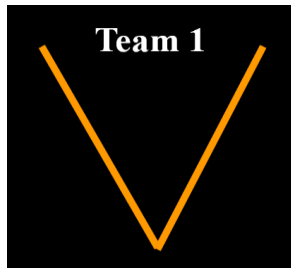
-L
-D

Area searched if incomplete

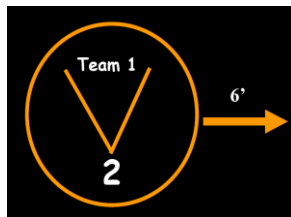
Area searched if incomplete

C. Victim Marking

Another distinct marking system is used to conspicuously denote information relating to any victims in the areas searched. Marking can be done with spray paint, lumber marking device or other suitable marker as long as it is very visible.



Make a large (at least 2' x 2') "V" near the location of any **potential** victim. Mark the name of the search team or crew identifier in the top part of the "V"



Make a circle around the "V" when a potential victim is **confirmed** to be **alive** either visually, vocally, or hearing specific sounds that would indicate a high probability of a live victim. If more than one confirmed live victim, mark the total number of victims under the "V".

An arrow may need to be painted next to the "V" pointing towards the victim when the victim's location is not immediately near where the "V" is painted. Show the distance on the arrow.

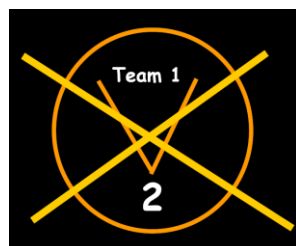


Paint a horizontal line through the middle of the "V" when a **confirmed** victim is determined to be **deceased**.

If there is more than one confirmed deceased victim, mark the total number of victims under the "V".



Use both the live and deceased victim marking symbols when a combination of live and deceased victims is determined to be in the same location.



Paint an "X" through the confirmed victim symbol after **all** of the victim(s) have been removed from the specific location identified by the marking.

APPENDIX D: Recommended Initial Actions Checklist

The following are checklists of recommended actions to be taken in the initial call out, initial response reconnaissance and subsequent stages of structural collapse rescue.

Initial Call-out – Information to consider for calling resources for structural collapse rescue		
	Action	Comments
	Level of response needed	
	Length of Operational Period	
	Type of construction	
	Any special hazards? (HazMat, bio, etc.?)	
	Private Section Liaison needed?	
	Special Resources needed (Canine, Technical, etc.?)	
	Staff and resources for the next Operational Period	
	Incident Management Team (IMT) needed?	
	Implement the Incident Action Plan process	
	On scene logistic support needed	
	EOC/ECC activated	
	Staging Areas identified	
	On scene security	
	Access routes identified	
	On scene credentials needed?	
	Are there fatalities?	
	Other	

Initial Response Reconnaissance - A general rule is that no personnel shall enter a collapsed or damaged building to render patient care or extrication until a general survey and size up of damage is done. This reconnaissance provides for a general survey of the area and size up of the damage and is designed to determine the following information.

	Action	Comments
	Building's use	
	Number of occupants	
	Number of victims trapped	
	Probable location	
	Are rescue operations currently underway?	
	Hazards	
	Gas and Utilities	
	Flammables	
	Electrical	
	Flooding from burst mains	
	Plumbing and Sewer disruption	
	Structural stability of adjoining buildings	
	Rescue efforts already underway by untrained personnel and/or citizens.	Stop such efforts immediately.
	Other?	

Stage 1 - Immediate rescue of surface casualties

	Action	Comments
	Victims found on top of the debris or lightly buried are removed first.	
	All rescue efforts should be directed to the victims who can be seen or heard.	
	Rescue efforts should be also directed to reach those victims whose location is known even if you cannot see or hear them.	
	If fatalities, ensure local coroner or medical examiner is notified.	

Stage 2 - Scene organization and management. The following list provides recommended initial actions to take to establish command and before rescue operations begin.

	Action	Comments
	Shut down all utilities.	
	Evaluate structural integrity, assign a safety officer.	
	Request an engineer or architect.	
	Direct rescue operations from a safety stand point.	
	Assign team leaders for each designated rescue team.	
	Divide the collapse area into manageable areas.	
	Draw up a contingency plan and place on standby.	
	Exploration and rescue from likely survival places.	
	Seek out casualties by looking in places that could have afforded a reasonable chance for survival.	

