



STATE OF WASHINGTON
MILITARY DEPARTMENT
Camp Murray • Tacoma, Washington 98430-5000

May 24, 2016

TO: Jay R. Inslee
Governor

FROM: Bret D. Daugherty, Major General
The Adjutant General

A handwritten signature in black ink that reads "Bret D. Daugherty".

SUBJECT: Emergency Management Council 2014-2015 Annual Report

The Emergency Management Council (EMC) respectfully submits their annual report of statewide emergency preparedness as mandated by RCW 38.52.040.

The attached report is for the period of January 2014 through December 2015 and provides the recommendations that target recurring issues in statewide disaster response and recovery. The EMC's report is based on assessments of events and activities for the aforementioned time period and on recommendations from past incidents and reports.

Attachment (1)

cc: Robert Ezelle, Emergency Management Division
Ron Averill, Emergency Management Council
Jim Baumgart, Governor's Policy Advisor
David Postman, Governor's Chief of Staff





STATE OF WASHINGTON
MILITARY DEPARTMENT
EMERGENCY MANAGEMENT DIVISION

*MS: TA-20 Building 20
Camp Murray, Washington 98430-5122
Phone: (253) 512-7000 • FAX: (253) 512-7200*

May 20, 2016

TO: Bret D. Daugherty, Major General
The Adjutant General

FROM: Robert Ezelle
Director

A handwritten signature in blue ink, appearing to read "Robert Ezelle", with a long horizontal flourish extending to the right.

SUBJECT: EMC Annual Report to the Governor

Attached is a memorandum and the Emergency Management Council's annual report for submission to Governor Jay Inslee. This report is mandated by RCW 38.52.040 and provides recommendations to the governor that target recurring issues in statewide disaster response and recovery.

If you have any questions on this topic, please call me at (253) 512-7001.

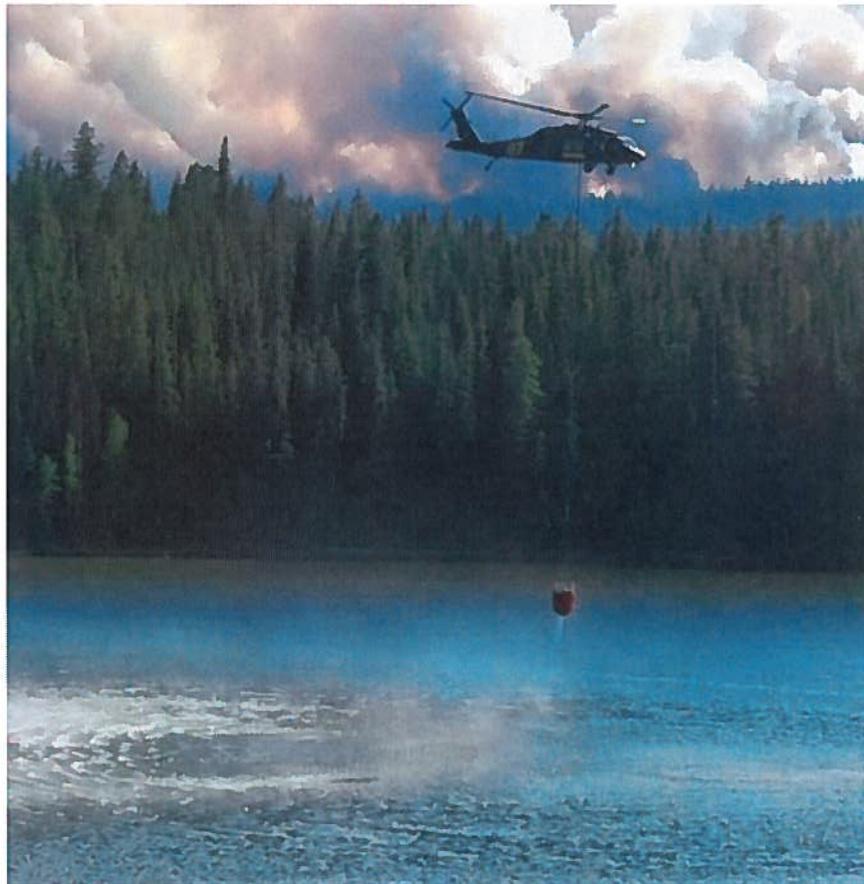
Attachments (2)



2014-15 Report

Statewide Emergency
Preparedness

Emergency Management Council



**Statewide Emergency Preparedness
Annual Report to the Governor**

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**Washington State
Emergency
Management
Council**

Washington State Patrol

State Fire Marshal

State and Local
Emergency Management

Department of Ecology

Department of Health

Military Department

Building Officials

Department of Natural
Resources

Private Industry

Search and Rescue
Volunteers

City Officials

County Officials

Local Fire Chiefs

Members-at-Large

Washington Emergency
Management Division
Building 20: TA-20
Camp Murray, WA 98430

**The Honorable Jay Inslee
Governor of Washington
P.O. Box 40002
Olympia, WA 98504-0002**

December 30, 2015

Dear Governor Inslee:

On behalf of the Emergency Management Council (EMC) members, I am honored to present the 2014-2015 EMC Annual Report on the status of statewide emergency preparedness. The EMC members, constituents, and stakeholders value the opportunity to inform you on the status of emergency management our state over the past two year and to provide recommendations that address identified issues.

This report provides recommendations that target recurring issues in statewide disaster response and recovery. While many challenges were identified and some resolved, several significant gaps remain for the emergency management community to address.

The EMC, through its committees and workgroups, continues to support activities that strengthen our ability to respond and reduce the threat of the risks we face in the state from natural, technological, and human-caused hazards.

We appreciate your support of the EMC efforts, and intend to provide you status updates and additional recommendations aimed at state and local emergency management issues over the next year.

Sincerely,



Dave DeHaan, EMC Chair

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Introduction

This report is respectfully submitted by the State Emergency Management Council (EMC or Council) to the Governor as part of our responsibility to provide an annual assessment of state-wide emergency preparedness (RCW 38.52.040). This report is for the period of January 2014 through December 2015 and is based on assessments of events and activities for that period and on recommendations from past incidents and reports.

