



*2013 Washington State  
Enhanced State Hazard Mitigation Plan*

***Element Enhanced***

**Enhanced State Mitigation Plan**

Relevant Code of Federal Regulations that the Element must meet.

<b>ELEMENT</b>	<b>ENHANCED STATE MITIGATION PLAN</b>	<b>Page</b>
<b>ENHANCED:</b> §201.5(b)	<i>Enhanced State Mitigation Plans must include all elements of the Standard State Mitigation Plan identified in § 201.4, as well as document the following:</i>	3
§201.5(b)(1)	<i>Demonstration that the plan is integrated to the extent practicable with other State and/or regional planning initiatives (comprehensive, growth management, economic development, capital improvement, land development, and/or emergency management plans) and FEMA mitigation programs and initiatives that provide guidance to State and regional agencies.</i>	5
§201.5(b)(2)	<i>Documentation of the State’s project implementation capability, identifying and demonstrating the ability to implement the plan, including:</i>	15
§201.5(b)(2)(i)	<i>Established eligibility criteria for multi-hazard mitigation measures.</i>	15
§201.5(b)(2)(ii)	<i>A system to determine the cost effectiveness of mitigation measures, consistent with OMB Circular –94, Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs, and to rank the measures according to the State’s eligibility criteria.</i>	15
§201.5(b)(2)(iii)	<i>Demonstration that the State has the capability to effectively manage the HMGP as well as other mitigation grant programs, including a record of the following:</i>	23
§201.5(b)(2)(iii)(A)	<i>Meeting HMGP and other mitigation grant application timeframes and submitting complete, technically feasible, and eligible project applications with appropriate supporting documentation;</i>	23
§201.5(b)(2)(iii)(B)	<i>Preparing and submitting accurate environmental reviews and benefit-cost analyses;</i>	23
§201.5(b)(2)(iii)(C)	<i>Submitting complete and accurate quarterly progress and financial reports on time; and</i>	23
§201.5(b)(2)(iii)(D)	<i>Completing HMGP and other mitigation grant projects within established performance periods, including financial reconciliation.</i>	23
§201.5(b)(2)(iv)	<i>A system and strategy by which the State will conduct an assessment of the completed mitigation actions and include a record of the effectiveness (actual cost avoidance) of each mitigation action.</i>	66
§201.5(b)(3)	<i>Demonstration that the State effectively uses existing mitigation programs to achieve its mitigation goals</i>	69
§201.5(b)(4)	<i>Demonstration that the State is committed to a comprehensive state mitigation program, which might include any of the following:</i>	78
§201.5(b)(4)(i)	<i>A commitment to support local mitigation planning by providing workshops</i>	78



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§201.5(b)(4)(ii)	<p><i>and training, State planning grants, or coordinated capability development of local officials, including Emergency Management and Floodplain Management certifications.</i></p> <p><i>A statewide program of hazard mitigation through the development of legislative initiatives, mitigation councils, formation of public/private partnerships, and/or other executive actions that promote hazard mitigation.</i></p>	91
§201.5(b)(4)(iii)	<p><i>The State provides a portion of the non-Federal match for HMGP and/or other mitigation projects.</i></p>	105
§201.5(b)(4)(iv)	<p><i>To the extent allowed by State law, the State requires or encourages local governments to use a current version of a nationally applicable model building code or Standard that addresses natural hazards as a basis for design and construction of State sponsored mitigation projects.</i></p>	106
§201.5(b)(4)(v)	<p><i>A comprehensive, multi-year plan to mitigate the risks posed to existing buildings that have been identified as necessary for post-disaster response and recovery operations.</i></p>	107
§201.5(b)(4)(vi)	<p><i>A comprehensive description of how the State integrates mitigation into its post-disaster recovery operations.</i></p>	111
§201.5(c)(1)	<p><i>A State must review and revise its plan to reflect changes in development, progress in statewide mitigation efforts, and changes in priorities, and resubmit it for approval to the appropriate Regional Administrator every three years. The Regional review will be completed within 45 days after receipt from the State, whenever possible.</i></p>	111
§201.5(c)(2)	<p><i>In order for a State to be eligible for the 20 percent HMGP funding, the Enhanced State Mitigation plan must be approved by FEMA within the three years prior to the current major disaster declaration.</i></p>	117



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### **I. Compliance with Standard State Plan Requirements**

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**Requirement 44 CFR §201.5(b):** Enhanced State Mitigation Plans must include all elements of the Standard State Mitigation Plan identified in **§201.4**.

The 2010 Washington State Hazard Mitigation Plan (SHMP) received its approval pending adoption (APA) on August 10, 2010. The Director of Washington State Emergency Management Division (EMD) promulgated a memo to state agencies, boards, commissions and councils, state colleges and universities on September 16, 2010 announcing the approved and adopted status of the plan. The U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) issued its approval in a letter from the Regional Administrator dated October 1, 2010.

The intention is to submit the updated 2013 SHMP to the Director of EMD for review in April 2013 and to FEMA Region X Mitigation Section for their review in May 2013. The state anticipates receiving an APA in June 2013, promulgating a memo that the SHMP is approved and adopted in August 2013, and receiving FEMA's approval letter from the Region X Administrator for October 1, 2013. This keeps the planning cycle tied to the federal fiscal budget year for grant funding and administrative purposes.

### **Comprehensive State Hazard Mitigation Planning Program**

The State Hazard Mitigation Plan (SHMP) has been updated throughout to include the most current data available including the Enhanced Plan portion. New data, information, charts and graphs have been incorporated where appropriate. The narrative was revised for active voice and succinct story telling. The prose is meant to inform not entertain. And per governor executive order, the narrative has been put into "plain talk". Briefly, the summary of changes includes the following:

**Integration with Other Planning Initiatives** section has been updated with a summary of the current status of Growth Management Act (GMA) and Shoreline Management Act (SMA) planning throughout the state, continued building code (I-Codes) incorporation to the latest standards, a summary of the Flood Control Assistance Account Program (FCAAP), and the Transportation Partners Account (TPA) spending results of the past three years. There is better integration of wildlife habitat and recreational use properties captured under conservation programs. The state's Facility Inventory System (FIS) annual update has been incorporated. Additionally, an update is provided on the status of the state's utilization of the Flood Repetitive Claim (FRC) Repetitive Loss (RL) and Severe Repetitive Loss (SRL) properties grant programs, HMGP, local mitigation planning, GIS, and emergency management plans.

**Project Implementation Capabilities** section has been updated. It includes eligibility criteria, Benefit Cost Assessment (BCA) thresholds, project prioritization process, and a sample scoring sheet used in



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evaluating projects. The Appendix 2 and Appendix 3 provides a detailed list of mitigation strategy project action items and initiatives currently on-going throughout state agencies including open and completed action items.

**Program Management Capability** section has been updated with the most recent FEMA documentation concurring with the state's capability to manage a mitigation program.

**Assessment of Mitigation Actions** section has been updated with current status of GMA, SMA, FCAAP, TPA, RFC, and HMGP/PDM/HMA plus the efforts of the earthquake, tsunami, and volcano program.

**Effective Use of Available Mitigation Funding** section has been updated with the most current data, as has the information concerning the use of available mitigation funds. The three tables illustrating the funding approved for HMGP, FMA, and PDM during the 2013-2016 time period have been updated. A summary of the technical assistance provided for both mitigation planning purposes and to the subapplicants for grant applications is incorporated. This includes updates on local planning initiatives which now includes most of the state's tribal partners have or are working towards completing a tribal hazard mitigation plan and now moving towards getting projects from those tribes. Plus DNR is creating a LiDAR based landslide inventory mapping project as a GIS layer for state and local jurisdictional use in determining landslide hazard risks.

**Commitment to a Comprehensive Mitigation Program** section summarizes various other sections of the SHMP to demonstrate the state's ability to remain focused on enhancing the overall mitigation programs statewide. This section includes grant awards and match participation, state floodplain management, NFIP, CRS, Map Modernization, RiskMAP, EMD business portal, WSDOT slope stability project, TPA, GMAP, CREW, TTHMP, AHAB, Tsunami inundation maps, CWPP, legislative updates, governor speeches and directives, adding an EMD recovery planner, and requiring EMD LNO to have mitigation or recovery backgrounds.

EMD planning initiatives (DNR landslide inventory mapping, tribal planning outreach), technical assistance deliveries (meetings, classroom courses, webinars, etc), GIS datasets for risk analysis, WAHUG user group, mitigation planning user group, tribal partners participation, state match for local planning from federal planning grants plus WSDOT's mitigation programs, OFM's annual Facility Inventory System cataloging state facilities, and RCO habitat conservation activities. Additionally, more AHAB sirens have been installed for increased alerting for tsunami and lahar warning.

A new list of applicable Legislative actions over the past three years that relate to mitigation activities has been added, including an update on the current status of the State's building codes – another of our most beneficial planning initiatives.

While the attempt has been made to provide enough detail to not require one to go to other sections of the plan, it is impossible to incorporate everything within this section. Where appropriate, reference to other sections of the plan has been included should additional information be necessary.



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### II. Integration with Other Planning Initiatives

**Requirement 44 CFR §201.5(b)(1):** Demonstrate that the plan is integrated to the extent practicable with other State and/or regional planning initiatives (comprehensive, growth management, economic development, capital improvement, land development, and/or emergency management plans) and FEMA mitigation programs and initiatives that provide guidance to State and regional agencies.

Hazard mitigation planning is integrated into several key state planning initiatives and mitigation programs. The primary examples are the Growth Management Act, Shoreline Management Act, International Building Codes Program, the Flood Control Assistance Account Program, and the FEMA-funded, state-administered hazard mitigation programs. The information below is a brief synopsis of some of the major planning initiatives. A more detailed list is attached as Appendix 4 Integration with Other Planning Initiatives.

Growth Management Act (GMA) – This state law, Revised Code of Washington (RCW) 36.70A, requires all cities, towns, and counties in the state to identify critical areas, and to establish regulations to protect and limit development in those areas. Among the critical areas defined by state law are frequently flooded areas (floodplains, and areas potentially impacted by tsunamis and high tides driven by strong winds) and geologically hazardous areas (those areas susceptible to erosion, landslide, seismic activity, or other geological events such as coalmine hazards, volcanic hazards, mass wasting, debris flows, rock falls, and differential settlement). The GMA requires local communities most affected by growth to engage in twenty-year land use planning and to concentrate development in urbanized areas to use infrastructure efficiently. The GMA requires all cities and counties to adopt development regulations that protect environmental and natural resources. Most local communities have had these laws on their books now for more than a decade.

Guidance provided to local government states that goals for critical areas protection programs should address:

- Protecting members of the public and public resources and facilities from injury, loss of life, or property damage due to landslides and slope failures, erosion, seismic events, volcanic eruptions, or flooding.
- Maintaining healthy, functioning ecosystems through the protection of unique, fragile, and valuable elements of the environment.
- Directing activities not dependent on critical areas resources to less ecologically sensitive sites and mitigating unavoidable impacts to critical areas by regulating alterations in and adjacent to critical areas.
- Preventing cumulative adverse environmental impacts to frequently flooded areas, among others.



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Local governments must consider best available science (defined in Appendix 7 *Best Available Science*) in their identification and protection of critical areas by way of a Critical Areas Ordinance. Every seven years, cities and counties must review and revise their critical areas ordinances and policies. All jurisdictions were required to have updated critical areas regulations by the end of 2008. While the majority of the counties have updated their plans, some have not. The reasons for this vary, but for many jurisdictions, it is as a result of the state of economy. In 2010, 19 of Washington's 39 counties are considered distressed, having a three-year average unemployment rate equal to or greater than 120 percent of the statewide unemployment rate. In 2012, 10 of Washington's 39 counties are considered distressed, having a three-year average unemployment rate equal to or greater than 120 percent of the statewide unemployment rate. As tax bases are lower, jurisdictions have had to down-size, reducing their workforces. A more in depth analysis of the update status of the Critical Areas Ordinances is available within the *Mitigation Strategy* portion of the plan.

The GMA also allows those cities and counties required or choosing to develop comprehensive plans to add an optional natural hazard reduction element to those plans (see the *Mitigation Strategy*, SHMP). To facilitate the development of natural hazard reduction elements, the Department of Commerce – Growth Management Services used a Hazard Mitigation Grant Program (HMGP) grant to develop and publish a guidebook in 1999 on how to incorporate natural hazard reduction into local land-use plans. That guidebook remains a viable tool for use by local jurisdictions.

Additionally, staff members from the State Emergency Management Division's (EMD) Mitigation section work closely with Commerce – Growth Management Services to ensure the connection between hazard mitigation and land-use planning and development regulations. For example, Mitigation staff members routinely identify sources of best available science for frequently flooded areas and geologically hazardous areas for land-use planners, and participate on an ongoing basis in an interagency coordinating committee on growth management planning. This level of cooperation with Commerce and with the state's Department of Ecology (Ecology) will become even more valuable as FEMA's revised Flood Insurance Rate Maps are completed and adopted within the state.

Shoreline Management Act (SMA) – This program, administered by Ecology, requires local jurisdictions with shorelines to develop regulations that accommodate reasonable and appropriate uses, protect shoreline resources, and protect the public's right to access and use shorelines (see the *Mitigation Strategy*, SHMP). Local jurisdictions can use shoreline regulations to avoid or minimize development on unstable shoreline slopes and in frequently flooded areas. Ecology updated implementing regulations in 2003; they are more comprehensive than before and require local shoreline regulations to better incorporate science and protect critical resources and physical processes and functions. To date Ecology has provided over \$10 million in planning grants to help fund local shoreline planning and regulation development efforts. It is estimated that more than 260 towns, cities, and counties will update their Shoreline Master Programs (SMP) by 2014 and over 120 of those jurisdictions have started that effort. 62 jurisdictions through December 2012 have been approved. To aid in this effort, the State Legislature and Governor approved an amendment to RCW 90.58.080 of the SMA effective July 22, 2007 in which an extension of an additional year could be granted to local governments to complete their SMPs. On the same date an additional amendment to RCW 95.58.030 of the SMA was approved which revised the definition of a floodway giving local governments more options regarding floodway mapping.



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International Building Code Program - The Washington State Building Code is comprised of several different codes. Most are national model codes adopted by reference and amended at the state level. Others, such as the Washington State Energy Code, are state-written state-specific codes. The State Building Code Council (SBCC) was created in 1974 to provide independent analysis and objective advice to the legislature and the Governor's Office on state building code issues. The SBCC establishes the minimum building, mechanical, fire, plumbing, and energy code requirements necessary to promote the health, safety, and welfare of the people of the state of Washington by reviewing, developing, and adopting the state building code. For example, fire deaths per million residents have declined from 10.3 in 2000 to 8.8 in 2009.

Briefly, the Legislature approved a measure for adoption of the International Codes (I-Codes) for building, residential, fire, and mechanical codes through the agency rule making authority (RCW 19.27.031). This provision allows for incorporation of the latest I-Codes and takes into account the current seismic risk and other hazard factors in the state. The I-Codes took affect statewide July 2004. The Washington State Building Code Council (SBCC) reviews and adopts the I-Codes. The 2012 editions of the I-Codes will be effective July 1, 2013. In addition to adopting the I-Codes, the SBCC also adopts other types of codes (and amendments to the I-Codes) to enhance building regulations to account for conditions unique to our state.

Flood Control Assistance Account Program (FCAAP) – This program, administered by Ecology, provides financial assistance to eligible local agencies that belong to the National Flood Insurance Program (NFIP) for preparing comprehensive flood control management plans and flood damage reduction projects that protect human life and property from flood related incidents (see the *Mitigation Strategy*, SHMP).

State budget reductions were implemented for the 2009-11 biennium and continue through the 2011 and 2013 bienniums, that cut FCAAP funding by 50%. This, effectively, eliminated the competitive grant portion of FCAAP, leaving less than \$400,000 for emergency projects. FCAAP funds has a statutory \$4 million level. Ecology foresees funding at the statutory amount for future biennia being restored, however, additional funding is needed to allow the program to effectively meet cost increases since its inception in 1984.

To be eligible for an FCAAP grant, the appropriate local authority with flood control jurisdiction over the area where the proposed project is located must have a Comprehensive Flood Control Management Plan (CFCMP) approved by Ecology, in consultation with the Department of Fish and Wildlife. Whereas local hazard mitigation plans demonstrate "the jurisdiction's commitment to reduce risks from natural hazards, serving as a guide for decision makers as they commit resources to reducing the effects of natural hazards" (44 CFR 201.6), the purpose of the CFCMP is to comprehensively evaluate problems and proposed solutions to flood hazard reduction specifically. FCAAP funding for CFHMPs is available up to 75% of the total project cost. The CFCMP's specific requirements are detailed in WAC 173-145.

Transportation Partnership Account (TPA) – The TPA is a revenue generation and expenditure plan that funds 274 transportation projects across the state over a 16-year period. The revenue comes from a combination of taxes on transportation related items, including gasoline taxes, passed in 2005. The expenditure plan allocated a total of \$2.98 billion towards projects with a hazard mitigation element,



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including the seismic retrofit or replacement of existing bridges and structures that are vulnerable to earthquakes. In 2007, the State Department of Transportation began work on the portion of the bridge seismic retrofit program that was allocated \$87 million in funds from TPA. This program is focused on strengthening the support columns of bridges in the Central Puget Sound region to make them more resistant to earthquake damage.

The TPA provides \$2 billion in funds for the replacement of the Alaskan Way Viaduct (State Route 99). The Alaskan Way Viaduct is an elevated roadway running along the City of Seattle’s waterfront, and accounts for approximately 25 percent of the traffic through the downtown area. After the 6.8 magnitude Nisqually earthquake in 2001, the viaduct was damaged, and temporarily shut down. A team of experts concluded that the existing structure could not be adequately retrofitted and had to be replaced. With work scheduled 2010-2019, the eventual replacement of the viaduct will result in a new and earthquake-resilient segment of the arterial system through the State’s most populous city.

Additionally, the TPA provides \$891 million towards replacing the oldest and most vulnerable bridges, including \$500 million towards the State Route 520 floating bridge. The existing State Route 520 floating bridge system that crosses Lake Washington is vulnerable to failure during severe windstorms and earthquakes. The new bridge system is designed to withstand effects from winds up to 92 mph and a 1,000-year earthquake. The construction timeline is 2010-2014.

The table below provides a summary of the status of the Bridge Seismic Retrofit Program. To date nearly \$100 million has been invested in the program since 1991 including \$87 million to retrofit bridges in Central Puget Sound. The TPA funded work began in 2007 and will be complete by 2015.

Bridges in the Seismic Retrofit Program as of March 2012	
Completely Retrofitted	268
Partially Retrofitted	134
Needing Retrofitting	487
Under Contract	12
<b>Total</b>	<b>901</b>

Source: WSDOT Bridge Office, March 2012, available at:  
<http://www.wsdot.wa.gov/Bridge/Reporting/SeismicRetrofitProgram.htm>

WSDOT received \$18.2 million in federal funds to seismically retrofit the King Street Rail Station in Seattle. Washington State received \$621 million in federal stimulus funds for high-speed rail. Per the WSDOT press release dated October 28, 2010, nearly \$1 billion in federal, state, and local capital and operating funds has been invested in high-speed intercity passenger rail in the Pacific Northwest since 1994. This investment has resulted in the state-support Amtrak *Cascades* passenger rail service, which has served over six million travelers and provided a valuable alternative to driving. Washington State has invested nearly \$331 million.

Federal Hazard Mitigation Programs – State hazard mitigation planning is integrated into the Hazard Mitigation Grant Program (HMGP), Flood Mitigation Assistance Program (FMA), and the Pre-Disaster



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Mitigation Program (PDM). For example, since early 2002, the state required recipients of HMGP construction grants to develop a hazard mitigation plan as a condition of receipt of the grant; this requirement led to the completion of nine hazard mitigation plans for communities that otherwise might not have developed a plan. And, the state's administrative plan for all three programs requires all construction-related mitigation projects to support the general mitigation objectives in the state's hazard mitigation strategy. Since April 1989, the HMGP has provided an aggregate investment of more than \$129.9 million for planning and projects designed to reduce or eliminate hazard-caused damage throughout the state, ranging from strengthening water towers so they do not fall during earthquakes, to purchase of repetitive flood-loss properties.

Much smaller investments from the PDM (est. \$22.8 million) and the FMA (est. \$2.4 million) have paid for mitigation projects and development of local hazard mitigation and flood plans. Additionally, several local jurisdictions have invested their Emergency Management Performance Grant (EMPG) funds in hazard mitigation planning.

In the 2007 Washington State Enhanced Plan, a number of steps were identified to mitigate and reduce the number of repetitive loss and severe repetitive loss properties. One step was to revise the HMGP application to indicate that mitigating these properties are a priority of the state. The HMGP application package and project evaluation, scoring and prioritization criteria were extensively revised for the DR-1817 and DR-1825 Hazard Mitigation Grant Programs, to include additional points for mitigating repetitive flood-loss structures through acquisition, elevation or relocation, and for providing a long-term solution for a repetitive problem such as repetitive flood damage. This scoring criteria continues through the 2010 Washington State Enhanced Plan and disasters DR-1963, DR-4056 and DR-4083. It will continue for the 2013 State Hazard Mitigation Plan. Nonetheless, between 1,200-1,300 repetitive loss properties exist in Washington State.

The State Mitigation Grant Programs Administrative Plan, updated in early May 2012, and approved by FEMA in late May 2012, allows the state to establish priorities for HMGP for projects that will be considered and recommended for funding outside of the competitive process. Washington State has not exercised this option since DR-1817 when it prioritized acquisition of substantially damaged properties. Non-competitive priorities are advertised in the program announcement to keep all interested stakeholders informed about the process and priorities.

In addition, the state has taken – and will continue to take – action to increase the number of project applications for the mitigation of Repetitive Flood Claims (RFC) for Repetitive Loss (RL) and Severe Repetitive Loss (SRL) properties. In notices of availability of funding for Pre-Disaster Mitigation and the three flood-mitigation programs, the state has encouraged communities to consider applying for funds for projects to mitigate RL and SRL properties, noting that funding for SRL properties could be up to 90 percent federal funds as a result of the repetitive loss reduction strategy in the State Enhanced Hazard Mitigation Plan. Besides changing the scoring criteria and providing technical assistance and outreach to local jurisdictions, the state is working on Increased Cost of Compliance (ICC) issues within funded projects to maximize the return on investment. The state is encouraging jurisdictions to apply for the annual Hazard Mitigation Assistance funds through the Repetitive Flood Claims (RFC) and SRL program using Increased Cost of Compliance funding as match for the SRL grant program in another attempt to encourage projects to mitigate SRL properties.



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Finally, the state is providing requesting communities with lists of RL and SRL properties for use in developing mitigation grant applications and in their hazard mitigation plan updates, and is helping communities to appropriately address the National Flood Insurance Program compliance requirements as they update existing hazard mitigation plans or develop initial plans.

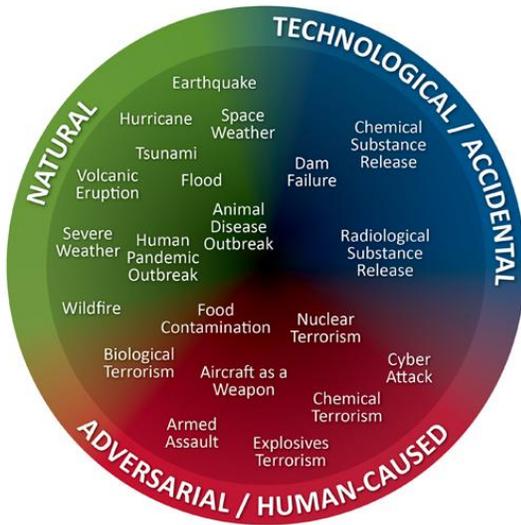
Note that the National Mitigation Framework, released in May 2013 by FEMA, is intended as an unifying umbrella for mitigation coordination between levels of government. As defined by FEMA, "mitigation reduces the impact of disasters by supporting protection and prevention activities, easing response, and speeding recovery to create better prepared and more resilient communities." Additionally, FEMA defines "risk is the potential for an unwanted outcome resulting from an incident or caused by systemic degradation, as determined by its likelihood, associated consequences, and vulnerability to those consequences." The end result per FEMA is "risk management includes identifying opportunities to build resilience into planning, resourcing to reduce risk in advance of a hazard, and mitigating the consequences of disasters that occur. By focusing on the resilience of the community as a whole, the community's adaptive capacity to recover from all kinds of change is enhanced, whether that risk has been identified or not." Therefore, mitigation, as a mission area, is specifically intended to minimize risks associated with these threats and hazards. No single threat or hazard exists in isolation and mitigation core capabilities can be applied to deal with cascading effects as well as other unknown risks.

Washington State already practices many of the tenets espoused in the National Mitigation Framework like:

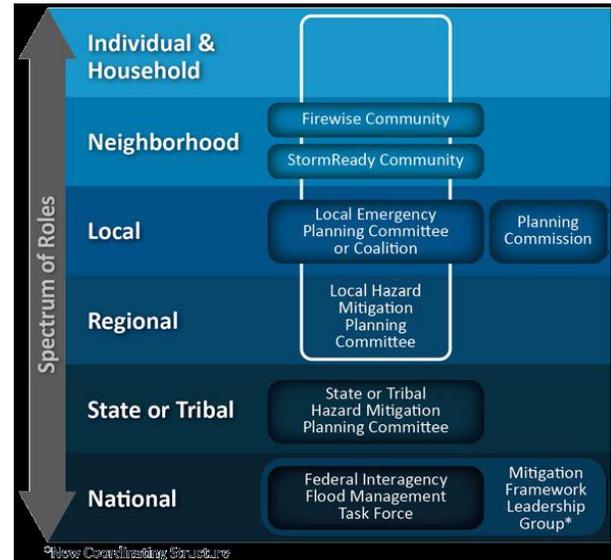
- "Effective mitigation begins with identifying the threats and hazards a community faces and determining the associated vulnerabilities and consequences. Sound assessment requires risk information—based on credible science, technology, and intelligence—validated by experience. Understanding risks makes it possible to develop strategies and plans to manage them. Managing risks from threats and hazards requires decision making to accept, avoid, reduce, or transfer those risks. Avoiding and reducing risks are ways to reduce the long-term vulnerability of a community and build individual and community resilience."
- Public education efforts to "Mitigation begins with individual awareness and action. Informed actions that reduce risk allow individuals, families, households, and their animals to better withstand, absorb, or adapt to the impacts of threats and hazards. Adverse incidents can compromise safety, physical and behavioral health, property, and financial well-being."
- Supporting local "actions to reduce long-term vulnerability, such as effective building code adoption and enforcement" and state legislative action "such as laws governing local land use and development decisions or building codes."



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Examples of Threats and Hazards by Category (National Mitigation Framework 2013)



Examples of Coordinating Structures (National Mitigation Framework 2013)

Local Mitigation Planning — The State EMD works with local jurisdictions to encourage and support local hazard mitigation planning, as well as mitigation project development and funding. The EMD Mitigation Section’s staff members provide ongoing assistance through on-site visits, assist local jurisdictions to obtain grant funding for plan development and review, coordinate information requests of state government, and participate in local plan development activities. The level of assistance requested and provided by Mitigation section staff has varied by community and the level of experience and knowledge of local staff as well as complexity of issues and numbers of jurisdictions involved in a particular plan. In total, during the 2011-2013 timeframe, EMD either provided or coordinated training for over 360 students involved in mitigation planning efforts in a classroom setting. Additionally, 50 students attended BCA training to not only to enhance project and grant applications, but also assist with mitigation strategy development, as many jurisdictions are completing BCA evaluations on their various structural projects for prioritization of mitigation actions. EMD provided 32 technical assistance webinars for DR-4056 for an estimated 300 attendees. A detailed accounting of all of the technical assistance provided is contained within the Enhanced Element on *Coordination of Local Mitigation Planning*, SHMP.

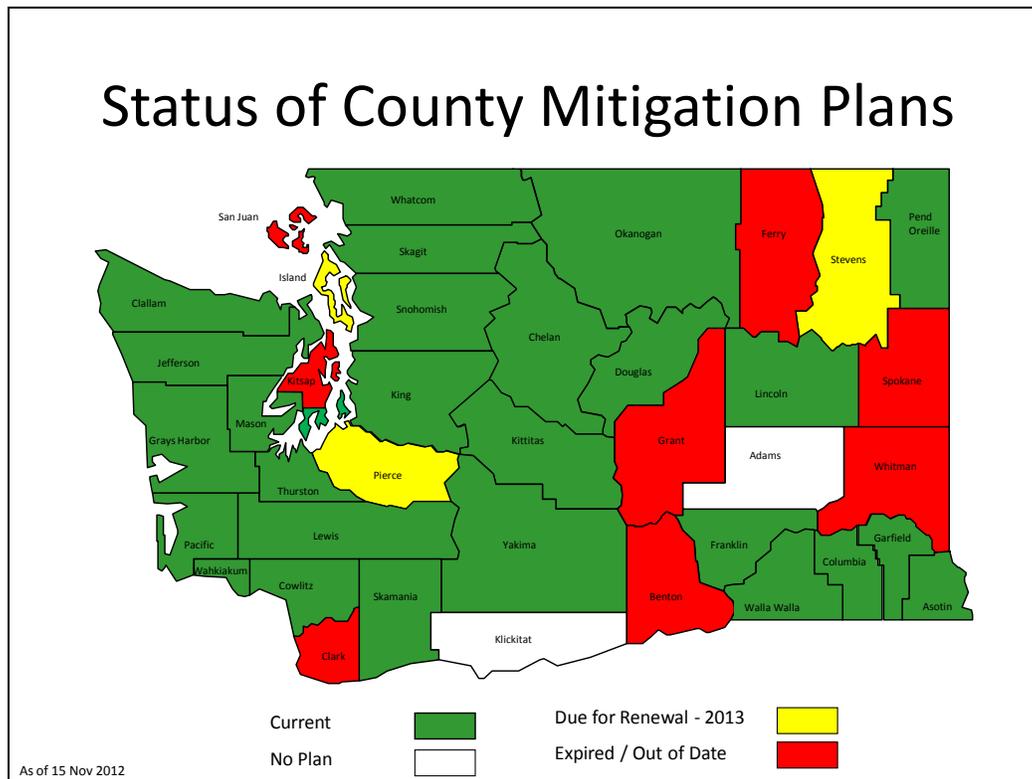
EMD Mitigation Section continues to provide the Risk Assessment matrix developed by a previous State Hazard Mitigation Strategist. Additionally, State Emergency Management Division has completed HAZUS runs for those jurisdictions that did not have the ability to perform this function. EMD subcontracted with Washington State Department of Natural Resources (WA-DNR), Division of Geology and Earth Resources (DGER), to perform a Landslide Mapping Project using LIDAR data for the coastal bluffs surrounding the Puget Sound Basin and with the Office of Financial Management (OFM) Facilities Management for a GIS dataset and layer for owned and leased state facilities.

During the previous plan update cycle, EMD supported the augmentation of HAZUS to enable better modeling studies in Washington State. DNR’s Division of Geology and Earth Resources (DGER) gathered



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enhanced information that jurisdictions can utilize during their risk assessment rather than relying on the HAZUS-MH default data. In addition, a soils and liquefaction hazard maps database, USGS ShakeMaps Scenarios for Washington State for HAZUS earthquake modeling, plus tsunami inundation zone maps remain available for local users. See the Washington HAZUS User Group (WAHUG) website <http://www.usehazus.com/wahug> or the Washington State Geologic Information Portal website [http://www.dnr.wa.gov/ResearchScience/Topics/GeosciencesData/Pages/geology\\_portal.aspx](http://www.dnr.wa.gov/ResearchScience/Topics/GeosciencesData/Pages/geology_portal.aspx) for these datasets, GIS layers, and GIS viewers. Additional information on these projects can be found within the Enhanced Element, *Coordination of Local Mitigation Planning*.



There are 61 approved local and tribal hazard mitigation plans in Washington through December 2012. While the number of overall plans is down, many of the individual plans have become regional or countywide plans, which include many more jurisdictions and special purpose districts than the original individual plans. These plans cover in excess of 400 local jurisdictions – cities, towns, counties, special districts such as schools, hospitals, fire, cemetery, water, sewer, dike and flood control districts, and a handful of private, non-profit organizations. Consequently, less than 40,000 residents are not covered by a hazard mitigation plan. Only Adams and Klickitat Counties are without plans. Thus, 99.43 percent of the state’s population of 6,817,770 is covered by a hazard mitigation plan.

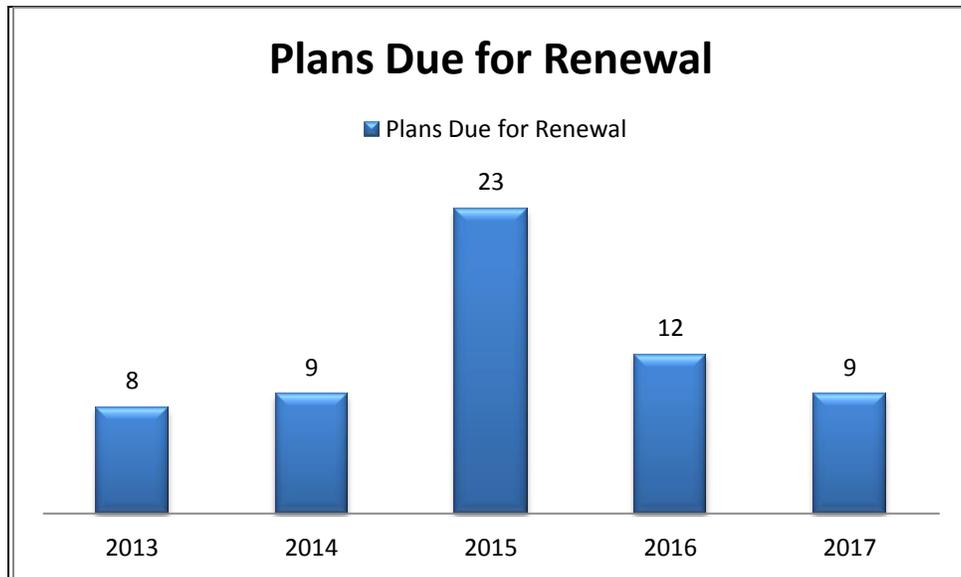
During the period 2010 through 2012, 51 plans were reviewed by the state and 40 plans were approved by FEMA. The latter includes 18 County plans, 9 City Plans, 9 Tribal Plans, and 4 Special Purpose Districts.



