

CITY COUNCIL AGENDA ITEM
CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:	Hazard Mitigation Plan Update
DEPARTMENT:	City Manager's Office
PREPARED BY:	Gail Marsh, Emergency Management Coordinator Julie Modrzejewski, Assistant City Manager

ISSUE STATEMENT:

Council adopted the City's Hazard Mitigation Plan in April 2004, and subsequently, it was adopted by the Washington State Office of Emergency Management and FEMA. The Hazard Mitigation Plan (plan) identifies and recommends projects and programs that when implemented, would eliminate, minimize, or otherwise mitigate the vulnerability of the people, property, environmental resources, and economic vitality of the community to the impacts of future disasters. The hazards that the City is potentially vulnerable to are:

- | | |
|------------------------|------------------|
| ○ Earthquakes | ○ Flooding |
| ○ Hazardous materials | ○ Wildland fires |
| ○ Severe weather | ○ Volcano |
| ○ Landslides/sinkholes | ○ Tsunamis |

The plan defines each hazard, assesses the risk the hazard poses to Shoreline and provides long-term mitigation actions and implementation strategies that could reduce the loss in the event of a hazard event. These identified projects and programs are termed "mitigation initiatives" and constitute the principal component of the plan. Overall, the fundamental purpose of the plan is to guide, coordinate, and facilitate the efforts of the agencies, organizations, and individuals participating as they seek funding, authority, or other resources necessary for implementation of mitigation initiatives. The Emergency Management Coordinator is responsible for tracking and reporting the plan's progress.

BACKGROUND:

As part of the City's Emergency Operations Plan, which the Council adopted on May 2003, the City contracted with the University of Washington Institute for Hazard Mitigation to prepare the plan. The plan identifies 28 strategies (see attachment A, Chapter 9, Action Plan), which have been programmed into department work plans. For ease of reporting, this update will focus on the timeline for implementation, which is grouped into three categories: short-term (1-2 years), long-term (3-5 years) and ongoing (3-5 years). By-and-large, the majority of the strategies are ongoing and requires multiple-year planning efforts.

Short-Term Strategies

Short-term means the mitigation strategy will be implemented in years 1 to 2 and is either critical to the life safety of Shoreline residents, or relatively easy to implement because funding has already been secured or is readily available.

Strategy	Status
M-1: Create a full time position in the City of Shoreline for an Emergency Management Coordinator.	o Completed - June 2004
M-6: Identify critical community facilities and infrastructure that are without back up power generators.	o Completed assessment - most facilities have only partial backup power
M-11: Identify critical city facilities and infrastructure and acquire back up power generators for those currently without.	- o City has installed a generator at the Police Department - o City received grant to install a generator at the Spartan Recreation Center (identified as a possible emergency shelter) - targeted for April 2007 completion
M-21: Reassess the City of Shoreline evacuation and primary response routes.	- o Completed assessment - o Battery backups were added to 6 signals and 4-5 more are planned in 2007

Long-Term Strategies

Long-term means that mitigation strategies will be implemented in 3 to 5 years. Long-term mitigation measures will take more effort to implement and funding has not been secured/identified or is not readily available.

Strategy	Status
M-4: Create and maintain a partnership with Washington State Department of Transportation (WSDOT) to ensure that the I-5 overpasses located in Shoreline are retrofitted to current seismic standards within a reasonable time frame.	- o 145th bridge and 195th pedestrian bridge were retrofitted - o 155th and 175th bridges are scheduled for 2008-2009 - o Staff continues to work with the State to program the 185th bridge
M-9: Provide incentives for voluntary structural retrofitting of older structures on vulnerable soils.	- o City is participating in the regional Project Impact Partnership Retrofit Program, which offers courses to citizens - information is available in the "Get Ready Shoreline" mailer distributed to every household - January 2007 - o Staff assisted in 2006 update of "Earthquake Home Retrofit Handbook," which is available to citizens - o Staff will promote retrofitting

Strategy

M-10: Improve/expand storm water drainage, dams, detention and retention system capabilities.

M-12: Identify critical government functions and establish backup operations for these functions.