2014/2015 was an extraordinary period for Washington State disaster and emergency response. Response to incidents during this time include the SR 530 Landslide; two historic wildland fire seasons; two school shootings; two severe weather events; Ebola planning; H5N1 preparedness; and a major hazardous material incident in Eastern Washington. These emergencies resulted in impacts to every portion of the State emergency management community and five major Stafford Act Disaster Declarations. Additionally, issues related to crude oil train shipments, landslide risks, climate change impacts, and severe budget restraints faced by responding local and state agencies have created a demonstrable need for action in improving the disaster response capability in Washington State. These events tested many response and mobilization plans revealing successes, challenges, and gaps, but perhaps most significantly, exhibited the willingness of the response community at all levels to work together to overcome obstacles. Future reliance on an ad hoc spirit of cooperation of emergency management/response components cannot be left to chance and the lessons learned from these events provide a road map for better interdisciplinary coordination, planning, and response.

The SR 530 Landslide Commission Final report¹ succinctly detailed many recommendations that are germane and applicable across the spectrum of all-hazards response. The Resilient Washington Initiative² identifies a comprehensive set of recommendations to better prepare the State for an inevitable future earthquake event. Other after-action and incident reports have echoed the findings of these two studies and detailed many other interrelated issues.

Collaboration is the resounding theme underlying all of the SR 530 Landslide Commission Final report recommendations and is the key to moving ahead on Resilient Washington Initiatives. Many of the gaps identified have been acknowledged before and have spawned efforts working towards solutions. Several issues raised have been the subject of specific discipline, academia, and disparate planning efforts producing volumes of information and in some cases partial solutions. This information, however, is often limited in its dissemination and unknown outside the groups directly involved. Many of the recommendations and identified gaps reflect common frustrations of multiple disciplines struggling to address issues within their limited scope of responsibility and a scarcity of resources. Within a more organized composition, disparate groups could address their related problems and solutions in a larger collaborative structure aligning common goals. Collaboration across disciplines, agencies – private and public, non-traditional responders, non-profits and others is the key to address, in a cost effective manner, many of these all-too common disaster preparedness and response challenges.

Positive Developments

The proposed new Sub-cabinet Level Committee aimed at addressing the recommendations of the Resilient Washington Initiative provides a needed increase of investment to this initiative. To be efficient and successful, this effort will require support from many of the organizations, agencies, schools and committees already involved in geologic and resilience endeavors.

¹ http://www.governor.wa.gov/sites/default/files/documents/SR530LC_Final_Report.pdf

² <http://mil.wa.gov/uploads/pdf/seismic-safety-committee/RWS%20final%20report.pdf>

The formation and limited use this year of the Emergency Management Assistance Teams (EMATs) to assist local jurisdictions during disasters proved to be a valuable concept that needs further development. This system provided a cadre of experienced emergency management staff to augment local Emergency Operations Center personnel.

The implementation of the Washington Intrastate Mutual Aid System (WAMAS) allowed for its immediate use in providing resources to multiple jurisdictions impacted by wildland fires. Further development of system management and training needs to be a priority for all stakeholders.

Recommendations

The Council endorses the SR 530 Commission's recommendations and again emphasizes its support of the Resilient Washington Initiative's recommendations. The Council has used these two reports as the foundation for our recommendations in this report and in the development of actions that we suggest should be taken to accomplish the tasks identified. Additionally, the Council considered past reports and recommendations for common subjects and has synthesized them into our recommendations. The Council has combined a number of common recommendations to ensure efficiency, interoperability, and broader based solutions.

Recommendation #1.

Establish an EMC Comprehensive Statewide Emergency Management System Workgroup

Provide Executive Office Staff and funding for an EMC workgroup charged with scoping, defining, detailing, identifying and assisting with the implementation of a comprehensive Statewide Emergency Management System.

Action requested:

The EMC requests that the Governor support the Chair of the EMC in establishing a workgroup assigned to formulate a state-wide comprehensive emergency management system. The EMC requests that the Governor assign staff from the Governor's Office and the Office of Financial Management as active regular members of the workgroup. The EMC asks the Governor to review and approve the workgroup membership as developed by the EMC and to review and approve the initial workgroup work plan and timeline. Additionally, the EMC requests that the Governor fund a workgroup budget for allowable expenses including survey/research costs, meeting costs, and member's direct costs of attending meetings estimated at \$250,000 for the 2016-2017 period.

Narrative

The Washington Comprehensive Emergency Management System Workgroup would define and develop a structure for a statewide comprehensive emergency management system to address all-hazards, multi-discipline issues in all functions of emergency management including planning, mitigation/prevention, response and recovery, and identify assessment fundamentals to measure system effectiveness.

Products of this workgroup would include, but not be limited to, the following:

- 1. Identification and assessment of current emergency management assets, systems, plans, and groups (using existing accurate information and reports where available). This could include:**
 - o Regional and statewide threats and hazards;

- Existing emergency management programs, including their funding and statutory authority;
- Examples of nationwide emergency management innovations/best practices including Emergency Management Accreditation Standards;
- Strategies to implement state-sponsored cross-jurisdictional joint training and exercises;
- Past and existing regional reports/assessments on specific incidents and emergency management related issues including lessons learned and recommendations;
- Technology portals used to access complex information systems.

2. Develop and amalgamate new and existing procedures, systems and programs to develop an integrated statewide Emergency Management System. This work could target:

- Integration of the emergency management principles and practice into government statewide;
- Cross-jurisdictional coordination of multi-discipline emergency management efforts;
- Statewide training for all-hazard mobilization and activation/request procedures;
- Establishment of relationships with regional Incident Management Teams and emergency management organizations through integration of procedures, trainings and exercises;
- Guidelines and processes that define delegation of authority, resource allocation, and expectations for all-hazard responses between Incident Management Teams (IMTs) and counties/local emergency management during non-fire emergencies;
- Integration of emergency management, first responders, Law Enforcement, IMTs, Urban Search and Rescue Teams, and others to ensure specialized equipment, personnel and other resources are rapidly deployed;
- A standardized process and/or integration procedure for requesting, tracking, mobilizing, and demobilizing resources across disciplines;
- Collaboratively develop a process to evaluate and improve both the pre-incident and rapid onsite identification, registration, credential verification, training, and engagement of volunteers for all disciplines including emergency management, first responders, and organizations that make up Incident Management Teams;
- Liaison deployment from state government and predetermined regional coalitions to coordinate with each impacted tribe throughout an emergency;
- Collaboration of State Department of Social and Health Services and appropriate stakeholders to develop a regional, standardized Navigator Program for managing disaster survivor needs;
- Address issues related to development and structure of complex and ad hoc disaster Joint Information Systems;
- Specific needs populations representation in planning, mitigation response and recovery efforts;
- All discipline/agency collaboration and coordination of all-hazards emergency management efforts and response;
- Development of a technology platform to provide a single point of information regarding all aspects of the State-wide Comprehensive Emergency Management System.