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All the counties with expiring or expired plans are either actively working on their updates or awaiting federal grant funds to help pay for the update effort. Not noted within these calculations are the various city and special purpose district plans currently under development. These are jurisdictions, which have elected not to become part of a county or regional plan, and are undertaking the planning process independently. There are currently an estimated 25 plans of this type under development.

Leaning forward, the next update of the State Hazard Mitigation Plan will be during a bubble of local plans due for renewal. The state hazard mitigation strategist is the primary state reviewer of local plans. The strategist's time will be significantly impacted in 2015 and 2016 due to the amount of local plans needing review simultaneously while the state plan is being revised. Nonetheless, the state is committed to assisting local jurisdictions getting hazard mitigation plans completed and approved by FEMA on their first submission.



In previous two plans (2007 and 2010), getting increased tribal partner participation in mitigation planning activities was emphasized. Extensive outreach was provided to those jurisdictions to either get them to create their own plans or integrate them into their county-based plan. Nearly  $\frac{3}{4}$  of the state's tribal jurisdictions either were developing their plan or have completed their plan. Consequently, this planning initiative has been a success. The next effort will be getting tribal partner projects submitted for consideration in receiving HMGP / PDM / HMA funding.

Emergency Management Plans — RCW 38.52 delineates the need for a comprehensive emergency management program administered by the state and authorizes the creation of local organizations for emergency management in the political subdivisions of the state. Emergency Management is defined as the preparation for and the carrying out of all emergency functions to mitigate, prepare for, respond to, and recover from emergencies and disasters, etc.

The *Washington State Comprehensive Emergency Management Plan* (CEMP) is a comprehensive plan for statewide mitigation, preparedness, response, and recovery activities. As such, this plan is the primary



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implementing document for the *National Incident Management System (NIMS)* within the state of Washington. Additionally, the CEMP provides a framework for state, tribal, and county coordination and cooperation supporting the response and recovery of local jurisdictions in times of emergencies and disasters. The basic plan and Emergency Support Functions (ESF) describe specific roles, responsibilities, functions, and support relationships of state agencies. The scope of the CEMP is applicable to all state agencies, commissions, boards, and councils (where applicable) and considers the emergencies and disasters likely to occur as identified in the *Washington State Hazard Identification and Vulnerability Assessment (HIVA)* and the *Washington State Enhanced Hazard Mitigation Plan (HMP)*.

The State EMD created a Comprehensive Emergency Management Planning Guide in 2007 “to help state agencies, local governments, tribal nations and businesses develop an integrated planning program that focuses on the complete spectrum of incident management activities.” The guide specifically references the Washington State Enhanced Hazard Mitigation Plan to help in identifying hazards within a jurisdiction.

As of December 2012, 35 counties have current plans, two counties are out of compliance, and two counties are due by the end of 2012.

Other - In addition, state government is mitigating against the impact of climate change through legislative action and Governor Executive Orders for reducing greenhouse gas emissions through clean energy initiatives, economic development incentives, and capital improvement criteria emphasizing mitigation. The state is one of the few that has a climate change adaptation plan titled *Preparing for a Changing Climate: Washington State’s Integrated Climate Response Strategy, April 2012*. See [http://www.ecy.wa.gov/climatechange/ipa\\_responsestrategy.htm](http://www.ecy.wa.gov/climatechange/ipa_responsestrategy.htm).

See the State Hazard Mitigation Plan *Mitigation Strategy* for more information including integration with other state planning initiatives. See the State Hazard Mitigation Plan *Appendix 2 Open Mitigation Strategy Action Items* and *Appendix 3 Closed and Removed Mitigation Strategy Action Items*.



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### III. Project Implementation Capabilities

**Requirement 44 CFR §201.5(b)(2)(i-ii):** Document the State's project implementation capability, identifying and demonstrating the ability to implement the plan, including:

- Establishing eligibility criteria for multi-hazard mitigation measures.
- A system to determine the cost effectiveness of mitigation measures, consistent with OMB Circular A-94, Guidelines and Discount Rates for Benefit- Cost Analysis of Federal Programs, and to rank the measures according to the State's eligibility criteria.

The State EMD's Mitigation section developed state criteria for determining eligibility of proposed multi-hazard mitigation measures. The latest Mitigation Grants Program Administrative Plan dated May 2012, lists federal and state criteria used for all federal hazard mitigation programs (HMGP, PDM, FMA, RFC and SRL). The criteria is listed below and is found in the Appendix 9 *Mitigation Grants Program Administration Plan*, SHMP.

#### Project Eligibility Requirements

Federal Criteria. According to the requirements of 44 CFR Part 206.434, a project must:

1. Be in conformance with the State Enhanced Hazard Mitigation Plan and the applicable local mitigation plan approved under 44 CFR Part 201;
2. Be located in a community participating in good standing in the National Flood Insurance Program;
3. Meet all applicable federal, state, and local permit requirements, and not contribute to or encourage development in the floodplain, wetlands, or other hazardous areas, and support environmental justice (Federal Executive Orders 11988, 11990 and 12898); and
4. Be cost effective and substantially reduce the risk of future damage, hardship or loss or suffering, in that it:
  - a. Addresses a problem that has been repetitive or that poses a significant risk if left unsolved.
  - b. Will not cost more than the anticipated value of the reduction in both damages and subsequent negative impacts to the area, if future disasters were to occur.
  - c. Has been determined to be the most practical, effective, and environmentally sound alternative after consideration of a range of options.
  - d. Contributes, to the extent practicable, to a permanent or long-term solution of the problem it is intended to address.
  - e. Considers long-term changes to the areas and entities it protects, and has manageable future maintenance and modification requirements.



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### State Criteria.

5. A project also must be identified in the applicable local hazard mitigation plan or support its goals and objectives. It also should meet one or more of the following state criteria:
  - a. Protect lives and reduce public risk.
  - b. Reduce the level of disaster vulnerability in existing structures.
  - c. Reduce the number of vulnerable structures through acquisition, relocation, flood proofing, seismic retrofitting, or other measures.
  - d. Avoid inappropriate future construction in areas known to be vulnerable to future disasters.
  - e. Restore or protect natural resources, recreation, open spaces, and other environmental values.
  - f. Develop and implement comprehensive programs, standards, and regulations that reduce disaster damage.
  - g. Increase public awareness of natural hazards, preventive measures, and emergency responses to disasters.
  - h. Upon completion, have affordable operation and maintenance costs.

Eligible jurisdictions that are not yet participating in the National Flood Insurance Program (NFIP) will be required to join NFIP as part of a hazard mitigation planning grant award. They must join before the Division submits the draft local hazard mitigation plan to FEMA for review and approval. Eligible jurisdictions are those with authority over land use, and include cities, towns, counties, and federally recognized Indian Tribes.

Before proposed project applications are submitted to the Mitigation Grant Review Committee for scoring and ranking (see narrative entitled *Prioritization of Proposed Mitigation Projects* below), staff members from the State EMD's Mitigation section work closely with applicants to ensure that their proposals are cost-effective. Benefit-cost analyses for the proposed mitigation projects use FEMA-approved benefit-cost modules, which are based on the benefit-cost criteria established in *OMB Circular A-94, Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs*. Only projects with a benefit-cost ratio of at least 1.0 are forwarded to a review committee for further consideration and evaluation against federal and state criteria.

Mitigation section staff members receive specialized benefit-cost analysis (BCA) training from FEMA to better understand the concept of benefit-cost and to help applicants with their benefit-cost analysis. At the State's request, FEMA provided BCA training for local jurisdictions in July 2011 and May 2012 in an effort to help jurisdictions more accurately complete the BCA portion of the grant applications. Nonetheless, the Mitigation section continues to provide technical assistance to help potential grant applicants understand the benefit-cost concept, help them assemble the necessary data for the BCA, and providing feedback to ensure development of the best possible benefit-cost ratio. In addition, the Mitigation section staff members collaboratively developed worksheets in the grant application that guide the development of the benefit-cost narrative and the data necessary for an accurate and complete BCA.



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Furthermore, as part of the review of the project applications submitted under DR 1817 and 1825, the State EMD Mitigation section hired a contractor to review and evaluate all BCAs included in the applications. The selected contractor was highly experienced with FEMA's BCA software and had conducted similar work with the State of Oregon on their recent HMGP. With this additional professional review, the State EMD staff had high confidence in the validity of each BCA and that each project submitted to FEMA would ultimately be approved. Based on this success, the BCA contractor was renewed for 2012 for disasters DR-4056 and DR-4083.

### Prioritization of Proposed Mitigation Projects:

A Mitigation Grant Review Committee of state and local representatives evaluates and prioritizes eligible mitigation grant applications. The committee uses a scoring system to prioritize projects according to both federal and state eligibility criteria listed in the *Mitigation Grants Program Administration Plan*, Appendix 9 of the SHMP.

For each round of grant funding, a review committee of at least five members, as described below, is convened:

- Two individuals from the Military Department – usually the Mitigation section Manager and the State Hazard Mitigation Program Manager.
- One supervisor or designee of the particular state agencies related to the particular type/nature of the project (example: Department of Ecology representative for floods, Department of Natural Resources for geologic hazards).
- Two individuals, one from a city, and one from a county or appropriate special service district, located outside of the declared disaster area or from a community not applying for mitigation funds.

The committee uses a scoring system that emphasizes seriousness of risk when considering an applicant's responses to the federal and state eligibility criteria. Among the criteria receiving greatest weight in scoring are those dealing with reduction of risk posed by hazards, prevention of repetitive losses, and reflecting the most practical, effective, and environmentally sound solutions.

Once the Mitigation Grant Review Committee evaluates and ranks the proposed applications in priority order, the State EMD's Mitigation section applies the prioritized project applications against the available funding and prepares a project recommendation package for the EMD Director's signature and forwarding to FEMA's Region 10 office for additional review, approval, and funding.



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Criteria for Construction (both structural and non-structural) Projects:

WASHINGTON STATE HMGP DR 1817/1825 PROJECT APPLICATION REVIEW COMMITTEE EVALUATION SCORE SHEET		
DATE:	REVIEWER:	
APPLICANT:		
JURISDICTION:		
PROJECT TITLE:		
TOTAL SCORE:	ORDINAL RANKING:	
<p><b>DIRECTIONS:</b> The evaluation sheet is separated into sections I-IV, each with an assigned total point value. Each section corresponds to a particular section of the application you have been given to review. For example, to score items in I. Proposed Project, you will review Section 4 of the application packet.</p> <p><b>Point Score:</b> There are 12 scored items with a total of 135 points possible. Each application will be scored on its own merit.</p> <p><b>Ordinal Ranking:</b> Once you have completed scoring the applications you will assign an ordinal ranking with #1 being the highest. The #1 application may not necessarily be the one with the highest number of points. After reviewing all the applications and weighing their benefit how would you prioritize them for funding?</p>		
I. PROPOSED PROJECT - SECTION 4 OF APPLICATION	POINTS	
1. Substantially reduces the risk of future damage, hardship, loss, or suffering resulting from a major disaster	0-10	
2. Addresses, minimizes, or avoids impacts to environmental/historic preservation, natural, cultural or historic resources	0-10	
3. Provides a long-term solution to a repetitive or imminently dangerous situation	0-10	
4. Solves a problem independently, or functions as a beneficial part of an overall solution.	0-10	
<b>PROPOSED PROJECT SUBTOTAL (40 Points possible)</b>		
II. SCOPE OF WORK – SECTION 5.1 OF APPLICATION	POINTS	
5. Clearly describes the problem(s) to be mitigated, the project's purpose and outcome(s).	0-15	
6. Clearly defines the population that directly or indirectly benefits from the proposed project.	0-15	
7. Includes details about the conceptual design, specific work components for implementation and construction, <i>how</i> it will be implemented, and by <i>whom</i> ?	0-15	
<b>SCOPE OF WORK SUBTOTAL (45 Points possible)</b>		
HMGP Project Evaluation Score Sheet		Page 1



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III. PROJECT ALTERNATIVES – SECTION 10 & 4.12	POINTS	
8. Reflects the most practical, effective and environmentally sound solution from among all alternatives considered. (Narrative on this in Section 4.12)		
<i>Note: Applicants must demonstrate through a written narrative that they have considered three alternatives (one being 'no action') and determined the proposed alternative to be the most practical, effective, and environmentally sound among the possible solutions. (We have not included the "No Action" alternative for these applications as the initial review determined that the "No Action" alternatives were not cost effective, practical or effective.)</i>	0-30	
<b>PROJECT ALTERNATIVES SUBTOTAL</b> (30 Points possible)		
IV. OTHER ITEMS TO CONSIDER	POINTS	
9. Project completed within 0-12 months (See Work Schedule in Section 5 or Section 8 if it was included in the application packet)	5	
Project completed within 13-24 months	2	
10. Addresses structures in repetitive flood loss areas either by acquisition, elevation or relocation	5	
11. Has multiple objectives such as damage reduction, environmental enhancement and economic recovery	5	
12. Has a beneficial impact on more than one community or is multi-jurisdictional	5	
<b>OTHER ITEMS TO CONSIDER SUBTOTAL</b> (20 Points possible)		
<b>TOTAL SCORE I-IV</b> (135 total points possible)		
<b>ORDINAL RANKING</b> (out of all apps being reviewed; 1 is highest):		

**REVIEWER REMARKS**

Pros and cons of Project or Issues to discuss with the Review Committee.



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Criteria for Planning Projects



**MITIGATION GRANT PROGRAMS  
PLANNING APPLICATION EVALUATION SCORE SHEET**

APPLICANT: \_\_\_\_\_

PROJECT TITLE/DESCRIPTION: \_\_\_\_\_

SCORES: PART 1 \_\_\_\_\_ PART 2: \_\_\_\_\_ PART 3: \_\_\_\_\_ TOTAL: \_\_\_\_\_

Please rate how well the application addresses each element of the criteria below:

**PART 1. PLANNING PROCESS 15 – Points** 0 - 15 pts \_\_\_\_\_

Each question is weighted at 5 points.

1. How well does the applicant describe how it provides the public an opportunity to participate in the planning process?
2. How well does the applicant describe how it will include neighboring communities, local and regional agencies, business, academia, and other interests in the planning process?
3. How well does the applicant describe previous planning efforts and how it will incorporate them into this all-hazards planning process?

**PART 2. RISK ASSESSMENT ELEMENT 35 – Points** 0 - 35 pts \_\_\_\_\_

Each question is weighted at 7 points.

1. If the applicant has a current Risk Assessment, does it contain a description of the type, location, and extent of all natural hazards that can affect the jurisdiction?
2. If the applicant does not have a Risk Assessment, how well does the application describe how it will be completed?
3. How well did the applicant document previous occurrences of hazard events and the probability of future hazard events?
4. Has the applicant completed a **vulnerability** assessment for the hazards identified in their risk assessment that includes:
  - a. The types and numbers of existing and future buildings, infrastructure and critical facilities located in the identified hazard areas;
  - b. An estimate of the potential dollar losses to vulnerable structures identified and a description of the methodology used to develop this estimate;



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- c. A general description of land uses and development trends within the community so that mitigation options can be considered in future land use decisions.
5. If the applicant has not completed a vulnerability assessment, how well did the application describe how it will complete the above elements of a vulnerability assessment?

**PART 3. MITIGATION STRATEGY ELEMENT – 130 POINTS**

0 – 130 pts. \_\_\_\_\_

Each question is weighted at 10 points each.

1. If the applicant currently has a mitigation strategy does it contain a description of local mitigation goals and objectives with proposed strategies, programs, and actions to reduce or avoid long term vulnerabilities to the identified hazards?
2. If not, how well does the applicant describe how it will develop these goals, objectives, strategies, and programs?
3. Has the applicant conducted an analysis of a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each identified hazard, with particular emphasis on new and existing buildings and infrastructure?
4. If not, how well did the applicant describe how it will complete the analysis and what areas it will cover?
5. How well did the applicant describe how it will develop an action plan describing the actions in the analysis element and how it will prioritize and implement the plan?
6. Did the applicant develop a set of specific cost-effective mitigation projects that will reduce damages from future disaster that includes a summary of how it identified and prioritized these actions?
7. If not, did the applicant describe what types of projects it might consider and how it would prioritize them?
8. Did the applicant describe how these actions will support the mitigation goals and priorities of the community?
9. Did the applicant provide a description of its process to reduce the number of NFIP target repetitive loss properties in the community and a summary of how well the process works?



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- 10. If not, did the applicant describe how it will address the repetitive flood loss issue in its community?
- 11. How well did the applicant describe whether or how it is committed to reducing damages from future natural disasters through the development of partnerships with businesses, academia and other private and non-profit interests able to provide financial or technical assistance in support of its mitigation goals and priorities? Did the applicant provide specific examples of any current activities?
- 12. How well did the applicant describe the development trends within its community and discuss actions to mitigate disaster losses?
- 13. Did the applicant discuss if its plan will require any interagency agreements to implement?

**PART 4. PLAN MAINTENANCE ELEMENT – 20 POINTS**

0 – 20 pts \_\_\_\_\_

Each question is weighted at 4 points each

How well does the applicant address the following:

- 1. A section describing the established method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.
- 2. A process by which the applicant will incorporate the requirements of the mitigation plan into other planning mechanisms, such as comprehensive or capital improvement plans.
- 3. A discussion on how the community will maintain public participation in the planning process.
- 4. Plans for formal adoption of the plan by the community.
- 5. A section describing how the local plan will be implemented and administered by the local government including discussion of how officials will approach and manage mitigation actions involving the acquisition of private property

**REVIEWER REMARKS** Additional Comments

Ordinal Ranking among all planning applications reviewed: \_\_\_\_\_



## 2013 Washington State Enhanced State Hazard Mitigation Plan

### IV. Program Management Capability

**Requirement 44 CFR §201.5(b)(2)(iii)(A-D):** Demonstrate that the State has the capability to effectively manage the HMGP as well as other mitigation grant programs, including a record of the following:

- Meeting HMGP and other mitigation grant application timeframes and submitting complete, technically feasible, and eligible project applications with appropriate supporting documentation.
- Preparing and submitting accurate environmental reviews and benefit-cost analyses.
- Submitting complete and accurate quarterly progress and financial reports on time.
- Completing HMGP and other mitigation grant projects within established performance periods, including financial reconciliation.

The EMD mitigation section has grown its expertise and human capital to meet the demands of the program. Since the Nisqually earthquake in 2001, significant disasters have occurred in Washington State regularly thus keeping the EMD mitigation section busy. Currently, the State Mitigation Officer is also the Mitigation Section Supervisor with three project hazard mitigation grant coordinators overseeing applicant projects from disasters DR-1734 through DR-4083. Additionally, there is a program manager overseeing the annual federal mitigation programs and a hazard mitigation strategist reviewing local plans and revising the state plan. These six people have collaboratively assisted applicants with their applications, supporting documentation, environmental reviews, benefit-cost analyses, quarterly progress reports, project completions, and financial reconciliations.

The state's program management capability is not judged through the opinions of local jurisdictions but rather through the bureaucratic and statutory requirements of FEMA. Consequently, the state has provided FEMA documentation that the state is competent in its capability to manage the mitigation program. It is best to use FEMA's words to prove the state is doing a good job that to make something up.

Accordingly, FEMA Region 10 certifies that the State of Washington has demonstrated that it has the capability to effectively manage FEMA-funded hazard mitigation grant programs. A copy of its most recent certification is on the following eight pages.



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### ENHANCED STATE HAZARD MITIGATION PLAN REVIEW CROSSWALK

State: Washington State Enhanced Plan (final panel combined crosswalk) Date: August 10, 2010

#### 4. Program Management Capability (Review of this section conducted by FEMA Regional Offices, not the Enhanced Plan Panel)

*Requirement §201.5(b)(2)(iii A-D): [The Enhanced Plan must demonstrate] that the State has the capability to effectively manage the HMGP as well as other mitigation grant programs, [and provide] a record of the following:*

- *Meeting HMGP and other mitigation grant application timeframes and submitting complete, technically feasible, and eligible project applications with appropriate supporting documentation;*
- *Preparing and submitting accurate environmental reviews and benefit-cost analyses;*
- *Submitting complete and accurate quarterly progress and financial reports on time; and*
- *Completing HMGP and other mitigation grant projects within established performance periods, including financial reconciliation.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the <b>new or updated</b> Enhanced Plan describe the State's capability to effectively manage the HMGP as well as other mitigation grant programs?		<i>This section is reviewed by the Regional office. Enhanced Review Panelists <u>do not</u> review this section.</i>		n/a
B. Does the <b>new or updated</b> Enhanced Plan provide a record for meeting HMGP and other mitigation grant application timeframes and submitting complete, technically feasible, and eligible project applications with appropriate supporting documentation?		<i>This section is reviewed by the Regional office. Enhanced Review Panelists <u>do not</u> review this section.</i>		n/a
C. Does the <b>new or updated</b> Enhanced Plan provide a record for preparing and submitting accurate environmental reviews and benefit-cost analyses?		<i>This section is reviewed by the Regional office. Enhanced Review Panelists <u>do not</u> review this section.</i>		n/a
D. Does the <b>new or updated</b> Enhanced Plan provide a record for submitting complete and accurate quarterly progress and financial reports on time?		<i>This section is reviewed by the Regional office. Enhanced Review Panelists <u>do not</u> review this section.</i>		n/a
E. Does the <b>new or updated</b> Enhanced Plan provide a record for completing HMGP and other mitigation grant projects within established performance periods, including financial reconciliation?		<i>This section is reviewed by the Regional office. Enhanced Review Panelists <u>do not</u> review this section.</i>		n/a
<b>SUMMARY SCORE</b>		<b>See Regional Certification to Determine Score.</b>		n/a
			n/a	n/a



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U.S. Department of Homeland Security • Federal Emergency Management Agency

**ENHANCED STATE MULTI-HAZARD MITIGATION PLAN  
PROGRAM INFORMATION WORKSHEET**

**Documentation for 44 CFR 201.5(b)(2)(iii):**  
Demonstration of State Capability to Effectively Manage the HMGP and other Mitigation Grant Programs

The FEMA Region's Mitigation Division is responsible for advising the Regional Director on the State's capability to effectively manage the Hazard Mitigation Grant Program and other mitigation grant programs, such as the Floodplain Management Program and Pre-Disaster Mitigation Program, to meet the Enhanced State Plan criteria contained in 44 CFR Part 201.5(b)(2)(iii). This Program Information Worksheet will be completed by the Region's Mitigation Division. In addition to the information provided in the Enhanced State Plan, the Mitigation Division will consult regional personnel responsible for the management of the related programs (HMGP, FMA, PDMC), regional grants managers for pre- and post-disaster mitigation grants, and the Regional Environmental Officer regarding the state's effective management of mitigation programs. If applicable, the Region will also review program audits conducted by FEMA, Office of Inspector General, and/or the General Accounting Office.

**Documentation Statements**

*FEMA Region 10 documents that the State of Washington Multi-Hazard Mitigation plan accurately reflects the management of the state's hazard mitigation program. If not, Region will require revisions to the plan prior to continuing review process.*

No	Yes
	X

*FEMA Region 10 documents that the State of Washington, based on a review of four complete quarters ending (last day of the month immediately prior to submission of the plan), has a record of the following:*

Explanation:		Not Met	Met
(A) Meeting all mitigation grant application timeframes and submitting complete, technically feasible, and eligible project applications with appropriate supporting documentation;			
(1) State submits grant applications within the period established in the notice of funds availability or statutory guidelines.	<p>The State has demonstrated its commitment to submit grant applications within established guidelines over the last 13 declared disasters, and has continued that pattern in the last 4 quarters. For DR1734 and DR1817, the State requested and was granted extensions pursuant to 44 CFR 206.426(e).</p> <p>Since November 2006, the State has responded to 5 major Disasters and has been working to build up staff capability in the Hazard Mitigation Assistance arena:</p> <ul style="list-style-type: none"> <li>There was a 100% turnover in State staff in November 2006. At that time, the State had only a single HMA staffer, the State Hazard Mitigation Programs Manager (SHMO) who handled all 5 FEMA HMA grant programs, and a single Hazard</li> </ul>		X

Date: August 16, 2010

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		Not Met	Met
	<p><b>Explanation:</b></p> <p>Mitigation Planner. The Acting SHMO had very little experience with the HMA programs, but showed himself to be a "quick learn", and extremely thorough and dedicated.</p> <ul style="list-style-type: none"> <li>• Late 2006/early 2007: two new Presidential disaster declarations (DR 1671 and 1682, a flood and a windstorm).</li> <li>• In December 2007, a major flood resulted in DR1734.</li> <li>• In December 2008-March 2009, two additional disasters DR1817 and 1825, a flood and a snowstorm.</li> <li>• Utilizing State Management Costs from these 5 new disasters, the State began hiring and training additional HMA staff from 2008 through 2010.</li> <li>• The HMA project team now includes 3 full-time Specialists to assist the SHMO, as well as two HM Planners.</li> </ul> <p>Although arduous, this hiring/training process has radically expanded the State's abilities to provide technical assistance to sub-applicants, and ensure submittal of quality, fully-documented, eligible sub-applications.</p> <p>Beginning with DR1825 in the Spring of 2010, State staff have assumed full responsibility for NEMIS project data entry. Region 10 has provided 2 rounds of training, as well as on-site mentoring to assist in this transition. Previously, Region 10 staff and DAEs had performed NEMIS data entry for the State for at least 6 years.</p>		
(2) State requests for extensions (application period and performance extensions) are timely, for extenuating circumstances, and with justifiable documentation.	<p>Washington utilizes its own extension policy to ensure consistent and eligible sub-grant extension requests to be submitted to FEMA. The State has been successfully utilizing this extension policy since its implementation eight years ago.</p> <p>Overall HMGP grant extension requests submitted for DR1734 and DR1817 were also timely and justified. For DR1817, large-dollar PW requests were submitted just prior to the 1 year HMGP application deadline.</p>		X



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		Explanation:	Not Met	Met
(3) Application packages are fully developed and complete (i.e. no additional information or correction to the Statement of Work, Budget Narrative, Budget Worksheets, or financial documents are necessary).		<p>Washington has a comprehensive application package that it utilizes for the HMGP grant programs, and previously for the FMA grant program. This package requires thorough Statements of Work, Budgets, Property Site Data, a State Environmental Checklist, descriptions of the decision-making process and Alternative solutions that were evaluated, and Benefit-Cost Analysis and Narratives. Non-disaster HMA grant sub-applications are developed and submitted through eGrants (PDMC, FMA, SRL, and RFC grant programs).</p> <p>Examples of actions taken over the past 3 years to ensure quality HMA grant applications:</p> <ul style="list-style-type: none"> <li>• The HMGP sub-grant application package was utilized effectively for over 12 years, but was updated in 2009 to more closely mirror FEMA's eGrants application format and the new BCAR internal data documentation requirements.</li> <li>• State staff provides extensive technical assistance to sub-applicants, working closely through all stages of the application development process.</li> <li>• In 2009, provided direct assistance to three rural communities whose staff did not have the time or expertise to develop HMA sub-apps. State staff developed the bulk of the sub-application narrative and prepared the Benefit Cost Analyses. The sub-applicants gathered data, worked directly with the impacted homeowners, and shepherded the sub-application through the local adoption process.</li> <li>• The State recently sponsored 2 local government training workshops on FEMA's Severe Repetitive Loss (SRL) grant program to assist in developing project applications for the 100+ SRL properties in Washington.</li> </ul>		X
(4) State submitted grant applications are technically feasible (projects or activities can be implemented with available resources and mitigate the identified hazard).		The State does an excellent job of ensuring mitigation projects submitted are technically feasible. No issues.		X
(5) State submits grant applications that meet the program eligibility requirements.		Washington State has no history of submitting an ineligible grant application to FEMA Region 10. The State process of reviewing and evaluating grant applications is thorough and effective. Both EMD staff and the State's multi-agency Hazard Mitigation grant selection panel evaluate each application very closely.		X



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		Not Met	Met
<b>Explanation:</b>			
<b>(B) Prepare benefit-cost analyses and submit accurate environmental reviews;</b>			
<p>(1) State possesses the capability to work with an applicant to identify potential environmental issues and requirements, then determine the completeness and adequacy of the environmental analysis and documentation. The state's review should verify that all potential environmental impacts have been addressed; that information has been developed to evaluate the significance of those impacts; that adequate consultation has taken place with appropriate Federal, state, tribal, local agencies, and other interested parties concerning project impacts; and that the appropriate resolution has been proposed. <b>OR</b> state has an established process for identifying and requesting necessary assistance with environmental review.</p>	<p>Washington has a process for identifying and requesting necessary assistance with environmental reviews. The HM sub-grant application requires completion of a State Environmental Checklist for compliance with the State Environmental Policy Act (SEPA). The State performs an initial preliminary environmental review to identify potential issues and assists the Regional Environmental Officer in the NEPA and environmental reviews, as requested. EMD staff are very proactive in working with sub-applicants to provide adequate EHP documentation.</p> <p>In 2008, the State began requiring pre-application submittal of Historic Preservation review forms to the SHPO for identification of potential historic or archaeological issues. This step greatly accelerates the Regional Historic Preservation review process.</p>	<div style="background-color: black; width: 100%; height: 100%;"></div>	<div style="background-color: black; width: 100%; height: 100%;"></div>
<p>(2) State takes initiative to complete BCAs with minimal technical assistance from FEMA or FEMA contractors, (Calls to the BCA helpline for technical interpretation are encouraged). Additional assistance may be required, but instances should be few in number and do not automatically demonstrate the state does not have the capability to effectively manage mitigation grant programs, <b>OR</b> state has an established process for identifying and requesting assistance.</p>	<p>During the past six years, Washington State has extended its commitment to submitting only eligible sub-grant applications by thoroughly training local jurisdictions and new EMD staff in benefit-cost analyses (BCA) methodologies.</p> <ul style="list-style-type: none"> <li>• Through disaster HMTAPs, and recently, in 2010, through State contractual support, Washington has provided annual BCA training workshops for local government staff and provides technical assistance to assist sub-grant applicants.</li> <li>• Due to the challenges of local staff turnover, state staff have taken a larger role in developing BCAs on behalf of inexperienced sub-applicants.</li> <li>• In 2009, the State hired a BCA contractor through State Management Costs funds to assist with particularly challenging BCA issues.</li> <li>• The State does make use of the BCA Helpline, and encourages experienced local government staff and contractors to deal directly with the Helpline.</li> </ul>	<div style="background-color: black; width: 100%; height: 100%;"></div>	<div style="background-color: black; width: 100%; height: 100%;"></div>



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		Explanation:	Not Met	Met
(3)	Is all relevant benefit cost information submitted with original project applications; are all values used in BCAs documented in the project applications and obtained from credible sources?	<p>This information is required in the State's thorough grant application in order for the State to determine that the project and the application are eligible to submit to FEMA. State staff, assisted by the Contractor if necessary, review all BCAs for compliance with FEMA standards. These staff were trained by URS staff, under contract from FEMA.</p> <p>There are no issues or concerns with the information provided by Washington.</p>	X	
(4)	BCAs that are submitted adhere to FEMA's applicable statutes, policies, and methodologies.	<p>Yes, the BCAs that FEMA receives with the applications are compliant with FEMA's requirements and methodologies.</p> <p>The State currently has serious concerns with regard to the adequacy/accuracy of the new seismic BCA modules in BCAR, and has raised protests to FEMA HQ. Seismic retrofit projects that were eligible under the old BCA modules (V. 3.0) are not passing under BCAR V. 4.5).</p>		X
<b>(C) Submitting complete and accurate quarterly progress and financial reports on time;</b>				
(1)	State submits complete quarterly progress reports as required by CFR 13.40 (b)(2)(i) and (ii) and/or 44CFR Part 206.438(c) under HMGP.	<p>Quarterly Financial Status Reports (FSRs) for each disaster and each non-disaster HMA grant award are submitted directly to Region 10 Grant Programs Division, and are cc'd to the HMA Branch.</p> <p>Quarterly Performance Progress Reports (PPRs) are submitted directly to the HMA Branch for HMGP and to GPD for the non-disaster grants, with cc's to HMA. The PPRs provide detailed project status updates, sub-grant financial status, and discussion of any implementation challenges that could lead to an extension request. <b>Programmatic Reports are truly exemplary.</b> NOTE: GPD provides non-disaster PPRs to HMA Branch staff for formal review and approval for GPD records.</p> <p>Until implementation of the new SF425 Financial Status Report package beginning in late 2009, the State was not required to provide the financial status of individual sub-awards. However, Washington has for at least 6 years provided that data as part of the Quarterly Programmatic Reports.</p>	X	



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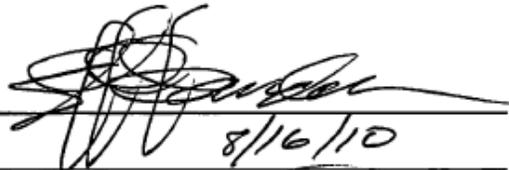
Explanation:		Not Met	Met
(2) State submits complete quarterly progress reports by the agreed upon due date.	The State has a long-standing history of submitting quarterly reports in a timely manner. Due to 4 major disaster operations (6 Presidential Declarations) in the past 5 years, together with internal staff transitions, EMD staff have been late with Quarterly Reports on a couple of occasions, but only by a few days.	[ ]	X
(3) State submits complete quarterly financial reports.	Yes. Please see (1) above.	[ ]	X
(4) State submits complete quarterly financial reports by the agreed upon due date.	Yes. Please see (2) above.	[ ]	X
<b>(D) Completing all grant projects within established performance periods, including financial reconciliation.</b>			
(1) State monitors the sub-grantee's performance against the identified project milestones and completion date.	<p>Washington does an excellent job of maintaining oversight of awarded sub-grants, including site visits as necessary.</p> <ul style="list-style-type: none"> <li>• The State requires subgrantees to submit detailed project status and progress information.</li> <li>• State staff are extremely careful and thorough in evaluating sub-grantee claims for reimbursements to ensure that only eligible costs are paid and that local match is adequately documented.</li> <li>• Staff also work closely with sub-grantees to resolve issues that arise during implementation of individual projects.</li> <li>• Requests to extend POPs for individual sub-awards are made in a timely manner and include adequate justification and financial status information.</li> </ul>	[ ]	X



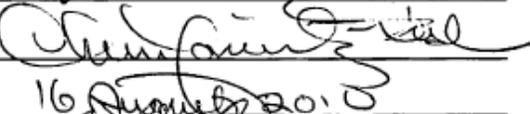
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	Explanation:	Not Met	Met
(2) State completed all post-award activities within 90 days from the performance period end date.	<p>Yes. This State ensures that all <i>subgrantee</i> post-award activities are completed within 90 days from performance period end date. No issues.</p> <p>However, since late 2006, the State has experienced considerable delays in completing and submitting closeout packages to Region 10 for individual sub-awards and overall grant awards. This is due to the 2006 staff transition, multiple disaster operations, and only one full-time State HMA staffer. The State staff has focused on developing eligible new applications, meeting new HMGP and non-disaster HMA deadlines, and hiring and training additional HMA staff. As a result, closeout of completed sub-awards had not been the highest priority. This decision has been supported by Region 10 staff.</p> <p>Fortunately, in the past 4 quarters, as newly-hired staff have been able to take over more of the "new application" workload, the State has been actively working on closeout packages. <i>As of the end of July, 2010, the State is now caught up with the closeout backlog for both HMGP and non-disaster grants.</i></p>		X

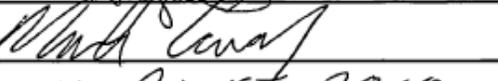
FEMA Regional 10 Senior HMA Specialist:

  
Date: 8/16/10

FEMA Region 10 Hazard Mitigation Assistance Branch Chief:

  
Date: 16 August 2010

FEMA Regional Director or Mitigation Division Director:

  
Date: 17 AUGUST 2010



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Additionally, embedded in the succeeding pages is the FEMA-4083 DR-WA Hazard Mitigation Administrative Plan Approval that documents Washington State's capability to effectively manage the HMGP, PDM, HMA, etc grants pursuant to requirement 44 CFR §201.5(b)(2)(iii)(A-D).