Typical areas that should be searched are as follows:

	Spaces under stairways	
	Basement and cellar locations	

Stage 2 - Scene organization and management. (con't)

Typical areas that should be searched are as follows (con't):

	Locations near chimneys or fireplaces	
	Voids under floors that are not entirely collapsed	
	Undiminished rooms whose egress is barred	
	Voids created by furniture or heavy machinery	

Locate casualties using the "hailing system."

	Place rescuers in "call" and "listen" positions.	
	Have the Division/Group Leaders call for silence.	
	Going "around the clock" each rescuer calls out or taps on something. A period of silence should follow each call.	
	All members should attempt to determine a "fix" on any sound return.	
	After a sound is picked up, at least one additional "fix" should be attempted from another angle.	
	Once communications with the victim is established, it should be constantly maintained.	

Stage 3 - Breaching and shoring. In some instances, victims may be reached by breaching and shoring. Initially try to avoid the breaching of wall. This may undermine the structural integrity of the rest of the building.

	Action	Comments
	It is safer to cut holes in floors and use the shaft approach.	
	If you must breach a wall or cut a floor, cut a small hole first to assure that you are not entering a hazardous area.	

Stage 3 - Breaching and shoring. (con't)

	Action	Comments
	Shoring may be used to support weakening walls or floors.	
	Shores should not be used to restore the structural elements to their original positions.	
	An attempt to force beams or walls into place may cause collapse.	
If you decide to shore, keep the following in mind:		
	The maximum length of a shore should be no more than 50 times its width.	
	The strength of a shore is dependent on where it is anchored. If anchored to a floor, it will be dependent on the strength of the floor.	
	Shoring should be attempted only by qualified personnel or under the supervision of technical rescue personnel.	
	Shoring should NEVER be removed once in place.	
Stage 4 - Selected debris removal consists of reducing the size of the rubble.		
	Action	Comments
	This must be accomplished based on a pre-determined plan.	
	Cranes and heavy equipment may be needed to accomplish this portion of the rescue.	
	Remove debris from the top down.	
	Remove debris from selected areas where information suggests that victims might be.	

Stage 5 - General debris removal should be deployed after all other methods have been used. This basically amounts to the demolition phase.

	Action	Comments
	Used only after the decision is made by the incident commander that no other victims are alive.	
Other Considerations		
	Action	Comments
	It is safer to reach entrapped victims from above.	
	Diagram the building on the command board.	
	If fatalities are involved, coordinate with local coroner or medical examiner and follow local protocols.	
	Beware of "at will" response by volunteers or citizens.	
	Call for additional recourses if necessary.	
	Insure proper PPE	
	Request appropriate departments (Building, Utilities, and Public Works) to come on site if necessary to evaluate.	
	Request local Building Official to come on site if necessary	
	Perimeter and scene control and ensure control of all accesses to the site.	
	Consider Traffic Control	
	Consider Security of Scene	
	Consider Lock out/Tag Out	

APPENDIX E:

Recommended Information Management Tools

TEMPLATE A: GENERAL PUBLIC INFORMATION and OTHER INFORMATION ITEMS

<i>Date / Time form completed</i>	
<i>Name of Person completing this form</i>	
<i>Title:</i>	
<i>Agency :</i>	
<i>Cell / phone</i>	
<i>Email</i>	

OBTAIN INCIDENT COMMAND APPROVAL BEFORE RELEASING ANY INFORMATION

Information Item	Approved for public release by: (name/agency) Date/time:
PART A: GENERAL PUBLIC INFORMATION ITEMS	
Address(es) of impacted buildings (identify street address and name of city (if applicable) or unincorporated area):	
Street closures instituted by incident command—location, hours, expected duration	
Incident that caused structural collapse (nature of incident, if known; date/time of collapse)	
Incident Command agency:	

Information Item	Approved for public release by: (name/agency) Date/time:
Primary Fire/EMS response agency for this location:	
Instructions to Public (e.g. stay away from area, remove cars from street, tune into radio for additional information)	
Are people trapped in building(s)? Is there any estimate of the number of individuals trapped in building(s)?	
Has communication been established with people inside the building?	
Agency / Website for public to contact for information on possible victims:	
Time of next public update:	
PART B: OTHER INCIDENT INFORMATION NOT FOR DISCLOSURE BUT POTENTIALLY SOURCES OF INFORMATION THAT MAY BE RELEASED TO PUBLIC	
Local Building Official (name, contact information) for jurisdiction (county or city)	
Website of the public agency that can provide information about the buildings impacted (either Fire agency files of floor plans or City/County building permits information on line)	