Status

- homes as part of the 2007 Building Safety Week in May
- Staff will send letters to affected homes - targeted for 2007
- Ongoing implementation of the Surface Water Master Plan
- Continuity of Operations Plan (COOP) project - targeted for February 2007-September 2008

Ongoing Strategies

Ongoing means that the mitigation strategy will be implemented in years 1 to 5 years and will continue into the future indefinitely. Ongoing also indicates that they have a continuing component to the strategy.

Strategy

M-2: Create a communitywide comprehensive education program to educate the public about hazards and hazard mitigation.

M-3: Create and maintain a partnership with utility providers to ensure that the utility infrastructure serving Shoreline is retrofitted or built to standards that make them less vulnerable in a hazard event including critical infrastructure protection.

M-5: Implement non-structural retrofitting in city facilities and provide incentives for non-structural retrofitting for privately owned

Status

- Staff created "hazards brochure" for Permit Center
- "Get Ready Shoreline" mailer distributed to every household - January 2007
- Communitywide meetings scheduled - February, April, September 2007
- Staff provides education and outreach via community groups and events, neighborhood meetings, etc. (e.g., Celebrate Shoreline, Night Out, Chamber, Rotary, etc.)
- Staff sent letters to faith-based organizations and have distributed education materials to 4 churches
- Staff sent letters to all Neighborhood Council reps and Block Watch Captains for participation in Ready Neighborhood Program
- City Manager sent letter to Seattle City Light - January 2007
- Staff is exploring mutual aid possibilities
- City facilities are approximately 85% complete - this remains ongoing due to dynamic

Strategy

structures throughout the city.

M-7: Identify and assess critical and essential city infrastructure and facilities.

M-8: Assure that the public is informed of the necessity of maintaining a 3-day supply of food and water, along with basic first aid and medical supplies.

M-13: Educate homeowners, developers and business owners about how to reduce impacts of urban flooding.

M-14: Provide incentives for non-structural retrofitting of hazardous materials containment throughout the city.

M-15: Create and maintain a partnership between City and Washington State Public Health Laboratories so there is coordination during and immediately after a disaster.

M-16: Create and maintain partnerships with educational and care facilities.

Status

organizational changes

- o This strategy will be addressed in the Public Works Continuity of Operations Plan - targeted for 2008

- o City is active in 3Day3Way County campaign
- o "Get Ready Shoreline" mailer distributed to every household - January 2007
- o Communitywide meetings scheduled - February, April, September 2007
- o Staff provides education and outreach via community groups and events, neighborhood meetings, etc. (e.g., Celebrate Shoreline, Night Out, Chamber, Rotary, etc.)

- o City is active in joint efforts with neighboring jurisdictions to solve downstream flooding issues
- o Staff created "hazards brochure" for Permit Center
- o "Get Ready Shoreline" mailer distributed to every household - January 2007

- o Citywide recycling events are held twice annually
- o Staff conducts ongoing environmental education classes and continues supporting the battery recycling program

- o Health Department is active on the City's Emergency Management Council
- o Health Department hosted a meeting/tour of facility in 2005
- o Police and Emergency Management have actively partnered with the School District's Safety Committee
- o Staff taught National Incident Management System (NIMS) to Community College staff
- o Staff worked with American Red Cross and Community College to install shelter supplies facility in city - completed in 2006

Strategy

M-17: Institute low impact development regulations for new developments as well as re-development projects.

M-18: Create and maintain a partnership between the City of Shoreline and the Shoreline Fire Department so there is coordination in implementing mitigation measures as well as coordination during and immediately after a disaster.

M-19: Create and maintain a partnership between the City of Shoreline and the Shoreline School District so there is coordination in implementing mitigation measures as well as coordination during and immediately after a disaster.

M-20: Create and maintain a partnership with Snohomish County.

M-22: Educate business owners about potential hazards and hazard mitigation.

M-23: Educate private homeowners about how to implement measures to reduce impacts of wildland fires.

M-24: Utilize the most current data and technology to develop a work program to regulate development and re-development on NEHRP E soils.