### I. INTRODUCTION

#### A. Purpose of Document

*Mitigation Grant Programs Administrative Plan, October 2012* (herein referred to as the Administrative Plan) establishes the guidance, rules, and procedures used by the Emergency Management Division of the Washington State Military Department, (hereafter referred to as the Department) to administer the following mitigation grant programs funded by the Department of Homeland Security, Federal Emergency Management Agency (hereafter referred to as FEMA):

- Hazard Mitigation Grant Program (HMGP), authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988, as amended (42 USC 5170c), and 44 CFR Part 206 Subpart N.
- Pre-Disaster Mitigation (PDM) program, authorized under Section 203 of the Stafford Act (42 USC 5133).
- Flood Mitigation Assistance (FMA) program, authorized under Section 1366 of the National Flood Insurance Act of 1968, as amended (42 USC 4104c), and 44 CFR Part 79.
- Repetitive Flood Claims (RFC) program, authorized under Section 1323 of the National Flood Insurance Act of 1968, as amended (42 USC 4030), and 44 CFR Part 79.
- Severe Repetitive Loss (SRL) program, authorized under Section 1361A of the National Flood Insurance Act of 1968, as amended (42 USC 4102a), and 44 CFR Part 79.

This Administrative Plan meets the requirements of 44 CFR Part 206.437. It is included by reference in the *Washington State Enhanced Hazard Mitigation Plan*, approved by FEMA on October 1, 2010. Additionally, the enhanced mitigation plan is incorporated by reference in the state's Comprehensive Emergency Management Plan (CEMP) in accordance with RCW 38.52.

Until revised, resubmitted for review and reapproved by FEMA, this plan covers the administration of the following mitigation grant programs:

- Hazard Mitigation Grant Program for DR-4083, July 20, 2012 Severe Storm, straight line winds and flooding disaster, declared September 25, 2012.



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- FY2013 annual Hazard Mitigation Assistance grant programs, whose application period opened after September 25, 2012.

Programmatic requirements for the mitigation grant programs listed above are covered in FEMA's *Hazard Mitigation Assistance Unified Guidance*, June 1, 2010. Programmatic requirements for all future HMA grant programs will be covered by the guidance in place at the date of the disaster declaration (for HMGP) or funding availability (for all other programs).

### **B. Intent of the Programs**

The intent of the mitigation grant programs is to reduce the risk of future damage, hardship, loss, or suffering as a result of major disasters by providing financial support to implement mitigation planning initiatives and cost-effective hazard mitigation measures to eligible Applicants around the state. In addition, the purpose of the flood-related mitigation programs is to reduce or eliminate claims under the National Flood Insurance Program. Mitigation measures should be identified as part of the mitigation planning process of state and local governments or tied to goals and objectives of the state's Enhanced Hazard Mitigation Plan and the appropriate local hazard mitigation plan, required as a condition of receiving federal disaster assistance.

### **C. Eligible Applicants**

Eligible Applicants include agencies of state government, local governments (city, town, or county), special purpose districts, Indian tribes, and certain registered private nonprofit organizations providing like-government services and essential facilities. For the PDM and three flood-related programs, nonprofit organizations are ineligible to apply directly and must be sponsored by an eligible local government (city, town, or county). For the flood mitigation programs, only communities as defined in 44 CFR Part 79.2(c) are eligible to apply; they also must meet other state criteria.

Jurisdictions that apply for assistance under the grant programs are called Applicants throughout this document. Once an Applicant receives grant funding, it is considered a Subgrantee. The terms Applicant and Subgrantee are used interchangeably in this document.

To be eligible to apply to the state of Washington for a project grant from any of the mitigation grant programs, Applicants must:

- Be participating and in good standing in the National Flood Insurance Program (NFIP), as required by the grant program or location of the proposed project. This requirement pertains to jurisdictions with authority over land use and includes cities, towns, and counties, and to federally recognized Indian Tribes.
- Be compliant with all appropriate requirements of the state's Growth Management Act (RCW 36.70A) OR be actively working toward resolving issues identified as non-compliant OR being in a GMA-compliant community (Indian Tribes are exempt from this requirement). However, if the proposed project (e.g., elevating homes in the floodplain) relates to the identified non-



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compliance issue (e.g., floodplain regulations), then the project would not be eligible for mitigation grant funding.

- Have a FEMA-approved hazard mitigation plan developed under 44 CFR Part 201 prior to:
  - Receipt of grant funding for HMGP.
  - Close of the application period, and prior to receipt of grant funding, for PDM, FMA and SRL programs.

## **II. RESPONSIBILITIES**

### **A. State Government**

The Department represents the State of Washington as Grantee, and administers the mitigation grant programs identified in this plan. The State Hazard Mitigation Programs Manager is the individual within the Department with primary responsibility for administering these programs; the current incumbent is Mark W. Stewart. This position / individual is designated as the State Hazard Mitigation Officer, per 44 CFR Part 206.433(c), and as the Alternate Governor's Authorized Representative – Mitigation in the FEMA – State Agreement.

In administering the mitigation grant programs, the State Hazard Mitigation Programs Manager, assisted by other Department mitigation staff, will:

1. For HMGP: Make recommendations to the Emergency Management Division Director and the Governor's Authorized Representative on the scope of the program for the Governor's request for federal assistance - Presidential disaster declaration. This may include:
  - a. Statewide or county-specific application of the HMGP.
  - b. A list of communities, jurisdictions, and agencies with an approved local hazard mitigation plan.
  - c. A list of communities, jurisdictions, and agencies with a local hazard mitigation plan under development, under review, and pending approval.
  - d. A review of the entities in the disaster-impacted areas that have approved plans and those that may not have approved plans at the time of the event.
2. Develop and/or distribute program and application guidance, funding criteria, application timelines, and application forms.
  - a. For each HMGP, the Department may limit the number of applications allowed per eligible Applicant, and the maximum project budget / grant award, based on the projected funding available for the disaster. In addition, the Department may bring unfunded applications from other mitigation programs into a HMGP.
  - b. For other mitigation programs, FEMA will publish the number of applications and maximum federal grant award in annual program guidance.
3. Solicit qualified mitigation planning or project proposals from eligible Applicants.



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4. Provide technical assistance to eligible Applicants as staff and financial resources permit. This may include Applicant briefings on program-specific issues; application development, benefit-cost and other grant-related workshops; site visits to validate potential mitigation measures; attending community meetings and local mitigation planning workshops; and reviewing draft applications prior to submission. At a minimum, Applicants will be provided copies of the state's *Application Development Guide*.
5. Prioritize projects for funding:
  - a. HMGP – Convene, as needed, a Mitigation Grant Review Committee to review, evaluate, prioritize, and recommend projects for funding using established evaluation criteria published with the grant applications. Such a committee will be convened when requests for funding exceeds available funds.
  - b. Other programs – The State Hazard Mitigation Programs Manager, assisted by other Department mitigation staff, and the Review Committee as necessary, reviews applications for compliance with published program guidance and cost effectiveness, and prioritizes them using established evaluation criteria.
6. Forward funding recommendations to FEMA for review and approval.
7. Withdraw projects from consideration, if necessary
8. Develop grant agreements with and administer distribution of funds to Subgrantees.
9. Submit quarterly and final reports to FEMA.
10. Monitor Subgrantee performance, including in-progress reviews of projects and draft mitigation plans, and arrange for a final engineering inspection of projects.

### **B. Applicant**

To be eligible to apply for and receive grant funds for mitigation projects, Applicants must have developed and adopted a FEMA-approved hazard mitigation plan that meets the criteria of 44 CFR Part 201.6 (local governments, special districts, etc.) or Part 201.7 (Indian Tribes). State agencies are required to be part of the state's Enhanced Hazard Mitigation Plan that meets the criteria of 44 CFR Part 201.4 and Part 201.5.

Representatives of the Applicant are responsible for (at a minimum):

1. Identifying potential mitigation projects and planning initiatives.
2. Establishing local priorities, submitting Letters of Intent and applications to the state for funding consideration by announced deadlines.



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3. Providing information, documentation, and data necessary to comply with the National Environmental Policy Act (NEPA) and to support FEMA in its environmental and historic preservation analysis.
4. Providing information, documentation and data that will enable the state to:
  - a. Conduct benefit - cost analysis (note: Applicant may prepare its own benefit-cost analysis using FEMA-approved methodology and software modules).
  - b. Conduct preliminary environmental and floodplain management reviews.
  - c. Determine potential historic or archaeological impacts.
5. Submitting invoice vouchers with appropriate documentation for reimbursement.
6. Submitting quarterly and final reports to the Department by published timelines in grant agreements.
7. Assisting with performance reviews and project inspection by Department mitigation staff.

Additionally, the Chief Executive Officer of the Applicant, or its appropriate legislative body (e.g., City Council, County Board of Commissioners), must designate an Applicant Agent and an Alternate Applicant Agent specific to the individual mitigation grant program. The Applicant Agent and his or her alternate represents the Applicant to arrange for work, monitor and evaluate work completed, and provide all required documentation to the Department. The Applicant Agent must have authority to sign on behalf of the Applicant, such as legally binding the Applicant in the grant agreement.

### **C. Federal Government**

The Administrator of FEMA Region X will review the Department's recommendations for funding mitigation planning initiatives and mitigation projects. FEMA is the final approval authority for grant awards for all plan and project grant applications. FEMA is responsible for preparing environmental and historic preservation review documents on the submitted projects to comply with the requirements of the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA).

## **III. FUNDING OF ELIGIBLE PROJECTS**

### **A. Federal**

Funding for the mitigation grant programs varies: for HMGP, it is by disaster; and for PDM, FMA, RFC, and SRL programs, it is by Congressional appropriation and by Congressional directives.

FEMA approved Washington's enhanced hazard mitigation plan on October 1, 2010. As of this date, and for the following three years, the maximum amount of HMGP funding for each disaster will be up to 20 percent of the federal expenditures for the disaster, under all categories of the Public Assistance and the Individual Assistance programs, less administrative costs.



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Only upon formal notification by FEMA that a Subgrantee's application and funding documents have been approved, will the Department develop a grant agreement and obligate federal funds for a specific planning initiative or mitigation project for the Subgrantee.

### **B. Subgrantee**

The Subgrantee's share of eligible project costs is 25 percent, unless action by the Washington Legislature results in the state picking up half (or 12.5 percent) of the non-federal share. The Subgrantee's share may be composed of Subgrantee-generated revenue, other state funds, and public or private loans, etc. In general, the non-federal cost share may not include funds from other federal agencies or programs, except for those with authorizing statutes that explicitly allow the funds to be used as a cost share for other federal grants (e.g., Community Development Block Grant program can use used for the local share). In addition, funds contributing to the non-federal cost share for mitigation grant programs cannot be used as cost share for other federal grant programs.

Subgrantee contributions also can be in the form of documented third-party in-kind or donated services and material. Volunteer labor and materials, cash donations from other organizations and property owners, are some of the types of in-kind services that may be considered as part of the Subgrantee's share, per 44 CFR Part 13.24. In-kind contributions must be specifically identified in the grant application and in the budget to be eligible for consideration.

The Subgrantee's share of eligible project costs is tracked through documentation provided by the Subgrantee and on a reimbursement spreadsheet maintained in the working project file (see below).

### **C. State**

Subgrantees are expected to provide 25 percent of the eligible costs for an HMGP-funded mitigation project, unless the state elects to provide half of the non-federal share, or 12.5 percent. State participation in the non-federal share of HMGP is determined on a disaster-by-disaster basis. It is based on recommendation of the Governor, action by the Legislature, and established in the FEMA-State Agreement signed by the Governor. Historically, the state's participation has been half of the non-federal share (or 12.5 percent) of the approved project costs for Subgrantees, and the entire non-federal share (or 25 percent) for state agencies receiving HMGP funds.

Legislative approval was received for state participation in the non-federal share for DR-4056 HMGP; legislative action is pending for DR-4083 HMGP.

For the PDM, FMA, RFC and SRL programs, the entire non-federal share is the Subgrantee's responsibility; no state funds are provided.

The Department provides grant funding to Subgrantees on a **reimbursement-only** basis. Prior to disbursement of any awarded funds, the Department and the Subgrantee will execute a grant agreement that establishes the period of performance for each project, as well as outlining an agreed-upon scope of work that includes any programmatic, environmental and/or historic preservation conditions required by FEMA, project costs, and estimated completion schedules. The Department



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develops grant agreements following project approval and receipt of grant award documents from FEMA. The Department's goal is to develop and send a grant agreement for the approved project to the Subgrantee for signature within 90 days of the date of grant award.

For all grants, the Department maintains a working project folder that contains a copy of the Subgrantee's grant funding application, and copies of the following: the grant agreement and applicable contracting documents, grant award documents, any amendments or grant agreement changes, quarterly reports, A-19s (invoice vouchers seeking reimbursement) with supporting documentation for all eligible costs and a spreadsheet to track reimbursements by cost share (federal, state [if any], and Subgrantee), any correspondence related to the project, and final inspections and reports (Official grant agreement files are maintained in the Military Department's Contracts Office).

The Department will monitor Subgrantee conformance to the terms and conditions of the grant agreement and performance during the grant performance period using the Subgrantee's quarterly report, reimbursement requests, desk monitoring, and on-site monitoring visits. In addition, Department staff will make site visits to provide technical assistance as necessary or requested.

#### IV. GRANT MANAGEMENT

##### HMGP

In accordance with 44 CFR Part 207, the Department can request FEMA provide a management grant equal to 4.89 percent of the federal share of the estimated eligible program costs for administration of the Hazard Mitigation Grant Program. The grant is awarded after the Department provides adequate documentation to FEMA to support the costs and activities for which the funding will be used. Management costs are defined in Part 207.2 as "... any indirect costs, administrative expenses, and any other expenses not directly chargeable to a specific project that are reasonably incurred by a Grantee or Subgrantee in administering and managing the ... HMGP grant award."

These grant funds will partially reimburse the Department for its costs to support activities to administer and manage the HMGP. These costs include the regular time and overtime as well as the associated fringe benefits for the Department's permanent, project, and non-permanent staff and disaster reservists that support the HMGP. The costs for goods and services, travel, per diem, and lodging, also are components of the Department's administration and management costs.

The state has chosen ***not*** to provide Subgrantees an allowance for costs associated with the administration of HMGP grants out of the state management grant; cost of managing a project (e.g., construction management) should be covered by a separate line item in the budget and included in the project's benefit-cost analysis. For other mitigation grant programs, Subgrantees can request up to 5 percent of the project budget for grant management costs, per program guidance.

##### 1. FEMA Determination of State Management Cost Funding for HMGP



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- a. Between 30 and 35 days after the declaration date, FEMA will provide the Department with the preliminary lock-in amount for management costs based on projections at that time of the federal share for the disaster. FEMA may obligate 25 percent of the estimated lock-in amount at this time.
- b. At 6 months after the date of declaration, FEMA will revise the preliminary lock-in amount for management costs based on the projections at that time of the federal share for the disaster.
- c. At 12 months after the date of declaration, FEMA will determine the final lock-in amount for management costs based on the projections at that time of the federal share for the disaster.

### **2. State Procedures for Requesting Management Cost Funding HMGP**

- a. Following notification by FEMA of the preliminary lock-in amount, and within 120 days from the declaration date, the Department will submit a HMGP project narrative that describes the activities, projected personnel requirements, Subgrantee allowance, and other costs related to the management of the program for that disaster. Documentation to support the management activities, Subgrantee allowance and associated costs will include:
  - i. The Department's plan for expending and monitoring the funds and ensuring sufficient funds are budgeted for grant closeout; and
  - ii. An estimate of the management funds that the Department will make available to Subgrantees for their administrative allowance.
- b. FEMA will approve or reject the HMGP project narrative on management costs within 30 days of its receipt.
- c. If FEMA rejects the initial narrative, it will provide to the Department definitive reasons for the denial as well as clearly identify the additional documentation required for approval. The Department will have 30 days to submit a revised narrative for consideration and approval.
- d. At 6 months after the declaration date, the Department may request an additional obligation of 10 percent of the management cost funds, based on the revised 6-month preliminary lock-in amount. This request for additional funds will include documentation to support the request.
- e. At 12 months after the declaration date, FEMA will notify the Department of the final lock-in amount. The Department will submit a final funding request, based upon the final lock-in amount, to the FEMA Regional Administrator. The final funding request will include any necessary revisions to the required supporting documentation. FEMA will obligate the remaining funds upon approval of the final request.

### **3. Quarterly Reports**

The Department will provide quarterly reports to FEMA's Grant Programs Division on actual expenses of HMGP management costs following approval and funding of the initial HMGP project narrative.



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#### **4. Period of Availability**

The HMGP management grant will be made available until 8 years from the date of disaster declaration, or 180 days following the latest performance period date of a Subgrantee project, whichever is sooner. By the 8 year anniversary date, the funds must be expended, drawn down and final payments made.

#### **PDM, FMA, RFC, SRL**

For these programs, Applicants can request and include grant management costs, up to 5 percent of the total project costs, as part of the budget in their grant applications. Cost of managing a project (e.g., construction management) is a separate line item in a budget and must be included in the project's benefit-cost analysis. The state can request up to 10 percent of awarded funds to pay costs to manage these programs. FEMA makes project and program management funds available only upon approval of an application.

### **V. PROJECT ELIGIBILITY REQUIREMENTS**

#### **A. Federal Criteria**

According to the requirements of 44 CFR Part 206.434, a project must:

1. Be in conformance with the State Enhanced Hazard Mitigation Plan and the applicable local mitigation plan approved under 44 CFR Part 201.
2. Be located in a community participating in good standing in the National Flood Insurance Program, for projects involving flood-insured properties or projects located within the Special Flood Hazard Area.
3. Meet all applicable federal, state, and local permit requirements, and not contribute to or encourage development in the floodplain, wetlands, or other hazardous areas, and support environmental justice (Federal Executive Orders 11988, 11990 and 12898).
4. Be cost effective and substantially reduce the risk of future damage, hardship or loss or suffering, in that it:
  - a. Addresses a problem that has been repetitive or that poses a significant risk if left unsolved.
  - b. Will not cost more than the anticipated value of the reduction in both damages and subsequent negative impacts to the area, if future disasters were to occur.
  - c. Has been determined to be the most practical, effective, and environmentally sound alternative after consideration of a range of options.
  - d. Contributes, to the extent practicable, to a permanent or long-term solution of the problem it is intended to address.



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- e. Considers long-term changes to the areas and entities it protects, and has manageable future maintenance and modification requirements.

### **B. State Criteria**

A project also must be identified in the applicable local hazard mitigation plan or support its goals and objectives. It also should meet one or more of the following state criteria:

1. Protect lives and reduce public risk.
2. Reduce the level of disaster vulnerability in existing structures.
3. Reduce the number of vulnerable structures through acquisition, relocation, flood proofing, seismic retrofitting, or other measures.
4. Avoid inappropriate future construction in areas known to be vulnerable to future disasters.
5. Restore or protect natural resources, recreation, open spaces, and other environmental values.
6. Develop and implement comprehensive programs, standards, and regulations that reduce disaster damage.
7. Increase public awareness of natural hazards, preventive measures, and emergency responses to disasters.
8. Upon completion, have affordable operation and maintenance costs.

### **VI. SOLICITATION OF APPLICATIONS**

While each of the mitigation programs has a different funding mechanism, the basic process to solicit applications is the same.

#### **HMGP**

Following a Presidential Declaration of a Major Disaster, the State Hazard Mitigation Programs Manager and Department mitigation staff will publicize the HMGP and inform potential Applicants of the availability of mitigation grant funding in a variety of ways.

At a minimum, Department mitigation staff will provide information on the HMGP during Public Assistance program applicant briefings, and send information via email to local Emergency Management offices statewide, participants in the Public Assistance program, Washington State Association of Counties, Association of Washington Cities, State Agency Liaisons, Indian Tribes, and other interested parties and eligible applicants. Department mitigation staff also will distribute information at all mitigation training and briefings, and will post information on the Emergency Management Division's



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web page. At their discretion, the Department and FEMA may issue a joint press release describing the program.

Information disseminated about HMGP will include basic program information and requirements, "Letter of Intent" (LOI) for mitigation planning initiatives and projects, program timeline and application deadlines, and a point of contact for further information. After the Department analyzes Letters of Intent it receives, it will send full application packages to eligible Applicants with potentially eligible applications.

Only jurisdictions that submit a Letter of Intent will be eligible to submit an application for grant funding.

Depending upon the scope of the disaster and projected amount of available funds, the Department may limit the number of applications each eligible Applicant can submit, and limit the total project costs of each planning initiative and project. The Department will share this information with potential Applicants as early as its announcement of HMGP availability, but no later than the date at which it provides applications to potential Applicants. Applications for HMGP grant funding are provided by the Department, and do not use FEMA's Internet based eGrants system.

### **PDM, FMA, RFC, SRL**

For these mitigation programs, the Department at a minimum will notify communities of their availability upon receipt from FEMA of the Notice of Funding Availability and/or publication of annual program guidance. The Department will use a Letter of Intent process similar to that used for HMGP described above, as well as posting information on the Department's web page. The Department will base LOI and final application deadlines upon the dates that the state must submit its application materials to FEMA. Interim deadlines will be established to provide Department mitigation staff with sufficient time to review Letters of Intent and applications for eligibility, completeness, competitiveness, and cost effectiveness prior to the FEMA application deadline. Application for these programs will be through FEMA's Internet-based eGrants system.

## **VII. PROJECT IDENTIFICATION**

In addition to the project application process outlined above, the State Hazard Mitigation Programs Manager and other Department mitigation staff may identify, encourage, and provide direct and/or technical assistance to communities to develop and submit application for appropriate mitigation projects through the following processes:

1. Briefing Preliminary Damage Assessment survey teams on the Hazard Mitigation Grant Program and enlist their help in identifying potential mitigation projects.
2. Briefing the Public Assistance Project Worksheet Teams that will complete inspections of damaged facilities so that they may identify potential projects.



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3. Reviewing unfunded grant applications from prior declared disasters or other mitigation grant programs.
4. Reviewing local hazard mitigation plans from declared jurisdictions.
5. Reviewing the disaster event vis-à-vis strategies in the State Enhanced Hazard Mitigation Plan to identify potential projects or project types that would benefit from expedited consideration and funding (e.g., acquisition of substantially damaged homes in the floodplain).

### VIII. PROJECT CRITERIA

Project applications must meet FEMA and State eligibility criteria as outlined in this plan and in the pertinent version of FEMA's Hazard Mitigation Assistance grant programs guidance document. Each Applicant must consider a number of alternatives, describe each alternative in its project application, and *should* involve the public in its decision making process. The Applicant must find that its Proposed Action is the most practical, effective and environmentally sound alternative after considering a range of options, and it must be found cost-effective using FEMA benefit-cost methodology. The Applicant must describe the methodology / process it used to select its Proposed Action.

For any proposed project in or affecting floodplains or wetlands, the Applicant *must* do the following for its application to be considered complete and to warrant further consideration:

1. Follow Public Notice Requirements of 44 CFR Part 9.8, which require providing the public with adequate information and opportunity to comment at the earliest possible time during the project / application development process. Department mitigation staff will provide a public notice template and publication instructions to Applicants upon request.
2. Provide an analysis of practicable alternatives, as required by 44 CFR Part 9.9(b). This part requires the identification and evaluation of alternatives to carrying out the Proposed Action in a floodplain or wetland, to include a) alternative sites outside the floodplain or wetland; b) alternative actions which essentially serve the same purpose but which have less potential to affect or be affected by the floodplain or wetland; and c) no action.

### IX. APPLICATION PROCESS

#### HMGP

#### A. Submission of Applications to the State

The Department will solicit Letters of Intent from potential Applicants as described above. Letters of Intent are used as a screening tool to determine an Applicant's eligibility as well as potential eligibility of the proposed project or planning initiative, and to track potential demand for available program resources. The Department will send HMGP application packages, to include a copy of this



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Administrative Plan, to eligible applicants with potentially eligible projects. The Department additionally will notify those Applicants that are ineligible or which have proposed ineligible projects or planning initiatives of their ineligibility.

The Department will establish a date for completed applications to be returned, typically between 90 and 120 days from the date applications are mailed to potential Applicants. This date will allow enough time for Applicants to ensure compliance of environmental requirements and coordination with regulatory agencies, development of alternatives, and the public involvement process. Late applications will not be accepted.

The Department will submit the state’s complete application packet to FEMA within 12 months of the date of the disaster declaration, per federal regulation. See example HMGP application timeline, below.

<b>Example Hazard Mitigation Grant Program Application Timeline</b>	
Hazard Mitigation Grant Program (HMGP) available <u>statewide</u> for both planning grants and project grants.	
<b>Dates of Incident Period</b>	Disaster Event Incident Period.
<b>Day 1</b>	President declares disaster in initial counties.
<b>Day 1-45 post declaration</b>	Applicant briefings for Hazard Mitigation Grant Program conducted in declared counties.
<b>Day 5</b>	Letters of Intent, program information and timeline – Emailed to ALL County and City Emergency Management Offices, Tribal Emergency Managers, State Agencies, Association of Washington Cities, and Washington Association of Counties. LOIs, Fact Sheet, and program timeline posted on the State’s website – <a href="http://emd.wa.gov">http://emd.wa.gov</a> .
<b>Day 60</b>	Letters of Intent for projects and new or revised hazard mitigation plans must be <b>submitted to and received by State EMD</b> via fax, email, or postal mail. <b><i>Late LOIs will not be considered.</i></b>
<b>Day 65</b>	Application packets made available on the EMD web site to eligible applicants for mitigation construction projects and/or hazard mitigation planning initiatives.
<b>Day 65-175</b>	Technical and application development assistance to include review of draft application scheduled at the request of the applicant, as time allows. For projects in or affecting a floodplain or wetland, a minimum of one public notice required. Contact State EMD Mitigation Staff, below, for public notice template and proof of publication requirement. Consultation must be completed with State Department of Archaeology and Historic Preservation for buildings 49 years old or older.



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<b>Day 180</b>	Applications <b>must be submitted to and received by State EMD</b> (one hard copy, one electronic copy on CD). <b><i>Late applications will not be considered.</i></b>
<b>Day 181 – 360</b>	Applications reviewed for completeness and cost-effectiveness by EMD staff. Eligible applications sent to review committee for prioritization and funding recommendation.
<b>Day 365 post declaration</b>	Deadline for State to forward prioritized list of HMGP applications to FEMA for environmental and historic preservation reviews, and funding consideration.
<b>Prior to Funding Approval</b>	<p>All jurisdictions must have an adopted, FEMA-approved hazard mitigation plan to receive HMGP project funding. <u>Lack of approved plan means project grant award will be held by FEMA until the mitigation plan receives FEMA approval.</u></p> <p>Obtain necessary permits, complete State Environmental Policy Act checklist. FEMA review for eligibility occurs within the first few months following application receipt. Applications that are recommended to FEMA for final review and funding approval might have from 4 to 18 months to prepare permits and SEPA checklist.</p> <p>Recommended applicants must be ready to begin the project within 30 days of a signed grant agreement (contract). Time constraints on projects due to environmental issues should be identified in the grant application.</p>
<p><b>Written requests for project / application development assistance</b> and attendance at public meetings must be received no later than <b>(Day 160)</b> by Mark Stewart at <a href="mailto:mark.stewart@mil.wa.gov">mark.stewart@mil.wa.gov</a>, via Fax at (253) 512-7205, or postal mail at Emergency Management Division, Building 20, MS: TA-20, Camp Murray, WA 98430.</p>	

**B. Review, Ranking, and Selection of Projects for HMGP**

**1. Review Process**

As required by 44 CFR Part 206.435, Department mitigation staff will review all applications submitted by eligible jurisdictions for completeness, to ensure they meet state and federal eligibility criteria, and for cost effectiveness. Department mitigation staff will review the benefit-cost analysis submitted with project applications, or conduct its own based upon information provided by the Applicant for the project. As necessary, Department mitigation staff will obtain and use additional information, such as flood insurance studies or insurance claims payments, in its review of the cost effectiveness of the project. Department mitigation staff may substitute its own benefit-cost analysis in a project application if it determines that its analysis is more accurate and/or supported by documented data from credible sources.

A benefit-cost ratio of at least 1.0 calculated using FEMA methodology is required to demonstrate project cost effectiveness. The benefit-cost ratio may be used as a tiebreaker when projects are reviewed and prioritized.



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All Applicants will be notified whether their application passes this initial review threshold. There is no appeal of the Department's decision of an application's ineligibility due to the application's incompleteness, lack of required documentation, and/or a benefit-cost ratio under 1.0.

If funding requested in the eligible applications in any of the three categories of HMGP funding – mitigation projects, mitigation planning initiatives, Five Percent Initiative projects – exceeds the amount available in that category, the Department will establish a Mitigation Grant Review Committee, to review, evaluate, and prioritize the applications within that category.

The Mitigation Grant Review Committee normally will consist of at least five members, to include at a minimum, the following:

- a. Two individuals from the Department's mitigation staff.
- b. One designee from a state agency that deals with issues related to the particular type or nature of the disaster (example: Department of Ecology representative for floods).
- c. Two or more individuals representing local government from outside of the declared disaster area or from a community not applying for HMGP funds.

The Department will seek local committee members that have experience in public works, engineering, land use planning, disaster grant administration, or other related experience. The committee also may consult experts from state, local, and federal agencies. The Department may seek the assistance of the Washington State Emergency Management Association, Washington State Association of Counties, and the Association of Washington Cities to provide names of potential local committee members.

Committee members will serve without compensation, but will be reimbursed for authorized expenses incurred in the performance of their duties, in accordance with RCW 43.03.050 and 43.03.060, as now existing or hereafter amended.

The committee will review and prioritize those grant applications that pass initial eligibility screening. The committee will evaluate and prioritize applications and make funding recommendations to the Emergency Management Division Director based on criteria published with grant applications.

### **2. Ranking Process and Criteria**

Ranking eligible projects and developing a recommendation for funding will include consideration of the following:

- a. Combined ordinal application score(s) as determined by the Mitigation Grant Review Committee.



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- b. Available funding.
- c. State priorities for the HMGP based on goals and objectives in the State Enhanced Hazard Mitigation Plan, October 1, 2010.
- d. Geographical mix of submitted applications.
- e. Previous mitigation program participation and results.
- f. Current mitigation program participation. At its discretion, the Department may limit Applicants to *five* mitigation grant-funded projects they may hold at any one time, depending upon the following:
  - i. Demonstrated capability of the Applicant to administer previous and existing projects.
  - ii. Demand for currently available funds.
  - iii. State-announced priorities for the particular HMGP.
- g. As necessary, the benefit-cost ratio will be used as a tiebreaker when projects are prioritized and funding recommendations developed.

If the situation warrants, the Department may set aside a percentage of Hazard Mitigation Grant Program funds to implement specific projects or project types based on the disaster, or specific initiatives or strategies identified in the State Enhanced Hazard Mitigation Plan. Such initiatives will be described in HMGP program announcements provided to all eligible applicants on program availability. Applications received for announced special projects and mitigation initiatives will be exempt from the Committee ranking process.

The Committee will develop and provide to the Emergency Management Division Director a prioritized list of projects to recommend to FEMA for approval and funding.

The Department's mitigation staff will formally notify Applicants of the results of the committee ranking and review process and of their recommended, or non-recommended, status, to include the rationale for the non-recommendation. Applicants not being recommended for funding may appeal this decision under specific criteria.

### **3. Criteria For Non-Recommendation of Applications (HMGP)**

The following are the criteria under which Department mitigation staff and / or the Mitigation Grant Review Committee will not recommend applications for funding to the Emergency Management Division Director:

- a. Application and / or required supporting materials were not received by the announced / published deadline.