Information Item	Approved for public release by: (name/agency) Date/time:
For each damaged building, general information: number of stories, nature of occupancy (office, commercial, retail, residential, government office, industrial); SEE TEMPLATE B.	
Resources on scene (e.g. Fire, Dog, Medical, Structural Collapse Teams, Cranes), Participating Agencies	
Are all requested response units on site or are some en route? (ID Resources requested and en route -- not yet on site) Agency / Resource / Capability	
Resources requested and not yet confirmed as available/en route Agency of whom request made / Resource requested / capability	
Medical Way Station Established from which victims will be transported to hospitals? (Y/N/ NA)	
Hospital(s) to which victims are being transferred Name / Address / Contact Phone for Incident Responders to use	

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Structural Collapse Incident**TEMPLATE B: INDIVIDUAL BUILDING INFORMATION FORM****(1 form per building)**

<i>Date / Time form completed</i>	
<i>Name of Person completing this form</i>	
<i>Title:</i>	
<i>Agency :</i>	
<i>Cell / phone</i>	
<i>Email</i>	

OBTAIN INCIDENT COMMAND APPROVAL BEFORE RELEASING ANY INFORMATION

Item	Approved for public release by: (name/agency) Date/time:
Building Address / Name: Name of Building: Street address: Cross streets: Jurisdiction (city or unincorporated county):	
Building Condition: <i>(check all that apply):</i> ☐ total collapse ☐ partial collapse: (describe) ☐ incidental damage from collapse of adjacent building Fire: ☐ N/A ☐ fire in progress ☐ fire extinguished Agency Responding:	

Item	Approved for public release by: (name/agency) Date/time:
Adjacent Building Information (list buildings): ___ Adjacent buildings damaged _____ ___ Adjacent buildings at risk from this building _____ ___ Adjacent buildings undamaged _____	
Building Lock-out Status: ___ building open to public ___ lock-out in progress ___ lock-out confirmed Agency responsible: _____ Contact info: _____	
Perimeter Control: ___ requested ___ in process ___ established Agency responsible: _____ Contact: _____ Approximate boundaries: Other Info/Issues:	
Traffic Control: ___ requested ___ in process ___ established Agency responsible: _____ Contact: _____	
Utilities: Gas: (Provider: _____ Emergency Contact #: _____) ___ possible/active gas leak ___ no gas leak ___ utility contacted for cut-off ___ utility cut-off confirmed	

Item	Approved for public release by: (name/agency) Date/time:
Electric: (Provider: _____ Emergency Contact #: _____) ____ downed wires evident/sparking ____ no apparent electrical issues ____ utility contacted for cut-off ____ utility cut-off confirmed Other Flammables on site:	
Water: (Provider: _____ Emergency Contact #: _____) ____ water leaks evident ____ utility contacted for shut-off ____ utility shut-off confirmed Utilities (cont'd): Sewer: (Provider: _____ Emergency Contact #: _____) ____ sewer leaks evident ____ utility contacted for shut-off ____ utility shut-off confirmed Other: (Cell Towers, Cable located at/on building):	
Victim Information: ____ confirmed individuals trapped in building (number if known: _____) ____ unable to confirm whether individuals trapped in building ____ confirmed that no individuals are trapped in building ____ emergency response agency is in contact with victims in building: voice / phone	

Item

Approved for public
release by:
(name/agency)

Date/time:

Probable locations of Victims:

Casualties:

___ casualties possible

___ casualties confirmed (#: _____)

Call for more information on persons injured/trapped: _____

Call for more information on casualties: _____

On-scene command contact information for this building:

Name/ Agency / contact info

Owner or Manager of Building:

Name:

Phone:

(circle one): unable to contact / in phone contact / on scene

Other: (name / contact info / status of contact)

Building Engineer:

Architect:

Item	Approved for public release by: (name/agency) Date/time:
Local Building Official: Name: Phone: Unable to contact / In phone contact / on scene Website of permitting agency or local fire agency has been checked to obtain information about the building? (Y/N) Web address :	
Floor Plans Floor plans available on website for this building Floor plans made available to incident command	
Approximate size of building (floors, square feet) <i>Confirmed from Website: Y/N</i>	
Type of construction: (wood frame; wood frame on concrete ground floor; reinforced concrete; steel frame; etc.) <i>Confirmed from Website: Y/N</i>	
Occupancy (office, commercial, retail, residential, government office, industrial) <i>Confirmed from Website: Y/N</i>	