Status

- Staff identified all nursing care facilities in city and during December's 2006 windstorm contacted all facilities
- Planning Department has administratively adopted the low impact standards of the 2005 King County Surface Water Design Manual, which makes low impact design provisions an option
- Staff is working toward the adoption of the 2005 King County Surface Water Design Manual - targeted for 2007
- Fire Department is an active participant on the Emergency Management Council
- Ongoing coordination with Fire Department with community events, CERT, Incident Command System and NIMS trainings, and citywide drills/exercises
- School District is active on the Emergency Management Council
- Staff participates on the School District's Safety Committee, which began in December 2006 and will continue with ongoing meetings planned through 2007
- Ongoing relationships have been developed with the Emergency Services Coordinating Agency and Snohomish County Department of Emergency Management
- Presentations delivered/planned for the Chamber and Rotary meetings to promote Business Ready Program in 2007
- Created "hazards brochure" for Permit Center
- Fire Department distributed wildfire prevention handouts to targeted households
- Currently addressed via the adopted building codes under SMC 15
- Staff is working toward the adoption of 2006 International codes - targeted for July 2007

Strategy

M-25: Target code enforcement of abatement of nuisance vegetation on both City right-of-ways and public property.

M-26: Utilize Geographic Information Systems (GIS) in decision-making processes.

M-27: Utilize the most current data and technology when regulating landslide areas.

M-28: Remove the Robinson Water Tower.

Status

- Ongoing Public Works Right-Of-Way Maintenance Program
- Ongoing Code Enforcement Program

- Ongoing GIS Program

- Currently addressed via the adopted building codes under SMC 15

- Council adopted Critical Areas Ordinance - 2006

- Completed - 2004

Overall, nearly every City department plays a role in addressing key strategies. In addition, to a large degree, mitigating the City's hazards requires strong, healthy partnerships with other agencies and staff would like to express appreciation to all of the City's partners:

- Fire Department
- Shoreline School District
- Shoreline Community College
- Shoreline's Auxiliary Communications Team
- Washington State Department of Public Health Laboratories
- Washington State Department of Transportation
- American Red Cross
- Center for Human Services
- Crista Ministries

RECOMMENDATION

This report and presentation are for informational purposes and no Council action is required.

Approved By: City Manager  City Attorney _____

ATTACHMENT A

Hazard Mitigation Plan: Chapter 9, Action Plan

9. Action Plan

This section outlines the implementation agenda that the Emergency Management Council should follow for the five years following adoption of this plan. More information about each of the items listed can be found in Section 8.

The items are displayed on Table 9.1 in the order of their priority for implementation. They have been ranked for implementation based on input from the Stakeholder Committee and other participants; however, a benefit to cost analysis will be completed as part of the project development process, using FEMA approved benefit cost methods. See Appendix B for more information about these methods. The Emergency Management Council should consider the following an action plan for the first 5-year planning cycle.

Each mitigation strategy is assigned a timeline. This estimates the amount of time it will take to begin implementation of each strategy. Under timeline there are three categories, short term, long term and ongoing. Short Term means that the mitigation strategy will be implemented in years 1 to 2 and is either crucial to the life safety of Shoreline residents, or relatively easy to implement because funding has already been secured or is readily available. Long Term means that mitigation strategy will be implemented in years 3 to 5. Long term mitigation measures will take more effort to implement and funding has not been secured or is not readily available. Ongoing means that the mitigation strategy will be implemented in years 1 to 5 and will continue into the future indefinitely. Ongoing mitigation measures should be implemented early in the planning cycle, but will be ongoing projects once implementation has occurred.

Each mitigation strategy is related to a plan goal and objective. After implementation plan goals should be used to assess how well each of the mitigation strategies is accomplishing its intended goal and objective.