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- b. Application is incomplete as submitted.
- c. Project is not cost effective.
- d. Applicant does not meet the National Flood Insurance Program (NFIP) requirements for project or applicable grant program.
- e. Applicant does not comply with state Growth Management Act (GMA) or is not making progress to resolve non-compliance issues, as certified by the Washington Department of Commerce.
- f. Grant request exceeds established funding limits.
- g. Applicant has submitted more than the allowed number of applications.
- h. Project does not meet eligibility criteria in 44 CFR 206.434, or fails to meet application-scoring minimums.
- i. Project merely identifies or analyzes a hazard or a problem (i.e., stand-alone studies).
- j. Proposed use of mitigation grant funds replace or are a substitute for funding available under other federal authorities, except when limited circumstances exist such as extraordinary threats to lives, public health or safety, or improved property.

Additionally, the Department reserves the right to not review, rank, or submit an application from an eligible Applicant with serious unresolved audit findings related to performance or financial management.

#### **4. Applicant Appeals**

- a. Criteria For Appeal

An Applicant may appeal a decision of the Department mitigation staff or the Mitigation Grant Review Committee on its application based on the following:

- i. Failure by the Department mitigation staff or Review Committee to follow the established review and adjudication process outlined in this plan.
  - ii. Arbitrary or capricious decisions by the Department mitigation staff or Review Committee.
- b. Appeal Process and Timeline



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All Applicants will receive formal notification of whether their applications have been recommended for funding. This information also will be provided to the Emergency Management Division Director.

Applicants whose applications initially are not recommended for funding by the Department mitigation staff or Review Committee will be provided the specific reason for non-recommendation. Should an applicant wish to appeal the non-recommendation of their project, it must:

- i. Within 15 days of receipt of formal notice of non-recommendation, respond in writing to the specific items causing non-recommendation, with full justification or clarification to the Department mitigation staff / Mitigation Grant Review Committee. Additional information and/or documentation not included in the original application will not be considered.
- ii. The Department mitigation staff / Review Committee will review the appeal, make such additional investigation as necessary, and forward the appeal with a written recommendation to the Emergency Management Division Director.

All Applicants will be notified when an appeal of the Department mitigation staff's / Review Committee's recommendations has been filed. The notification will state that the appeal will delay all recommendations forwarded to the Emergency Management Division Director until the appeal process is complete, and that a successful appeal may result in a re-ranking of the recommended projects and could affect funding for one or more applications.

The Emergency Management Division Director will review the material submitted and make any additional investigations as deemed appropriate. The Applicant will be notified of the Director's decision within 10 days of the Department's receipt of the formal "Appeal of Determination" packet.

If the Emergency Management Division Director denies the appeal:

- i. The original list of recommendations of the Department mitigation staff / Committee will be forwarded to The Adjutant General, State Military Department, with a copy of the appeal results.
- ii. All applicants will be notified of the appeal recommendation results and that the appeal process has been completed.

If the Emergency Management Division Director finds in favor of the appeal, the Department mitigation staff / Review Committee will take appropriate implementing actions:

- i. Reconsider and re-rank the entire listing of recommended projects, if necessary.



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- ii. Notify affected Applicants; they not be allowed to appeal this decision.
- iii. A revised recommendation packet will be forwarded to The Adjutant General, State Military Department, for a decision. The information packet will include all appropriate documentation and explanation of appeal results. All decisions of The Adjutant General, State Military Department, are final.

Following any appeal period and / or appeal decision, a decision package will be submitted to the Emergency Management Division Director containing those projects recommended for submission to FEMA for review, final approval and funding. These projects may be ones proposed by the Department or that have been reviewed and ranked by the Mitigation Grant Review Committee. The Department will notify all Applicants whether and when their applications are being forwarded to FEMA.

### C. Submission of Recommended Projects to FEMA (HMGP)

1. The State Hazard Mitigation Programs Manager will prepare a project package, for transmittal to FEMA by the Emergency Management Division Director, containing:
  - a. A narrative describing the anticipated projects and justification for recommendation and rationale for each project.
  - b. Copies of recommended applications and additional pertinent information.
  - c. A certification by the Department that the projects meet all federal and state eligibility requirements.
  - d. A completed SF 424 Application for Federal Assistance, which requests funding for all projects recommended.

Additionally, the Department may submit a prioritized list of state-recommended, unfunded projects as alternates for consideration if additional funds become available.

As information is available, the State Hazard Mitigation Programs Manager will update Applicants regarding the status of FEMA review of their applications.

2. Upon notification from FEMA, the State Hazard Mitigation Programs Manager will inform Applicants of FEMA's decision on their projects.

Funded Applications: Department mitigation staff will prepare grant-funding agreements with Applicants, now considered Subgrantees, and provide them with a copy of *Guidelines for Approved Mitigation Grant Awards*. This document contains information on:

- Process for accounting for expenses and requesting reimbursement;
- Quarterly and Final reporting requirements;
- Grant agreement between the State and the Applicant.



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Non-Approved / Unfunded Projects: Department mitigation staff will send a letter to Applicants on their non-approval / non-funded status. Applicants will be informed that they can appeal FEMA's decision according in accordance with 44 CFR Part 206.440.

### **D. Withdrawal of Recommended Projects (HMGP)**

The Department may opt to withdraw an application from consideration by FEMA. Reason(s) may include, but are not limited to, the following:

1. Material errors, misrepresentation, or lack of substantiated information or data by the Applicant in the application.
2. Non-allowed cost increases or expenditures prior to FEMA approval of eligible pre-award costs or award of a grant.
3. Loss or reduction of committed funding or in-kind contributions for the non-federal share of the project or planning initiative.
4. Project implementation (i.e., construction for a project, plan development, or review process) begins prior to grant award without previous approval of the Department and FEMA.
5. Project fails to maintain cost effectiveness.
6. Project, or Applicant, fails to maintain eligibility as outlined in 44 CFR Part 206.424, to include project cost effectiveness, participation and good standing in the National Flood Insurance Program (NFIP), as well as compliance with the state Growth Management Act (GMA).
7. Applicant fails to maintain program eligibility through a FEMA-approved hazard mitigation plan required by 44 CFR Part 201.

The Department reserves the right to postpone drafting a grant agreement or to deny funding if there is a significant problem with previous Subgrantee performance, such as failure to complete projects in agreed-upon times or according to required programmatic, environmental or historic preservation conditions; major cost overruns; failure to provide required documentation in a timely manner, etc. In such situations, the Subgrantee is responsible for developing and initiating corrective action satisfactory to the Department.

### **PDM, FMA, RFC, SRL**

The Department will solicit, review, and prioritize application for these nationally competitive mitigation programs in a process similar to the one described above, with the following exceptions:



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1. Applicants submit program applications to the state via FEMA’s eGrants system. Permission to use the system is granted to potential Applicants by the State Hazard Mitigation Programs Manager following submission of Letters of Intent.
2. The application timeline for these programs, established by State Hazard Mitigation Programs Manager, is based on Hazard Mitigation Assistance Unified Guidance published annually by FEMA. See example application timeline for these programs on page 23. Late applications will not be accepted; see page 24.
3. Department mitigation staff will review and prioritize applications based on applicable program guidance as well as criteria used to evaluate HMGP applications. During the review process, Department mitigation staff will provide written feedback to Applicants on whether their applications require revisions. Applications requiring additional work will be returned to Applicants via FEMA’s eGrants system.
4. If time and / or the number of application allow, the Mitigation Grant Review Committee will be convened and consulted in the prioritization process prior to submission to FEMA. For these programs, state prioritization is used only in initial processing during the national evaluation, and is one of several factors used by FEMA to determine which applications are moved to the peer review, technical review, and cost effectiveness review portions of the national evaluation.

<b>Example Application Timeline for PDM / FMA / RFC / SRL Programs</b>	
<b>Day 1</b>	FEMA announces funding availability and program guidance for Fiscal Year
<b>Day 5</b>	Letters of Intent, program guidance, and application timeline – Emailed to ALL County and City Emergency Management Offices, Tribal Emergency Managers, State Agencies, Association of Washington Cities, and Washington Association of Counties. LOIs, Fact Sheet, and program timeline posted on the State’s website – <a href="http://emd.wa.gov">http://emd.wa.gov</a> .
<b>Day 60</b>	Letters of Intent for projects and new or revised hazard mitigation plans must be <b>submitted to and received by State EMD</b> via fax, email, or postal mail. <b><i>Late LOIs will not be considered.</i></b>
<b>Day 5-145</b>	EMD staff provides access to eligible applicants to FEMA’s <i>eGrants</i> Internet-based application system.
<b>Day 5-145</b>	Technical and application development assistance scheduled at the request of the applicant, as time allows. For projects in or affecting a floodplain or wetland, a minimum of one public notice is required. Contact State EMD Mitigation Staff, below, for public notice template and proof of publication requirement. Consultation must be completed with State Department of Archaeology and Historic Preservation for buildings 49 years old or older.



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<b>Day 150</b>	<p>Applications <b>must be submitted to and received by State EMD via eGrants. <u>Late applications will not be considered.</u></b></p> <p>All jurisdictions applying for project funds must have an adopted, FEMA-approved hazard mitigation plan prior to the announced application deadline. <u>Lack of approved plan means project grant application will not be accepted or considered.</u></p>
<b>Day 151 – 180</b>	Applications reviewed for program eligibility, completeness, and cost-effectiveness by EMD staff. Eligible applications are prioritized for national evaluation.
<b>Day 180</b>	Deadline for State to forward prioritized list of applications to FEMA for consideration in national evaluation.
<b>Day 181 – 270</b>	Applications reviewed by FEMA regional and headquarters staff and submitted to national program evaluation.
<b>Day 270</b>	FEMA announces to state the results of national evaluation, indicating which applications are selected for funding and placed in “pre-award” status, and which applications are not funded because of inadequate funding or ineligibility.
<b>Pre-Award (Prior to Funding Approval)</b>	<p>All jurisdictions must have an adopted, FEMA-approved hazard mitigation plan to receive project funding. <u>Lack of approved plan means project grant award will be held by FEMA until the mitigation plan receives FEMA approval.</u></p> <p>Necessary permits, State Environmental Policy Act checklist, and consultation with State Historic Preservation Office for buildings 49 years old or older are required. FEMA review for eligibility occurs within the first few months following application receipt. Applications that are recommended to FEMA for final review and funding approval might have from 4 to 18 months to prepare permits and SEPA checklist.</p> <p>Recommended applicants must be ready to begin the project within 30 days of a signed grant agreement (contract). Time constraints on projects due to environmental issues should be identified in the grant application.</p>
<p><b>Written requests for project / application development assistance</b> and attendance at public meetings must be received no later than (<b>Day 120</b>) by Tim Cook at <a href="mailto:tim.cook@mil.wa.gov">tim.cook@mil.wa.gov</a>, via Fax at (253) 512-7205, or postal mail at Emergency Management Division, Building 20, MS: TA-20, Camp Murray, WA 98430-5122.</p>	

**Late Applications**

As described previously, the mitigation grant programs application process has two steps: a Letter of Intent followed by full applications. Only eligible jurisdictions that submit LOIs for eligible mitigation planning initiatives or projects will receive full application packages (for HMGP) or permission to access FEMA’s eGrants application system (for other mitigation programs).



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The Department's policy is that it will not accept Letters of Intent or application packages from Applicants beyond announced deadlines for any reason. Specific timelines for Applicants to deliver Letters of Intent and applications to the Department for each mitigation grant program are established by the Department and/or FEMA based on specific programmatic and legal requirements.

**HMGP** – If the Department determines that extraordinary circumstances exist (e.g., a second disaster is declared within a few weeks of the disaster declaration that originally made HMGP available), it will consider extending deadlines for receipt of Letters of Intent and / or full applications to the extent feasible given programmatic and legal requirements. If deadlines are extended, the Department will provide as much time as possible to 1) allow potential Applicants to respond to the new disaster and to prepare Letters of Intent or application packages for the initial HMGP, and to 2) provide the Department with adequate time to review applications and make funding recommendations to FEMA within legally prescribed timelines.

If the Department extends application deadlines for either Letters of Intent and / or application packages as a result of extraordinary circumstances, the extension will be announced and provided to all potential Applicants statewide. Late Letters of Intent and / or applications will not be accepted or considered for funding if they are received after the announced, revised deadlines.

**PDM, FMA, RFC, and SRL** – The Department will not accept late Letters of Intent or applications beyond announced application deadlines for these programs for any reason. FEMA sets national application deadlines for these programs, and these deadlines are not subject to reconsideration or revision at the request of the State of Washington or any other state for any reason. The Department establishes interim deadlines in advance of FEMA's application deadline to accommodate its review of applications for eligibility, completeness, competitiveness, and cost effectiveness.

### **X. PROGRAM ADMINISTRATION**

#### **A. Organization**

The Governor's Authorized Representative (GAR) oversees mitigation expenditures. The State Hazard Mitigation Programs Manager (SHMPM) is responsible for the daily operations and technical aspects of the program, hazard mitigation planning, and administering the hazard mitigation grant programs noted in this document, and the State Enhanced Hazard Mitigation Plan.

The Department will review and update state mitigation plan in conjunction with participating state agencies as necessary, but at least every three years as required by 44 CFR Part 201.

#### **B. Staffing**



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The following staffing pattern is used during normal, non-disaster period operations. Percentages below estimate the split of responsibilities for administering all mitigation grant programs:

Mitigation & Recovery Section Manager	10%
State Hazard Mitigation Programs Manager	90%

Following disaster declarations, the State Hazard Mitigation Programs Manager is designated the State Hazard Mitigation Officer under 44 CFR 206.433(c), identified as such on the Department’s organizational chart and confirmed by name in the Federal-State Agreement (included here by reference).

During active disaster recovery operations, the following notional baseline-staffing pattern is established. The number of personnel required, the percentage of time designated individuals will be tasked, and the length of tasking will be dependent on the size and number of disasters for which recovery operations are ongoing.

SHMPM	EMPS3*	100%	12 - 48 months
EM Program Specialist 2	EMPS2*	100%	9 - 48 months
EM Program Assistant	EMPS1*	100%	9 - 48 months
Reservist 1(Engineer)	RVST1	50%	6 - 24 months
Admin Support		50%	6 - 24 months

*\*Emergency Management Program Specialist*

### C. Administration

The State Hazard Mitigation Programs Manager is responsible for project management and record keeping, including project files, which contain all correspondence, applications, reimbursement vouchers, receipts, reports, and related documentation. The State Hazard Mitigation Programs Manager will oversee preparation of the state-local grant agreement for each project outlining the work to be completed and its costs.

The State Hazard Mitigation Programs Manager will submit quarterly Programmatic Performance Reports on Form SF-PPR for each of the open grants and sub-grants to FEMA, as required by 44 CFR 206.437(b)(4)(xiii). These will be based on the written progress reports provided by Subgrantees for each open project. A Subgrantee quarterly progress report format is shown in Appendix 1, Guidelines for Approved Grants. Each Subgrantee will be required to submit a final report, and the State Hazard Mitigation Programs Manager will submit closeout documents to FEMA.

### D. Financial Management

The Department will serve as the Grantee for the State of Washington for FEMA’s mitigation grant programs, and is responsible for ensuring the State and Subgrantees will administer grant funds and implement projects in compliance with 44 CFR Part 13, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments, and the administrative requirements of



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44 CFR Part 206 Subpart N, Hazard Mitigation Grant Program. Subgrantees are accountable to the Grantee for awarded funds.

Subgrantees are the legal entities to which the state awards money for projects and mitigation planning initiatives; Subgrantees can be a state agency, local government, special purpose district, private non-profit organization, or Indian Tribe. Subgrantees are responsible to the Grantee for expenditures, work performed, and reporting requirements.

The Department will ensure that costs associated with Grantee administration of the mitigation grant programs and with Subgrantees implementation of mitigation program sub-grants are in allowable and in accordance with the requirements of 44 CFR Part 13.22 and Part 206.439. Washington Military Department Finance Division staff will submit quarterly Federal Financial Reports on Form SF 425 to FEMA for each of the open grants as required by 44 CFR Part 13.

### 1. Procurement

The Department will ensure the State and all Subgrantees comply with the procurement requirements of 44 CFR Part 13.36. The State will follow the policies and procedures it uses for procurement using non-federal funds. Subgrantees can use their own procurement procedures, which reflect applicable local and state laws and regulations as long as those procedures also conform to the requirements of 44 CFR Part 13.36.

The Department will ensure that Subgrantees conduct all procurement transactions in a manner that provides full and open competition consistent with the standards of 44 CFR Part 13.36.

The Department will require Subgrantees to sign a certification that their organization and principals are not debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in federal contracts, and ensure that any sub-contractors also sign a similar certification.

The Department reserves the right to review Subgrantee procurement plans and documents, and require a Subgrantee to make changes to bring its plans and documents into compliance with the requirements of 44 CFR Part 13.36. Further, the Department will ensure that a Subgrantee's procurement process requires contractors and subcontractors to provide adequate documentation with sufficient detail to support the costs of the project and to allow both the Subgrantee and Department to make a determination on eligibility of project costs.

### 2. Subgrantee Reimbursement

Eligible grant costs are reimbursed on an actual cost basis up to the grant agreement amount. The Department does not provide for advancement of funds for any of the mitigation grant programs unless authorized by the Washington Legislature, as state law prohibits gifting of funds. Should this policy change, procedures to implement this action will be developed and implemented.



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Subgrantees are required to track project costs, and to submit reimbursement requests by approved budget cost category, as described in the grant agreement between the Subgrantee and Department. Subgrantees must provide copies of original documentation to clearly support the reimbursement request. Such documentation includes but is not limited to the following: timesheets or time and attendance records for staff that worked on the project, coded so that hours worked on the project are readily discernible; dated invoices or receipts for all goods and services purchased; copies of dated invoices on vendor / contractor letterhead for all professional services (e.g., consultants, engineering) provided or work performed by contractors and subcontractors, dated receipts for required permits and other project-related expenses, etc. Any project costs not supported by sufficient documentation will be disallowed and will not be reimbursed.

As part of each project file maintained by the Department's Mitigation Section, a spreadsheet will track approved project amounts, individual warrants and processing dates, total expenditures by federal, state, and local funding sources, total expenditures by approved budget cost category, and remaining funds. Payments shall be based on Subgrantee submittal of an A-19, Voucher Distribution form, with an original, pen-and-ink signature of a staff member authorized on the Grant Agreement's Signature Authorization Form. (See Sample A-19 Voucher Distribution Form, page 56). Requests for payments will be processed in a timely manner. The goal of the Department is to process payment requests to the Finance Division within 10 days of receipt. The goal of the Military Department's Finance Division is to process payments and issue a warrant within 10 days of receipt of the completed A-19 from the Department's mitigation staff.

Delays can occur if the Subgrantee's request-for-payment package is incomplete or contains inaccuracies. Department mitigation staff notifies a Subgrantee as soon as discrepancies are noted, and the reason for the delay will be noted in the project file. Upon receipt of the necessary documents, Department mitigation staff will complete its portion of the payment process.

### 3. Cost overruns

For HMGP, FMA, and SRL, *if* additional funds are available, upon receipt of a written request from the Subgrantee, the Department may request the funds from FEMA Region X to cover additional eligible costs. A project must remain cost effective in order to receive additional grant funding. A grant agreement amendment will be developed and processed to include any additional funds prior to disbursement.

For PDM and RFC, cost overruns are 100 percent responsibility of the Subgrantee, per program guidance.

See Cost Increases / Overruns, Page 45.

### 4. Final Payment Requests



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The Subgrantee must submit a final A-19 Voucher Distribution form and final report to the Department after the project work has been completed.

The Department will perform a final inspection of the completed project. A joint State/FEMA inspection will be conducted if necessary and appropriate. FEMA will notify and coordinate any additional inspections by FEMA staff prior to the inspection. Final payments will be made upon completion of the Department's final inspection as specified in the grant agreement. As necessary, the Department reserves the right to retain all or part of the state's 12.5 percent cost share pending project completion and closeout for HMGP projects; additionally, the Department reserves the right to retain federal funds in an amount equal to 10 percent of the project budget for such purposes for projects funded by other mitigation grant programs.

### **5. Recoupment of Federal Funds**

Every effort is made to avoid those instances where applicants receive more funds than can be supported by documentation.

#### **a. Grant still open:**

- i. If work on the Subgrantee's project is in progress and an overpayment is determined, an adjustment will be made on the next request for reimbursement submitted on an A-19 Invoice Voucher. The adjustment will be documented and placed in the project file as well as filed with reimbursement documentation provided to the Finance Division.
- ii. If work on the Subgrantee's project has been completed, the Department will send a letter to the Subgrantee requesting repayment of the funds for the unsupported costs. When a Subgrantee is required to return overpayments to the State, the warrant must be made payable to the Washington Military Department, Emergency Management Division. Upon receipt, the warrant is forwarded to the Department's Finance Division for deposit and return to FEMA through the SmartLink system.

#### **b. Grant closed:**

If an overpayment is discovered after the grant is closed, a letter will be sent to the Subgrantee requesting repayment of the funds. The repayment process is the same as noted above. If unsupported costs are found following closure of the disaster, a letter will be sent to the Subgrantee requesting repayment of the funds. Repayment requests will address both federal and state funds. Upon receipt, the Finance Division will issue and forward a warrant for the federal funds portion to FEMA. The warrant will include a cover letter defining the applicable event and reason for the return of federal funds.

In either situation, the Subgrantee will be required to refund any federal and state funds within 30 days of receiving notification of the reimbursement requirement. If an appeal option is



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available, the applicant may still submit the requested repayment, or file an appeal within sixty (60) days. An extension for returning the requested funds will be granted on an exception basis when an unusual circumstance prevents prompt reimbursement. The request must be made in writing. Unusual circumstances may include timing of board meetings to authorize payment and unexpected staff absences (e.g., medical, or death in family). Extensions typically are granted up to 30 days.

### **6. Accounting Codes**

Expenditures recorded in the state's Agency Financial Reporting System (AFRS) for federal grants by the Military Department are coded to project codes. A project code is established for each disaster (e.g., DR-4083 is identified as project E301 in AFRS). Within each project, subprojects are identified (e.g., MI for mitigation), and each project is identified by what is called a project phase (e.g., GR for Subgrantee reimbursements and MG for grant management). In addition, within each project code, discrete project indices are established for tracking federal and state grant funds reimbursed to Subgrantees, and for tracking costs charged to the state management grant. Such a coding structure in AFRS gives the department the ability to track expenditures in the required program structure, by funding source (federal, state) and grant cost, if the grant crosses biennia. The State Legislature appropriates expenditure authority for a two-year (biennium) budget period.

The project code also is included in the coding for the revenue transactions from the draw of federal funds. The coding indicates the federal funding source and the Catalog of Federal Domestic Assistance (CFDA) number.

### **7. Accounts Payable**

Salary and Benefits – Timesheets support all direct program staff salaries and benefits. Timesheets are prepared by the program staff member, approved by the supervisor, and sent to the Payroll section of the Department's Accounting Office. Payroll staff reviews the timesheets, and communicates with program staff about any issues. The timesheets are input into the Time Management System (TMS). When finished inputting and reviewing, TMS is released by the Payroll staff to post the information to AFRS. The program staff's actual payroll warrants are issued via the Human Resource Information System. Program staff HRIS documents are coded to a clearing account in AFRS. TMS transfers the cost from the clearing account in AFRS to the appropriate coding.

Goods and Services – Program staff request the order of goods and services with a purchase request to the Procurement section. The Procurement section prepares a purchase order per state purchasing regulations. Copies are provided for the vendor, program staff, and Accounts Payable section. Once the goods and services are picked up or delivered, the program staff sends a signed receiving report to Accounts Payable. The signed receiving report is dated for the day the goods or services are received. Accounts Payable puts together a copy of the purchase order, invoice, and receiving report. The payment package is reviewed for the amount, coding, signatures, and dates. Then the payment package is approved and batched for



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payment. The batch is reviewed and approved by a higher-level accountant. The batch is input into AFRS and released. The payment is paid either by a warrant or by electronic fund transfer.

Subgrantee reimbursement request – Program staff send a signed and approved A-19 Voucher Distribution document to Accounts Payable. The payment document is reviewed for the amount, coding, signatures, and dates. The payment package is approved and batched for payment. The batch is reviewed and approved by a higher-level accountant. The batched is input into AFRS and released. The payment is paid by either a warrant or electronic fund transfer.

Re-Issuance of a Warrant – Warrants are valid for 180 days. After 180 days, the warrant must be listed as Statute of Limitation before being reissued. If a warrant is lost or destroyed, a state affidavit must be filled out before the warrant can be reissued. Note: Payments to other state agencies are made using the Inter Agency Payment process or journal vouchers. Both processes are internal processes in AFRS.

### **8. Accounts Receivable**

The Department uses the U.S. Department of Health and Human Services Division of Payment Management (HHS/DPM) Payment Management System (PMS) system to draw funds approved by FEMA. Draws are made only after the expenditures have been made (i.e., costs are reimbursed), or occasionally simultaneous to the processing of an expenditure or transfer. Draws for reimbursements are made within five days after the close of the fiscal month per the SFY 2009 Cash Management Improvement Act (CMIA) Agreement. Per the agreement, a draw will be made at the end of the calendar month if the amount is material.

The amount of the draw is determined by the difference between the expenditures and the revenue recorded to date in AFRS. The AFRS expenditures are reconciled to the grant spreadsheet maintained by Finance staff. The PMS draws are deposited electronically in a State of Washington bank account maintained by the Office of the State Treasurer. The accountant for a specific grant draws the funds. The cash receipts accountant prepares the document for posting to AFRS and the deposit with the State Treasurer. Draws for Military Department program cost are accumulated and drawn on a program-approved A-19 prepared by the Accounts Receivable section.

Note: Any interest payments are made directly between the United States Treasury and the State Treasurer. This only applies for grants that meet the criteria to be included in the CMIA agreement.

### **E. Reporting**

#### Federal Financial Report (SF 425)

Disaster grant (HMGP) FFRs are prepared and submitted within 30 days after the close of a quarter or when the grant is closed. Non-disaster grant (PDM, FMA, RFC, SRL) FFRs are prepared and submitted



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within 30 days after the close of a quarter or when the grant is closed. The AFRS reports are reconciled to program expenditure records maintained by Mitigation staff, and then used in the preparation of the FFRs and to make PMS draws. The Washington Military Department accountant responsible for a grant prepares the FFR and the Governor's Authorized Representative or alternate approves the report. Federal and any state portion of any required match are both pulled from an AFRS report. The local match is provided by program worksheets. An extension for completing the quarterly FFRs is attained via e-mail from the appropriate budget staffer at FEMA Region 10, if required.

In addition, every six months, HMGP Subgrantee and management expenditures are reconciled between mitigation program records and AFRS reports. This is done by Mitigation and State Finance staff to both track all expenditures and to continually refine the amount of state general funds needed in the state's Disaster Response Account for the state portion of the non-federal share of the HMGP.

### Performance Progress Report (SF-PPR)

Quarterly performance progress reports are prepared on Form SF-PPR by Department mitigation staff following receipt of the quarterly reports that Subgrantees are required to file by the 15th of the month following the close of the quarter. Department mitigation staff electronically submits the quarterly SF-PPRs for each open mitigation grant program to FEMA no later than the 30<sup>th</sup> of the month following the close of the quarter.

### Federal Cash Transactions Reports Program Support Center (PSC) 272

The PSC 272 report is prepared electronically by the Accounts Receivable section of the Washington Military Department, and submitted to FEMA within 30 days after the close of each quarter. The PSC 272 is reconciled to the FFR and AFRS

## **F. Management of Equipment, Assets and Real Property**

The Department will ensure Grantee and Subgrantee compliance with the requirements of 44 CFR Part 13.31, Real Property; 44 CFR Part 13.32, Equipment; and 44 CFR Part 80.19, Land Use and Oversight.

### **1. Equipment and Assets:**

- a. Department: Any equipment and/or asset purchased with grant funds with a cost of \$5,000 or more will be tagged and posted to the Central Asset Management System (CAMS) by the Supply Officer 1. Additionally, any equipment that is small and attractive is tagged and posted to CAMS. Any equipment that is purchased with federal funds is indicated as such in CAMS. The Supply Officer 1 will make a physical inventory of fixed assets every two years. The physical inventory is reconciled to CAMS. Any missing assets are investigated and adjustments are made to CAMS. Any asset with a federal indication in CAMS will be disposed of according to the specific grants requirements. Upon grant closeout, the Department will submit a completed copy of the Tangible Personal Property Report, SF-428, and Attachment B – Final Report, SF-428B, with closeout documentation for all equipment purchased with grant funds.



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- b. Subgrantee: Article IX, Paragraph 3 of each grant agreement with Subgrantees specifically identifies the requirements regarding the acquisition, tracking, and disposition of equipment and other assets purchased with grant funds. Such equipment and assets includes emergency power generators and associated connecting equipment. Subgrantees will comply with the Federal Office of Management and Budget (OMB) Circular A-102 (or its replacement) in managing its equipment and other assets. Upon subgrant closeout, a Subgrantee will submit a completed copy of the Tangible Personal Property Report, SF-428, and Attachment B – Final Report, SF-428B, with its closeout documentation for all equipment purchased with grant funds.

### **2. Real Property (General):**

Subgrantees are expected to use real property they have acquired or modified using mitigation grant funds for its originally authorized purpose as long as needed for that purpose, per the requirements of 44 CFR Part 13.31

Subgrantees are required to submit a completed copy of the Real Property Status Report, SF-429, and Attachment A, SF-429A, with closeout documentation for all real property purchased with grant funds. The Department will request disposition instructions from FEMA to assist Subgrantees that wish to convert the use of the property to another purpose or transfer ownership to another organization.

Subgrantees that wish to dispose of or transfer possession of real property must make a request in writing to the Department, to include a completed copy of the Real Property Status Report, SF-429, and Attachment C – Disposition Request, SF-429C. Disposition of property or conversion of its use may result in the Subgrantee repaying grant funds used for acquisition of the property.

### **3. Real Property Acquired for Open Space:**

The acquisition and management of real property in the floodplain acquired for the purposes of converting it to open space in perpetuity is governed by requirements in 44 CFR Part 80.19. Subgrantees are required to submit a completed copy of the Real Property Status Report, SF-429, and Attachment A, SF-429A, with closeout documentation for all real property purchased with grant funds.

Real property acquired for open space must remain in the possession of the acquiring public agency. It can be transferred to another public agency or a qualified conservation organization, but only upon prior written approval of the FEMA Regional Administrator. Subgrantees that wish to transfer possession of acquired real property must make a request in writing to the Department, to include a completed copy of the Real Property Status Report, SF-429, and Attachment C – Disposition Request, SF-429C. The Department then will request disposition instructions from FEMA to provide to the Subgrantee.



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### **XI. AUDIT REQUIREMENTS**

Uniform audit requirements as set forth in 44 CFR Part 13.26 and 44 CFR Part 207.7(b) apply to all grant assistance provided under this program. FEMA may elect to conduct a federal audit on a mitigation grant program, any of the sub-grants, or the state management grant. For individual communities with mitigation projects, subrecipient monitoring will occur on a regular basis and follow Department guidelines for subrecipient monitoring, which may include reviewing audit findings/reports provided by the State Auditor's Office.

Requirements of the Single Audit Act are included in section A.27 of the General Terms and Conditions of the mitigation programs grant agreement between the Department and the Subgrantees, and are included here by reference.

Any issue that could affect the performance of a Subgrantee will be analyzed to determine if it could impact the current grant, and, if so, determine follow-up actions to preclude findings from reoccurring within the scope of the current grant agreement. For programmatic audit findings, Department mitigation staff will work closely with Department financial staff to compile the necessary responses and actions within the proscribed timeframes

### **XII. CLOSEOUT PROCEDURES**

#### **A. Project / Subgrant Closeout**

1. Subgrantees, within 60 days of the end of the project or period of performance, whichever is sooner, will submit closeout information in the form of a final report certifying that the project has been completed in accordance with the terms of the grant agreement, and provide to the Department all required documentation on work completed and project expenditures.
2. The Department, within 90 days of the end of the project or period of performance, whichever is sooner, will complete the following tasks: schedule a final inspection of the project with the Subgrantee, and notify FEMA of the inspection date, as appropriate; prepare a final inspection report with photographs and assemble required closeout documentation; review project expenditures and make final payment to Subgrantee; submit closeout report, final payment and required project documentation to FEMA; and place copies of closeout documentation into project files. As necessary, the Department will request an extension for the liquidation period from FEMA mitigation and grant management staffs.

#### **B. Disaster / Grant Closeout**

Upon completion of all projects within a declared disaster event in which HMGP funds have been obligated, the following steps will be taken to close out the disaster records with FEMA. The



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Department will notify FEMA that all projects within a declared disaster event have been completed in accordance with grant agreements.

- Review all project files and final reports for that disaster.
- Reconcile HMGP disaster funds between the Department and FEMA to verify data to Department records.
- Drawdown Management Cost funds for remaining eligible expenses.
- Reconciliation of Management Costs funds as approved by FEMA for each disaster.

Upon final review and reconciliation of all completed documents, the disaster event shall be closed.

### **C. Recapture Of Funds**

The Department will begin recapture actions in accordance with the terms and conditions of section A.17 of the grant agreement if at any time during the grant performance period, after the project closeout, or after the program closeout, the Department determines that the Subgrantee received federal and state funds to which it was not entitled. The Subgrantee will be notified in writing describing the finding and provided an opportunity to provide any documents or additional information. A copy of the letter will be provided to the Department's Finance Division. Department mitigation staff will work with the Department's Finance Division and Subgrantee to obtain the funds, to include any interest, if appropriate, and return them to the applicable funding sources (see Recoupment of Funds, page 28 for more detail).

### **XIII. ADMINISTRATIVE DOCUMENT REVIEW**

This document will be reviewed annually, or after a Presidential Disaster Declaration (for HMGP) to ensure compliance with the law, implementing regulations, and state policies. It will be updated as needed to reflect regulatory, policy, or organizational changes to improve program administration.