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Structural Collapse Incident

TEMPLATE C: RECORD OF PUBLIC COMMUNICATIONS

Date	Time	Spokesperson	Key Message Points Communicated	Agencies Communicated With (local radio/TV, other)	Method: fax /press conference / phone	Follow-up items

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APPENDIX F:

Model MOU with the Associated General Contractors of Washington (AGC)

MEMORANDUM OF UNDERSTANDING REGARDING LIFESAVING DISASTER AID AND COORDINATION OF THE CONSTRUCTION INDUSTRY, SKILLED TRADES AND THE FIRE SERVICE IN _____ COUNTY

1. BACKGROUND

Disaster response has been a major part of emergency service agencies' training and preparedness for more than fifty years. Initially, the focus of this planning was on fighting large-scale fires and the rescue and recovery of the victims of structural failures and other disasters.

In more recent times, the focus has broadened to include acts of terrorism. In such instances, the potential exists to overwhelm the ability of emergency service agencies to respond appropriately absent the mutual aid of other disciplines. It is also recognized that the scale of a terrorist incident or natural disaster may be such that the construction industry, which possesses specialized equipment and skilled personnel, could aid in lifesaving efforts.

The parties recognize that it is not possible to predict how or when a disaster may occur and further recognize that a disaster may overwhelm the ability of emergency service agencies to respond with mutual aid, and that the nature of the disaster may make it physically impossible for agencies to respond. It is therefore understood that the commitments made within this MOU are intended to provide for an 'as available' resource, with each agency being the sole determiner of whether it can respond with mutual aid.

2. PURPOSE & SCOPE

The parties to this Memorandum of Understanding (MOU) have determined that it is desirable to create a general framework which provides the following:

1. Standardized training for improved coordination between fire service agencies and the construction industry and skilled trades requested to respond to such disasters;
2. The establishment of equipment and material inventories that may be useful in responding to disasters; and
3. The creation of a general framework for providing mutual aid between the agencies executing this agreement which may be called upon to respond to a disaster.

3. FIRE SERVICE RESPONSIBILITIES

Fire service agencies signing this MOU agree to do the following to improve the potential for appropriate response to disaster events:

1. Utilizing the National Incident Management System (NIMS) for the mitigation of disasters.

2. Work with the other disciplines and emergency service agencies to create routines and protocols which will allow the emergency service agencies to work together more effectively and efficiently to prevent, prepare for, respond to, and recover from disasters;
3. Identify certain types of specialized equipment and supplies that may be of assistance in responding to the life-rescue phase of a disaster response;
4. Assist in the development of training for construction industry personnel to enable a safe and coordinated response to the life-rescue phase of a disaster response;
5. Establish a mechanism by which trained personnel and equipment operators from the construction industry may be called upon and incorporated into the life-rescue phase of a disaster response.

4. THE CONSTRUCTION INDUSTRY AND SKILLED TRADES RESPONSIBILITIES

Member organizations who voluntarily agree to assist the fire service agencies signing this MOU, by doing the following:

1. Assist in the development of training programs for construction industry personnel in the life-rescue phase of a disaster response, to include National Incident Management System (NIMS) training;
2. Assist in the establishment of the means by which trained personnel and equipment operators from the construction industry may be called upon and incorporated into the life-rescue phase of a disaster response;
3. Assist in identifying equipment and supplies owned or possessed by the construction industry that may be of use by construction industry personnel when called upon to assist in the life-rescue phase of a disaster response; and
4. Assist in the coordination of equipment and supplies that can be mobilized in the life-rescue phase of a disaster response.