This workgroup would consist of many EMC member organizations and other groups/organizations as required for whole community emergency management representation. Representation should include the Governor's office, the Legislature, tribes, county and municipal government, first responders, transportation agencies, non-government support agencies, the private sector, and members of the public. Additionally, the workgroup would engage academia, technology groups, and other sectors to assist with identification and development of products and solutions aimed at identified outcomes.

Please see References Section for correlations of this Recommendation with previous Reports.

Recommendation #2

Establish an EMC Emergency Management Sustainable Funding Sub-group

Provide Executive Office Staff and funding for a sub-group of the EMC Comprehensive Statewide Emergency Management System Workgroup to address sustainable funding of all-hazards, multi-disciplinary emergency management planning, response and recovery statewide.

Action requested:

The EMC requests that the Governor support the Chair of the EMC in establishing a sub-group organized under the EMC Comprehensive Statewide Emergency Management System Workgroup assigned to define and identify sustainable funding for statewide multi-discipline, all-hazards Emergency Management. The EMC requests that the Governor assign staff from the Governor's Office and the Office of Financial Management as active regular members of this sub-group. The EMC asks that the Governor review and approve the sub-group membership as developed by the EMC and review and approve the initial sub-groups work plan and timeline. Additionally, the EMC asks that the Governor allow this sub-group access to the funds provided to the Comprehensive State-wide Emergency Management System Workgroup for research costs, meeting costs and member's direct costs of attending meetings for the 2016-2017 period.

Narrative

The economic down turn and budget cuts at federal, State and local governments have impacted emergency management operations at all levels. The State Emergency Management Division (EMD) has gone from an almost 100% state-funded program to over 80% funding from federal grants. Local programs have been impacted as well and often rely on shrinking federal grants. The tenets of Initiative 747 have hampered the ability of jurisdictions to sustain current programs with the impact that the most visible needs are being funded first. Emergency management is not as visible as street pot-holes or broken water systems, but its chronic reduction in funding will be readily evident following a major disaster with the likely outcome of increases in lives lost and damage.

This EMC sub-group would define “sustainable statewide emergency management funding” from an all-hazards, multi-discipline perspective and identify potential funding structures and mechanisms for development of future legislation and budget planning processes.

Products of this sub-group would include, but not be limited to:

1. Identification of integral components in sustainable state-wide emergency management funding. Targets of this work could include:

- Identify local, regional, and state emergency management (EM) funding needs;
- Identify agencies, departments, and organizations that should be considered in EM sustainable funding;
- Identify current gaps and limitations in EM funding at local, regional, and state levels;
- Review of nationwide EM funding methodologies;
- Develop a plan for state-wide, multi-discipline, local, regional, and state EM sustainable funding;
- Develop strategies to implement state-wide EM funding;
- Prioritize and recommend actions and legislation aimed to implement EM funding strategies;
- Provide education, training and promotion of sustainable EM funding plan; and

- Review effectiveness of the state-wide sustainable EM funding plan and revise as necessary.
2. **Identification of potential revenue sources to fund sustainable state-wide emergency management funding. This could include:**
 - Beneficiaries of a state-wide Comprehensive Emergency Management system;
 - Potential for user fees associated with emergency management services;
 - Cost recovery mechanisms for emergency management services;
 - Potential for development fees related to increased potential in disaster impacts; and
 - Potential taxes, surcharges, levies, tolls, or duties.
 3. **Develop a work plan to enact sustainable state-wide emergency management funding. The plan could include:**
 - Stakeholder workshops; and
 - Legislative requirements.

Please see References Section for correlations of this Recommendation with previous Reports.

Recommendation #3

Establish a State Geologic Hazards Resilience Clearinghouse

Provide Executive approval for establishment of a State Geological Hazards Resilience Clearinghouse with the State Department of Natural Resources (DNR) as a key stakeholder.

Action requested:

Officially recognize and charge the identified departments, institutes, committees, and agencies as members of the State Geologic Hazards Resilience Clearinghouse to partner with the DNR in establishment and operation of a functional geological hazards information collection and dissemination resource.

Narrative

The EMC recommends that the DNR - Division of Geology and Earth Resources in conjunction with academic partners, such as the University of Washington's Institute for Hazard Mitigation Planning and Research, lead the establishment and operation of a clearinghouse in response to geological hazard events such as earthquakes, volcano, landslides, and tsunamis. The clearinghouse is intended to assist federal, state, tribal, and local governments before, during, and immediately after an event and to document field investigations and share observations and knowledge among emergency responders and the engineering and scientific communities that can be used to make emergency management decisions. The clearinghouse will also serve as an essential decision support tool for pre- and post-disaster recovery planning efforts and bolster existing efforts to build disaster resilient communities.

The clearinghouse will leverage existing capabilities provided by the DNR - Division of Geology and Earth Resources library and serve as a resource to communities throughout Washington State as well to the Governor's Sub-Cabinet Resilient Washington Initiative group in the form of research, subject matter expertise available for guideline development and act as a resource cache for new and historical geological information.

The clearinghouse will provide a location, real or virtual, before and after a damaging geological event, where engineers, geologists, seismologists, sociologists, economists, and other professionals can become part of a collaborative team and to facilitate the gathering, sharing, and dissemination of information to maximize its availability and increase efficiency. This collaboration will also function as a supporting resource to the Governor’s Resilient Washington State Initiative Sub-Cabinet group.

Recommended Clearinghouse partners include DNR, EMD, Washington State Department of Transportation (WSDOT), Ecology, University of Washington, Western Washington University, Central Washington University, Cascadia Region Earthquake Workgroup, and the EMC Infrastructure Protection Sub-committee.

Please see References Section for correlations of this Recommendation with previous Reports.

Additional Recommendations

In addition to the items listed above the Council supports the following recommendations from the SR 530 Landslide Commission Report:

- A. Activate the First Responder Network Authority and actively participate in the design of the FirstNet network, under the leadership of the State Interoperability Executive Committee (SIEC), with the goal of being one of the first states to deploy this new nationwide network.**
and
Instruct the SIEC to immediately update the State Communication Interoperability Plan (Plan) to include formal certification of Communications Leader and Communications Technician response positions and maintain a State listing for use by incident commanders during a major disaster.