### **XIV. RECORDS RETENTION**

All records and files will be retained in accordance with federal and state laws and regulations, whichever is longer. RCW 40.14.060, Destruction, disposition of official public records or office files and memoranda, requires retention of records for six years following completion of a project (e.g., final payment and closure of subgrant / grant).

### **XV. AUTHORITIES AND REFERENCES**

Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended.

Federal Emergency Management Agency (FEMA) Regulations, 44 CFR Part 206, Subparts M and N, and Part 79.



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FEMA Regulations, 44 CFR Part 13, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments.

Single Audit Act of 1984.

Revised Code of Washington, Chapter 38.52, Emergency Management.

### XVI. DEFINITIONS

Selected definitions are shown below. A complete list of applicable definitions is found in 44 CFR Subpart N.

**Applicant** means a state agency, local government, special district, eligible private non-profit organization, or Indian Tribe seeking grant funding.

**Governor's Authorized Representative (GAR)** is the individual designated by the Governor to represent the state in activities related to the implementation of Public Law 93-288 as amended, and to serve as the Grant Administrator of funds.

**Grant** means an award of financial assistance.

**Grantee** shall mean the State of Washington.

**Mitigation Grant Review Committee** means the multi-member grant application review body at the state level.

**Project** means any eligible mitigation measure or action to reduce risk of future damage, hardship, loss, or suffering from disasters. The terms "project" and "measure" are used interchangeably in federal regulations.

**State Hazard Mitigation Officer (SHMO)** means the individual designated as the responsible individual for all matters related, overall, to the Hazard Mitigation Grant Program, and the Sections 404 and 409 respectively of PL 93-288, as amended. For the State of Washington, this function is conducted by the Department's State Hazard Mitigation Programs Manager, who has responsibilities for the daily operations and technical aspects of the program, hazard mitigation planning, and administering the Hazard Mitigation Grant Program and other FEMA-funded mitigation programs as noted in this document and the State Enhanced Hazard Mitigation Plan.

**Subgrant** means an award of financial assistance under a grant to an eligible Applicant.

**Subgrantee** means the Applicant, government or other legal entity to which a sub-grant is awarded and which is accountable to the grantee for the use of the funds provided. *(This is the wording used to reference the Applicant on the FEMA funding documents.)*



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**State Enhanced Hazard Mitigation Plan** is the state document that complies with the requirements of 44 CFR Part 201 that identifies hazards that impact the state, state facilities vulnerable to those hazards, statewide hazard damage reduction goals and strategies, the means to accomplish them, and a time frame for implementation.

### V. Assessment of Mitigation Actions

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**Requirement 44 CFR §201.5(b)(2)(iv):** Document the system and strategy by which the State will conduct an assessment of the completed mitigation actions and include a record of the effectiveness (actual cost avoidance) of each mitigation action.

Historically, the EMD Mitigation section assessed mitigation actions with loss avoidance studies when manpower and funding were available, or relied upon FEMA to provide loss avoidance studies for projects. FEMA has provided a number of such studies, including, but not limited to the following, which are some of the most recent studies:

- “Evaluating Losses Avoided Through Hazard Mitigation.” *City of Centralia, Washington.* (2008)
- “Measuring Success Hazard Mitigation.” Rainier Manor Mobile Home Park, Sumner, Washington. (2007)
- “Evaluating Losses Avoided Through Hazard Mitigation.” *City of Snoqualmie, Washington.* (2007)

The EMD Mitigation section contracted out two Loss Avoidance Studies for the 2013 plan update. The first was a flood study in Lewis County around the City of Centralia for elevation projects paid with mitigation funds. The second was a seismic study of earthquake retrofits projects in western Washington paid with mitigation funds. The Loss Avoidance Studies are included in the appendices. Extracts from the two studies are below.

Flood loss avoidance studies are typically done when a major flood event occurs after homes have been elevated. For the present study, this is not the case. The most recent significant flood event in Centralia was the January 2009 flood, which was a much smaller event than the December 2007 event. Furthermore, the elevations of many of the homes elevated after the December 2007 event were completed after the January 2009 flood. Therefore, for the present study, we consider flood “scenarios”—specific flood events such as a 100-year event and the December 2007 event. This loss avoidance study compares the estimated damages for the 24 homes at the pre-elevation first floor elevations to those at the post-elevation first floor elevations.

The 2013 loss avoidance study is complicated by the fact that FEMA’s flood hazard analysis and floodplain mapping was revised in 2010, with substantial changes. FEMA’s November 11, 2010 Flood



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Insurance Study (FIS) for Lewis County, Washington and Incorporated Areas and the associated FIRMs are “preliminary,” which means they are not yet final or adopted by local jurisdictions. Nevertheless, this data represents the latest and most accurate flood hazard data available for Centralia and vicinity.

The flood hazard data in the 2006 and 1981 studies were essentially identical. However, the 2010 study has substantially higher stream discharges and correspondingly higher flood elevations for the 10-, 50-, 100- and 500-year flood events than the 2006 and 1981 studies. These changes are very important, not only for the present loss avoidance study, but also for flood mitigation planning and implementation of flood mitigation measures in Centralia and vicinity. The 24 homes elevated after the December 2007 flood were elevated to at least 2.0 feet above the then-current 100-year flood levels, based on the FEMA 1981 or 2006 flood data. Based on the 2010 FEMA flood data, the 100-year flood elevation and other flood elevations are substantially higher. The result is that the elevated homes have higher residual flood risk after elevation than previously thought to be the case, based on the FEMA 1981 or 2006 flood data.

Three flood scenarios were used to determine the avoided losses from flood damage. For the 2006 FEMA 100-Year Flood event, there are no damages after elevation because all 24 homes were elevated at least 2 feet above this flood level. For the 2010 FEMA 100-Year Flood, the total damages and losses are just over \$1 million because 19 of the 24 elevated homes would have shallow flooding since the 2010 FEMA 100-Year Flood elevations are significantly higher than the 2006 FEMA 100-Year Flood elevations. The pre-elevation damage and losses are \$5,336,725. For the Flood of Record (December 2007), the total damages and losses are over \$1.7 million because 19 of the 24 elevated homes would have shallow flooding since the flood of record is higher than the 2010 FEMA 100-Year flood. Overall, Elevating homes is highly effective in eliminating or reducing damages from flooding, but not 100% effective for floods larger than anticipated at the time of the elevation project. Floods greater than the 100-year flood, such as the December 2007 flood of record, can and do occur. In events larger than the 100-year flood, some elevated homes may still have damages, although water depths and damages will be much lower than if the homes had not been elevated.

2006 FEMA 100-Year Flood Total Damages and Losses	
Before Elevation	\$2,954,999
After Elevation	\$0
Avoided	\$2,954,999
Percent Reduction	100%

2010 FEMA 100-Year Flood Total Damages and Losses	
Before Elevation	\$5,336,725
After Elevation	\$1,018,166
Avoided	\$4,318,559
Percent Reduction	81%

Flood of Record (Dec 2007) Total Damages and Losses	
Before Elevation	\$5,778,091
After Elevation	\$1,745,273
Avoided	\$4,032,818
Percent Reduction	70%

Ten earthquake scenarios were used to determine the avoided losses from seismic damage for eight projects. The Average Annualized Loss (AAL) was calculated for each project to allow for comparison. The Average Annualized Loss addresses two key components of seismic risk: the probability of ground motion in terms of physical damage and economic loss. Average Annualized Loss also takes into account the regional variations in seismic risk. Average Annualized Loss annualizes expected losses by averaging



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losses per return period (100; 250; 500; 750; 1,000; 1,500; 2,000; and 2,500 years), which factors in historic patterns of smaller but more frequent earthquakes with those that are larger in magnitude but are infrequent in nature. This methodology enables the comparison of risk to occur between different geographic areas. The study also ran a Seattle Fault event and Cascadia Fault event. All ten scenarios showed substantial damage losses avoided plus casualties avoided.

### EQ Losses avoided [all values are in \$1,000's] (without casualties avoided)

Scenario	1 (SLU)	2 (UWBM)	3 (CLT)	4 (WRS)	5 (QACC)	6 (RH-ESC)	7 (PLU)	8 (FSR)
2,500	\$6,818.5		\$1,809.8	-	\$3,012.2	\$4,756.7	\$3,313.6	\$499.9
2,000	\$6,801.9		\$1,764.9	-	\$2,882.3	\$4,573.1	\$3,274.6	\$359.3
1,500	\$6,596.5	-	\$1,623.3	-	\$2,530.5	\$4,090.9	\$3,122.8	\$240.3
1,000	\$6,187.4	-	\$1,366.3	-	\$2,190.9	\$3,138.8	\$3,090.7	\$144.0
750	\$5,837.5	-	\$1,176.6	-	\$1,873.4	\$2,638.1	\$2,900.0	\$86.2
500	\$4,641.6	-	\$791.3	-	\$1,262.6	\$1,588.6	\$2,288.7	\$56.7
250	\$2,612.3	-	\$328.3	-	\$531.8	\$673.9	\$1,221.4	\$48.8
100	\$747.6	-	\$71.9	-	\$121.3	\$184	\$308.3	\$39.7
AAL	16.7	96.0	3.4	91.6	5.5	8.1	8.0	0.6
Seattle Event	\$4,390.1	-	\$11.1	-	\$923.6	\$25.7	\$25.7	\$453.7
Cascadia Event	\$2,663.4	-	\$173.4	-	\$265.9	\$747.0	\$558.9	\$50.4

### EQ Losses avoided [all values are in \$1,000's] (with casualties avoided)

Scenario	1 (SLU)	2 (UWBM)	3 (CLT)	4 (WRS)	5 (QACC)	6 (RH-ESC)	7 (PLU)	8 (FSR)
2,500	\$10,264.4		\$4,340.6	-	\$4,116.1	\$7,594.2	\$5,619.4	\$530.8
2,000	\$10,175.1		\$4,208.5	-	\$3,920.6	\$7,276.7	\$5,520.6	\$378.6
1,500	\$9,766.3	-	\$3,818.5	-	\$3,415.9	\$6,457.8	\$5,198.1	\$251.2
1,000	\$9,068.8	-	\$3,132.8	-	\$2,923.4	\$4,865.9	\$5,049.0	\$149.2
750	\$5,837.5	-	\$1,176.6	-	\$1,873.4	\$2,638.1	\$2,900.0	\$86.2
500	\$6,553.2	-	\$1,703.6	-	\$1,640.4	\$2,372.5	\$3,564.3	\$58.0
250	\$3,473.0	-	\$642.6	-	\$666.4	\$959.6	\$1,774.0	\$49.0
100	\$887.5	-	\$115.4	-	\$142.3	\$231.7	\$386.7	\$39.7
AAL	23.0	96.0	7.2	91.6	7.1	12.0	12.2	0.6
Seattle Event	\$4,390.1	-	\$11.1	-	\$923.6	\$25.7	\$72.6	\$453.7
Cascadia Event	\$3,513.4	-	\$297.5	-	\$316.4	\$1,023.6	\$789.2	\$50.4

All mitigation projects funded with federal monies must meet the minimum benefit cost analysis ratio of 1.0. EMD hired a BCA consultant to ensure all projects proposed for federal mitigation funding meet the BCA threshold. At closeout, the BCA is reviewed to ensure final numbers match or surpass the initial BCA ratio.

Washington State is actively involved in FEMA's RiskMap project. It may be determined at the time the analysis is to be conducted that if a jurisdiction's flood information is near completion, it may be more beneficial to await the release of the new data to determine effectiveness of a project, rather than utilizing older data. Likewise, the State is currently conducting seismic studies at various locations statewide. If studies are forthcoming within a relatively short period of time which will allow for more



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viable analysis, it may be determined that new ShakeMaps should be utilized, rather than completing a Loss Avoidance Study immediately after the completion of a project.

It is the intent of the state to complete a loss avoidance study for the majority of all completed projects after 2013 for the next plan update. The intent is to review the project database no less than every six months to determine whether projects have been completed, and once completed, to conduct the analysis within a relatively short period of time.

### VI. Effective Use of Available Mitigation Funding

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**Requirement 44 CFR §201.5(b)(3):** Demonstrate that the State effectively uses existing mitigation programs to achieve its mitigation goals.

The State of Washington effectively uses mitigation programs to achieve its mitigation goals. Among the primary mitigation programs of the state are the federally funded, state-administered hazard mitigation programs (HMGP, PDM, and FMA) and the state's Growth Management Act (GMA), Shoreline Management Act (SMA) and Flood Control Assistance Account Program (FCAAP). In addition there are the relatively new federally funded, state-administered hazard mitigation programs Repetitive Flood Claims (RFC) and Severe Repetitive Loss (SRL). Each of these programs has established its own mitigation goals, strategies and/or objectives. The state mitigation goals from the *Mitigation Strategy*, SHMP can be reviewed below.



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### State Mitigation Goals and Objectives

#### Goal 1: Protect Life.

- Objective 1.1 – Improve systems that provide warning and emergency communications.
- Objective 1.2 – Develop or amend laws so they effectively address hazard mitigation.
- Objective 1.3 – Reduce the impacts of hazards on vulnerable populations.
- Objective 1.4 – Strengthen state and local building code enforcement.
- Objective 1.5 – Train emergency responders.

#### Goal 2: Protect Property.

- Objective 2.1 – Protect assets, particularly critical assets.
- Objective 2.2 – Protect and preserve facility contents.
- Objective 2.3 – Reduce repetitive and severe repetitive losses.

#### Goal 3: Promote a Sustainable Economy.

- Objective 3.1 – Provide incentives for mitigation initiatives.
- Objective 3.2 – Continue critical business operations.
- Objective 3.3 – Form partnerships to leverage and share resources.

#### Goal 4: Protect the Environment.

- Objective 4.1 – Develop hazard mitigation policies that protect and improve the

#### Goal 5: Increase Public Preparedness for Disasters.

- Objective 5.1 – Improve the understanding of natural hazards and the risk they pose.
- Objective 5.2 – Improve hazard information, including databases and maps.
- Objective 5.3 – Improve public knowledge of hazards and protective measures so individuals appropriately respond during hazard events.
- Objective 5.4 – Develop new policies to enhance hazard mitigation initiatives.

The state-administered hazard mitigation programs require applicants to develop projects that support the hazard mitigation goals and objectives of the state's hazard mitigation strategy. Applicants seeking funds from the HMGP, PDM, FMA, RFC and SRL programs are asked to address the state and federal criteria, developed primarily from the goals and objectives of the state mitigation strategy, goals, and objectives above. The HMGP and PDM programs are specifically linked with objectives 1.3, 2.1-2.3, 3.1, 5.2 and 5.3. These objectives focus primarily on protecting life and property while promoting mitigation and preparedness. The FMA, RFC and SRL are primarily focused on objectives 1.3, 2.1-2.3 and 3.1 which deal primarily with protecting life and property with RFC and SRL focusing very specifically on objective 2.3 to reduce repetitive loss. Through ensuring that all mitigation projects are acceptable (see section III above) and assessing the projects for cost effectiveness (see section IV above), the projects are shown to be effective in achieving the state's goals.

Washington State emphasizes effectiveness in the hazard mitigation programs it administers. The state does this, in part, by marketing the programs to all eligible applicants and then working with them to develop the best possible projects. See section III above for a description of the process of soliciting applications and working with applicants to develop their documents. For the HMGP, the state typically receives applications that request up to 10 times the amount of available funding. This allows the state



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to select and recommend for funding only the best and most cost-effective projects. The initial new program promotional hurdles have been surpassed and the state is now receiving awards for RFC and SRL projects. In addition, the state revised its applicant scoring criteria to promote projects that resolve repetitive damaged properties.

Washington State Emergency Management requests state legislative appropriation of half the local match component after all federally declared disasters. The state's commitment to post disaster mitigation exceeds \$20 million dollars.

The Hazard Mitigation Grant Program Table demonstrates effective use of HMGP funds. The Total column shows the total HMGP award amount, which includes the federal, state and local shares, for the disasters for which the program was available. The Spent column shows actual dollars spent on that disaster under the HMGP. The Requested column shows, through letters of intent or actual applications, funding sought by potential applicants; figures listed are for disasters in which data was readily available. From disaster 1100 (February 1996 floods) through disaster 1817 (January 2009 floods), approved projects include approximately, 52 hazard mitigation plans, 41 acquisition projects (each project could include more than one structure), 33 elevation projects, 38 seismic retrofit projects, and 44 other projects that fall into other categories including minor localized flood reduction and infrastructure retrofitting.

The Flood Mitigation Assistance Program Table demonstrates effective use of FMA funds. Typically, due to limited funding available in any one year, project funds are used for a single project, such as a group of acquisitions or elevations proposed by a local jurisdiction. The same is true for planning funds. From 1996 through 2009, FMA funds have gone toward five acquisition projects, five elevations, and six flood mitigation plans. SRL awards are included in the FMA table.

The Pre-Disaster Mitigation Program Table demonstrates effective use of funds made available through the PDM. In program years 2002 and 2003, the state made all its planning money available to local jurisdictions developing local hazard mitigation plans. From 2002 through 2009, PDM funds have gone toward 29 hazard mitigation plans, three acquisitions, two elevations, eight seismic retrofits, and eight other projects that fall into other categories including minor localized flood reduction and infrastructure retrofitting. FY11 planning awards were for six county based multiple jurisdictional plan updates.



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Hazard Mitigation Grant Program Since 1989								
Date	Type	Disaster #	Federal Share	State Match	Local Match	Total	Spent*	Requested**
Apr-89	Floods	FEMA-822	\$200,840	\$100,420	\$706,203	\$1,007,463	\$1,011,852	\$401,680
Jan-90	Floods	FEMA-852	\$1,320,360	\$660,180	\$660,180	\$2,640,720	\$2,640,720	\$4,238,389
Nov-90	Floods	FEMA-883	\$3,221,872	\$1,610,936	\$1,610,936	\$6,443,744	\$7,096,387	\$7,073,377
Dec-90	Floods / Storms	FEMA-896	\$193,000	\$96,500	\$253,600	\$543,100	\$543,100	\$543,100
Oct-91	Fires	FEMA-922	\$70,616	\$0	\$70,616	\$141,232	\$141,232	\$141,232
Jan-93	Windstorm	FEMA-981	\$843,032	\$421,516	\$2,066,985	\$3,331,533	\$3,331,533	\$3,331,533
Aug-94	El Nino / Salmon	FEMA-1037	\$866,700	\$144,450	\$144,450	\$1,155,600	\$1,155,600	\$1,155,600
Nov-95	Floods	FEMA-1079	\$4,863,497	\$868,483	\$868,483	\$6,600,463	\$6,600,463	\$50,189,864
Feb-96	Floods	FEMA-1100	\$14,900,229	\$2,483,372	\$2,483,372	\$19,866,973	\$19,883,305	\$46,122,755
Nov-96	Ice Storm	FEMA-1152	\$1,200,000	\$200,000	\$200,000	\$1,600,000	\$1,706,373	\$1,600,000
Dec-96	Winter storms	FEMA-1159	\$11,000,109	\$1,833,406	\$1,833,406	\$14,666,921	\$15,543,535	\$56,764,903
Mar-97	Floods	FEMA-1172	\$964,914	\$160,819	\$160,819	\$1,286,552	\$1,286,552	\$6,902,914
Jun-97	Floods	FEMA-1182	\$74,940	\$12,400	\$12,400	\$99,740	\$99,200	\$99,200
Oct-98	Floods	FEMA-1252	\$1,106,899	\$184,483	\$184,483	\$1,475,865	\$1,475,865	\$5,573,335
Oct-98	Landslide	FEMA-1255	\$5,051,948	\$841,991	\$841,991	\$6,735,930	\$6,735,931	\$22,347,870
Mar-01	Earthquake	FEMA-1361	\$19,591,125	\$3,265,188	\$3,265,188	\$26,121,501	\$25,144,643	\$319,511,577
Oct-03	Floods	FEMA-1499	\$741,957	\$129,033	\$118,286	\$989,276	\$1,010,462	\$14,700,000
Feb-06	Winter Storm	FEMA-1641	\$1,094,250	\$182,375	\$182,375	\$1,459,000	\$764,816	\$5,755,930
Nov-06	Floods / Storms	FEMA-1671	\$7,129,755	\$1,238,492	\$1,138,093	\$9,506,340	\$3,372,094	\$115,403,956
Dec-06	Windstorm	FEMA-1682	\$5,773,105	\$1,012,264	\$912,103	\$7,697,473	\$4,310,080	\$53,394,616
Dec-07	Floods	FEMA-1734	\$11,976,387	\$1,996,065	\$1,996,064	\$15,968,516	\$8,458,525	\$74,397,382
Jan-09	Floods / Storms	FEMA-1817	\$11,628,628	\$1,453,579	\$1,453,579	\$14,535,785	\$6,116,071	\$124,065,279
Dec-08	Winter storms	FEMA-1825	\$5,131,637	\$855,273	\$855,273	\$6,842,183	\$2,890,806	\$0
Jan-11	Floods / Storms	FEMA-1963	\$1,463,196	\$182,900	\$182,900	\$1,828,995	\$19,754	\$2,328,096
Jan-12	Winter Storm	FEMA-4056	\$4,851,817	\$606,477	\$606,477	\$6,064,771	\$387	\$2,861,171
Jul-12	Windstorm***	FEMA-4083	\$1,416,666	\$0	\$472,222	\$1,888,888	\$0	\$0



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<b>Totals</b>	<b>\$116,677,479</b>	<b>\$20,540,601</b>	<b>\$23,280,483</b>	<b>\$160,498,564</b>	<b>\$121,339,286</b>	<b>\$918,903,759</b>
<b>Cost Shares</b>	<b>72.70%</b>	<b>12.80%</b>	<b>14.51%</b>	<b>100%</b>		

Source: EMD Statistics, specifically 3Q2012 Disaster HMGP Quarterly and Closeout Reports to FEMA. Updated December 2012.

\* -- For those disasters whose amount spent exceeds the amount available, the applicant paid the difference.

\*\* -- Column shows requested amounts through letters of intent or applications for disasters whose records are readily available.

\*\*\* -- The final funding amounts have not been officially locked in.

Closed HMGP Disaster Grants; no additional spending anticipated.



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Flood Mitigation Assistance Program since 1996

Year	Federal	Local	Total
1996/97 Planning	\$33,041	\$11,014	\$44,055
1999 Planning	\$18,680	\$6,200	\$24,880
1999 Project	\$242,130	\$80,710	\$322,840
2000 Planning	\$21,321	\$7,107	\$28,428
2000 Project	\$181,005	\$60,335	\$241,340
2001 Project	\$161,067	\$53,689	\$214,756
2002 Project	\$126,390	\$42,130	\$168,520
2003/04 Planning	\$66,100	\$26,168	\$92,268
2003/04 Project	\$54,614	\$18,205	\$72,819
2006 Project	\$189,900	\$83,220	\$273,120
2007 Planning	\$20,800	\$6,973	\$27,773
2007 Project	\$461,250	\$153,750	\$615,000
2009 Project	\$227,915	\$75,972	\$303,887
2010 Project	\$844,877	\$281,626	\$1,126,503
2011 Project	\$934,196	\$103,800	\$1,037,996
Totals	\$3,583,286	\$1,010,899	\$4,594,185

source: EMD Mitigation Section Statistics, December 2012

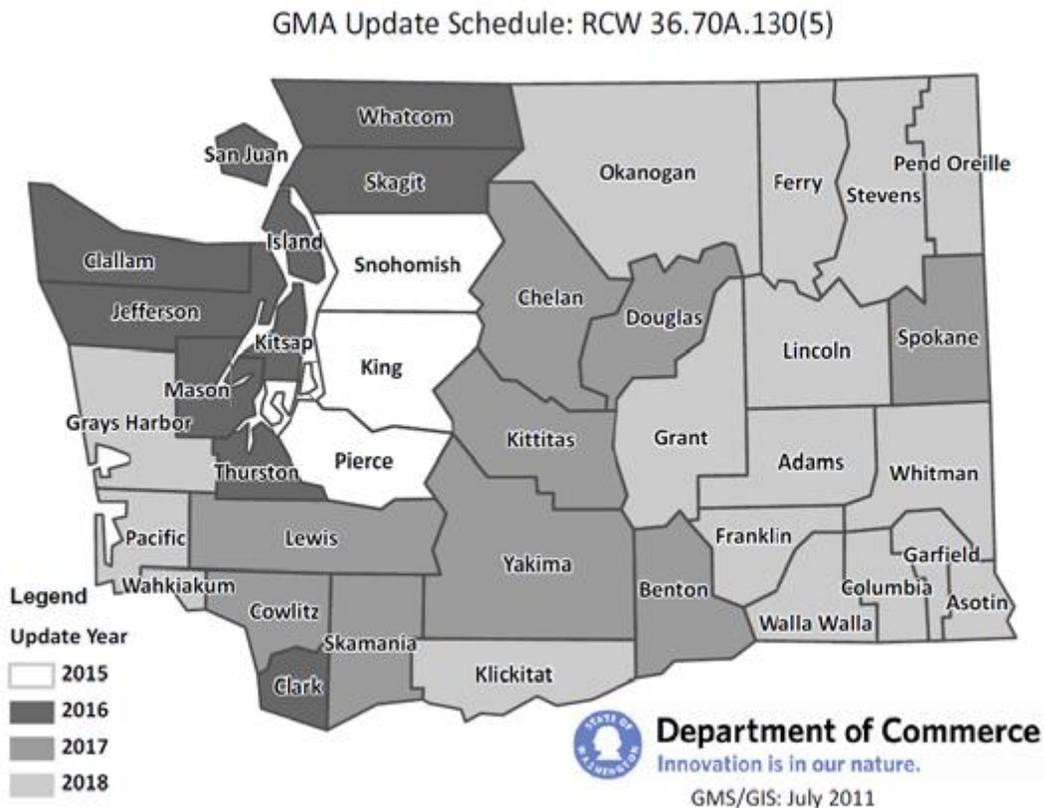
Pre-Disaster Mitigation Program since 2002

Year	Federal	Local	Total
2002 Planning	\$381,623	\$127,208	\$508,831
2003 Planning	\$206,028	\$68,676	\$274,703
2003 PDMc Planning	\$219,554	\$73,184	\$292,739
2003 PDMc Project	\$671,963	\$223,988	\$895,950
2005 PDMc Planning	\$1,052,931	\$351,044	\$1,403,976
2005 PDMc Project	\$7,429,641	\$3,684,939	\$11,123,330
2006 PDMc Planning	\$56,250	\$18,750	\$75,000
2006 PDMc Project	\$56,250	\$18,750	\$75,000
2007 PDMc Planning	\$41,250	\$13,750	\$55,000
2007 PDMc Project	\$2,283,680	\$2,533,088	\$4,816,768
2008 PDMc Planning	\$75,000	\$25,000	\$100,000
2008 PDMc Project	\$774,965	\$258,322	\$1,033,287
2008 L-PDM Planning	\$229,800	\$76,600	\$306,400
2008 L-PDM Project	\$1,136,186	\$369,729	\$1,505,915
2009 PDMc Planning	\$369,252	\$123,085	\$492,337
2010 PDMc Planning	\$73,107	\$24,369	\$97,476
2010 L-PDM Project	\$750,000	\$250,000	\$1,000,000
2011 PDMc Planning	\$2,618,183	\$935,090	\$3,553,275
2011 PDMc Project	\$1,199,250	\$399,750	\$1,599,000
Totals	\$19,624,913	\$9,575,322	\$29,208,987

source: EMD Mitigation Section Statistics, December 2012

The Growth Management Act (GMA), Shoreline Management Act (SMA) and Flood Control Assistance Account Program (FCAAP) are also examples of the state’s effective use of mitigation programs to achieve the mitigation goals listed in the Element C, *Mitigation Strategy*, SHMP. See section II of this plan for more complete descriptions of these programs and the funds budgeted for the current biennium. Refer to the state’s goals and objectives listed at the beginning of this section when reviewing the objectives delineated below which each program endeavors to achieve.

The GMA’s primary purpose related to natural hazard mitigation is to identify and protect the functions and values of critical areas (frequently flooded and geologically hazardous areas). In so doing, the GMA is specifically linked to objectives 1.2., 1.3, 2.1, 2.3, and 4.1. By requiring cities and counties to identify critical areas and establish regulations to protect and limit development in those areas, the GMA strives to protect life, property and the environment. Many local ordinances originally were prepared in the 1990s. Beginning in 2004, the state legislature created minimum standards for review and compliance for cities and counties to review and update their comprehensive plans, development regulations and critical areas on a 7-year cycle. Legislation passed in 2011 extended the time between mandated growth management plan / development regulation and shoreline plan updates to every eight years. The first block of counties and cities must complete their updates by June 30, 2015 instead of December 1, 2014. The Department of Commerce provides state grants to local jurisdictions for GMA planning assistance.



The Shoreline Management Act (SMA) regulations cover the use and protection of and access to shoreline resources. It primarily supports objectives 1.2 and 4.1 of the Mitigation Strategy. Prior to

December 2003 when the state adopted new regulations requiring all communities to update their Shoreline Master Plans by 2014, many cities and counties had not updated their plans since they first adopted them in the 1970s indicating a limited effectiveness of the program. Beginning June 30, 2019, each county, and the cities within each county, must review and revise their shoreline master programs on an eight-year cycle, rather than the current seven-year cycle. Since 2003, the Department of Ecology has provided over \$10 million in grant funding for local jurisdictions to update their SMPs. Funding levels are based on a variety of factors, including miles of shoreline, population, and area. This regulation and funding demonstrates the state's commitment to this program and its objectives.

The Flood Control Assistance Account Program (FCAAP) purpose is to protect human life and property from flood related incidents. In so doing, it supports objectives 1.2, 1.3, 2.3, 3.1 and 4.1 of the Mitigation Strategy. Despite struggling for funding, communities have continued to make floodplain management a priority thus ensuring the success of the program in meeting its objectives. Local governments have exceeded the minimum requirements established by NFIP regulations with numerous innovations in the field of floodplain management, including but not limited to: higher freeboard standards (Everett, Pierce and Chelan County); prohibiting fill for structural support of residential buildings in floodplains (Skagit and King Counties); providing storage to compensate for filling floodplains (numerous localities); prohibiting new residential structures in the floodplain (Thurston County); and exceeding federal standards for floodways (Pierce County). See *Floodplain Management in the State of Washington: A Status Report as of February 2004* for additional examples. In addition, a review of the Table below will show a direct correlation between those counties identified by the state as most at risk for flooding and the Department of Ecology's disbursement of FCAAP funds for floodplain management and flood hazard reduction indicating program funds are being put to their most effective use (the table below can also be reviewed in Element B, *Risk Assessment, Flood Hazard Profile, SHMP*).

In addition, the Department of Ecology is a full mapping partner with FEMA in their Map Modernization program in an effort to more accurately identify flood hazard areas for local governments. From 2004 – 2009, Ecology participated in Map Modernization projects in 18 counties covering 220 communities utilizing \$2.7 million in FEMA funds and \$1.3 million in FCAAP funds in support of mapping updates. FEMA has started RiskMAP projects for all of the state's coastal counties (Pacific coast and Puget Sound) in 2012. However, many of the mapping projects initiated have become stalled by the national debate over levee policy. Nonetheless, Washington State is poised to have many digital flood maps become finalized in the upcoming years. Although FCAAP funds were reduced in the past two state bienniums that eliminated the competitive portion of the program, the balance of funds have been applied to the Green River system, primarily to improve the levee system protecting one of the state's most productive economic area. The Howard Hanson Dam has been restored to its operational capacity. It is the principal flood abatement feature in the Green River corridor. Ecology expects the FCAAP funding to be fully restored in a forthcoming legislative session.

The 2012-2013 Puget Sound Partnership Action Agenda serves as the State of Washington's plan to recover the Puget Sound ecosystem by 2020. The Action Agenda identifies the protection and restoration of floodplain (river and estuarine) functions as one of the highest ecosystem recovery priorities and includes a strategy to Protect and Restore Floodplain Function. The Action Agenda sets a two-part 2020 recovery target for floodplains in the Puget Sound: 1) 15 percent of degraded floodplain areas are restored or floodplain projects to achieve that outcome are underway across Puget Sound; and 2) there is no additional loss of floodplain function in any Puget Sound watershed relative to a 2011 baseline. FEMA PDM and HMGP mitigation investments can support these targets. The local actors are proposing and implementing mitigation projects that can specifically support the Action Agenda floodplain target.

Ecology has joined with EPA, FEMA, NOAA, Puget Sound Partnership, The Nature Conservancy, USACE, and USGS in the Floodplains by Design project, a multi agency effort aimed at achieving the floodplain recovery target through improved coordination and alignment of programs focused on various aspects of floodplain management. The Floodplains by Design partnership will help identify the places where the opportunity to pursue mutually beneficial actions (i.e. those that mitigate flood risks and advance the recovery target) can be jointly pursued. One of the first projects is to overlay insurance claims, Severe Repetitive Loss (SRL), and Repetitive Loss (RL) properties against fish restoration habitat in a GIS environment to identify properties for functional evaluation as future buyout properties that will provide both flood mitigation and fish habitat benefits.

Subsequent to this, the Floodplains by Design partnership will be completing a more comprehensive analysis of floodplain functions and flood risks across the 17 major river systems in Puget Sound. This assessment will identify the places in Puget Sound that offer the greatest opportunity to implement multi-objective floodplain management projects that both mitigate flood risks and restore salmon habitat/ecosystem functions. Both of these analyses can serve to help guide state and federal hazard mitigation investments in ways that advance the State’s interests in Puget Sound ecosystem recovery in addition to advancing priority hazard mitigation needs.