5. DISASTER RESPONSES

The parties agree to voluntarily support the needs arising in the life rescue phase of a disaster incident following:

1. The parties will provide manpower, equipment, and resources to a disaster incident in the life rescue phase when in the determination of the requesting fire service agency, the incident is such that it may be beyond the capacity of that agency and requires additional assistance;
2. Fire service agencies requested to provide manpower, equipment, and resources will do so on an "as available" basis, which shall mean that the determination of such availability rests solely with the party requested to respond;
3. The construction industry and skilled trades when requested to provide manpower, equipment, and resources will do so on an "as available" basis, which shall mean that the determination of such availability rests solely with the party requested to respond;
4. The parties will endeavor to provide such training as may be necessary to that response and as described above, however, the parties recognize that this may not

always be possible because the nature and time of occurrence of any disaster is difficult to predict';

5. The requesting fire service agency shall have a designated incident commander, safety officer, and medical assistance for the safety and health of those responding to help.
6. This MOU does not supplant any existing operational agreements. In the event of any inconsistency between the provisions of this MOU and existing operational agreements, the latter shall prevail.
7. Requests for mutual aid to disasters under this agreement shall be made through established and approved communication channels. Such requests shall be made by a responsible fire official.
8. This MOU will be reviewed by the participating emergency service agencies on an annual basis and amended as approved by a majority of the participating agencies. Any emergency service agency may withdraw from this agreement by giving ninety (90) days prior notice in writing to the other signatory partner(s) before that review date, or within 90 days of any amendment;
9. Participate in training exercises on a regular basis.

7. EFFECTIVE DATE AND SIGNATURE

This MOU shall be effective upon the signature of the Parties.

Signatures and dates:

_____ For _____ Date _____

_____ For _____ Date _____

_____ For _____ Date _____

_____ For _____ Date _____

_____ For _____ Date _____

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APPENDIX G:

Recommended AGC Contact Information

Recommended Associated General Contractors (AGC) Contact Procedures

The AGC is the point of contact for initiating planning and training efforts and mobilizing equipment and supplies during response in accordance with the Memorandum of Understanding between the AGC and the fire service (if implemented).

Table G – 1: AGC Contact Information

Associated General Contractors (AGC) Emergency Contact List					
	<i>Name</i>	<i>Position</i>	<i>Phone</i>	<i>Cell</i>	<i>Pager</i>
1					
2					
3					
4					

Contact names and numbers will be developed upon the signing of a Memorandum of Understanding (MOU) between the AGC and a respective Fire Chief's Association.

When making contact with the AGC for emergency actions, the following information is required:

Information needed to make initial contact with the AGC	
Type of Incident	
If known, what specific capability is needed	
Point of Contact on Scene	
Contact Phone Number	
Location of Incident (Access Routes, Escort Needed?)	
Information needed to make initial contact with the AGC (con't)	

Where to report? (Staging Area, Command Post, etc.)	
Safety Information	
When to report	
Expected length of deployment	

Information needed from the AGC	
Who is the Private Section Liaison?	
Contact Information	
What specific support is needed?	
Expected time of arrival	
Expected time to be ready to operate	

APPENDIX H:

Glossary of Terms

The following are common structural collapse rescue terms taken from the FEMA US&R Field Operations Guide (September 2003)

1. **Activation** – Formal request from DHS/FEMA to a TF via the Point of Contact that an event has occurred or is projected to occur, that requires mobilization and response for a mission.
2. **Advisory** – Formal notification by DHS/FEMA to all TFs that an event is imminent or has occurred but does not require action at this time.
3. **After-Action Debriefing Form** – Used by the TF managers at the conclusion of a mission to collect and categorize appropriate information.
4. **After-Action Meeting** – A formal meeting of the TF personnel assigned to a mission after return from the field.
5. **After-Action Report** – Documentation of TF actions and other pertinent information.
6. **Alert** – Formal notification by DHS/FEMA to identified TFs that a disaster is imminent or has occurred that may result in activation.
7. **Assembly Point (AP)** – Location or facility where TF members initially report after receiving activation orders from the sponsoring organization.
8. **Base of Operations (BoO)** – TF base camp used to facilitate mission activities.
9. **Cache** – A DHS/FEMA-approved complement of tools, equipment, and supplies stored in a designated location, available for emergency use.
10. **Collapse hazard zone** – The area established by the TF for the purpose of controlling all access to the immediate area of the collapse.
11. **Demobilization** – The process used to plan for and implement the return of TFs to their original Point of Departure.
12. **Disaster Field Office (DFO)** – The temporary office established in or near the designated disaster area from which the Federal Coordinating Officer and staff, the Emergency Response Team, the State Coordinating Officer and staff (when possible), and regional response organizations coordinate response activities.
13. **Disaster Medical Assistance Team (DMAT)** – The basic medical unit of the National Disaster Medical System (NDMS). All TF Medical Teams will be registered as a "specialized" DMAT with the NDMS.
14. **Emergency signaling** – Signals produced by warning devices on the US&R work site to address evacuation of the area, cease operations or quiet the area, and resume operations.
15. **Engagement/disengagement** – Procedures followed by a TF when beginning or ending operations at a specific work site or assigned area.
16. **Emergency Response Team (ERT)** – The interagency group assembled to assist the assigned FCO in carrying out his/her disaster response coordination responsibilities. The ERT coordinates the overall Federal disaster response reporting on the conduct of specific operations, exchanging information, and resolving issues related to ESFs and other response requirements. ERT members respond and meet as requested by the FCO.