- B. Prioritize Mass Fatality Management Planning Statewide by convening a representative group of county health departments, tribes, and Medical Examiners/Coroners Offices to develop a statewide mutual aid agreement structure for medical examiners and coroners**
and
Direct the State Department of Health work collaboratively with tribes, county health departments, and Medical Examiners/Coroners Offices to identify opportunities for improvements to planning for and managing mass fatality incidents, including establishing Family Assistance Centers.

Committee and Workgroup Reports

Washington State Emergency Response Commission (SERC) Report

December 2015

Washington State is experiencing rapid changes in how crude oil and other hazardous materials are moving through rail corridors, pipelines, highways and waterways. In addition, there is an increase in businesses reporting hazardous and extremely hazardous chemical storage and releases of such chemicals throughout the state. As a result, more than ever before, there is need for hazardous materials response capability to address these increased safety and environmental risks.

Previous gap analysis reports led by the Washington State Emergency Response Commission (SERC), Ecology, State Patrol, Washington Fire Chiefs and other stakeholders in 1993 and 2005 were conducted to evaluate and identify gaps in hazardous materials response capability in Washington State. Both of these studies found that substantial disparity in hazardous materials response coverage exists. There is no evidence to indicate this disparity has improved since the last study. It appears that the gaps have grown.

In January 2006, the Washington State Emergency Management Council (EMC) unanimously endorsed pursuing the development of a Statewide Chemical, Biological, Radioactive, Nuclear, and Explosives (CBRNE) Response Program. Ecology administered an additional study, which was completed in October 2006. The final report provided a detailed description and recommendations of program administrative structure, candidate funding mechanisms, mutual aid compacts and draft legislation. Details were provided on the location, team types and numbers, how they should be equipped and trained with startup and recurring cost estimates. Legislation to create the program was introduced in the 2007 and 2008 legislative sessions; however, no bills were passed.

The Governor's 2014 budget provided funding for state agencies Ecology, the Military Department's Emergency Management Division, and Utilities & Transportation Commission to conduct a *Marine and Rail Oil Transportation Study* with a final report due in March 2016. A preliminary recommendation of the study is a legislative package that would include providing funding to update previous studies and analyze the current need for state-supported regional hazardous materials response teams. This proposed updated study and report, to be led by the Office of the State Fire Marshal (OSFM) and Ecology, is vital to public safety and the protection of our state's greatest assets.

The SERC actively supports renewed efforts to achieve sustainable funding to support a Statewide Hazardous Material (Haz-Mat) Response Team Program. The need for a regional Haz-Mat Program was again brought to the forefront for the SERC due to the Marine and Rail Oil Study, recent Haz-Mat incidents, including those associated with the increased transport of Bakken Oil through our communities, and the lack of an established process to mobilize resources to manage high-impact events across jurisdictional boundaries. A recent incident in the Spokane Valley area shut I-90 down for eighteen (18) hours. The incident taxed the City of Spokane Haz-Mat Team as well as Fairchild AFB Haz-Mat Team, which responded in support of this incident. Due to lack of an all-Hazards Mobilization or Regional Hazmat Response Program, the only agency that was able to rapidly assist was a neighboring Idaho State Hazmat Team. An all-Risk Mobilization or Regional Hazmat Response Program would have alleviated that problem.

Annual Washington Mutual Aid System (WAMAS) Subcommittee Report

December 2015

WAMAS Subcommittee Activities

Significant refinement occurred in applying WAMAS throughout the state in 2015.

- Subcommittee Members at the end of the year are:
 - Robert Ezelle, Emergency Management Division
 - Sean Davis, Franklin County
 - Amy Ockerlander, City of Duvall
 - Bill Gillespie, Washington Search and Rescue Volunteer Advisory Council
 - Doug Powell, Spokane County
- WAMAS Subcommittee members and selected guests met in April to discuss
 - Operations and Deployment Guide revisions made in January 2015
 - Request for Assistance (RFA) process
 - Education and Outreach proposals
 - Use of REQ-A (similar to Emergency Management Assistance Compact, EMAC)
 - Use of unaffected jurisdiction to handle all WAMAS request and to take the state out of the processing of WAMAS. Similar to EMAC Advance Team (A-Team)
- Emergency Management staff updated the WAMAS Operations and Deployment Guide and distributed for final review prior to endorsement in July
- The WAMAS Operations and Deployment Guide was endorsed by the WAMAS Subcommittee Chair and the EMC Chair on 9 July 2015.
- WAMAS was used in the response and recovery efforts resulting from the 2015 Wildfires.
 - New initiative based on 2014 WAMAS Operations and Deployment Guide version 8 and Snohomish County EM
 - Emergency Management Assistance Team (EMAT) that would provide support to local EOC/ECC staff
 - New initiatives created during the response by EMD
 - WAMAS Coordinators located in the SEOC; comprised of local EM staff and paid by the State
 - Intergovernmental Agreement that the state would pay 87.5% for any costs associated with a local requesting jurisdiction using an EMAT
- WAMAS Coordinators at the state:
 - Received 70 personnel requests for local emergency management staff
 - Acted as an intermediary and filled 51 of the personnel requests

The subcommittee agrees that the widest dissemination of the Operations and Deployment Guide as well as training to local jurisdictions needs to be accomplished. Who is going to provide the training and how this will be accomplished in the coming year is yet to be determined.

Subcommittee members agree that once training and outreach are conducted that WAMAS needs to be exercised by as many towns, cities, and counties as possible.

Emergency Management Advisory Group

December 2015

The Emergency Management Advisory Group (EMAG) was established by the April 2014 revision to WAC 118-09, Criteria for Eligibility and Allocation of Emergency Management Assistance Funds. The EMAG initial cadre consisted of the county and city emergency managers that were instrumental in shepherding the WAC 118-09 review through the code revision process. Between April and December 2014 the Interim EMAG developed and approved the group's charter, identified membership, and began development of the group's work plan.

The EMAG's charter assigns the following responsibilities to the EMAG:

- A. Serves as a collaborative forum to advise the Director, Washington Emergency Management Division (henceforth referred to as the Director), and the EMC on emergency management issues impacting state, local and tribal emergency management.
- B. Shall advise the Director on the distribution of Emergency Management Assistance Funds.
- C. Collaboratively maintains and enhances the statewide system of Emergency Management to ensure all Washingtonians are served by an Emergency Management Program.
- D. Provides a means by which local and tribal emergency managers can communicate issues and concerns to the Director.

The EMAG held its first official meeting on January 8th, 2015. Some members of the interim EMAG continued on the team, while many new emergency managers, including 2 tribal representatives joined the group. The EMAG reviewed the recommendations of the SR530 Landslide Independent Commission and with the approval of the EMC, adopted the following 5 lines of effort as their 3-year work plan.