Comparison of Jurisdictions Most At Risk to Flood and Flood-Related Investments  
 2010 State Mitigation Plan                      Map Mod                      FCAAP 1985 – 2009

Jurisdictions Most at Risk	Start Date	Rank SHMP	Funding
1. Grays Harbor County	2006	5	\$2,115,000
2. King County	2005	3	\$4,337,000
3. Lewis County	2005	1	\$1,570,000
4. Snohomish County	2006	1	\$3,568,000
5. Skagit County	2003	2	\$3,724,000
6. Pierce County	2003	4	\$4,760,000
7. Thurston County	2006	6	\$1,383,000
8. Cowlitz County	2006	7	\$995,200
9. Whatcom County	2003	6	\$2,573,000
10. Clark County	2003	8	\$985,000

Source: Washington Department of Ecology

## VII. Commitment to a Comprehensive Mitigation Program

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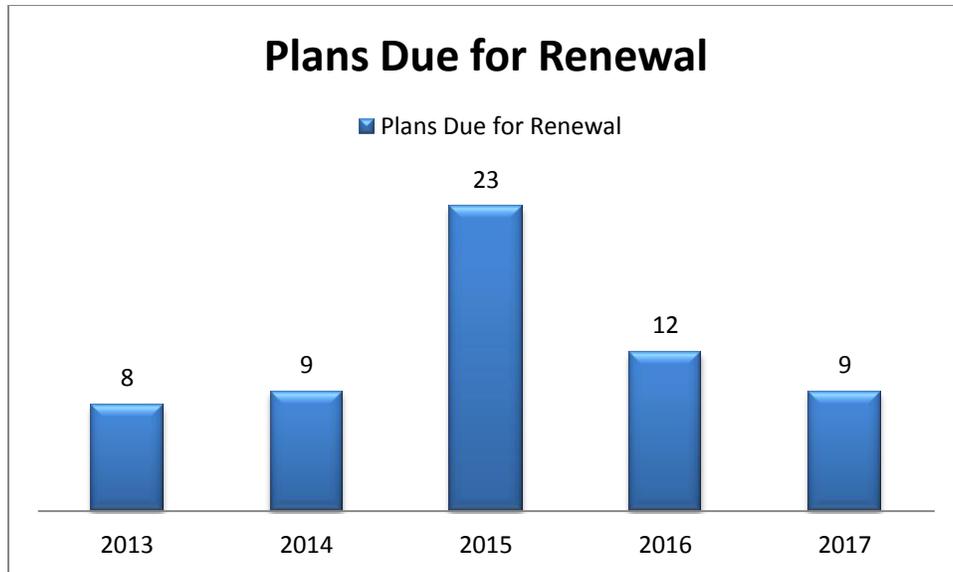
**Requirement 44 CFR §201.5(b)(4)(i-iv):** Demonstrate that the State is committed to a comprehensive mitigation program, which might include any of the following:

**Requirement 44 CFR §201.5(b)(4)(i):** A commitment to support local mitigation planning by providing workshops and training, State planning grants, or coordinated capability development of local officials, including Emergency Management and **Floodplain** Management certifications.

As described in more detail in the Enhanced Plan Element, *Coordination of Local Mitigation Planning*, the State EMD Mitigation Section staff continued to provide support to local planning initiatives during this update cycle. The level of assistance requested and provided by Mitigation Section staff varied by community and their level of experience and knowledge, as well as by complexity of issues and the numbers of jurisdictions involved in a particular plan. Anecdotally, it appears counties are moving towards multiple jurisdictional hazard mitigation plans instead of individual cities and special purpose districts submitting their own hazard mitigation plans except for some of the most urbanized counties.

### Hazard Mitigation Planning Status in the State

Washington State has 39 counties. As of October 31, 2012, twenty-nine counties have current plans while ten counties have expired plans. Of those, eight counties are actively updating their expired plans. Adams and Klickitat counties have not had the emergency management staffing in recent years to oversee a contractor or a jurisdictional team to develop a county or multiple jurisdictional hazard mitigation plan despite the state's mitigation section staff repeated attempts to get them to fill out a PDM or HMGP planning application. Three county plans are due for renewal in 2013 and in the update process. Most county plans are multiple jurisdictional hazard mitigation plans that include cities and special purpose districts components. The next bubble of local plans due for renewal is 2015-2016.



There are 61 approved local and tribal hazard mitigation plans in Washington. While the number of overall plans is down, many of the individual plans have become regional or countywide plans, which include many more jurisdictions, and special purpose districts than the original individual plans. These plans cover in excess of 400 local jurisdictions – cities, towns, counties, special districts such as schools, hospitals, fire, cemetery, water, sewer, dike and flood control districts, and a handful of private, non-profit organizations. Consequently, less than 40,000 residents are not covered by a hazard mitigation plan, with only Adams and Klickitat Counties without plans. Thus, 99.43 percent of the state’s population of 6,817,770 is covered by a hazard mitigation plan.

During the period 2010 to 2013, 51 plans were initiated / reviewed by the state Mitigation Section staff and 40 plans were approved by FEMA. These include:

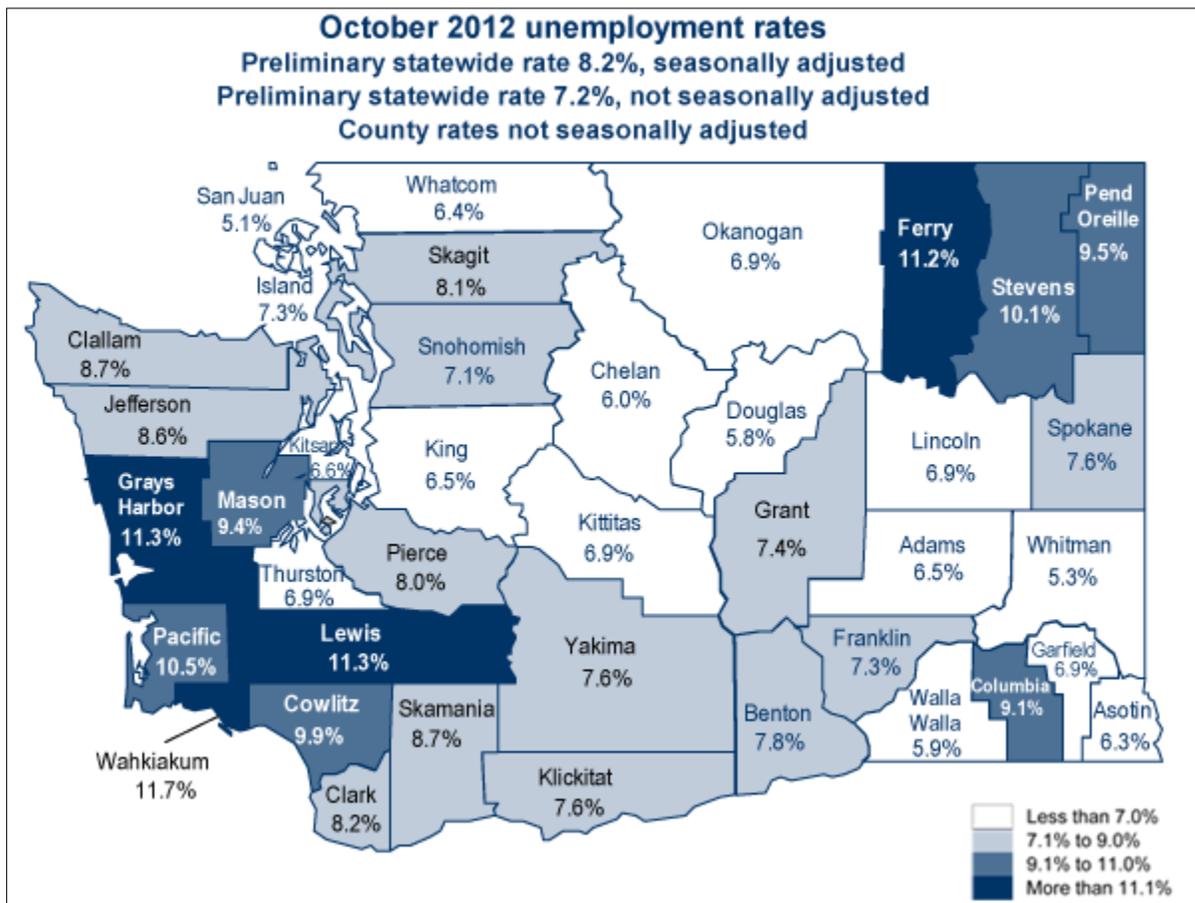
- 18 County plans
- 9 City Plans
- 9 Tribal Plans
- 4 Special Purpose Districts

The map below depicts the status of local hazard mitigation planning initiatives. All the counties with expiring or expired plans are either actively working on their updates or awaiting federal grant funds to help pay for the update effort.



### Economic Conditions of the State

The condition of the state's economy directly impacted the update and development process throughout the state. In 2009, 19 of 39 counties in Washington were considered *distressed*, meaning that each of the counties maintained a three-year average unemployment rate equal to or greater than 120% of the statewide unemployment rate. Because of this, many jurisdictions were required to reduce their work force and limit the amount of travel for their employees. This left a large void within many jurisdictions, which lost personnel who, in many cases, were the people who had previously developed the mitigation plans. By late 2012, ten counties remained distressed. Organic, locally funded mitigation planning was not happening at the pace of previous plan update cycles.



### Technical Assistance Needs in the State

State Mitigation Section staff continued to give technical assistance in 2010-2013 because FEMA requirements changed since the original plans were developed. FEMA Mitigation Planning Guidance and Crosswalk Tool for local jurisdictions went into effect October 2012 after a one-year review period. In particular, the Mitigation Strategist attended meetings held in conjunction with other events, which are well attended by representatives from across the state: the Partners in Preparedness Conference, Coastal Sea Level Rise symposiums, and the annual SERC/TERC/LEPC conference held in Eastern Washington to provide outreach. In addition, an extensive amount of one-on-one technical assistance

was also provided via telephone and web-based meetings, as well as several workshops, and many on-site technical assistance sessions.

#### Methods of Delivering Technical Assistance

- site visits – one-on-one or planning teams
- workshops
- attendance at kick-off meetings
- via phone and conference calls
- web-based meetings
- emails
- written correspondence
- classroom setting
- webinars
- attendance at public meetings
- samples and templates

#### Areas in which Technical Assistance was Provided (non-inclusive but most common areas where assistance was provided)

- update versus new plan – differences and what is needed
- kick-off meetings to detail process involved
- public meetings – what fulfills this requirement
- meeting with local planning teams to assist with issue resolution
- mitigation strategy development
- gaining public input and participation
- risk analysis
- capabilities assessment
- plan layout
- data gathering - sources
- HAZUS-MH development
- Benefit-Cost Analysis (BCA) development
- planning process
- planning team development – who should be involved
- NFIP requirements
- Repetitive/Severe Repetitive Loss Properties
- funding sources
- coordination with local planning mechanisms
- inclusion of local jurisdictions, special purpose districts – level of involvement/add-on
- review of plan drafts while under development (to make certain any issues the jurisdiction was experiencing were being handled immediately rather than waiting until the plan was completed)
- GIS maps for jurisdictions that do not have GIS capabilities

#### Requests for Proposals - Bidding Process for Contractor Selection

- assistance with development of the scope of work for contract bids (some jurisdictions require engineering studies for projects as part of their contracts)
- review of bids to determine thoroughness and level of services provided (e.g., were all requirements of plan development included?)

- selection process for contractors – assisted with the creation of questions to ask which would indicate level of experience and knowledge base of contractors

#### Samples/documentation provided to jurisdiction at onset of planning phase

At the beginning of the plan update or development, the Mitigation Strategist provided templates and information to each jurisdiction that would assist in the process. Providing samples of previously approved annexes, plans, templates, etc., proved very effective for many jurisdictions, especially those who were new to planning. Below are some of the examples provided to the planners:

- Crosswalk (new requirement by the state that locals must complete crosswalk and submit along with plan to the state – since this policy was enacted, level of plan accuracy increased dramatically)
- Planning Guidance
- Matrix of Change for Plan Updates
- Community add-on language
- Risk analysis – samples of various ways in which a risk analysis can be conducted
- STAPLEE worksheets
- Special Purpose District Annexes (fire, hospital, school district, water district)
- Resolution for Adoption
- Templates for information gathering (Tetra Tech provided these to the state and has authorized their dissemination to local jurisdictions to assist with plan development for regional and local annexes)
- NFIP guidelines/requirements (provided to us from FEMA Region X)
- Public Meeting Notice
- Newspaper Ads announcing community meetings

#### Training and Workshops delivered

1. L273 Managing Floodplain Development through the National Flood Insurance Program at Seattle March 2011 (33 students)
2. MGT338 Risk and Vulnerability Assessment for Rural Communities at Grays Harbor March 2011 (35 students)
3. Pilot U of H Coastal Floodplain Management at UW June 2011 (25 students)
4. L276 Benefit Cost Analysis (BCA) at Camp Murray July 2011 (23 students)
5. AWR 228 Coastal Community Resilience November 2011 at Clallam County (4 students)
6. G393 Mitigation for Emergency Managers at Ellensburg March 2012 (18 students)
7. AWR 213 CIKR Planning Threat Analysis at Richland March 2012 (35 students)
8. L276 Benefit Cost Analysis (BCA) at Camp Murray May 2012 (27 students)
9. Pilot Seminar Disaster Management for Wastewater Utilities at University Place May 2012 (88 students)
10. NDPTC Coastal Flood Risk Reduction at Bellingham June 2012 (22 students)
11. L273 Managing Floodplain Development through the National Flood Insurance Program at Spokane October 2012 (22 students)
12. Pilot NDPTC Coastal Flood Risk Reduction at Forks February 2013 (anticipating 25 students)
13. L317 Comprehensive Data Management for HAZUS at Tacoma March 2013 (anticipating 20 students)
14. G393 Mitigation for Emergency Managers at TBD Summer 2013 (anticipating 30 students)
15. L273 Managing Floodplain Development through the National Flood Insurance Program at TBD Summer 2013 (anticipating 25 students)

**HMGP OUTREACH/TRAINING PLAN DR-4056 DRAFT 3/30/12**

**HMGP Applications are due on 11/1/12. Formal outreach to occur June 1<sup>st</sup> - October 1<sup>st</sup>. Technical Assistance ongoing until Application deadline**

<b>*TOPIC</b>	<b>TYPE</b>	<b>TIMEFRAME</b>	<b>WHO DELIVERS Where</b>	<b>DATES</b>
LOI Eligibility Screening Interviews	Phone Calls	15 mins-45 min. per call	EMD Mitigation Staff	April 1-May 31, 2012
Notify Eligible HMGP Applicants to Apply	Email		EMD Mitigation Staff	Friday, June 01, 2012
Benefit Cost Analysis (Mark request to FEMA)	Class Training	2 days	FEMA Camp Murray	Tues – Wednesday May 29-30, 2012
Managing Floodplain through NFIP (Mark request to FEMA)	Class Training	3-4 days	FEMA location TBD	Fall - Spokane, Spring - West Side
Acquisition & Elevation Requirements	Webinar	1 hour (2x)	EMD Mitigation Staff	Tuesday, July 24, 2012
Acquisition & Elevation Requirements	Webinar	1 hour (2x)	EMD Mitigation Staff	Tuesday, August 21, 2012
BCA Follow-up on Applicant's specific issues	Webinar	1.5 hours (2x)	EMD Mitigation Staff	Monday, July 09, 2012
BCA Follow-up on Applicant's specific issues	Webinar	1.5 hours (2x)	EMD Mitigation Staff	Tuesday, August 14, 2012
Budget Development	Webinar	1 hour (2x)	EMD Mitigation Staff	Thursday, August 09, 2012
Budget Development	Webinar	1 hour (2x)	EMD Mitigation Staff	Monday, September 10, 2012
Developing a Scope of Work For Planning Initiatives	Webinar	1.5 hours (2x)	EMD Mitigation Staff	Tuesday, June 19, 2012
Developing a Scope of Work For Planning Initiatives	Webinar	1.5 hours (2x)	EMD Mitigation Staff	Tuesday, August 07, 2012
Developing a Scope of Work For Projects	Webinar	1.5 hours (2x)	EMD Mitigation Staff	Monday, June 25, 2012
Developing a Scope of Work For Projects	Webinar	1.5 hours (2x)	EMD Mitigation Staff	Thursday, July 19, 2012
EHP Review / SHPO On-Line Submittal	Webinar	1.5 hours (1x)	Science Kilner / Russ Holter	Thursday, July 12, 2012
EHP Review / SHPO On-Line Submittal	Webinar	1.5 hours (1x)	Science Kilner / Russ Holter	Thursday, July 12, 2012
How to Complete the HMGP Application	Webinar	2 hours (3x)	EMD Mitigation Staff	Tuesday, June 12, 2012
How to Complete the HMGP Application	Webinar	2 hours (3x)	EMD Mitigation Staff	Tuesday, July 17, 2012
How to Complete the HMGP Application	Webinar	2 hours (3x)	EMD Mitigation Staff	Wednesday, September 12, 2012
ICC Compliance & HMGP Grants	Webinar	1 hour (1x)	EMD Mitigation Staff	Friday, June 15, 2012

In total, during the 2011-2013 timeframe, EMD either provided or coordinated training 364 students involved in mitigation planning efforts in a classroom setting. Additionally, 50 students attended BCA training to not only to enhance grant applications, but also mitigation strategy development, as many jurisdictions are completing BCA evaluations on their various structural projects for prioritization of mitigation actions. EMD provided 32 technical assistance webinars for DR-4056 for an estimated 300 attendees.

#### GIS Datasets for Risk Analysis

During the 2010-2013 update cycle, a continued emphasis has been placed on the use of GIS to assist jurisdictions to conduct a more viable risk assessment EMD subcontracted with Washington State Department of Natural Resources (WA-DNR), Division of Geology and Earth Resources (DGER), to perform a Landslide Mapping Project using LiDAR data for the coastal bluffs surrounding the Puget Sound Basin and with the Office of Financial Management (OFM) Facilities Management for a GIS dataset and layer for owned and leased state facilities.

During the previous plan update cycle, EMD supported the augmentation of HAZUS to enable better modeling studies in Washington State. DNR's Division of Geology and Earth Resources (DGER) gathered enhanced information, which jurisdictions can utilize during their risk assessment rather than relying on the HAZUS-MH default data. In addition, a soils and liquefaction hazard maps database, USGS ShakeMaps Scenarios for Washington State for HAZUS earthquake modeling, plus tsunami inundation zone maps remain available for local users. See the Washington HAZUS User Group (WAHUG) website <http://www.usehazus.com/wahug> or the Washington State Geologic Information Portal website [http://www.dnr.wa.gov/ResearchScience/Topics/GeosciencesData/Pages/geology\\_portal.aspx](http://www.dnr.wa.gov/ResearchScience/Topics/GeosciencesData/Pages/geology_portal.aspx).

#### WAHUG Users Group

During the 2010-2013 plan update cycle, the Washington HAZUS User's Group (WAHUG) continued in providing on-site technical assistance for both GIS and HAZUS to Emergency Management and Cartography staff statewide. This technical assistance included general software installation and hands-on instruction for the flood and earthquake models for mitigation planning activities, as well as instruction and assistance understanding the HAZUS reports. A FEMA Region X Risk Analyst from their mitigation section leads the group.

#### Tribal Partners Participation

In previous two plans (2007 and 2010), getting increased tribal partner participation in mitigation planning activities was emphasized. Extensive outreach was provided to those jurisdictions to either create their own plans or integrate into their regional county-based plan updates. Consequently, those tribal partners willing to develop a hazard mitigation plan are either doing so or have completed their plans. Consequently, this planning initiative has been a success. The next effort will be getting tribal partner projects submitted for consideration in getting HMGP / PDM / HMA funding.

#### Technical Assistance for Planning Grants

The Mitigation Section provided over \$4.2 million to help with local plan development in 13 jurisdictions. Funding was provided through the HMGP and PDM. The state provided half of the non-federal match for HMGP-funded hazard mitigation plans.

During the HMGP application periods for DRs 1963, 4056 and 4083, the Mitigation Section staff provided significant technical assistance to local jurisdictions and tribes for both planning and project application development. The staff provided any assistance requested by the subapplicants in order to complete a

successful application. This is demonstrated by the fact that all planning applications submitted under those HMGPs were ultimately sent to FEMA and approved for funding. The below chart details various grant activities during the 2010-2013 timeframe.

Additionally, the Mitigation Section staff hired a Benefit-Cost Analysis (BCA) contractor to review all BCAs submitted with the HMGP project applications for DRs 1963, 4056, and 4083. If the reviews found errors in the BCAs, the staff worked with the local jurisdictions to correct the errors and ultimately complete an accurate BCA. As of the date of this plan, FEMA has not found any of the BCAs in the HMGP applications for DRs 1817 and 1825 to be in error. EMD intends to continue this trend of success with HMGP applications for DRs 1963, 4056 and 4083.

<b>Table of Mitigation Grants for Hazard Mitigation Plans</b>							
<b>Jurisdiction</b>	<b>planning activity</b>	<b>HMGP 1817</b>	<b>HMGP 1963</b>	<b>HMGP 4056</b>	<b>HMGP 4083 (pending LOI)</b>	<b>PDM 10, 11, pending 12</b>	<b>Total Funding</b>
Clallam County	HAZUS data update		\$81,160				\$81,160
Covington, City	<i>new plan</i>			\$49,625			\$49,625
Cowlitz County	plan update	\$115,000					\$115,000
Everett, City	plan update					\$94,476	\$94,476
Island County	plan update			\$149,965			\$149,965
King County	plan update					\$532,386	\$532,386
Pierce County	plan update					\$534,000	\$534,000
Puyallup, City	plan update	\$45,044					\$45,044
Quileute Tribe	<i>new plan</i>			\$74,925			\$74,925
Seattle, City	plan update					\$379,221	\$379,221
Spokane County	plan update					\$550,000	\$550,000
Washington State EMD	plan update					\$457,670	\$457,670
Washington State OSPI	<i>new plan</i>					\$1,099,998	\$1,099,998
Whitman County	plan update	\$134,890					\$134,890
		<b>\$294,934</b>		<b>\$274,515</b>	<b>\$0</b>	<b>\$3,647,750</b>	<b>\$4,217,199</b>

source: EMD statistics on FEMA grants received, November 2012

### **State Floodplain Management Program**

The Washington State Department of Ecology (Ecology) Floodplain Management Program played an important role in state mitigation with respect to flooding events. Program staff assisted communities in administering their local floodplain management programs, making substantial damage

determinations after floods, and ensuring that communities are compliant with their local ordinances. In addition, program staff worked to assist non-participating communities that wished to enter the National Flood Insurance Program (NFIP) and provided technical assistance to participating communities interested in enrolling in the Community Rating System (CRS). Ecology Floodplain Management staff provided technical assistance to the Washington State Hazard Mitigation Advisory Team (SHMAT) as well as mitigation staff in administering the mitigation programs and developing a repetitive loss strategy for the state. Floodplain Management staff provided training to local government and emergency management officials on floodplain management and mitigation. Ecology also developed the Floodplain Management Guidebook, which provided additional planning guidance for local jurisdictions to meet FMA planning requirements with respect to NFIP, floodplain management, and mitigation planning.

Ecology has joined with EPA, FEMA, NOAA, Puget Sound Partnership, The Nature Conservancy, USACE, and USGS in the Floodplains by Design project, a multi agency effort aimed at achieving the floodplain recovery target through improved coordination and alignment of programs focused on various aspects of floodplain management. The Floodplains by Design partnership will help identify the places where the opportunity to pursue mutually beneficial actions (i.e. those that mitigate flood risks and advance the recovery target) can be jointly pursued. One of the first projects is to overlay insurance claims, Severe Repetitive Loss (SRL), and Repetitive Loss (RL) properties against fish restoration habitat in a GIS environment to identify properties for functional evaluation as future buyout properties that will provide both flood mitigation and fish habitat benefits.

Subsequent to this, the Floodplains by Design partnership will be completing a more comprehensive analysis of floodplain functions and flood risks across the 17 major river systems in Puget Sound. This assessment will identify the places in Puget Sound that offer the greatest opportunity to implement multi-objective floodplain management projects that both mitigate flood risks and restore salmon habitat/ecosystem functions. Both of these analyses can serve to help guide state and federal hazard mitigation investments in ways that advance the State's interests in Puget Sound ecosystem recovery in addition to advancing priority hazard mitigation needs.

Additionally, Ecology supported ongoing updates to existing FEMA floodplain mapping and risk reduction programs. Ecology's Floodplain Management Program partnered with FEMA under two FEMA programs - Map Modernization and Risk MAP - in support of effective implementation of floodplain regulations and flood hazard reduction. Both of these mapping programs are discussed in detail below.

### **National Flood Insurance Program (NFIP)**

The U.S. Congress established the National Flood Insurance Program (NFIP) with the passage of the National Flood Insurance Act of 1968. NFIP allows property owners in participating communities to purchase insurance as a protection against flood losses in exchange for State and community floodplain management regulations that reduce future flood damages. Participation in the NFIP is optional, and is based on an agreement between communities and the Federal Government. If a community adopts and enforces a floodplain management ordinance to reduce future flood risk to new construction in floodplains, the Federal Government will make flood insurance available within the community as a financial protection against flood losses. This insurance is designed to provide an insurance alternative to disaster assistance to reduce the escalating costs of repairing damage to buildings and their contents caused by floods.

The emphasis of the NFIP floodplain management requirements is directed toward reducing threats to lives and the potential for damages to property in flood-prone areas. One key component in the Act is the restriction in place which prohibits FEMA from providing flood insurance to any individual unless the community within which the intended insured resides has adopted and enforces floodplain management regulations that meet or exceed the floodplain management criteria established within 44 Code of Federal Regulations (CFR) Part 60, *Criteria for Land Management and Use*.

Authorized by the Act and funded by the National Flood Insurance Fund, the FMA, RFC, and SRL programs are available for mitigation efforts. These funding opportunities were discussed in detail earlier in this part of the plan.

Two elements that must be met by all jurisdictions within the local mitigation plan is the issue of Repetitive Loss Properties and Severe Repetitive Loss properties as they relate to floods only. These are defined as:

- *Repetitive Loss Properties*: A repetitive loss property is one for which two or more losses of at least \$1,000 each have been paid by the National Flood Insurance Program (NFIP) over a rolling 10-year period.
- *Severe Repetitive Loss*: An SRL property is a residential property that is covered under an NFIP flood insurance policy and:
  - That has at least four NFIP claim payments (including building and contents) over \$5,000 each, and the cumulative amount of such claims payments exceeds \$20,000; or
  - For which at least two separate claims payments (building payments only) have been made with the cumulative amount of the building portion of such claims exceeding the market value of the building.
  - For both (a) and (b) above, at least two of the referenced claims must have occurred within any 10-year period, and must be greater than 10 days apart.

In addition to providing flood insurance and reducing flood damages through floodplain management regulations, the NFIP identifies and maps the Nation's floodplains. Mapping flood hazards creates broad-based awareness of the flood hazards and provides the data needed for floodplain management programs and to actuarially rate new construction for flood insurance. Recently, this mapping initiative has taken a new step toward providing a more reliable mapping system with the creation of FEMA's Risk MAP program (discussed in greater detail below).

### ***Community Rating System***

The National Flood Insurance Program's Community Rating System (CRS) was implemented in 1990 as a voluntary program, which recognizes and encourages community floodplain management activities that exceed the minimum NFIP standards. The National Flood Insurance Reform Act of 1994 codified the Community Rating System in the NFIP.

Because of CRS, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community actions meeting the three goals of the CRS:

- Reduce flood losses
- Facilitate accurate insurance rating
- Promote the awareness of flood insurance

The more a jurisdiction does in excess of NFIP standards, the more points they earn. These points are utilized to establish the jurisdiction’s CRS class. There are ten CRS classes. Class one (1) requires the most credit points and gives the largest premium reduction; class 10 receives no premium reduction. For CRS participating communities, flood insurance premium rates are discounted in increments of 5%; i.e., a Class 1 community would receive a 45% premium discount, while a Class 9 community would receive a 5% discount, and as indicated above, a Class 10 is not participating in the CRS and receives no discount.

The CRS classes for local communities are based on 18 creditable activities, organized under four categories:

1. Public Information
2. Mapping and Regulations
3. Flood Damage Reduction
4. Flood Preparedness.

The table below describes the credit points earned, classification awarded and premium reductions given for Washington communities in the National Flood Insurance Program Community Rating System.

COMMUNITY NUMBER	COMMUNITY NAME	CRS ENTRY DATE	CURRENT CLASS	% DISCOUNT FOR SFHA
530073	Auburn, City of	10/1/92	5	25
530074	Bellevue, City of	10/1/92	5	25
530153	Burlington, City of	10/1/94	5	25
530103	Centralia, City of	10/1/94	5	25
530104	Chehalis, City of	10/1/94	5	25
530024	Clark County	10/1/04	5	25
530051	Ephrata, City of	10/1/00	7	15
530200	Everson, City of	10/1/94	7	15
530140	Fife, City of	05/1/06	5	25
530166	Index, Town of	04/1/98	6	20
530079	Issaquah, City of	10/1/92	5	25
530080	Kent, City of	05/1/10	6	20
530071	King County	10/1/91	2	40
530156	La Conner, Town of	10/1/96	8	10
530102	Lewis County	10/1/94	7	15
530316	Lower Elwha Klallam Tribe	10/1/00	7	15
530331	Lummi Nation	05/1/10	8	10
530169	Monroe, City of	10/1/91	5	25
530158	Mount Vernon, City of	05/1/97	7	15
530085	North Bend, City of	10/1/95	6	20
530143	Orting, City of	05/1/08	6	20
530138	Pierce County	10/1/95	2	40
530088	Renton, City of	10/1/94	6	20
530151	Skagit County	04/1/98	4	30
535534	Snohomish County	05/1/06	5	25
530090	Snoqualmie, City of	10/1/92	5	25

530173	Sultan, City of	10/1/03	7	15
530204	Sumas, City of	10/1/93	7	15
530188	Thurston County	10/1/00	5	25
530193	Wahkiakum County	10/1/07	8	10
530067	Westport, City of	10/1/09	6	20
530198	Whatcom County	10/1/96	6	20
530217	Yakima County	10/1/07	8	10

**Map Modernization Program**

The objective to FEMA’s Map Modernization Program is to update and modernize maps that predict where major floods are likely to occur. Map Modernization is a cornerstone for helping States and communities to be better prepared for flood disasters. However, presently, not all of Washington State’s high hazard areas are being updated. At present, Countywide Digital Flood Hazard Data is available, or in process, for the following Washington Counties:

- |              |           |
|--------------|-----------|
| Adams        | Lewis     |
| Clallam      | Pierce    |
| Clark        | Skagit    |
| Cowlitz      | Snohomish |
| Grant        | Spokane   |
| Grays Harbor | Thurston  |
| King         | Whatcom   |
| Kitsap       | Yakima    |

**Risk MAP (Risk Mapping Assessment and Planning)**

The purpose behind FEMA’s Risk MAP Strategy is to constantly reduce losses to life and property. Flood mapping is used for risk assessments, which are incorporated into mitigation plans where risk reduction measures are identified for future action. RiskMAP will identify, assess, and communicate multi-hazard risks with non-regulatory products and assessments. Washington State Department of Ecology is partnering with FEMA to implement the four fundamental strategies to Risk MAP in Washington State. The four strategies include Identify Risk, Assess Risk, Communicate Risk, and Mitigate Risk. The Risk MAP program further enhances mapping by involving communities during the assessment and planning stages, and guides and encourages communities to communicate risk to their constituents.

The information in the following sections provides statistical data as it relates to Washington’s involvement in the NFIP during the 2010 plan update process. Information is always changing, and therefore, as local jurisdiction plans are updated, the most current data should be gathered to meet planning requirements from the Emergency Management Division, Department of Ecology, or FEMA. At present time, the facts below demonstrate the overall importance of the NFIP to the State and demonstrate the level of flooding concern. The information represents the most currently available data as of the dates referenced within each section.

**Public/Private Partnerships, Mitigation Councils, Legislative Initiatives, Executive Actions**

**Requirement 44 CFR §201.5(b)(4)(ii):** A statewide program of hazard mitigation through the development of legislative initiatives, mitigation councils, formation of public/private partnerships, and/or other executive actions that promote hazard mitigation.

Besides the previously discussed Growth Management Act, Shoreline Management Act, International Building Codes Program, the Flood Control Assistance Account Program, Transportation Partnership Account, and the FEMA-funded, state-administered hazard mitigation programs and their associated partnerships, councils, initiatives and actions, the Washington State program of hazard mitigation includes Executive Actions, Public/Private Partnerships, Mitigation Councils, and Legislative Initiatives. The information below is a brief synopsis of some of the partnerships, councils, initiatives, and actions. A more detailed list is attached as Appendix 4 *Integration with Other Planning Initiatives*.

#### Executive Action

Washington State's Governor Gregoire instituted Government Management Accountability and Performance (GMAP) as the cornerstone of her accountability initiative. The GMAP forums were focused on the highest priorities that each agency is responsible for, and include: Safety, Transportation, Economic Development, and the Environment. During the spring of 2008, the Governor added emergency management as an indicator of each agency's ability to make our state more resilient to disasters. A state agency's involvement in the hazard mitigation plan serves as an indicator for that agency's preparedness. Agencies are required to fill specific ESFs within the state's emergency operations center when activated; participates in exercises with EMD when appropriate; develops strategies for inclusion in the SHMP, and develops a COOP plan. At the time of this update, Governor elect Inslee had not taken office.

#### Public/Private Partnership

The Department of Homeland Security noted in its 2006 report *Pandemic Influenza Preparedness, Response, and Recovery Guide for Critical Infrastructure and Key Resources*, "eighty-five percent of infrastructure resources reside in the private section, which generally lacks individual and system-wide business continuity plans. Private sector planning must be well coordinated across our interdependent critical infrastructures and between all appropriate public and private entities." EMD launched a website on November 19, 2007, to provide businesses with a roadmap to prepare for and mitigate the effects of all types of emergencies. Since its inception, it has continued to grow. See [http://emd.wa.gov/preparedness/prep\\_business.shtml](http://emd.wa.gov/preparedness/prep_business.shtml) for more. The website is meant to be a one-stop destination to provide user-friendly information to assist businesses in achieving their highest readiness level. Among other things, the site offers a 12-step Comprehensive Business Preparedness and Planning guide; statewide local training, exercise and volunteer program listings; embedded links to related web sites, source documents and easy-to-use templates that can be customized for any business; and an Industry Standard, Best Practice and Benchmarking section so that businesses can track their progress in relation to established standards within their business sector.