17. **ERT ESF #9 Leader** – The position on the ERT that assumes management and coordination of ESF #9 resources when the RST transfers all US&R responsibilities to the ERT and when the IST is operational in the field. The ERT ESF #9 Leader coordinates all US&R activities with the State, the Emergency Services Branch Chief, the IST ESF #9 Assistant, and the EST ESF #9 Leader.
18. **Emergency Support Function (ESF)** – A functional area of response activity established to facilitate the delivery of Federal assistance required during the immediate response phase of a disaster to save lives, protect property and public health, and to maintain public safety. ESFs represent those types of Federal assistance which the State will most likely need because of the overwhelming impact of a catastrophic or significant disaster on its own resources and response capabilities, or because of the specialized or unique nature of the assistance required. ESF missions are designed to supplement State and local response efforts.
19. **ESF #9** – National US&R Response System
20. **ESF #9 Assistant** – The position located with the IST that provides management oversight to the IST. The ESF #9 Assistant coordinates with the EST and ERT ESF #9 cells, the IST Leader, Task Force Leaders, local and State incident management personnel, and supporting ESFs.
21. **ESF #9 cell (at the DFO)** – DHS/FEMA representatives at the DFO who coordinate State requests for US&R resources.
22. **EST ESF #9 Leader** – The individual working at the EST responsible for assessing requests for US&R Task Forces, alerting, activating and deploying ESF #9 resources when approved and overseeing ESF #9 mission assignments, staffing, information and planning, and demobilization activities.
23. **ESF #9 Leader** – The individual at DHS/FEMA Headquarters responsible for assessing requests for US&R TFs.
24. **Emergency Support Team (EST)** – The Emergency Support Team (EST) is organized, using Incident Command System (ICS) functional groupings of management, operations, logistics, information and planning, and administration/finance, for the activation of the EST, of Federal resources, and mission assignments. The EST coordinates requests for additional resources and receives situation reports.
25. **Event** – A planned, non-emergency activity (e.g. sporting event, concert, parade, etc.)
26. **Federal Emergency Management Agency (FEMA)** – Agency with primary responsibility for ESF #9 (Urban Search and Rescue.)
27. **Federal Coordinating Officer (FCO)** – The senior official in charge at the DFO who manages all Federal response activities.
28. **Federal Response Plan (FRP)** – The Federal Government's plan of action to assist affected States and local jurisdictions after a major disaster or emergency.
29. **Incident** – An occurrence or event, natural or manmade, which requires a response to protect life or property. Incidents can, for example, include major disasters, emergencies, terrorist attacks, terrorist threats, civil unrest, wildland and urban fires, floods, hazardous materials spills, nuclear accidents, aircraft accidents, earthquakes, hurricanes, tornadoes, tropical storms, tsunamis, war-related disasters, public health and medical emergencies, and other occurrences requiring an emergency response.

