

Appendix D

The Capital Facilities Plan / Year 2015 Update

Hazard Mitigation

EXECUTIVE SUMMARY

INTRODUCTION

The Disaster Mitigation Act (DMA; Public Law 106-390) is the latest federal legislation enacted to encourage and promote proactive, pre-disaster planning as a condition of receiving financial assistance under the Robert T. Stafford Act. The DMA emphasizes planning for disasters before they occur. It established a pre-disaster hazard mitigation program and new requirements for the national post-disaster hazard mitigation grant program (HMGP).

The DMA encourages state and local authorities to work together on pre-disaster planning, and it promotes sustainability as a strategy for disaster resistance. “*Sustainable hazard mitigation*” includes the sound management of natural resources, local economic and social resiliency, and the recognition that hazards and mitigation must be understood in the largest possible social and economic context. The enhanced planning network called for by the DMA helps local governments articulate accurate needs for mitigation, resulting in faster allocation of funding and more cost-effective risk reduction projects.

A coalition partnership made up of Snohomish County, 12 cities and 30 special purpose districts worked together to create this Snohomish County Natural Hazard Mitigation Plan (SCNHMP) to fulfill the DMA requirements for all participating partners. This effort was funded by a Pre-Disaster Mitigation Program (PDM) planning grant from the Washington State Emergency Management Division.

PLAN PURPOSE

The SCNHMP serves the following purposes:

- To achieve DMA eligibility for Snohomish County and all Coalition Partners.
- To be the mitigation element of the Snohomish County Hazard Identification and Vulnerability Analysis.
- To serve as a coordinating document for existing flood hazard reduction plans.
- To provide Community Rating System (CRS) eligibility for Snohomish County and other CRS participating communities within the planning area.

THE COALITION

A coalition of local jurisdictions participating in preparation of the SCNHMP, including the cities and special purpose districts listed in Table ES-1 and ES-2. The Snohomish County Department of Emergency Management, of which all participating cities and the County are members, also participated as a coalition partner.

TABLE ES-1.
COALITION PARTNER CITIES

Arlington	Index	Monroe	Stanwood
Darrington	Lake Stevens	Mukilteo	Sultan
Gold Bar	Marysville	Snohomish	Snohomish County
Granite Falls			

TABLE ES-2.
SPECIAL PURPOSE DISTRICT PARTNERS

Snohomish Co. Fire District #1	Alderwood Water/Wastewater District
Snohomish Co. Fire District #3	Cross Valley Water District
Snohomish Co. Fire District #4	Highland Water District
Snohomish Co. Fire District #5	Mukilteo Water District
Snohomish Co. Fire District #7	Silver Lake Water District
Snohomish Co. Fire District #14	Darrington School District
Snohomish Co. Fire District #17	Monroe School District # 103
Snohomish Co. Fire District #18	Northshore Parks and Recreation District
Snohomish Co. Fire District #19	Sultan School District #311
Snohomish Co. Fire District #21	Olympus Terrace Sewer District
Snohomish Co. Fire District #24	Snohomish County Dike District #2
Snohomish Co. Fire District #25	Marshland Flood Control District
Snohomish Co. Fire District #26	Stillaguamish Flood Control District
Snohomish Co. Fire District #27	French Slough Flood Control District
Snohomish Co. Fire District #28	Snohomish County Health District

PLAN DEVELOPMENT METHODOLOGY

The development of the SCNHMP was carried out over four principle phases:

- Phase 1—Organize resources and involve the public
- Phase 2—Assess the risk
- Phase 3—Develop the mitigation plan
- Phase 4—Implement, evaluate and revise the plan.

Phase 1—Organize Resources

Under this phase, the Coalition Partnership was formed and a 13-member steering committee was assembled to oversee the development of the plan, consisting of Coalition Partners and other stakeholders in the planning area. An application for a Pre-Disaster Mitigation Program planning grant to fund the countywide effort was submitted. This grant was awarded and was sufficient to fund the entire effort for all planning partners (excluding the required cost sharing portion). A multimedia public involvement strategy, centered on a hazard preparedness questionnaire, was also implemented under this phase. This strategy proved to be highly effective in gauging the public's perception of risk and vulnerability to natural hazards and their support of mitigation alternatives.