- A. Develop a set of statewide EM processes/protocols that stresses interoperability, efficiency, and shared resources.
 - The EMAG is completing a standardized resource ordering process for use by state, county, city and tribal emergency management programs.
- B. Establish an effective, efficient statewide framework for disaster preparedness and response. Action plan is being framed.
- C. Establish a statewide risk-based approach to building all hazard capabilities. Action plan is being framed.

- D. Enhance the capability of existing emergency management human capital. This work group focused on 5 concepts for further study and possible implementation:
- Emergency Management Assistance Teams (EMATs) are deployable entities comprised of current emergency management professionals and select support functions/staff in the State of Washington. The primary objective of an EMAT is to provide structured support to emergency management directors/coordinators and their respective Emergency Operations Centers (EOC) when requested and work in conjunction (interface) with Incident Management Teams (IMTs) when conducting tactical operations for the affected jurisdictions. This concept was successfully employed twice during the 2015 fire season, first in support of Chelan County in June, and Okanogan, Ferry, and Stevens counties in August. The teams provided invaluable support to county emergency managers who lacked the resources to deal with the challenges posed by a record-breaking fire season.
 - Form a Disaster Assistance Cadre to become the centralized, statewide pool of recruited, trained, and fully vetted volunteers *and* subject matter experts who are available for deployment. Work has not yet begun.
 - Form Volunteer Management Assistance Teams consisting of experienced, respected volunteer leaders (individuals) who are trained, vetted, and specifically tasked with the strategic management of spontaneous volunteers during an incident or disaster. Work has not yet begun.
 - Develop Strategic Advisory Teams to support emergency managers/coordinators in their decision making process, by developing a “forum” for critical or strategic thinking during the incident or disaster. Work has not yet begun.
 - Develop Type 3 and Type 4 incident management teams to support incident management at incidents that extend beyond 1 operational period. Work has not yet begun.
- E. Secure ongoing, sustainable funding for all levels of emergency management within Washington State. Initial discussions have taken place about how to meet this objective. Action plan is being framed.

In addition to developing and beginning a work plan, the EMAG received presentations from the Commission on Hispanic Affairs and the State Independent Living Council and discussed the need to ensure emergency management programs have processes and procedures in place to provide messaging and emergency management services to persons with limited English proficiency and/or persons with access and functional needs.

DECEMBER 2015



Washington State Seismic Safety Committee (SSC)

Committee Co-Chairs: Dave Norman, Department of Natural Resources

Robert Ezelle, Emergency Management Division

Committee Representation:

WA State Agencies:

Emergency Management Division

Department of Natural Resources

Department of Transportation

Office of the Superintendent of Public Instruction

University of Washington, Pacific Northwest Seismic Network

Western Washington University, Resilience Institute

Federal Partners:

Federal Emergency Management Agency

United States Geological Survey

Association Stakeholders:

Washington Association of Building Officials

Washington Association of Structural Engineers

Washington Association of Civil Engineers

Private Industry Participants:

State Farm Insurance

Hill and Knowlton Strategies

Summary of Activities:

1. Resilient Washington State: From Planning to Implementation

The Washington State Seismic Safety Committee launched the Resilient Washington State Initiative in 2010 to lay the groundwork for improving Washington’s earthquake and natural hazards resilience. This objective—further refined by consideration of values such as life safety and human health, property protection, economic security, environmental quality, and community continuity—guided the development of the initiative’s final report. More than 84 private and public sector experts from across the state contributed to this 2.5 year effort.

The final report includes:

- A general assessment of the current recovery capacity of the state’s major systems and infrastructure, including estimates of the time it is likely to take for each component to recover following a serious earthquake.
- A target performance measure for restoration of each component.
- The top 10 recommendations for improving statewide resilience.

This comprehensive assessment revealed many of our state’s critical vulnerabilities and suggested where our efforts should be focused and sustained over the long term to provide the greatest improvement in life safety and post-earthquake economic recovery.

PROJECT RESULTS

Following an assessment of current recovery timeframes and identifying performance recovery targets for each critical sector, the results of the assessment detail that while Washington State has made significant progress preparing, **we are not ready for the next earthquake.**

The assessment resulted in 10 overarching recommendations to improve Washington’s earthquake and tsunami readiness. The recommendations include:

1. Make schools resilient: structurally, socially, and educationally.
2. Require that utility providers (domestic water supply, wastewater, electricity, natural gas, petroleum, and information and communication technology) identify the vulnerabilities in their systems and mitigate the deficiencies.
3. Improve the resilience of buildings in areas of high seismic hazard to improve life safety and increase the number of people who will be able to shelter in place.
4. Assess the permitting requirements that relate to environmental protection and mitigation to determine how best to make environmental planning mesh with seismic mitigation and recovery planning.
5. Strengthen business continuity planning efforts.
6. Strengthen regional transportation networks.
7. Make hospitals resilient—structurally and functionally.
8. Identify and map in greater detail sources of seismicity and geologically hazardous areas and develop plans for mitigation of identified hazards.
9. Improve life safety in coastal communities at risk of local tsunamis.
10. Implement resilience principles through formalized accountability.

“A resilient Washington state is one that maintains services and livelihoods after an earthquake. In the event that services and livelihoods are disrupted, recovery occurs rapidly, with minimal social disruption, and results in a new and better condition.”

- RWS Subcommittee

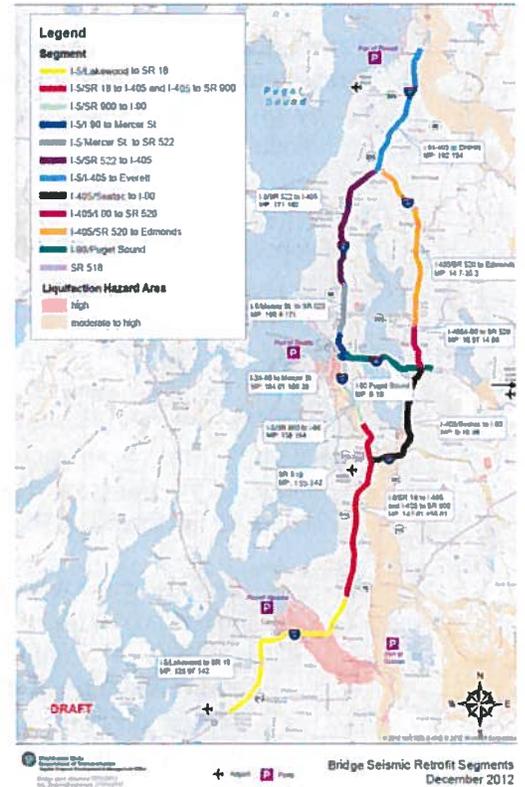
Initial implementation of the Resilient Washington State recommendations was a focus in 2015. A pilot project to assess select schools in Thurston County was initiated to further Recommendation #1. This will be completed by February 2016. Additionally, the nation’s first tsunami vertical evacuation refuge, the new Ocosta Elementary School, will open in 2016, making progress on Recommendation #9. Design for the second vertical evacuation structure, a berm in Long Beach, Washington, is currently under design.