Despite ongoing state budget cuts, EMD developed a new Private Industry Program Manager position in December of 2011. This position is focused on developing tools, templates, and products that all size business across our state can use to plan and prepare for disasters before they strike. One of the first projects undertaken by the Private Industry PM position was to transform the *Green River Recovery Guide* into the *Business Recovery Guide*, a much needed guide to help businesses understand what recovery programs are available to them to help restart their business post disaster. The Private

Industry Program Manager position also coordinates the integration of the private sector into exercises and ensure the private sector has access to a variety of course/workshops offered by federal, state, and local jurisdictions. EMD has invested in the Public Information Emergency Response (PIER) information management system allows private industry and particularly critical infrastructure to share situational awareness information that is critical to improving response and plan for short and long-term recovery.

Washington State has operational Private Industry program business liaison desks integrated into the state Emergency Operations Center since 2007. The Association of Washington Business (7,800 members) provided three liaisons to work the ESF15 External Affairs Private Sector Liaison Business Desk in the SEOC. In 2012, representatives from the Washington Retail Association started training to work the Business Liaison Desk.

In February 2009, the Washington Trucking Association, Washington State Department of Transportation, Washington State Patrol, and the Emergency Management Division developed the Commercial Vehicle Pass System (CVPS). It provides a way to move critical freight when major truck corridors are closed or severely restricted. The CVPS allows emergency managers working with the private sector to categorize emergency and essential goods during major disruptions and road closures, giving first priority to disaster relief supplies.

In January 2012, EMD initiated activities to develop a statewide all-hazards Re-Entry Pass system for use by the private sector to facilitate access by private industry into restricted / controlled areas for the purpose of assessment, recovery, repair, and / or restoration of infrastructure, organizations, and economic vitality related to an emergency or natural disaster. This program is being coordinated through the Washington State Emergency Management Association, the Washington Association of Sheriffs and Police Chiefs, Fire Marshall's Office, local and tribal governments, and the private sector. It is expected to be approved for implementation in late 2013.

The state is part of the Contingency Planning and Recovery Management Group, a public/private working group established to advance mitigation, preparedness, response and recovery from both private and public sector organization viewpoints. See <http://www.cparm.org/>. Currently the group is working to create a Disaster Resistant Business toolkit, a step-by-step process to create a business plan that is flexible enough to fit any size or type of business. The kit will provide best practices, low-cost methods and simple steps to not only complete the plan but to exercise it, to train employees on it, and to lessen exposures. The group also sponsors conferences.

The state is a member of the board of directors and an active participant in the Cascadia Region Earthquake Workshop (CREW), a coalition of private and public representatives working together to improve the ability of Cascadia Region communities to reduce the effects of earthquakes. See <http://www.crew.org/>. Among the goals of the organization is fostering productive linkages between scientists, critical infrastructure providers, businesses and governmental agencies to improve the viability of communities after an earthquake.

In 2012, the group published *Businesses in Cascadia: Seeking Ways to Help Pacific Northwest Businesses Lower their Earthquake Risk* and *Tsunami evacuations: Lessons from the Great East Japan earthquake and tsunami of March 11, 2011*. This is in addition to their quiver products and programs for earthquake scenarios, planning guides, and workshops. Previously, the group published *Cascadia Subduction Zone Earthquakes: A magnitude 9.0 Earthquake Scenario* to help government agencies, businesses and families understand the potential effects of a subduction earthquake and thus help the region set

priorities in the steps to prepare to make the area safer. As a follow-up to this publication, CREW developed and published additional resource documents including *Cascadia Deep Earthquakes* (2008) and *Cascadia Shallow Earthquakes* (2009) to represent the three distinct types of earthquake hazards found in the Pacific Northwest. Additionally, CREW published a guide entitled *Using the CREW Scenarios: Table Tabletop Exercises* (2007) to help facilitate the use of the products by non-emergency managers.

Washington State EMD and Green Diamond Resource Company have been in negotiations regarding an agreement to permit evacuation of coastal residents within Pacific County, Washington onto land privately held by Green Diamond during a disaster. Green Diamond Resource Company has agreed to make privately held timberland available as an evacuation route/site in the event of a disaster, including a tsunami, to citizens, first responders, and emergency management officials. In exchange for use of the aforementioned property as an evacuation site, the Washington State Military Department agrees to assume liability for damage to property and injury/death to persons caused by evacuation activities as allowed by law and subject to RCW 38.52.180. The agreement was executed March 2009.

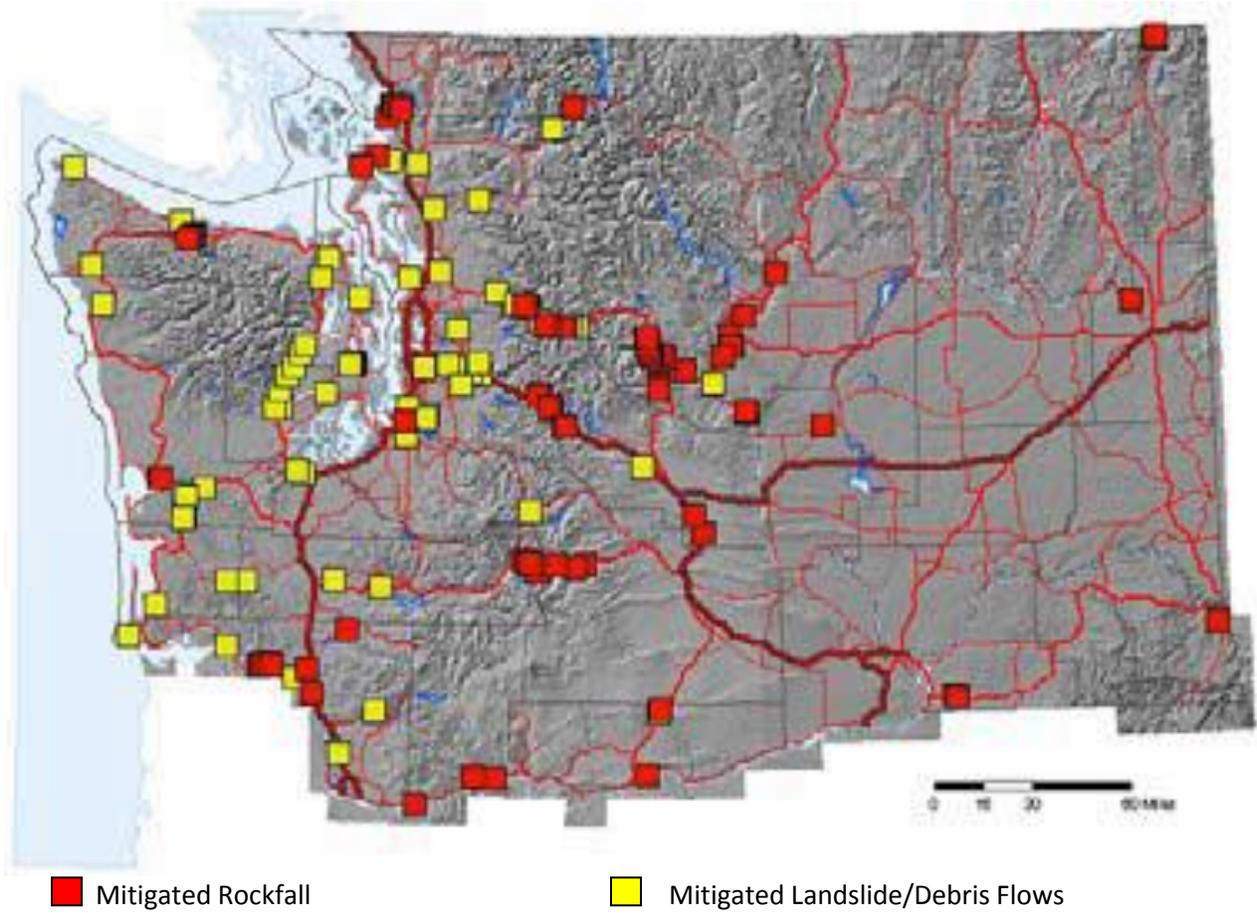
#### Other Partnerships

The Washington State Department of Transportation (WSDOT) created the Unstable Slope Management Program in 1995 to proactively address the issue of unstable slopes, including landslides, rock falls, and debris flows, across Washington's 7,048 miles of highway facilities. See [http://www.wsdot.wa.gov/NR/rdonlyres/979185A9-D1FD-4DFD-8341-F4D5E43C0A76/78467/Slopes\\_web.pdf](http://www.wsdot.wa.gov/NR/rdonlyres/979185A9-D1FD-4DFD-8341-F4D5E43C0A76/78467/Slopes_web.pdf) for details. The program was originally authorized for 10 bienniums or twenty years. WSDOT regional offices performed the initial unstable slope identification process resulting in an inventory of over 2,500 sites which were then rated based on numerous risk factors. The program seeks to cost-effectively reduce the risk of moderate to high hazard unstable slopes with long term risk reduction. Between 1995 and 2009, WSDOT spent approximately \$165 million stabilizing more than 83 moderate to high-hazard programmed unstable slopes and an additional \$208 million on unforeseen emergency slope corrections. The present funding is for \$25 million per biennium (projected to 2015) for planned work in the program (not including emergency relief projects). In the past fifteen years, 228 high-risk unstable slopes have been mitigated.

WSDOT's goal is to mitigate all identified high and moderate risk unstable slopes on interstate highways, principal arterials and other roadways with moderate to high traffic volumes by 2020. At the same time, the Department will continue to conduct rock slope scaling as an interim measure on highway corridors with a high incidence of rockfall. Geotechnical analysis and design of mitigation measures for 35 more high-risk unstable slopes is currently underway. Preliminary engineering to develop conceptual mitigation proposals and cost estimates for 64 moderate-risk slopes was begun in 2009. Additional engineering work to refine mitigation designs and improve cost estimates for these unstable slopes is needed to ensure that we can continue to manage risk through an aggressive construction program. Sustained funding at the current \$25 million per biennium level for unstable slope mitigation and \$1.5 million per biennium level for rock slope scaling is needed to ensure that these goals can be met.

In 2007, WSDOT initiated the Risk Reduction Rock Slope Scaling Program. The intent of this program is to reduce risk of rockfall along state highways. Risk reduction rock slope scaling entails the removal of loose unstable rock from a rock slope with the use of hand tools, such as scaling bars, hydraulic wedges, air pillows and in some cases with the use of mechanical equipment. These techniques can significantly reduce the likelihood of rockfall from reaching the highway where geologic site conditions make this type of work feasible.

Mitigated Slopes along State Routes in Washington State



Data source: Unstable Slope Management System (USMS). Date: 12/08/2009

The U.S. National Tsunami Hazard Mitigation Program (NTHMP) is a partnership between Federal and State agency representatives designed to reduce the impact of tsunamis on U.S. coastal communities. Led by the National Oceanic and Atmospheric Administration's (NOAA) National Weather Service (NWS), the NTHMP is the nation's community-focused program to improve tsunami mitigation and preparedness of at-risk areas within the United States and its territories (33 U.S.C. 3201 et seq). The mission of the NTHMP is to develop resilient coastal communities that are highly informed and prepared for all tsunami hazards, that loss of life is negligible, and loss of property is minimized should a tsunami strike any U.S. state, commonwealth, or territorial coastline. Washington State Emergency Management website hosts tsunami information, hazard fact sheets by county and community, tsunami school resource guide, preparedness videos, media guidebook for tsunamis and volcanoes, tsunami evacuation maps by community, *How the Smart Family Survived a Tsunami*, a Disaster Response Guidebook for Hotels and Motels on the coast, and *Map Your Neighborhood* program. An EMD employee continues to provide a variety of community outreach programs to include education pamphlets placed in visitor centers and other public places; 10-15 workshops per year are conducted for citizens and businesses in coastal areas; semi-annual evacuation drills, and communication tests are conducted.

Washington State Emergency Management Division has continued to contract with the Washington State Department of Natural Resources to produce the bi-monthly TsuInfo Alert newsletter on behalf of the NTHMP. Ninety newsletters have been published since 1999. Print copies of TsuInfo Alert are distributed to over 325 people and the electronic version is emailed to more than 188 parties. See <http://www.dnr.wa.gov/ResearchScience/Topics/GeologyPublicationsLibrary/Pages/tsuinfo.aspx>. The website includes a How to Search the NTHMP Tsunami Collection Catalog posted in 2010.

Washington State EMD continued to coordinate the distribution of NOAA Weather Radios to low-income and special needs populations along the coast. Participants completed a basic course on tsunami preparedness and programming a NOAA Weather Radio. Nearly 600 radios were distributed since the 2010 plan was approved. EMD also distributed weather radios to hotels and motels and essential facilities.

Washington State EMD continued to coordinate NOAA Warning Coordination Meteorologist's from the Seattle Forecast Office and Portland Forecast Office on the TsunamiReady program. In 2009, Washington State became the first state in the lower 48 to have all of its outer coastal counties recognized as TsunamiReady by NOAA's National Weather Service. The Shoalwater Bay Tribe and Quinault Nation are also TsunamiReady. A total of 52 county, city, or tribal jurisdictions were eligible for TsunamiReady recognition. Currently, 13 jurisdictions have been recognized as TsunamiReady. This is an additional four communities since the 2010 plan.

50 All-Hazards Alert Broadcast (AHAB) sirens were installed along the outer coast to provide timely warnings of tsunamis to the outdoor populations. An additional six AHAB sirens are being installed along the Long Beach Peninsula. This was an additional five sirens since the 2010 plan.

Previously, EMD partnered with Pierce County and the Puyallup Tribe of Indians to install eight AHAB siren systems to provide rapid alert and notification to citizens and visitors who are in the Mount Rainer Lahar Hazard Zone. EMD also supported the development of an AM emergency radio transmission capability for the Puyallup Valley that allows emergency personnel an additional tool to notify citizens of a natural or manmade disaster incident.



Data source: EMD Earthquake, Tsumani, Volcano Program. Date: 3/18/2012

EMD and the Earthquake Engineering Research Institute (EERI) published the *Scenario for a Magnitude 6.7 Earthquake on the Seattle Fault* in partnership with the City of Seattle, City of Bellevue, USGS, Structural Engineers Association of Washington, American Society of Civil Engineers, University of Washington, and CREW. Hazards US (HAZUS) was used to develop the scenario that provided the framework for engineers, emergency managers, and response personnel to identify key policy issues that coincided with the Washington Emergency Management Council's Seismic Safety 2004 Policy Recommendations. The report was published June 2005. See <http://www.emd.wa.gov/hazards/documents/EQScenarioFullBook.pdf>.

Washington State Emergency Management, in partnership with Washington State DNR, FEMA, USGS, and URS Corporation developed a "*Washington State Earthquake Scenario Catalog*," which will provide USGS calculated ground motions for 20 scenarios that are consistent with the National Seismic Hazard Map. The scenario ground motions are provided in ShakeMaps format. HAZUS modeling results are generated for a statewide study area as well as county specific results. This will allow for inclusion in the state and county mitigation plans, response plans, and facilitate realistic loss expectations in training and exercises. See <https://fortress.wa.gov/dnr/seismicscenarios/>. The scenarios are hosted with an interactive GIS viewer.

The state represents the national emergency management community on the national steering committee guiding development of the Advanced National Seismic System. ANSS is a nationwide system of advanced instruments that provide real-time information on earthquakes, information about building and site response, and data on earthquake processes and solid earth structure and dynamics. The state also is a member of the regional ANSS steering committee, and is chair of a national group developing ANSS products for emergency managers. A major initiative of the regional ANSS committee

has been upgrading the Pacific Northwest Seismograph Network with high-spatial-resolution information in order to generate better “ShakeMaps,” or maps of earthquake intensity derived from measurements of ground shaking. The PNSN received nearly \$1 million in ARRA funds to upgrade seismograph stations, install netquake accelerometers, and improve data transmission infrastructure. PNSN has grown from five seismometers in 1969 to over 220 seismograph stations in Washington and Oregon. Additionally, in 2012, PNSN and Washington State EMD are partnering to integrate USGS developed ShakeCast software at the State EOC. The program uploads ground motion data and initiates HAZUS loss estimates to generate probable damage estimates of the built environment.

A strategy developed for the Military Department’s Emergency Management Division (EMD), Department of Natural Resources-Division of Geology and Earth Resources (DNR), and the Office of Superintendent of Public Instruction (OSPI) is to systematically evaluate all public school buildings within Washington in order to establish the seismic risk for each. This will allow for the prioritization of school structures in need of seismic retrofitting across the state and permit a strategic, targeted approach for alleviating the risk of potentially dangerous school structures. WA EMD, with funding support from FEMA, will be undertaking a pilot project starting in April 2010 to evaluate school buildings in two school districts: Walla Walla and Aberdeen Public Schools. Since the staff and travel for this project is funded 100% by FEMA, the local districts will not need to provide any financial match or in-kind assistance as a condition of participating in this project. In addition to the life safety issue surrounding the students attending these schools, many schools buildings have been identified as necessary for post-disaster response and recovery operations; the potential of retrofitting those schools through mitigation dollars will be extremely beneficial to the local jurisdictions that rely on such facilities. The *Washington State School Seismic Safety Pilot Project— Providing Safe Schools for Our Students* report was published July 2011. See <http://www.k12.wa.us/SafetyCenter/Emergency/pubdocs/WAStateSchoolSeismicSafetyPilot7-2011.pdf>.

The assessment will be conducted using FEMA’s nationally accepted methodology known as “*Rapid Visual Screening of Buildings for Potential Seismic Hazards*.” This would entail professionally licensed volunteer experts from the Structural Engineering Association of Washington (SEAW) and Washington Association of Building Officials (WABO) walking through school buildings to identify, inventory, and rank such buildings according to their expected safety and usability during and after earthquakes. To get a true picture of risk for a particular site, staff from the Department of Natural Resources, will use non-invasive methods that assess the physical site characteristics by measuring how seismic waves travel through soil. Overall, this comprehensive method will provide in-depth information as to how a site and a specific school structure would perform during an earthquake. The duration of an assessment at each school site would take approximately 1-2 hours and will not disrupt the classroom-learning environment. In fact, teachers have used the site assessments by DNR as a teaching opportunity and the DNR staff has been able to provide a brief presentation to schoolchildren.

Upon completion of this pilot project, participating districts will be provided with a report that details the study findings for each school facility, as well as provides an ordered list of structures that should be targeted for retrofitting. In addition, the results of this study can be used by the school district to strongly justify an application for FEMA grant funding through the Pre-Disaster Mitigation Grant Program (PDM) and the Hazard Mitigation Grant Program (HMGP) to seismically retrofit deficient structures, thus alleviating some of the future costs that could be incurred. The *Washington State School Seismic Safety Pilot Project— Providing Safe Schools for Our Students* report was published July

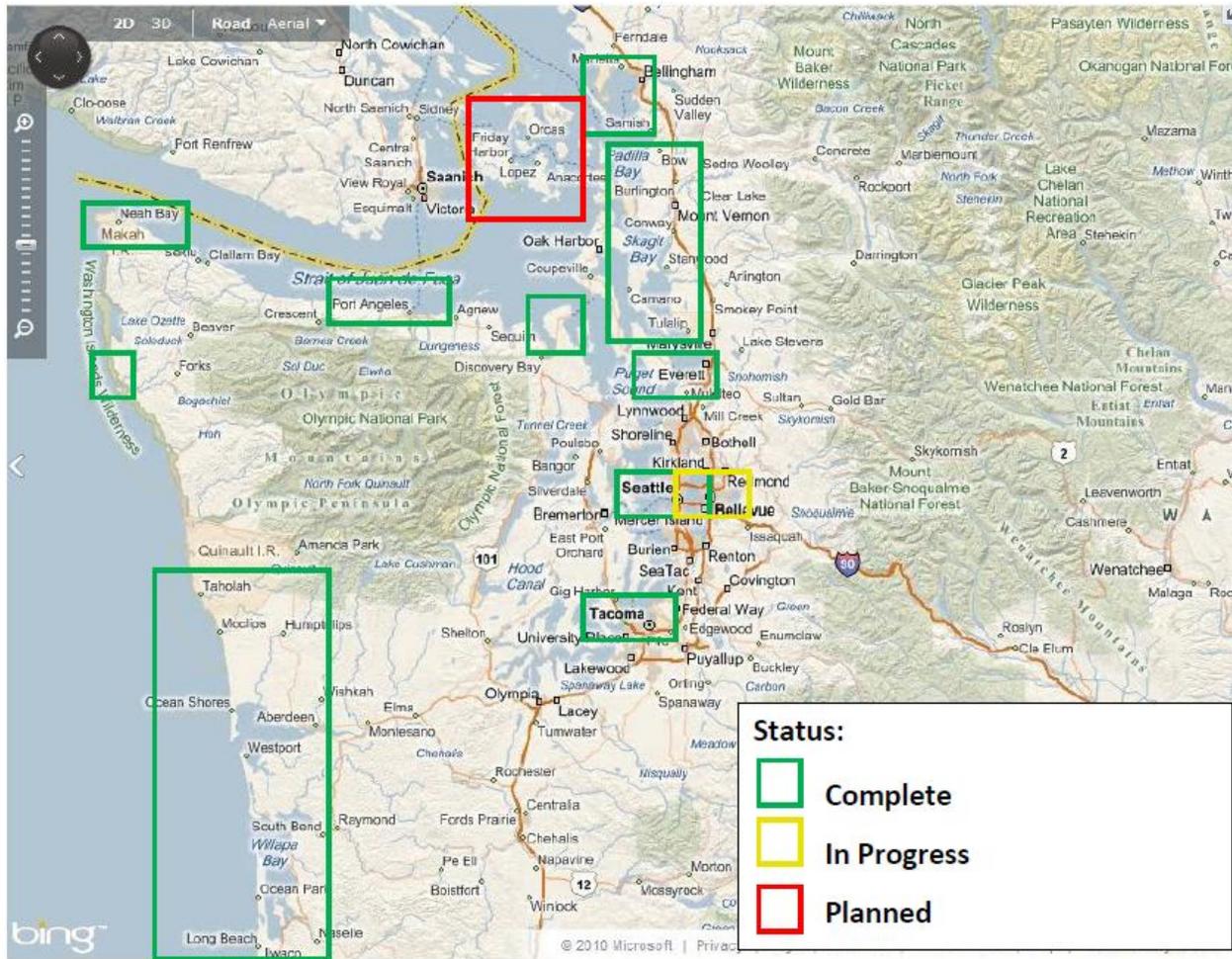
2011. See

<http://www.k12.wa.us/SafetyCenter/Emergency/pubdocs/WAStateSchoolSeismicSafetyPilot7-2011.pdf>

In coordination with the above, OSPI and EMD will seek grant funding to complete hazard mitigation plans for school districts statewide, which are not presently covered under a plan. OSPI received a PDM grant for this project in FFY2011.

The Washington State Seismic Safety Committee is working on developing lasting foundation for future seismic policy implementation for Washington State. The project is based upon the San Francisco Urban Planning and Research Association (SPUR) Initiative, entitled "*The Resilient City*," which examines the current state of resilience to a scenario quake in San Francisco. The Resilient City Initiative consists of three (3) reports: Before the Disaster, Disaster Response, and After the Disaster. The Seismic Safety Committee (SSC) has been reviewing this report over the past few months and intends to adapt the community-level guidance for a broader audience in Washington State. The Resilient State Project seeks to address different questions, such as, what do we need to be doing right now to shore up our buildings and lifelines, what happens in the days and weeks after a major earthquake, and when disaster strikes are we positioned to rebuild even better than before? Duration of The Resilient State project is expected to last 1.5-2 years. In November 2012, the draft final report was released for comments titled *Resilient Washington State, a Framework for Minimizing Loss and Improving Statewide Recovery after an Earthquake*. See [http://www.emd.wa.gov/about/documents/SSC\\_DRAFRWS\\_policydoc\\_11-12-2012.pdf](http://www.emd.wa.gov/about/documents/SSC_DRAFRWS_policydoc_11-12-2012.pdf).

Along with the University of Washington's Joint Institute for the Study of the Atmosphere and Ocean and NOAA's Pacific Marine Environmental Laboratory (PMEL), the state collaborated on the modeling of potential tsunami inundation along the outer coast and inland waterways of Puget Sound from local sources. This includes the Cascadia Subduction Zone as well as worst-case distant events from the Aleutian Islands. The results provided data for the creation of tsunami hazard maps covering these areas. The maps were prepared through NTHMP funds to assist local governments in the development of evacuation plans in areas at risk of potentially dangerous tsunamis. The group completed 80% of the tsunami inundation maps for coastal communities, covering 33 communities with 85,213 at-risk residents. In addition, the state worked with PMEL on a mapping project modeling tsunami inundation for Tacoma documented in the study *Tacoma, Washington, Tsunami Hazard Mapping Project: Modeling Tsunami Inundation from Tacoma and Seattle Fault Earthquakes, 2009*. See [http://www.dnr.wa.gov/Publications/ger\\_tsunami\\_inundation\\_maps.pdf](http://www.dnr.wa.gov/Publications/ger_tsunami_inundation_maps.pdf) for specific maps (as of May 6, 2010).



Washington Emergency Management Division coordinated with county, city, and tribal emergency managers in January 2009 on orders for 282 tsunami hazard zone and evacuation route signs from the Washington State Department of Transportation. 136 evacuation route or hazard signs are currently located on state highways with several hundred more located on county and local roads. Signs were ordered and delivered in July 2009 for the Quinault Tribe, Quileute Tribe, Shoalwater Bay, Lower Elwha, Lummi Nation, and the Makah Tribe. Counties that also ordered signs included Jefferson, Clallam, and Whatcom.

As of March 20, 2012, interactive maps of tsunami evacuation zones in both Oregon and Washington are available online and as a smartphone app (*TsunamiEvac-NW*). The Pacific Northwest Tsunami Evacuation Zones' online portal and smartphone app provide an at-a-glance view of tsunami hazard zones along the coasts of Oregon and Washington. This tool was developed by the Northwest Association of Networked Ocean Observing Systems (NANOOS) program. See <http://nvs.nanoos.org/tsunami>.

An analysis of liquefaction areas and evacuation routes has been completed. Washington State Department of Natural Resources and the Washington State Emergency Management Division will be presenting the findings to local jurisdictions and obtaining their input on whether/how to revise evacuation brochures. Because most of the tsunami inundation zone included within the study area is

highly liquefiable, local jurisdictions may choose in the near-term to revise evacuation brochures alerting the public to be alert for ground failure and concentrate on walking routes. Longer-term solutions may include structural hardening of driving or walking routes.

Washington State is taking a national lead on the implementation of tsunami vertical evacuation for tsunami threatened communities. Through funding support from the National Tsunami Hazard Mitigation Program (NTHMP), Washington State Emergency Management along with USGS, NOAA's National Weather Service, FEMA, the University of Washington's Hazard Mitigation Institute and Pacific County Emergency Management have begun a grassroots, 'bottom-up' process to identify potential locations and types of vertical evacuation safe havens that are acceptable to the community. The planning team has been hosting a series of workshops in Long Beach, Ilwaco, Ocean Park, and the Tokeland Peninsula to identify vertical evacuation solutions that are supported by the local residents. Ultimately, this will conclude with a plan that identifies a preferred alternative along with preliminary engineering estimates for design and construction of the tsunami refuges. This project will continue through 2013 and engaged communities in Grays Harbor, Jefferson, and Clallam counties.

The state is an active partner in a Planning Workgroup comprised of public and private agencies that has established a coordinated response and mitigation plan for a Mount St. Helens/Mt Adams volcanic event. The plan has been coordinated and sent on for member agency review, and when approved will serve as the model for a future response plan for a Mt Baker/Glacier Peak volcanic event which would replace the current plan. The Mount St. Helens / Mount Adams plan is still under development. However, *The Mount Baker / Glacier Peak Coordination Plan, Coordinating efforts between governmental agencies in the event of volcanic unrest at Mount Baker or Glacier Peak, Washington* was published August 2012. The Mount Rainier Volcanic Hazards Response Plan was published in July 1999.

Washington State Department of Natural Resources published Loss Estimation Pilot Project for Lahar Hazards from Mount Rainier, Washington that estimated losses in the Puyallup Valley from a lahar at \$6 billion. This report informed the state hazard mitigation plan update for the volcano hazard profile. See [http://www.dnr.wa.gov/Publications/ger\\_ic113\\_mt\\_rainier\\_lahar\\_hazards.pdf](http://www.dnr.wa.gov/Publications/ger_ic113_mt_rainier_lahar_hazards.pdf).

Ecology has joined with EPA, FEMA, NOAA, Puget Sound Partnership, The Nature Conservancy, USACE, and USGS in Floodplains by Design. One of the first projects is to overlay insurance claims, SRL, and RL properties against fish restoration habitat in a GIS environment to identify properties for functional evaluation as future buyout properties that will provide both flood mitigation and fish habitat. A later phased project will be to create a tool to evaluate the functioning of the floodplain.

The state is part of the Ocean Policy Advisory Group (OPAG) with the Department of Ecology and other agencies interested in solving problems related to the ocean environment. Some of the goals of the group are to enhance the sustainability and resilience of outer coast communities through appropriate economic development practices and also to protect the coastal environment and its communities from the threats of marine hazards such as storm surge and tsunamis. As a result of OPAG, the State Ocean Caucus was formed and meets to provide interagency collaboration. See <http://www.ecy.wa.gov/programs/sea/ocean/accomplishments.html> and <http://www.ecy.wa.gov/programs/sea/ocean/index.html> for more information.

The state has been involved with climate change including documents such as *Uncertain Future: Climate change and its effects on Puget Sound – Foundation Document* by UW's Climate Impacts Group in 2005. See <http://cses.washington.edu/cig/outreach/files/psat1005.shtml>. Consequently, EMD is part of the

Western Climate Initiative (Senate Bill E2SSB 5560), a program administered by the Department of Ecology and in conjunction with many other state agencies as the state attempts to reduce the impact climate change within our region. Between 2005 and 2010, Washington State has adopted a set of coordinated policies to grow our economy and reduce our greenhouse gas emissions. Emissions in this state come from transportation (46%), electricity (20%), industrial sources (16%), residential and commercial buildings (9%), agriculture (6%), and waste (3%). The policies adopted will help the state meet its statutory greenhouse gas reduction targets and the Governor's commitment to growing green jobs. For information is available at the following links.

- [Greenhouse Gas Emissions Limits](#)
- [Emissions Inventory and Reporting](#)
- [Creating Green Economy Jobs](#)
- [Reducing Emissions from Transportation](#)
- [Reducing Emissions from Electricity and Buildings](#)
- [Helping Communities Save Energy and Reduce Emissions](#)
- [State Agencies Reducing Emissions from their Operations](#)
- [Preparing for and Adapting to Climate Change](#)
- [Financing and Tax Incentives](#)
- [Executive Orders](#)
- [Other Important GHG Reduction Policies Enacted Prior to 2005](#)

Ecology published *Preparing for a Changing Climate, Washington State's Integrated Climate Response Strategy, April 2012*. Washington is experiencing changing climate conditions that bring significant risks to human health, our forests, agriculture, freshwater supplies, coastlines, and other resources that are vital to our economy, environment, and quality of life. Recognizing Washington's vulnerability to climate impacts, the Legislature and Gov. Chris Gregoire directed state agencies to develop an integrated climate change response strategy to help state, tribal, and local governments, public and private organizations, businesses, and individuals prepare. The response strategy lays out a framework that decision-makers can use to help protect Washington's communities, natural resources, and economy from the impacts of climate change.

The Department of Natural Resources (DNR) Forest Stewardship Program provides technical and financial assistance to help family forest owners improve forest health and reduce wildfire risk. Within this program, DNR cooperates with Washington State University Extension to conduct 8-week Forest Stewardship Coached Planning Shortcourses, in which landowners develop plans for the management of their property which include wildfire hazard reduction practices. Additionally, DNR administers a cost-share funding program that reimburses landowners for 50% of the cost of wildfire hazard reduction practices including thinning, pruning, slash disposal, defensible space, and shaded fuel break construction.

Working through the National Association of State Foresters, the Washington State DNR supports the FireWise Communities/USA recognition effort. The program is a nationwide initiative that recognizes communities for taking action to protect people and properties from the risk of fire in the wildland/urban interface. This program is of special interest to small communities and neighborhood associations that are willing to mitigate against wildfire by adopting and implementing programs tailored to their needs. The communities create the programs themselves with cooperative assistance from state forestry agencies and local fire staff. As of 2009, there are 35 FireWise Communities/USA in Washington State. As of the end of 2012, there are 100 FireWise Communities/USA in Washington State. There are five steps required to be recognized:

1. Complete an assessment and create a plan that identifies locally agreed-upon solutions that the community can implement
2. Have a FireWise task force, committee, commission or department
3. Observe a FireWise Communities/USA day each year
4. Invest \$2 annually per capita in local efforts
5. Submit an annual report to FireWise Communities/USA

Washington DNR and Federal Wildfire Agencies identified 199 high-risk Washington communities and listed them in the Federal register. Many of these communities are near lands managed by the United States Forest Service (USFS) or Bureau of Land Management (BLM). Wildland Urban Interface (WUI) communities near USFS/BLM managed lands can review and influence USFS/BLM hazardous fuel reduction activities and gain the opportunity to receive higher priority for grant funding for fuel reduction projects on non-federal land, if the community has completed a Community Wildfire Protection Plan (CWPP). As of the end of 2012, there are 48 CWPP plans, of which 15 are countywide plans. There are five basic plan components:

1. Risk assessment- Completing a hazard evaluation, by some means looking at risk factors and designating the level of wildfire risk in the hazard area.
2. Defining wildland urban interface within the planning area.
3. Mapping the interface and potential mitigation projects.
4. Reviewing and prioritizing fuel mitigation projects on adjacent Federal lands.
5. Defining Mitigation strategies that homeowners can take to protect their homes.