Phase 2—Assess the Risk

This phase involved coordination with another emergency management project being undertaken within the County. The Snohomish County Department of Emergency Management had contracted with the University of Washington's Institute for Hazard Mitigation and Planning to update the Snohomish County Hazard Identification and Vulnerability Analysis (HIVA). This update would use the best available science and technology to create a visual representation of hazards in the form of geographic information

system (GIS) mapping to be used in all stages of emergency management (preparedness, response, recovery and mitigation). Phase 2 occurred simultaneously with Phase 1, with the two efforts using information generated by one another to create the best possible regionally applicable risk assessment. Using information garnered from the public involvement strategy and the Coalition Partnership, a catalog of mitigation alternatives was created. This catalog would be a key tool to be used under Phase 3.

Phase 3—Develop the Mitigation Plan

Under this phase, the Steering Committee assembled the key information from Phases 1 and 2 into a planning document to meet the requirements of the DMA and CRS programs. The first task was to develop a guiding principle for this plan and a set of goals and objectives. Once these planning elements were established, templates were made with instructions for their completion to guide each Coalition Partner in the development of their jurisdiction-specific annexes to the SCNHMP. Each partner was required to do the following:

- Rank the relative risk according to the exposure to their jurisdiction.
- Identify their capabilities.
- Identify mitigation initiatives using the mitigation catalog.
- Prioritize these initiatives, emphasizing benefits vs. costs when appropriate.

The SCNHMP would be produced in two volumes: Volume 1 including all information that applies to the entire planning area; and Volume 2 including the jurisdiction-specific information.

Phase 4—Implement, Evaluate and Revise the Plan

Once the SCNHMP was assembled under Phase 3, the Steering Committee developed a plan-maintenance strategy for incorporation into the plan itself. This strategy centers on keeping the Steering Committee intact to review the progress of the SCNHMP annually. It was decided that this body will remain at 13 volunteer seats and will adhere to the ground rules established at its inception. The Steering Committee will meet annually at a time to be determined. This body will also oversee the plan's update, to be initiated within five years from adoption and be completed no later than eight years from adoption. Guidelines for incorporating the information and strategies in the SCNHMP into other planning mechanisms within the planning area were also established. The final element of this phase was to present the draft plan to the public for comment and for each Coalition Partner to adopt the plan once pre-adoption approval has been given by Washington's Emergency Management Division and the Federal Emergency Management Agency (FEMA).

MITIGATION GUIDING PRINCIPLE, GOALS AND OBJECTIVES

The following guided the Steering Committee and the Coalition Partnership in selecting the initiatives contained in this plan:

- **Guiding Principle**—Through partnerships, reduce the vulnerability to natural hazards in order to protect the health, safety, welfare and economy of the community.
- **Goals**
 - G-1—Prevent natural hazard-related injury and loss of life.
 - G-2—Reduce property damage.
 - G-3—Promote a sustainable economy.

- G-4—Maintain, enhance and restore the natural environment’s capacity to absorb and reduce the impacts of natural hazard events.
- G-5—Increase public awareness and readiness for disasters

- **Objectives**

- O-1—Eliminate or minimize disruption of local government operations caused by natural hazards.
- O-2—Increase resilience of infrastructure.
- O-3—Consider the impacts of natural hazards on future land uses in Snohomish County.
- O-4—Reduce natural hazard-related risks and vulnerability to potentially isolated populations in Snohomish County.
- O-5—Sustain reliable local emergency operations and facilities during and after a disaster.
- O-6—Seek projects that minimize or mitigate their impact on the environment.
- O-7—Consider open space land uses within identified high-hazard risk zones.
- O-8—Improve systems that provide warning and emergency communications.
- O-9—Enhance understanding of natural hazards and the risk they pose.
- O-10—Educate the public on the risk from and preparedness for natural hazards and ways to mitigate their impacts.
- O-11—Seek mitigation projects that provide the highest degree of natural hazard protection at the least cost.
- O-12—Minimize the impacts of natural hazards on current and future land uses by providing incentives for hazard mitigation.
- O-13—Support agricultural preservation within the context of floodplain management.
- O-14—Retrofit, purchase, or relocate structures in high hazard areas, including those known to be repetitively damaged.

MITIGATION INITIATIVES

The mitigation initiatives are the key element of the SCNHPMP. It is through the implementation of these initiatives that the Coalition Partnership can strive to become disaster-resistant through sustainable hazard mitigation. For the purposes of this document, mitigation initiatives are defined as activities designed to reduce or eliminate losses resulting from natural hazards.