2. Securing Washington’s Transportation Lifelines

In 2012 the Washington State Seismic Safety Committee published the Resilient Washington State: Final Workshop Report which provides the framework for improving Washington’s resilience when

earthquakes occur by proactively reducing critical vulnerabilities. The framework is intended to facilitate long-term implementation of seismic risk reduction policies and activities across the state. Following that framework, WSDOT established a vision to refine its concepts and create an interconnected lifeline of highways with built in redundancy to provide alternate routes after an earthquake if a segment of highway becomes impassable. To completely retrofit all of the phase 3 seismic lifeline routes, costs were estimated at well over \$1 billion. With limited funding it would not be possible to secure essential Puget Sound routes in a timely manner. WSDOT set priorities by focusing on the areas with the highest ground motion, population density and freight movement (i.e. Puget Sound).

Within the greater Puget Sound area WSDOT evaluated a number of potential routes. The goal is to provide or restore essential services within 3-7 days and be fully operational within 3 months. To address this, WSDOT identified a network of routes that can provide the critical corridors needed to get emergency responders into damaged areas rapidly and the state economy (freight and goods) moving again as quickly as possible. The Seismic Lifeline routes map (right) shows the corridors needed to provide these essential services. Due to the high costs to retrofit the bridges in downtown Seattle (black line), SR99 provides an important north/south alternate route (yellow line) with connections to I-5 at the north and south ends. WSDOT has invested nearly \$150 million to complete phases one and two and began work on phase three, substantially decreasing the risk of damage from earthquakes.



Estimated costs are \$100 million to implement the lifeline component of phase three which secures the lifeline in both directions. The Legislature funded \$50 million (as of July 13, 2013) for the continuation of phase three which is well underway and will continue to decrease the risk of damage from earthquakes. This network will offer safe travel routes for vehicles and trucks during and after a catastrophic event.

| Bridges Remaining to Rehabilitate | | | | | | |
|---|-----------|------------|-------------------------|------------|-----------|-------------|
| | Eastbound | Northbound | Northbound & Southbound | Southbound | Westbound | Grand Total |
| Lifeline | 35 | 33 | 1 | 2 | 2 | 73 |
| Puget Sound (excluding Lifeline) | 32 | 33 | 1 | 19 | 23 | 108 |
| Western Washington (excluding Lifeline & Puget Sound) | 23 | 24 | 1 | 33 | 21 | 102 |
| Grand Total | 90 | 90 | 3 | 54 | 46 | 283 |

Reference Section

Correlations with Previous Recommendations

Recommendation #1. Establish an EMC Comprehensive Statewide Emergency Management System Workgroup

The structure and goals identified in recommendation #1. Address and support many recommendations and goals identified in the SR 530 Report, Washington Statewide All-Hazards Emergency Preparedness Strategic Plan and a number of previous EMC Annual Reports to the Governor including the following:

SR 530 Landslide Commission Final Report (7 Recommendations will be addressed by this EMC Workgroup)

Recommendation 1. *The Commission recommends the Governor convene a funded task force, charged with affecting change and include participation from the Governor's office, the Legislature, tribes, county and municipal government, first responders, transportation agencies, non-government support agencies, the private sector, and members of the public. The task force should report to the Governor by December 2016 with recommendations to build a more robust and innovative system of response and to secure an adequate, sustainably funded emergency management system across the state.*

Recommendation 6. *The Commission recommends county departments of emergency management take on the responsibility of: Knowing about the state all-hazard mobilization; Knowing how to request the state all-hazard mobilization; Pro-actively train and build trusting relationships with regional Incident Management Teams.*

Recommendation 7. *The Commission recommends State and county emergency management organizations work with IMT personnel to develop guidelines and processes that define delegation of authority, resource allocation, and expectations for all-hazard responses between IMT's and counties during non-fire emergencies.*

Recommendation 8. *The Commission recommends the State Emergency Management Division develop a standardized process for requesting, tracking, mobilizing, and demobilizing resources.*

Recommendation 11. *The Commission recommends the emergency management agencies and organizations that make up Incident Management Teams work collaboratively to develop a process to evaluate and improve both the pre-incident and rapid onsite identification, registration, credential verification, training, and engagement of volunteers.*

Recommendation 12. *The Commission recommends liaisons be deployed from state government and predetermined regional coalitions to coordinate with each impacted tribe throughout an emergency.*

Recommendation 16. *The Commission recommends the State Department of Social and Health Services collaborate with appropriate stakeholders to develop a regional, standardized Navigator Program for managing survivor needs.*

Washington Statewide All-Hazards Emergency Preparedness Strategic Plan (6 Recommendations will be addressed by this EMC Workgroup)

OBJECTIVE 1.1: *Enhance Planning Capability. Increase the ability to: Conduct planning; Develop standard, coordinated plans; Identify and dedicate resources to the development of plans; Invest in science and technology to improve the planning process; Regularly test plans; Improve plans through an inclusive and open process; Continue performance of essential functions using Continuity of Operations and Continuity of Government programs and integrated day-to-day operations*

OBJECTIVE 1.5: *Enhance Community Volunteer Participation. Build a strong statewide volunteer capacity to assist emergency responders in all-hazard events.*

OBJECTIVE 4.2: *Enhance Emergency Operations Center Management Capability. Increase the ability to provide multi-agency coordination for incident management through the activation and operation of multiple Emergency Operations Centers (EOCs), Emergency Coordination Centers (ECCs), or Multi-*

Agency Coordination Centers (MACCs), including EOC activation, notification, staffing, and deactivation; management, direction, control, policy development, strategy, and coordination of response and recovery activities; coordination of efforts among regional public and private entities as well as state and federal agencies; and maintaining information and communication necessary for coordination of response and recovery activities.