In excess of 100 WUI Communities are covered under a CWPP or equivalent, and all of the communities currently under a plan have begun some form of mitigation, either fuel reduction projects, education, or both. All remaining high risk communities in eastern Washington are fully engaged in public planning processes to develop a county-wide CWPP.

DNR was a participant in the West Wide Wildfire Risk Assessment (WWA). The study was designed to quantify the magnitude of the current wildland fire problem in the west, and establish a baseline for planning mitigation activities and monitoring change over time. The methodology implemented provides results that are comparable across the entire West, forming a consistent basis for interpretation and use. WWA results are at a scale compatible with state and community use – much finer than current national efforts. The report was released in May 2013. The WWA results are not intended to replace local and state products as a decision-making tool. The WWA is meant to serve as a regional policy analysis tool that provides results comparable across geographic areas in the West.

Finally, EMD provides a public education program to support local jurisdictions, tribes, businesses and state agencies to fulfill their responsibilities to save lives, reduce injuries, and become more disaster resilient. EMD creates and promotes preparedness materials and programs for those local jurisdictions and agencies to help them educate, enable, and empower their citizens, neighborhoods, schools, businesses, and organizations to engage in effective and sustained preparedness activities within their communities. Specifically, EMD gives presentations, attends preparedness fairs, promotes the May Your Neighborhood (MYN) Program, and hosts a preparedness section on the EMD website that includes Prepare in a Year, The Getting Ready – Home Preparedness, Have a Plan / Disaster Kits for Pets, Kidz pages about hazards and disaster related games, plus 27 preparedness videos. Additionally, EMD supports schools with the online Basic Emergency Plan for Schools, 12 Steps to School Planning,

ICS/NIMS Comprehensive School Planning workshops, and the Shelter-in-Place, Lockdown, and Sheltering for Weather or other Emergencies video. EMD public education includes the *Emergency Management Business Portal*. This site was designed to be a one-stop destination that businesses of all sizes can find information on how to plan, prepare, respond, and recover from disasters. The *Safe at Work* program specifically designed to be delivered as part of the safety committee requirements as specified in OSHA/WSHA.

#### Legislative Initiative

The following are in addition to the previously discussed Growth Management Act, Shoreline Management Act, International Building Codes Program, the Flood Control Assistance Account Program, and Transportation Partnership Account. See section II above or Appendix 4 *Integration with Other Planning Initiatives* for more details.

In 2007, the State Legislature passed SB 6141 which amended the state's existing forest health law (RCW 76.06) and provided funding of \$1.3 million to initiate a pilot project and begin program development. This forest health program is managed by DNR and involves a three-tiered approach. The first and primary tier is to expand voluntary, preventive efforts that help maintain forests across all land ownerships in conditions that are resilient and resistant to insects, disease, and uncharacteristically severe wildfire. Options for more concerted actions, should forest health conditions worsen in a particular area, are made available in the second and third tiers. The pilot project involves tier one activities in Stevens County and intends to demonstrate the capabilities of the program so it can be instituted statewide. DNR will seek out additional funding in future legislative sessions to continue the program.

During the 2009 legislative session, the Legislature passed a bill related to NFIP, codified as RCW 48.27.030, which requires that:

1. Every insurer issuing a homeowner, condominium unit owner, residential tenant, and residential fire insurance policy that does not cover damage caused by flood must notify the policyholder that the policy does not cover damage caused by flood. The notice must also inform the policyholder how to contact the national flood insurance program ("NFIP") or one of the NFIP's agents. This notice must be provided:
  - a. At the time the policy is issued; and
  - b. At the time the policy is renewed.
2. The following language, when combined with current information about how to contact the NFIP or its agent, satisfies the notice requirements of this section: "This policy does not cover damage to your property caused by flooding. The federal government offers flood insurance through the National Flood Insurance Program to residents of communities that participate in its program. You can learn more about the National Flood Insurance Program at [www.floodsmart.gov](http://www.floodsmart.gov) or by calling (888) 379-9531."
3. Nothing in this section invalidates a flood exclusion, or any other exclusion, in an insurance policy subject to this section

Also during the 2009 legislative session, the Legislature passed HB 1565 (RCW 48.07) that requires all domestic insurance companies conducting business in the state to create and maintain a written business continuity plan identifying procedures relating to a local, state, or national emergency or significant business disruption. The State's Insurance Commissioner was given the authority to adopt the standards for these business continuity plans.

Additional to the 2009 legislative session, the Legislature further enhanced the GMA by, among other things, prohibiting expansion of the UGA into the one hundred year floodplain of any river or river segment that is located west of the crest of the Cascade mountains, and has a mean annual flow of one thousand or more cubic feet per second as determined by the department of ecology.

In the 2011 legislative session, the Legislature passed ESHB 1478 (RCW 36.70A.130) extending the time between mandated growth management plan / development regulation and shoreline plan updates to every eight years, and reallocates review and revision years for some jurisdictions. Counties and cities are to review their designated UGAs, the densities permitted within each UGA, and the nature of development that has occurred. UGAs and comprehensive plans are to be revised to accommodate the urban growth projected for the succeeding twenty-year period.

The 2013 legislative session had not started at the time of this update. The governor elect brings a climate change mitigation campaign priority into office with him. Governor office requested legislation may be submitted related to hazard mitigation and / or climate change.

**Requirement 44 CFR §201.5(b)(4)(iii):** The State provides a portion of the non-Federal match for HMGP and/or other mitigation projects.

Washington State’s commitment to hazard mitigation extends to its contribution toward the 25 percent non-federal cost share requirement of the HMGP since established in the late 1980s.

In 26 disasters from 1989 through 2012, the state has contributed nearly 13 percent of the costs of mitigation projects funded by the program. The percentage of contribution to the cost-share can differ, depending upon a number of factors, including the availability of resources and desires of the Governor and Legislature. However, in these 26 disasters, the state committed to split the non-federal share evenly with local jurisdiction HMGP participants. The final local share spent can sometimes be higher than the required amount due to cost-overruns.

The table below shows the breakdown of costs borne by federal, state and local governments for all HMGP projects since 1989; a full spreadsheet with cost shares by disaster is shown in Section IV of this tab.

Hazard Mitigation Grant Program – Cost Shares through December 2012				
	Federal	State	Local	Total
Total Investment	<b>\$116,677,479</b>	<b>\$20,540,601</b>	<b>\$23,280,483</b>	<b>\$160,498,564</b>
Percent Cost Share	<b>72.70%</b>	<b>12.80%</b>	<b>14.51%</b>	<b>100%</b>

For the PDM and FMA, the state has not chosen at this time to provide a portion of the 25 percent of non-federal cost share; applicant agencies are responsible for providing the entire amount through other available sources.

**Requirement 44 CFR §201.5(b)(4)(iv):** To the extent allowed by State law, the State requires or encourages local governments to use a current version of a nationally applicable model building code or standard that addresses natural hazards as a basis for design and construction of State sponsored mitigation projects.

In 2003, the Legislature approved a measure (RCW 19.27.031) that adopted the International Codes (I-Codes) for building, residential, fire, and mechanical codes that take into account the current seismic risk and other hazard factors. These codes took affect statewide in July 2004 and are tri-annually updated by the International Code Council. Once the new editions of the codes are available the Washington State Building Code Council (SBCC) reviews and adopts the codes. While adopting some of the I-Codes, the SBCC also adopts other codes and amendments to the I-Codes to account for the unique building situations encountered in the state.

On July 1, 2007, the 2006 editions of the I-Codes for building, residential, fire, and mechanical codes took affect statewide following approval by the Legislature and adoption by the State Building Code Council (SBCC). Community planning departments and buildings officials administer the codes locally and can amend the state building code as long as it does not diminish the minimum performance standards of the state code. In November of 2009, the SBCC adopted the 2009 editions of the I-Codes for the codes, to include: the Building, Residential, Mechanical and Fire I-Codes; the 2009 Uniform Plumbing Code, published by the International Assoc of Plumbing and Mechanical Officials (IAPMO); and the Washington State Energy Code. The Energy code is a unique state code (Washington State Energy Code WAC 51-11). Additionally, in an effort to increase floodplain mitigation, FEMA, the Structural Engineering Institute (SEI) of the American Society of Civil Engineers (ASCE) and other organizations, developed minimum requirements for flood-resistant design and construction of buildings. These were integrated into previous editions of the I-Codes and met the minimum regulations for design and construction necessary for NFIP compliance. During 2009, an amendment in the IRC was created requiring freeboard above base flood elevation in single family homes as follows: WAC 51-51-0322 - Flood resistant construction. R322.2.1 Elevation Requirements. 1. Buildings or structures in flood hazard areas not designated as Coastal A zones, shall have the lowest floor elevated to or above the design flood elevation, or a greater elevation as designated by local ordinance.

Additionally, in 2009, the SBCC adopted the International Existing Building Code (IEBC) I-Code as an appendix chapter available for local adoption (WAC 51-50-4800) titled Appendix K – Wildland and Urban Interface Code. The IEBC has performance criteria for seismic forces and requires seismic upgrades where 30 percent of a building roof or floor area is involved in an alteration. It also conducted a technical group on the Wildland and Urban Interface Code (WUIC) and has recommended adoption as an appendix to the fire code. So, local jurisdictions may adopt it effective as of July 1, 2010.

The 2012 editions of the I-Codes will be effective July 1, 2013.

**Requirement 44 CFR §201.5(b)(4)(v):** A comprehensive, multi-year plan to mitigate the risks posed to existing buildings that have been identified as necessary for post-disaster response and recovery operations.

A number of projects funded by HMGP funds following the Nisqually earthquake disaster of February 2001 mitigated the risks posed to local buildings used for disaster response and recovery operations. This includes facilities used by first responders, school buildings used for evacuation centers, and water facilities needed by communities. Projects completed include seismic retrofits of fire stations in Aberdeen, Port Townsend and South Bend, the city hall in South Bend, school buildings in La Conner, Littlerock, Onalaska, and South Bend, a hospital in Olympia, and water storage facilities in four King County communities. Previously, the state has helped fund generators or wiring for generators for local critical facilities including water systems. Seismic retrofits since the Nisqually Earthquake disaster have been completed for a library and historic building in Port Townsend, a community center in Seattle, a fire station in Renton, residence halls at the Evergreen State College and Pacific Lutheran University, and the clock tower on the Evergreen State College campus. As of December 2013, ongoing projects include a water reservoirs in Edgewood and Sumner, a library in Snohomish, fire station in Everett, and a community center in Seattle.

At the state level, the Department of General Administration (now known as the Department of Enterprise Services) includes seismic retrofits for all major state-owned facilities, including those on the Capitol Campus in Olympia, when those structures are renovated or rehabilitated. An example of this is the reconstruction of the Legislative Building (the state capitol building), which was damaged in the Nisqually earthquake. A three-year rehabilitation and earthquake-repair project was completed in 2004. The \$120 million project modernized numerous areas of the structure to include making seismic upgrades. Per the Olympian in 2011, since the 2001 earthquake, which was eerily similar to deep earthquakes that struck South Sound in 1949 and 1965, the state has spent more than \$40 million on earthquake repairs on the Capitol Campus and on parks and roads around state-managed Capitol Lake. The cost of repairs and seismic upgrades include \$21 million to repair the Legislative Building – it was closed for two years to complete the work – and \$8 million to rebuild Deschutes Parkway along Capitol Lake, the most earthquake-damaged road in the state. Read more at <http://www.theolympian.com/2011/02/27/1558683/capitol-campus-on-shaky-ground.html#storylink=cpy>. In Olympia, 27 buildings were closed immediately after the earthquake, and several required major repairs. The Fourth Avenue Bridge was knocked out of commission and cost \$39 million to replace, more than the cost of Olympia's new 2012 City Hall. The State Capital Museum, the former Lord Mansion built in 1923, is undergoing a major seismic upgrade to better connect the walls and floors. Three studies in the past 10 years have shown that the Natural Resources Building, Office Building 2, and state Department of Transportation headquarters on the Capitol Campus could use millions of dollars in seismic upgrades. Natural Resources Building Seismic Evaluation reported published September 2010 found this building in Olympia to be deficient in its predicted seismic performance in a future earthquake. Suggested retrofit solutions amount to \$5 million - \$15 million. See <http://www.ga.wa.gov/Facility/NRBSeismicReportFinal.pdf>.

The Department of Enterprise Services (DES), Real Estate Department, does review hazard mitigation criteria when it evaluates facilities for new leases and renewals of leases. DES avoids floodplains, strip malls, buildings with maintenance, safety, and seismic deficiencies while supporting locations near bus lines for commuter trip reduction or facilities that minimize energy consumption. It writes conditions into the Request for Proposals solicitation and responses need to document compliance with those conditions. DES verifies compliance as part of its process. DES also issues guidelines for Leadership in Energy and Environmental Design (LEED) and tracks its implementation for public facilities. DES reports 91% of state agency, university, and college projects are participating in LEED. DES is tracking 125 state owned projects of which 52 have been LEED certified, 38 have not yet completed the LEED certification

process, and 34 projects have received exemptions. The payback for LEED related costs is between 0 and 18 years. The state mandates LEED Silver Standard certified buildings as part of the state's climate adaptation strategy. See *Implementation of RCW 39.35D High Performance Green Buildings* <http://des.wa.gov/SiteCollectionDocuments/Facilities/Green/StateGreenBuildingReport-2012.pdf>.

Additionally, in 2013, DES started the Capitol Campus Alerts System, an alert and notification system, for Capitol Campus tenants and employees about urgent situations / emergencies. Emergency notifications are for active or barricaded shooter, bomb threat, major fire, and hazardous material incident. Alert notifications include severe weather forecast, tsunami or lahar warning, campus closures, and power or utility outages. The Capitol Campus has a high ratio of state employees and government functions.

Washington State has about 250 state employees who have taken the Citizen Corps course Community Emergency Response Team (CERT) Basic training course. The Washington Commission for National and Community Service holds quarterly "brown bag" meetings for them on a wide variety of topics. The vast majority of the members are located in Olympia, mostly on the Capitol Campus, but also in Lacey and Tumwater. Around the state, there are 63 registered CERT programs, unaffiliated with the State Agency CERT program. Most of them are with city, county, or local fire departments. There are also high school (Teen) and college (Campus) CERT programs that are being developed. *The mission of Citizen Corps is to harness the power of every individual through education, training, and volunteer service to make communities safer, stronger, and better prepared to respond to the threats of terrorism, crime, public health issues, and disasters of all kinds.* <http://www.citizencorps.wa.gov/councils/default.asp>

A strategy developed for the Military Department's Emergency Management Division (EMD), Department of Natural Resources-Division of Geology and Earth Resources (DNR), and the Office of Superintendent of Public Instruction (OSPI) is to systematically evaluate all public school buildings within Washington in order to establish the seismic risk for each. This will allow for the prioritization of school structures in need of seismic retrofitting across the state and permit a strategic, targeted approach for alleviating the risk of potentially dangerous school structures. WA EMD, with funding support from FEMA, will be undertaking a pilot project starting in April 2010 to evaluate school buildings in two school districts: Walla Walla and Aberdeen Public Schools. Since the staff and travel for this project is funded 100% by FEMA, the local districts will not need to provide any financial match or in-kind assistance as a condition of participating in this project. In addition to the life safety issue surrounding the students attending these schools, many schools buildings have been identified as necessary for post-disaster response and recovery operations; the potential of retrofitting those schools through mitigation dollars will be extremely beneficial to the local jurisdictions that rely on such facilities. The *Washington State School Seismic Safety Pilot Project— Providing Safe Schools for Our Students* report was published July 2011. See <http://www.k12.wa.us/SafetyCenter/Emergency/pubdocs/WAStateSchoolSeismicSafetyPilot7-2011.pdf>.

Washington State is taking a national lead on the implementation of tsunami vertical evacuation for tsunami threatened communities. Through funding support from the National Tsunami Hazard Mitigation Program (NTHMP), Washington State Emergency Management along with USGS, NOAA's National Weather Service, FEMA, the University of Washington's Hazard Mitigation Institute, and Pacific County Emergency Management have begun a grassroots, 'bottom-up' process to identify potential locations and types of vertical evacuation safe havens that are acceptable to the community. The planning team has been hosting a series of workshops in Pacific County to identify vertical evacuation solutions that are supported by the local residents. Ultimately, this will conclude with a plan that

identifies a preferred alternative along with preliminary engineering estimates for design and construction of the tsunami refuges. This project will continue through 2013 and engaged communities in Grays Harbor, Jefferson, and Clallam counties. See the Project Safe Haven website <https://catalyst.uw.edu/workspace/wiserjc/19587/>.

University of Washington researchers developed information tools to increase the speed and efficiency of Washington State Department of Transportation (WSDOT) post-earthquake response and recovery efforts. The researchers upgraded the Pacific Northwest Seismograph Network (PNSN) ground-motion processing software to rapidly generate and disseminate “ShakeMaps,” which are maps of earthquake intensity. The researchers also implemented two procedures to estimate the likelihood of slight (or greater) bridge damage; these procedures are based on the intensity of earthquake shaking (obtained from the ShakeMaps) and on each bridge’s location, year of construction, and bridge type (obtained from the Washington State Bridge Inventory). The first procedure, developed at the University of Washington, is based on observations of bridge damage from the 2001 Nisqually earthquake. The second procedure is contained in the Federal Emergency Management Agency HAZUS software for predicting the lowest level of damage. Shortly following an earthquake, e-mail and pager alert messages will be sent to WSDOT personnel notifying them of the preliminary earthquake magnitude and epicenter. ShakeMaps and a prioritized list of bridges (ranked by likelihood of bridge damage) will be available on a Web server at the University of Washington and will be pushed to a WSDOT FTP server.

The table below provides a summary of the status of the WSDOT Bridge Seismic Retrofit Program. To date nearly \$100 million has been invested in the program since 1991, and the TPA continues to provide additional funding to support the program.

Bridges in the Seismic Retrofit Program as of March 2012	
Completely Retrofitted	268
Partially Retrofitted	134
Needing Retrofitting	487
Under Contract	12
<b>Total</b>	<b>901</b>
Source: WSDOT Bridge Office <a href="http://www.wsdot.wa.gov/Bridge/Reporting/SeismicRetrofitProgram.htm">http://www.wsdot.wa.gov/Bridge/Reporting/SeismicRetrofitProgram.htm</a>	

WSDOT has collaborated with federal, state, and local agencies to determine how the remaining seismic retrofits should be prioritized. The conclusion was to focus on the bridges on Interstate 5 from Joint Base Lewis McChord near Lakewood to the I-5 and I-90 Interchange in Seattle. Retrofitting these bridges along Interstate 5 will provide a systematic plan that will begin to provide an earthquake resilient route that could be used to speed a recovery following a major seismic event.

#### Top 8 Lifeline Route Segments

- 1 Complete remaining bridges with single column piers in the Puget Sound vicinity
- 2 I-5 Ship Canal Bridge approaches
- 3 Bridges carrying I-5 traffic from Joint Base Lewis-McChord base to I-90 (mainline)
- 4 Bridges carrying I-5 traffic from Paine Air Field to I-90 (mainline)
- 5 Bridges over I-5 from Joint Base Lewis-McChord to I-90

- 6 Bridges over I-5 from Paine Air Field to I-90
- 7 Bridges on I-405
- 8 Bridges over I-405

Data source: WSDOT Bridge and Structures Office

WSDOT Ferries Division completed six seismic retrofit of bridge seats at the Bainbridge, Bremerton, Edmonds, Keystone, Seattle, and Vashon ferry terminals in the 2009-11 biennium.

In conjunction with the Resilience Institute Environmental Studies at Western Washington University and funded through the Department of Homeland Security 2009 Earthquake Hazard Reduction State Assistance Program, the State Earthquake Program has provided funds to complete a comprehensive evaluation of current seismic risk reduction policies both in Washington and across the Country. This project consists of conducting a Gap Analysis of Washington State's seismic policies in comparison to policies of other US states. The report was published October 2010 and it available at [http://www.emd.wa.gov/about/documents/HAZ\\_gap\\_analysisoct2010final.pdf](http://www.emd.wa.gov/about/documents/HAZ_gap_analysisoct2010final.pdf). According to FEMA, Washington State has the third highest annualized earthquake loss ration (AERL) – seismic risk – in the United States, behind California and Alaska. However, based on the analysis of policies listed in 47 state mitigation plans, Washington State has only an average number of policies that facilitate seismic mitigation. According to the Policy Risk Ratio and Proportional Risk Ratio (ratios of state legislation compared to California as the standard bearer), Washington State has the poorest policy coverage of any state with significant seismic risk, except for Alaska. Washington State lacks adopted policies related to school safety, hospital safety, funding for seismic mitigation, seismic advisory commissions, seismic monitoring, and earthquake insurance.

**Requirement 44 CFR §201.5(b)(4)(vi):** A comprehensive description of how the State integrates mitigation into its post-disaster recovery operations.

Hazard mitigation is an integral part of Washington's post-disaster recovery operations. Staff from the Mitigation section of the State EMD co-locates with mitigation staff from FEMA at the Joint Field Office (JFO) as soon as it opens. Staff from other state agencies that may have particular interest or jurisdiction in the disaster and in recovery operations also co-locate at the JFO. State and FEMA staffs work to identify mitigation opportunities through both the Individuals and Households Program (IHP) and the Public Assistance Program. IHP/State Human Services program staff members often provide mitigation information to disaster victims. State and federal mitigation staffs work together to identify public education opportunities and use existing materials or develop new materials specific to the hazard and disaster event. Public Assistance program staff encourages potential project applicants to identify mitigation elements in repair and restoration projects. Mitigation and public assistance program staffs often jointly conduct applicant briefings to discuss mitigation opportunities through both public assistance and hazard mitigation grant programs. State mitigation staff quickly disseminates letters of intent and information on the HMGP to potential applicants, and provide technical assistance to potential applicants on the grant application process.

**Requirement 44 CFR §201.5(c)(1):** A State must review and revise its plan to reflect changes in development, progress in statewide mitigation efforts, and changes in priorities, and resubmit it for approval to the appropriate Regional Administrator every three years. The Regional review will be completed within 45 days after receipt from the State, whenever possible.

The Mitigation and Recovery Section of the State Emergency Management Division (EMD) is responsible for developing and maintaining the SHMP. The section's Hazard Mitigation Strategist is the individual responsible for overseeing this work.

Participants in the plan maintenance process include the following:

- Members of the State Hazard Mitigation Advisory Team (SHMAT) (see Element A, *Planning Process*, for information on the makeup and involvement of this team in the state plan).
- Representatives of the agencies of Washington State Government that participated in development of the state plan (see Element A, *Planning Process*, for information on the agencies that are part of the state plan).
- Representatives of local jurisdictions whose hazard mitigation plans were used in the development of the state plan.

The state plan review will take place in three ways:

- Annually, for progress made on mitigation actions and projects identified in the Mitigation Strategy of the state plan and in the agency annexes. This is typically done in April through an email-based survey to state agencies.
- After each major disaster in Washington State declared by the President, to look for areas where the state plan should be refocused due to the impact of the disaster. This is typically done by key members of the SHMAT and the Mitigation and Recovery Section.
- Every three years, before submission to FEMA for approval. Typically, the SHMAT provides advisory direction to the State Hazard Mitigation Strategist who revises all the plans components and facilitates their review by subject matter experts.

### **Annual Progress Review**

The purpose of the annual review is to gauge the progress as well as any changed conditions that may affect hazard mitigation planning and implementation in Washington State. The state plan will be revised annually only as necessary to reflect significant policy changes that took place during the preceding year or during the state's legislative session (typically January through April period).

Review on progress implementing the actions and projects identified in the state plan's Mitigation Strategy will occur annually. State agencies that are part of the state plan will submit brief progress reports on an annual basis during the spring but before the end of the state budget biennium.

Information from these reports will form the basis for a summary of progress submitted by EMD's Mitigation and Recovery Section for the annual report of the State Emergency Management Council.

Once a year, the SHMAT and the participating state agencies in the plan will:

- Review and revise the state plan's Risk Assessment as necessary to ensure its currency. This will include a review and update of hazard profiles and data on vulnerable state facilities as new information becomes available.
- Examine progress on mitigation actions and projects in the state plan's Mitigation Strategy Action Item or Action Agenda.
- Identify implementation problems (technical, political, legal, and financial).
- Recommend how to increase involvement by state agencies and local jurisdictions in hazard mitigation.
- Recommend revisions to the Risk Assessment and to the Mitigation Strategy's goals and objectives, projects and timelines only to reflect major changes in policies, priorities, programs, and funding.

As part of the 2013 update, the 2010 process was analyzed and revised to better reflect the resource capabilities of the State and more specifically the Mitigation Response and Recovering Section. The changes reflect the needs of the State and lessons learned during the previous 3-year planning period.

Plan maintenance implies an ongoing effort to monitor and evaluate plan implementation and to update the plan as progress, roadblocks, or changing circumstances are recognized. During the current update cycle, the state faced some significant roadblocks that impacted not only the plan's update, but also the plan's status with respect to the mitigation activities of the state agencies. Due to limited state revenue, many of the action items, which had an anticipated end date during the lifespan of this plan, did not occur. Therefore, those action items, which were not completed, will continue within the plan. Some of the action items became obsolete or are no longer practical, and have been removed from the general strategies and moved to the *Appendix 3* portion of the plan. Additionally, staff turnover in the State Hazard Mitigation Strategist position slowed outreach and update efforts.

As was with previous plan editions and for the 2013-2016 update cycle, various plan elements will be monitored, evaluated and updated throughout the three year planning period via the Mitigation Strategist, with the SHMAT monitoring efforts and providing information as needed/requested. It was also determined the most efficient way to lead the update effort is to manage the Plan as any large project. As such, there will be a dedicated mitigation staff member assigned to monitor and evaluate the Plan throughout the three-year update process.

In coordination with the SHMAT, this dedicated staff person will manage the following:

- Progress made on goals and objectives
- Modifications to the State risk and vulnerabilities as needed
- Implementation of mitigation actions and projects
- Changes in policies or programs discussed in the Plan

Sub-groups will be established, with representatives from the various SHMAT agencies and organizations responsible for reviewing the plan and providing input and suggested changes. This input is based on subject matter expertise, on-going studies, best available science, and mitigation initiatives being undertaken by SHMAT members and their respective agencies or organizations. Additional emphasis will be placed on developing a system for tracking mitigation strategies, and assisting the state agencies in developing more in-depth action items.

During the planning period, state agencies will:

- Review hazard mitigation projects and initiatives and report on progress of completed, deleted, or deferred projects, as well as reporting any new initiatives/projects.
- State agencies will also review existing state/federal programs to ensure that the state is taking full advantage of possible funding sources in its implementation of the state hazard mitigation program.
- Continue working on a method of Risk Assessment, which can be utilized by the local jurisdiction plans. The next plan edition should include economic and social risk ranking criteria.
- Develop a method of capturing in greater detail the strategies of the local jurisdictions for inclusion within the State's plan. The focus of these strategies should be geared towards those strategies, which are significant in nature, not generic or overly broad.

Separate agency annexes to the state plan, each with separate narratives and mitigation goals, objectives and action items will not be required. Continuing with this plan, one set of mitigation goals will cover all participating agencies, and all agency mitigation action items will be included into one table in the Mitigation Strategy section of this plan. State agency participation will continue to be required in the plan review and revision process. Annual progress reports by participating state agencies will be required rather than semi-annual reports.

### **Post-Disaster Review**

After each presidentially declared major disaster in Washington State, EMD's Mitigation and Recovery Section will document the effects of the disaster, and convene the SHMAT to examine the disaster and, as necessary, develop recommendations to improve resistance to the hazard. This process allows for a review of the state plan and the impacts of the hazard that caused the event, as well as providing an opportunity to determine whether any of the Mitigation Strategies require revisions.

In documenting the disaster, EMD's Mitigation and Recovery Section may consult representatives from FEMA, appropriate state and local agencies, and private sector partners impacted by the disaster. If determined necessary, approximately six months after the event, the Mitigation Section will prepare and disseminate a report outlining the disaster and its impact, and propose new or revised recommendations for the state plan's Mitigation Strategy.

Such a post-disaster review may replace an annual review in any year a major disaster event occurs, depending upon severity of the disaster event and on the timing of the survey and the state plan's annual progress review.

The state received three disaster declarations after approval of the 2010 plan:

- January 2011 Severe Winter Storms (DR-1963);
- January 2012 Severe Winter Storm (DR-4056); and
- July 2012 Wind Storm (DR-4083).

The Hazard Mitigation Strategist met with the SHMAT to review the Severe Storm, Landslide, and Flooding profiles after these events occurred. It was determined that the profiles remained fairly current as written, with the exception of inclusion of the new disaster events in the historical data portion of the profile. The Strategist and SHMAT concluded that as the plan was again in its update cycle, the profiles would be updated with new information during the normal update cycle, which was already underway at the time the team met. Additionally, EMD's Mitigation and Recovery Section documented impacts of the disasters to make certain accurate information would be included.

The Mitigation staff at the Joint Field Office also requested Losses Avoided Studies be conducted for properties impacted by the disasters. The projects included in this study were:

- Drainage improvements consisting of a culvert upsizing and channel dredging in the City of Issaquah, and
- Installation of a flood drainage gate along the Stillaguamish River levee near the City of Stanwood.

The drainage improvement projects reported an overall Return on Investment of 96.7% successful after only two years into the project's useful life cycle.

### **Three-Year Plan Review and Revision:**

Every three years, EMD's Hazard Mitigation Section, will facilitate an update of the Washington SHMP prior to its submission to FEMA for approval. The review will begin approximately 12 months before FEMA approval is required. Review and revision will involve SHMAT and state agencies and local jurisdictions whose plans influenced development of the state plan. Additionally, the SHMP will be coordinated with other state plans, as appropriate.

It is the state's intent that the 2013 edition of the plan should continue to address both natural and manmade or technological hazards. The state plan's Risk Assessment will incorporate profiles for each of the identified manmade or technological hazards that affect Washington State.

To the extent possible, local multi-jurisdiction hazard mitigation plans completed as of the start of the three-year review and revision cycle will provide the basis for revising the state plan, especially those sections related to hazard identification and risk assessment.

During the 2010-2013 update cycle it is the intent of State and FEMA Region X to work together in an attempt to develop a method to incorporate already existing plans such as Flood Hazard Management / Mitigation Plans, Comprehensive Wildfire Protection Plans, etc., into the appropriate components of the local jurisdiction's mitigation plan in an effort to reduce redundancy in planning efforts.

The following framework will be the process used for the Three-Year Plan Review and Revision prior to the state plan's submission to FEMA in 2013:

- Review will continue to involve SHMAT and participating state agencies, as well as local jurisdictions as appropriate.

- Hazard and risk-assessment information in local plans that are revised and re-approved by fall 2012 will be reviewed and considered in the 2013 state plan update process.
- Hazard Profiles - New information and maps, as available, will be included in natural hazard profiles. Additionally, hazard experts will review the profiles for completeness and accuracy.
- Implementing Mitigation Actions - Participating state agencies and SHMAT will review the status of and progress on mitigation actions identified in the Mitigation Strategy of this plan.
- Effectiveness of state-funded, Local Mitigation Projects is addressed in *Appendix 10 Earthquake* and *Appendix 11 Flood* per the requirements of 44 CFR 201.5.b.2.iv.
- Identification of Implementation Issues - the EMD Mitigation and Recovery Section in conjunction with SHMAT will examine issues related to implementing mitigation actions identified in this plan and make recommendations for their resolution in the 2013 plan.
- Increase State, Local Participation in Hazard Mitigation:
  - The EMD Mitigation and Recovery Section will continue its outreach to state agencies in a variety of ways, including but not limited to State Agency Liaison meetings; one-on-one meetings with agency staff; through critical infrastructure protection, homeland security, and other related planning initiatives; and through the office of The Adjutant General, State Military Department, to the Governor's Cabinet, as necessary.
  - Section staff also will continue outreach to local jurisdictions through presentations at conferences, web-based trainings, one-on-one technical assistance visits, scheduling of mitigation-related training and workshops (mitigation planning, benefit-cost analysis, application preparation, etc.); and continued communication through phone, email and Internet, among other means.
  - An inventory of state-owned and leased facilities maintained annually by the State Office of Financial Management will again be used as the facilities database for the 2013 SHMP. Use of this database will continue to be expanded in the coming years to meet the needs of a variety of state planning initiatives, including hazard mitigation; this will streamline the collection of information on state facilities, reduce the burden on state agencies participating in the state hazard mitigation planning initiative, and should encourage increased participation.
- SHMAT, hazard experts, and others will continue to review the various elements of the plan, and assist with the update of the Risk Assessment and Mitigation Strategy portions for the 2013 plan.
- The EMD Mitigation and Recovery Section will continue to monitor the process of maintaining the state plan, involving SHMAT and others as needed and appropriate.
- In coordination with FEMA Region X, establish a subcommittee of the State Advisory Team to explore the feasibility of integrating hazard mitigation with other statewide planning initiatives.

The three-year review of the plan began in earnest August 2012, with involvement from SHMAT and participating state agencies occurring electronically throughout the update cycle. All natural hazard profiles were updated and several new man-made / technological hazards were incorporated. The state Hazard Identification and Vulnerability Assessment (HIVA) was incorporated. An inventory of state-owned and leased facilities maintained annually by the State Office of Financial Management was used. The EMD Mitigation and Recovery Section increased outreach to local jurisdictions through presentations at conferences, one-on-one technical assistance visits, scheduling of mitigation-related training and workshops (mitigation planning, benefit-cost analysis, application preparation, etc.); and increased communication through phone, email and Internet, among other means. Local hazard mitigation plans were reviewed in January 2012 for hazard information and potential losses from risk assessments that potentially could be incorporated into this update of the state plan.

**Requirement 44 CFR §201.5(c)(2):** In order for a State to be eligible for the 20 percent HMGP funding, the Enhanced State Mitigation plan must be approved by FEMA within the three years prior to the current major disaster declaration.

The intent is to submit the Standard and Enhanced Elements together for FEMA Region X review in the summer of 2013. All current major disaster declarations funding was issued under the previous (2004, 2007) or the current (2010) approved Washington State Enhanced Hazard Mitigation Plan.