Table 9.1: City of Shoreline Action Plan

	Mitigation Strategy	Associated Hazards								Timeline	Lead Agency	Funding	Implementation Strategies (Section 8)	Plan Goals Addressed				
		Earthquakes	Hazardous Materials	Severe Weather	Landslides & Sinkholes	Flooding	Wildland Fire	Volcano	Tsunami/Seiche					Goal 1: Protect public health, welfare, and public safety	Goal 2: Minimize losses to existing and future properties	Goal 3: Encourage coordination and communication amongst public and private organization	Goal 4: Ensure continuity of critical facilities and corresponding operations of local government	Goal 5: Protect and promote environmental quality
M-1	Create a full time position in the City of Shoreline for an Emergency Management Coordinator.	x	x	x	x	x	x	x	x	Short Term	City Manager's Office	Shoreline Operating Budget	p. 8-2			x		
M-2	Create a community wide comprehensive education program to educate the public about hazards and hazard mitigation.	x	x	x	x	x	x	x	x	Ongoing	Police Department	Shoreline Operating Budget, EMPG, HGMP, Pre-Disaster Mitigation Program	p. 8-3	x				
M-3	Create and maintain a partnership with utility providers to ensure that the utility infrastructure serving Shoreline is retrofitted or built to standards that make them less vulnerable in a hazard event including critical infrastructure protection.	x	x	x	x	x	x	x	x	Ongoing	Public Works	Shoreline Operating Budget	p. 8-4				x	
M-4	Create and maintain a partnership with Washington State Department of Transportation (WSDOT) to ensure that the I-5 overpasses located in Shoreline are retrofitted to current seismic standards within a reasonable time frame.	x								Long Term	City Manager's Office	Shoreline Operating Budget	p. 8-4		x			
M-5	Implement non-structural retrofitting in city facilities and provide incentives for non-structural retrofitting for privately owned structures throughout the city.	x								Ongoing	Public Works Department	Shoreline Operating Budget	p. 8-5		x			
M-6	Identify critical community facilities and infrastructure that are without back up power generators.	x	x	x	x	x	x	x	x	Short Term	Police Department	Shoreline Operating Budget	p. 8-6	x				
M-7	Identify and assess critical and essential city	x	x	x	x	x	x	x	x	Ongoing	Public Works	Shoreline Operating Budget	p. 8-7		x			

Mitigation Strategy		Associated Hazards							Timeline	Lead Agency	Funding	Implementation Strategies (Section 8)	Plan Goals Addressed					
		Earthquakes	Hazardous Materials	Severe Weather	Landslides & Sinkholes	Flooding	Wildland Fire	Volcano					Tsunami/Seiche	Goal 1: Protect public health, welfare, and public safety	Goal 2: Minimize losses to existing and future properties	Goal 3: Encourage coordination and communication amongst public and private organization	Goal 4: Ensure continuity of critical facilities and corresponding operations of local government	Goal 5: Protect and promote environmental quality
	Infrastructure and facilities.																	
M-8	Assure that the public is informed of the necessity of maintaining a 3-day supply of food and water, along with basic first aid and medical supplies.	x	x	x	x	x	x	x	x	Ongoing	Police Department	Shoreline Operating Budget, EMPG	p. 8-7	x				
M-9	Provide incentives for voluntary structural retrofitting of older structures on vulnerable soils.	x								Long Term	Planning & Development Services, Public Works	DHS/FEMA, Shoreline Operating Budget	p. 8-8		x			
M-10	Improve/expand storm water drainage, dams, detention and retention system capabilities.					x				Long Term	Public Works	Shoreline Capital Improvement Budget, HGMP, Pre-Disaster Mitigation Program	p. 8-9		x			
M-11	Identify critical city facilities and infrastructure and acquire back up power generators for those currently without.	x	x	x	x	x	x	x	x	Short Term	Public Works	Shoreline Operating Budget	p. 8-10		x			
M-12	Identify critical government functions and establish backup operations for these functions.	x	x	x	x	x	x	x	x	Long Term	City Manager's Office	Shoreline Operating Budget	p. 8-10				x	
M-13	Educate homeowners, developers and business owners about how to reduce impacts of urban flooding.					x				Ongoing	Public Works Department	Shoreline Operating Budget	p. 8-11	x				
M-14	Provide incentives for non-structural retrofitting of hazardous materials containment throughout the city.	x	x							Ongoing	Public Works Department	Shoreline Operating Budget, Pre-HGMP, Pre-Disaster Mitigation Program	p. 8-12		x			