OBJECTIVE 4.3: *Critical Resource Logistics and Distribution Capability. Increase the ability to identify, inventory, dispatch, mobilize, transport, recover, and demobilize and to accurately track and record available human and material critical resources throughout all incident management phases.*

OBJECTIVE 4.4: *Enhance Volunteer Management and Donations Capability. Increase the ability to maximize the positive effect of using volunteers and donations to augment incident operations.*

OBJECTIVE 4.14: *Enhance Search and Rescue Capability. Increase the ability to coordinate and conduct search and rescue (SAR) response efforts for all hazards in urban, rural, and wilderness environments, including locating, accessing, medically stabilizing, and extracting victims from damaged or hostile areas.*

EMC Annual Governors Reports 2007, 2008, 2009 (3 Recommendations will be addressed by this EMC Workgroup)

Task 1.2 *Develop and strengthen effective emergency preparedness and response partnerships*

Task 1.3 *Improve response and recovery capabilities to minimize human, economic, and environmental losses.*

Task 2.3 *Improve the development, planning and assessment of state emergency preparedness, response and recovery*

Correlations with Previous Recommendations

Recommendation #2. Establish an EMC Comprehensive Statewide Emergency Management System Workgroup

The structure and goals identified in this recommendation have the practical implication of impacting almost any recommendation related to emergency management issues. Sustainable funding will provide for an adequately robust statewide emergency management community to appropriately address the issues. This recommendation is specifically addressed in the SR 530 Report, the Resilient Washington State Initiative, Washington Statewide All-Hazards Emergency Preparedness Strategic Plan, and a number of previous EMC Annual Reports to the Governor including the following:

SR 530 Landslide Commission Final Report

Recommendation 1. *The Commission recommends the Governor convene a funded task force, charged with affecting change and include participation from the Governor's office, the Legislature, tribes, county and municipal government, first responders, transportation agencies, non-government support agencies, the private sector, and members of the public. The task force should report to the Governor by December 2016 with recommendations to build a more robust and innovative system of response and to secure an adequate, sustainably funded emergency management system across the state.*

Washington Statewide All-Hazards Emergency Preparedness Strategic Plan (Almost all recommendations in the strategic plan would benefit from this recommendation including these 10 examples)

OBJECTIVE 1.2: *Enhance Communications Capability. Increase the ability of public safety agencies and service agencies to communicate within and across agencies and jurisdictions and with the private sector via radio and associated communications systems, exchanging voice and data with one another on demand, in real time, when needed, and when authorized.*

OBJECTIVE 1.4: *Enhance Community Preparedness. Increase the level of awareness, training, and practice on how to prevent, protect, mitigate, prepare for, and respond to all threats and hazards for those that live and work in Washington.*

OBJECTIVE 1.5: *Enhance Community Volunteer Participation. Build a strong statewide volunteer capacity to assist emergency responders in all-hazard events.*

OBJECTIVE 2.1: *Enhance Intelligence Fusion Capabilities. Increase the ability to manage the development and flow of information and intelligence across all levels and sectors of government and the private sector on a continual basis. This includes functions performed by state and regional fusion centers and the following capabilities: Intelligence and Information Sharing and Dissemination; Information Gathering and Recognition of Indicators and Warning; and Intelligence Analysis and Production.*

OBJECTIVE 2.2: *Enhance Counter-Terror Investigation and Law Enforcement Capability. Increase the capability to deter, detect, disrupt, investigate, apprehend, and prosecute suspects involved in criminal activities related to homeland security.*

OBJECTIVE 2.3: *Enhance Chemical, Biological, Radiological, Nuclear, and Explosive (CBRNE) Detection Capability. Increase the ability to rapidly detect and confirm the import, transport, manufacture, or release of chemical, biological, radiological, nuclear, and explosive (CBRNE) materials at critical locations, events, and incidents.*

OBJECTIVE 3.1: *Enhance Critical Infrastructure Protection Capability. Increase the ability for public and private entities to identify, assess, prioritize, and protect critical infrastructure and key resources (CIKR).*

OBJECTIVE 3.2: *Enhance Food and Agriculture Safety and Defense Capability. Increase the ability to prevent, mitigate, and eradicate threats to food and agriculture safety; restore trade in agricultural products; dispose of affected products; decontaminate affected facilities; protect public and plant health; notify all stakeholders of the event and communicate instructions of appropriate actions; and maintain confidence in the U.S. food supply. The development of this system allows for early detection, immediate response, and the quick containment and control of a food contamination incident to protect the public health and ensure a safe food supply for the citizens of Washington State.*

OBJECTIVE 4.2: *Enhance Emergency Operations Center Management Capability. Increase the ability to provide multi-agency coordination for incident management through the activation and operation of multiple Emergency Operations Centers (EOCs), Emergency Coordination Centers (ECCs), or Multi-Agency Coordination Centers (MACCs), including EOC activation, notification, staffing, and deactivation; management, direction, control, policy development, strategy, and coordination of response and recovery activities; coordination of efforts among regional public and private entities as well as state and federal agencies; and maintaining information and communication necessary for coordination of response and recovery activities.*

OBJECTIVE 4.2: *Enhance Emergency Operations Center Management Capability. Increase the ability to provide multi-agency coordination for incident management through the activation and operation of multiple Emergency Operations Centers (EOCs), Emergency Coordination Centers (ECCs), or Multi-Agency Coordination Centers (MACCs), including EOC activation, notification, staffing, and deactivation; management, direction, control, policy development, strategy, and coordination of response and recovery activities; coordination of efforts among regional public and private entities as well as state and federal agencies; and maintaining information and communication necessary for coordination of response and recovery activities.*

EMC Annual Governors Reports 2007, 2008, 2009 (2 Recommendations will be addressed by this EMC Workgroup)

Task 1.1 & second objective. *Ensure demands placed on emergency responders do not outstrip capabilities and resources. Assess and identify resources and funding options to support and sustain emergency management system.*

Task 2.2 & second objective. Focus the state's efforts on activities that effectively address and reduce threats and acts of terrorism. and Sustain and support the activities of the WAJAC.