Although one of the driving influences for preparing this plan was grant funding eligibility, this is not just a “how to get money from FEMA” plan. It was very important to the Coalition Partnership and the Steering Committee to look at initiatives that will work through all phases of emergency management. Some of the initiatives outlined in this plan and the mitigation catalog that guided their selection are not grant eligible—grant eligibility was not the focus of the selection. Rather, the focus was the initiatives’ effectiveness in achieving the goals of the plan and whether they are within each jurisdiction’s capabilities.

A series of countywide initiatives were identified by the Steering Committee and the Coalition partnership. These initiatives are summarized in Table ES-3. Jurisdiction-specific initiatives are listed in Volume 2 of this plan.

TABLE ES-3.
COUNTYWIDE MITIGATION INITIATIVES

Initiative	Funding Source	Lead Agency	Timeline
1. Provide coordination and technical assistance in the application for grant funding that includes assistance in cost vs. benefit analysis for grant eligible projects	Existing programs for the two lead agencies	DEM and SWM jointly	Short term Ongoing
2. Provide countywide updates to the HIVA using best available science and technology as new hazard-specific data becomes available (e.g., avalanche, tsunami, landslide)	Possible DHS grant funding for future enhancements; DEM operational funds	DEM	Short Term
3. County to assume lead role in the update/re-study of floodplains as a Cooperating Technical Partner with FEMA for all Coalition Partners.	SWM funding, cost share through FEMA map modernization program	SWM	Short term Ongoing
4. Provide basin-specific floodplain information in the form of an informational brochure to all Coalition Partners annually for dissemination to county floodplain residents and identified repetitive loss areas. This outreach project will be designed according to the CRS criteria for outreach projects.	SWM funding	SWM	Short term (Annually) Ongoing
5. Sponsor and maintain a natural hazards informational website to include the following types of information: <ul style="list-style-type: none"> • Hazard-specific information such as warning, private property mitigation alternatives, important facts on risk and vulnerability • Pre- and post-disaster information such as notices of grant funding availability • CRS creditable information • Links to Coalition Partners' pages, FEMA and EMD • SCNHMP information such as progress reports, mitigation success stories, update strategies, Steering Committee meetings.. 	DEM operational budget	DEM with support from SWM	Short Term
6. Coordinating with all Coalition Partners, WRIA planning units and other stakeholders in the County, seek the acquisition of high-risk parcels that could provide significant open space benefits such as the attenuation of the impacts of natural hazards and beneficial environmental functions (e.g., enhancement of habitat for threatened or endangered species).	Grant funding: PDM, HMGP, FCAAP, REET, habitat related grants	Coalition Partner Cities, SWM, Snohomish County Parks Dept.	Long Term
7. The SCNHMP Steering Committee will remain as a viable body over time to monitor progress of the SCNHMP, provide technical assistance to Coalition Partners and oversee the update of the SCNHMP according to schedule. This body will continue to operate under the ground rules established at its inception.	No impact on existing funding	DEM to be lead coordinating agency with support from SWM, PDS and PIE	Short Term Ongoing

Abbreviations: CRS = Community Rating System (a FEMA program); DEM = Snohomish County Department of Emergency Management; EMD = Washington Emergency Management Division; FCAAP = Flood Control Assistance Account Program (a Washington Department of Ecology program); FEMA = Federal Emergency Management Agency; HIVA = Hazard Identification and Vulnerability Analysis; HMGP = Hazard Mitigation Grant Program (a FEMA program); PDS = Snohomish County Department of Planning and Development Services; PDM = Pre-Disaster Mitigation Program (a FEMA program); PIE = Snohomish County Public Involvement and Education program; REET = Real Estate Excise Tax; SCNHMP = Snohomish County Natural Hazards Mitigation Plan; SWM = Snohomish County Surface Water Management Division; WRIA = Water Resource Inventory Area

CONCLUSION

Full implementation of the recommendations of this plan will take time and resources. The measure of the plan's success will be the coordination and pooling of resources within the Coalition Partnership. Keeping this coordination and communication intact will be key to the successful implementation of this plan. Teaming together to seek financial assistance at the state and federal level will be a priority to initiate projects that are dependant on alternative funding sources. This plan was built upon the effective leadership of a multi-disciplined Steering Committee and a process that relied heavily on public input and support. This plan will succeed for the same reasons.