Mitigation Strategy	Associated Hazards							Timeline	Lead Agency	Funding	Implementation Strategies (Section 8)	Plan Goals Addressed				
	Earthquakes	Hazardous Materials	Severe Weather	Landslides & Sinkholes	Flooding	Wildland Fire	Volcano	Tsunami/Seiche				Goal 1: Protect public health, welfare, and public safety	Goal 2: Minimize losses to existing and future properties	Goal 3: Encourage coordination and communication amongst public and private organization	Goal 4: Ensure continuity of critical facilities and corresponding operations of local government	Goal 5: Protect and promote environmental quality
M-15 Create and maintain a partnership between City of Shoreline Emergency Services and Washington State Public Health Laboratories so there is coordination during and immediately after a disaster.	x	x							Police Department	Shoreline Operating Budget	p. 8-13			x		
M-16 Create and maintain partnerships with educational and care facilities.	x	x	x	x	x	x	x	x	Police Department	Shoreline Operating Budget	p. 8-13			x		
M-17 Institute low impact development regulations for new developments as well as re-development projects.					x				Planning & Development Services	Shoreline Operating Budget, Shoreline Capital Improvement Budget	p. 8-14					x
M-18 Create and maintain a partnership between the City of Shoreline and the Shoreline Fire Department so there is coordination in implementing mitigation measures as well as coordination during and immediately after a disaster.	x	x	x	x	x	x	x	x	Police Department	Shoreline Operating Budget	p. 8-15			x		
M-19 Create and maintain a partnership between the City of Shoreline and the Shoreline School District so there is coordination in implementing mitigation measures as well as coordination during and immediately after a disaster.	x	x	x	x	x	x	x	x	Police Department	Shoreline Operating Budget	p. 8-15			x		
M-20 Create and maintain a partnership with Snohomish County.	x	x	x	x	x	x	x	x	Police Department	Shoreline Operating Budget	p. 8-16			x		
M-21 Reassess the City of Shoreline evacuation and primary response routes.	x	x	x	x	x	x	x	x	Police Department	Shoreline Operating Budget	p. 8-17				x	

Mitigation Strategy		Associated Hazards							Timeline	Lead Agency	Funding	Implementation Strategies (Section 8)	Plan Goals Addressed				
		Earthquakes	Hazardous Materials	Severe Weather	Landslides & Sinkholes	Flooding	Wildland Fire	Volcano					Goal 1: Protect public health, welfare, and public safety	Goal 2: Minimize losses to existing and future properties	Goal 3: Encourage coordination and communication amongst public and private organization	Goal 4: Ensure continuity of critical facilities and corresponding operations of local government	Goal 5: Protect and promote environmental quality
M-22	Educate business owners about potential hazards and hazard mitigation.	x	x	x	x	x	x	x	Ongoing	Police Department	Shoreline Operating Budget	p. 8-17	x				
M-23	Educate private homeowners about how to implement measures to reduce impacts of wildland fires.					x			Ongoing	Planning & Development Services	Shoreline Operating Budget	p. 8-18	x				
M-24	Utilize the most current data and technology to develop a work program to regulate development and re-development on NEHRP E soils.	x							Ongoing	Planning & Development Services	Shoreline Operating Budget	p. 8-19				x	
M-25	Target code enforcement of abatement of nuisance vegetation on both City right-of-ways and public property.			x			x		Ongoing	Public Works, Planning & Development Services	Shoreline Operating Budget	p. 8-19		x			
M-26	Utilize Geographic Information Systems (GIS) in decision-making processes.	x	x	x	x	x	x	x	Ongoing	Finance Department	Shoreline Operating Budget	p. 8-20				x	
M-27	Utilize the most current data and technology when regulating landslide areas.				x				Ongoing	Planning & Development Services	Shoreline Operating Budget, Private Developers	p. 8-21		x			
M-28	Remove the Robinson Water Tower.	x		x								p. 8-21					

This page intentionally left blank