30. **Incident Action Plan (IAP)** – A document developed by the ICS management team that identifies all incident objectives, strategies and tactics, and assigns responsibilities.
31. **Incident Command Post (ICP)** – The location where the local jurisdiction's primary command functions are executed.
32. **Incident Commander (IC)** – The local jurisdiction's person responsible for the management of all incident operations.
33. **Incident Daily Briefing Form** – A form for conducting planning sessions and briefings during the course of a mission.
34. **Incident Support Team (IST)** – The IST provides a group of highly qualified specialists readily available for rapid assembly and deployment to a disaster area. The IST furnishes Federal, State, and local officials with technical assistance in acquiring and using US&R resources. It provides advice, Incident Command assistance, management, and coordination of US&R Task Forces, and US&R logistics support.
35. **Initial TF Briefing Form** – A form developed for use during the activation phase of the response.
36. **Joint Information Center (JIC)** – The physical location where Public Information Officers collocate and form the core of the Joint Information System.
37. **Load master** – Individual responsible for all matters associated with preparing the TF equipment, supplies, and personnel during the palletizing, loading, in-flight logistics, and down-loading of the aircraft.
38. **Local Emergency Operations Center (EOC)** – Each local jurisdiction will usually have an EOC to coordinate response to and support of moderate to large-scale incidents. Initial damage and needs assessment information is consolidated at this point to determine response needs and State and Federal asset requirements. Authority for the management of a disaster rests with the local officials and/or Incident Leader of the affected jurisdictions. State and Federal response is in support of local requests once local resources and capabilities are overwhelmed.
39. **Local jurisdiction** – The affected locality/government that has the mandated responsibility for managing the disaster within its borders or boundaries.
40. **Medical Team Fact Sheet** – An informational sheet outlining the capabilities and requirements of the TF Medical Team.
41. **Memorandum of Agreement (MOA)** – The document between an organization sponsoring a TF and DHS/FEMA outlining all agreements and responsibilities.
42. **Memorandum of Understanding (MOU)** – Written agreements developed on site between the IST and jurisdictional incident management personnel to ensure a complete understanding of the scope, nature and requirements of the ESF #9 assignment.
43. **Mobilization Center** – A temporary facility used to receive process and support resources/TFs during the mobilization and demobilization phases of a mission.
44. **National Disaster Medical System (NDMS)**. – A system under the auspices of NDMS used during natural disasters or emergencies.

45. **Operational checklist** – A chronological listing of considerations and/or tasks that the identified user should address when carrying out mission assignments.
46. **Operational period** – The time interval scheduled for execution of a given set of US&R actions.
47. **Operational procedures** – Documents developed to address strategies and tactics that a TF may be required to address and execute during a mission response.
48. **Operational work area** – The area established by the TF for controlling all activities in the immediate area of the work site.
49. **Operations Chief** – The position in the Incident Command System that is responsible for managing the overall incident tactical operations and to whom the US&R TFs directly or indirectly report.
50. **Point of Arrival (POA)** – The location where responding resources arrive, prior to being transported to a mobilization center or assigned to an affected local jurisdiction.
51. **Point of Departure (POD)** – Designated location where a TF reports for transport to an incident.
52. **Responder Information Sheet** – A form developed to collect and list all necessary information on TF personnel.
53. **Regional Support Team (RST)** – Entity that serves as the initial point of contact for the affected State(s), other Federal agencies, and the Emergency Support Team. The RST ceases to be a coordinating center once the DFO is established.
54. **Safety Officer** – an individual assigned the primary responsibility of safety compliance.
55. **Sponsoring Organization** – the entity responsible for developing and managing all aspects of a TF.
56. **Staging Area** – A designated area or facility where incoming resources report to and receive their tactical assignments and situation briefings by the local jurisdiction.
57. **TF Base of Operations Location Checklist** – A form developed to assist TF personnel select a location for the BoO.
58. **TF Command Post (TFCP)** – Central control point within the TF BoO.
59. **TF Operations Report** – A form for documenting events during the execution of rescue operations.
60. **TF Fact Sheet** – summarizes the composition, capabilities and limitations, and support requirements of a US&R.

APPENDIX I:

Training, Exercise, and Evaluation

A. Section I. Overview

Training, exercise and evaluation programs exist in emergency management programs within the eight county Puget Sound Regional Catastrophic Preparedness Grant Program area. City, county, state, federal and tribal governments as well as private businesses, non-governmental entities, and citizen groups recognize the need to work together to build disaster resilient communities. An overview of training, exercise and evaluation as it relates to regional catastrophic planning efforts is attached to the Puget Sound Regional Catastrophic Disaster Coordination Plan.

This Appendix identifies training, exercise and evaluation activities as they relate specifically to the Structural Collapse Rescue Annex. Training may range from orientation presentations to seminars focusing on specific aspects of the plans or procedures. Training may be very subject specific to include something as simple as how to complete forms associated with this annex. Exercises will also range from simple discussion-based tabletops to more complex operations based exercises such as functional or full scale.

Structural collapse rescue incidents have occurred infrequently in Washington State. Subsequently, the Annex will need to be used at every opportunity in disaster training, drills and exercises to ensure the fire service and other stakeholders are familiar with its contents and that it can be periodically discussed and updated.