Resilient Washington State Initiative (1 Recommendations that will be addressed by this Coalition Workgroup)
Recommendation 10b. *Identify annualized cost of implementation and continually examine opportunities for funding mechanisms related to the Resilient Washington State Initiative.*

Correlations with Previous Recommendations

Recommendation #3. Establish a State Geologic Hazards Resilience Clearinghouse

The structure and goals identified in this recommendation address/support many recommendations and goals identified in the Resilient Washington State Initiative, the SR 530 Report, Washington Statewide All-Hazards Emergency Preparedness Strategic Plan and a number of previous EMC Annual Reports to the Governor including the following:

Resilient Washington State Initiative (12 Recommendations that will be addressed by this Coalition Workgroup)
Recommendation 1c. Short Term. *Districts develop hazard mitigation plans to make them eligible for federal funding (when available) through the Hazard Mitigation Grant Program (HMGP).*

Recommendation 2b. *Develop and adopt model statewide codes for design performance standards for each utility type. Examine incentives for replacement programs that eliminate non-ductile (rigid) pipelines and replace them with ductile (flexible) alternatives that are less susceptible to breakage in seismic events.*

Recommendation 2f. *Conduct an analysis of the potential economic losses associated with power outages that may result from a variety of earthquake scenarios. (This is to help implement Recommendations 2d and 2e).*

Recommendation 3a. *Compile a detailed inventory of the actual building stock (types of buildings and structural systems, dates of construction, and seismic retrofits) in all jurisdictions across the state.*

Recommendation 3b. *Short term: Establish a working group with key stakeholders, including real estate, insurance, and financial professionals, to examine potential funding mechanisms and define an approach and requirements. Initiate a demonstration project within a county or region.*

Recommendation 3f. *Create a task force to identify possible strategies for development of a state-managed earthquake insurance program similar to the California Earthquake Authority or more effectively promote privately-offered earthquake insurance to increase coverage throughout the state and reduce direct losses to individuals and families.*

Recommendation 4a. *Complete a comprehensive review of the state's permitting rules and regulations and create an inventory of those that may pose challenges during the recovery phase. Create a process for developing potential alternative solutions that would better fit a recovery situation, making sure that the need to expedite permits is balanced with the need to ensure the quality and safety of repairs and the protection of the environment.*

Recommendation 5a. *Provide education, tools, and training to help businesses develop continuity plans or analyze existing plans, giving particular consideration to their supply chains and issues related to just-in-time inventories.*

Recommendation 7a. Short term: *Establish a task force to review California's Office of Statewide Health Planning and Development requirements regarding mandatory retrofitting of existing hospital facilities. This task force should identify and adapt for use in Washington a set of regulations that define the necessary level of building performance for hospitals and require hospitals to retrofit within a specified timeframe in order to achieve that level of performance.*

Recommendation 8a. *Continue to enhance knowledge of seismic sources impacting the State of Washington through mapping, research, field investigation, and seismic monitoring.*

Recommendation 8b. *Prioritize areas for detailed liquefaction and other seismic hazard mapping and accelerate the mapping. Short term: Develop a more comprehensive and detailed statewide assessment of liquefaction-prone areas: Prioritize areas where liquefaction is likely to have the highest impact; begin assessment around critical facilities; and do detailed studies of areas that are already of interest based on current mapping.*

Recommendation 10b. *Identify annualized cost of implementation and continually examine opportunities for funding mechanisms related to the Resilient Washington State Initiative.*

SR 530 Landslide Commission Final Report (3 Recommendations that will be addressed by this Coalition Workgroup)

Recommendation 3. *The Commission recommends the Governor explore the creation of a geologic hazards resilience institute to address education, outreach, and research needs, professional practice guidelines, and other geologic issues impacting Washington communities. The institute could work with members of tribal, state, local, non-profit, academic, and private sector specialists to align efforts and identify opportunities for collaboration.*

Recommendation 9. *The Commission recommends the Department of Natural Resources (DNR) Division of Geology and Earth Sciences, Washington State Department of Transportation (WSDOT), Snohomish County, and the US Geological Survey (USGS) conduct landslide investigations to characterize the mechanisms that activated the landslide and to understand the stability of the landslide mass.*

Recommendation 17. *The Commission recommends local governments develop public awareness initiatives to inform property owners and the general public of designated geologic hazard areas, once these hazards are identified from local, regional, or statewide mapping programs and encourages the Washington State Real Estate Commission to include natural hazards awareness in its "core" curriculum that informs licensees on current trends and issues of importance and supports the development of educational programs specific to local community issues, to raise awareness of natural hazards and risks from landslides, debris flows, flooding, volcanic eruptions, and earthquakes.*

Washington Statewide All-Hazards Emergency Preparedness Strategic Plan (7 Recommendations that will be addressed by this Coalition Workgroup)

OBJECTIVE 1.1: *Enhance Planning Capability. Increase the ability to: Conduct planning; Develop standard, coordinated plans; Identify and dedicate resources to the development of plans; Invest in science and technology to improve the planning process; Improve plans through an inclusive and open process*

OBJECTIVE 1.3: *Enhance Risk Management Capability. Increase the ability to identify and assess risks, prioritize and select appropriate protection, prevention, and mitigation solutions based on reduction of risk, monitor the outcomes of allocation decisions, and undertake corrective actions. Integrate Risk Management as a planning construct for effective prioritization and oversight of all homeland security investments.*

OBJECTIVE 1.4: *Enhance Community Preparedness. Increase the level of awareness, training, and practice on how to prevent, protect, mitigate, prepare for, and respond to all threats and hazards for those who live and work in Washington.*

OBJECTIVE 4.12: *Enhance Citizen Evacuation and Shelter-in-Place Capability. Increase the ability to withdraw people, companion animals, pets, and livestock from dangerous areas in an organized, phased, and supervised manner, and receive and care for them in safe areas.*

OBJECTIVE 4.14: *Enhance Search and Rescue Capability. Increase the ability to coordinate and conduct search and rescue (SAR) response efforts for all hazards in urban, rural, and wilderness environments, including locating, accessing, medically stabilizing, and extracting victims from damaged or hostile areas.*

OBJECTIVE 5.1: *Enhance Structural Damage Assessment Capability. Increase the ability to conduct damage and safety assessment of civil, commercial, and residential infrastructure and landscapes and perform structural inspections and mitigation activities.*

OBJECTIVE 5.2: *Enhance Restoration of Lifelines Capability. Increase the ability to initiate and sustain restoration activities, including facilitating repair and replacement of infrastructure for oil, gas, electric, telecommunications, drinking water, wastewater, and transportation services to facilitate essential movement and critical human and operational supplies.*

EMC Annual Governors Reports 2007, 2008, 2009 (2 Recommendations that will be addressed by this Coalition Workgroup)

Task 1.2 *Develop and strengthen effective emergency preparedness and response partnerships.*

Task 2.1 *Reduce casualties and damage to critical infrastructure, and improve communication of information to aid in response and recovery from a seismic event.*