B. Section II. Training

A. Training Needs

Fire Service personnel were identified as the key audience to learn about the two phases of the Structural Collapse Rescue Annex. Phase 1, which consists of a tactical plan and includes operational policy and concepts, resources, communications procedures, radio frequencies and contact information that are in common use or available; and Phase 2, which includes the following recommendations to improve structural collapse rescue response in the Puget Sound Region: that Washington State Fire Services adopt typing for structural collapse rescue resources; adopt the FEMA Urban Search and Rescue Response System Cache List as the equipment standards for structural collapse rescue resources; adopt the national standards for structural evaluation, search and victim marking; adopt a consistent format to gather structural collapse rescue incident information for dissemination to the Emergency Operations Center (EOC) and the general public; that Washington State Fire Marshal's Office continue to work with the Fire Service and the Associated General Contractors (AGC) to type heavy equipment, specifically cranes and that typing and cost information be added to the wage and equipment rates for the Washington State Fire Service for use with Fire Mobilization; that county Fire Chief's Associations follow the lead of the King County Fire Chief's Association and develop a standard Memorandum of Understanding (MOU) with the Associated General Contractors (AGC) for the use of private sector resources and expertise during the life-rescue phase of a significant incident; that ongoing relationships be maintained with the Associated General Contractors (AGC) of Washington to keep contact information and call out procedures up to

date for the use of private sector resources and expertise in structural collapse rescue response and other significant incidents, including the use of a Private Sector Liaison as an advisor to the Incident Commander; that an ongoing relationship be maintained with the Washington State Fire Mobilization Staff concerning structural collapse rescue operations; that information in this Annex be used in local, regional and state disaster training, drills and exercises; and that the Washington State EMD and the State Fire Mobilization Plan develop agreements with any Type 1 Task Force (FEMA Type 1 US&R Task Force) or equivalent in Washington State to facilitate the activation of such resources as a state resource in a lifesaving emergency.

B. Training Strategy

Date	Time	Plan/Annex	Training or Exercise Type	Title	Location of Training
3/7/2013	1 hr	Structural Collapse Rescue	Training	Overview of SCR to King County Fire Training Officers - AM	King County
3/7/2013	1 hr	Structural Collapse Rescue	Training	Overview of SCR to King County Fire Training Officers - PM	King County
3/20/2013	1 hr	Structural Collapse Rescue	Training	Overview of SCR to King County Fire Chiefs Association	King County
11/2013	1 hr	Structural Collapse Rescue	Training	Overview of SCR to Jefferson County Fire Chief's Assoc.	Jefferson County
3/3/2014	1 hr	Structural Collapse Rescue	Training	Overview of SCR to Kitsap County Fire Chiefs	Kitsap County
FUTURE TRAINING					
2 nd Qtr	1 hr	Structural Collapse Rescue	Training	Overview of SCR to Snohomish County Fire Chief's Assoc. Waiting for date confirmation.	Snohomish County

C. Related Training Courses

General emergency management or National Incident Management System (NIMS) general required training courses are not included in these tables. Training courses identified below are those that are specific to the subject matter of the Structural Collapse Rescue Annex, or advanced courses that will assist individuals in carrying out duties identified in this annex.

Independent Study Courses that relate to this annex. These courses can be found online at <http://training.fema.gov/IS>.

Course Number	Course Name
IS-804	Emergency Support Function (ESF) #4 – Firefighting

C. Section III. Exercises

Exercises are not planned as part of the effort to educate stakeholders on the Structural Collapse Rescue Annex.

D. Section V. Scheduling and Calendars

Washington State Emergency Management Division has made its Training and Exercise web-based calendar available for regional catastrophic plans training and exercise activities. Through the duration of the RCPGP program, RCPGP staff will update the calendar with input from those offering the training or leading the exercise. To view this calendar, go to the State web site at <http://www.emd.wa.gov>. Click on the Training and Exercise tab, then the Training and Exercise Calendar. At the top of the calendar, there is a drop down menu that includes Regional Catastrophic Training and Exercise Calendar. This calendar will be updated as events are scheduled.

Training and exercise schedules will be developed on an annual basis by project leads or a designated agency to be determined through the sustainment process. Training and exercise activities should be coordinated among plan participants as well as Washington State Training and Exercise personnel.