CITY COUNCIL AGENDA

15728 Main Street, Mill Creek, WA 98012 (425) 745-1891

Pam Pruitt, Mayor • Brian Holtzclaw, Mayor Pro Tem • Sean Kelly • Donna Michelson • Vince Cavaleri • Mike Todd • Mark Bond

Regular meetings of the Mill Creek City Council shall be held on the first, second and fourth Tuesdays of each month commencing at 6:00 p.m. in the Mill Creek Council Chambers located at 15728 Main Street, Mill Creek, Washington. Your participation and interest in these meetings are encouraged and very much appreciated. We are trying to make our public meetings accessible to all members of the public. If you require special accommodations, please call the City Clerk at (425) 921-5732 three days prior to the meeting.

The City Council may consider and act on any matter called to its attention at such meetings, whether or not specified on the agenda for said meeting. Participation by members of the audience will be allowed as set forth on the meeting agenda or as determined by the Mayor or the City Council.

To comment on subjects listed on or not on the agenda, ask to be recognized during the Audience Communication portion of the agenda. Please stand at the podium and state your name and address for the official record. Please limit your comments to the specific item under discussion. Time limitations shall be at the discretion of the Mayor or City Council.

Study sessions of the Mill Creek City Council may be held as part of any regular or special meeting. Study sessions are informal, and are typically used by the City Council to receive reports and presentations, review and evaluate complex matters, and/or engage in preliminary analysis of City issues or City Council business.

Next Ordinance No. 2016-807
Next Resolution No. 2016-544

April 5, 2016
City Council Meeting
6:00 p.m.

CALL TO ORDER:

FLAG SALUTE:

ROLL CALL:

AUDIENCE COMMUNICATION:

A. Public comment on items on or not on the agenda

NEW BUSINESS:

B. Hazard Mitigation Plan

(Rebecca C. Polizzotto, City Manager)

C. Construction Contract Award for the 2016 Citywide Asphalt Repair Project
(Rebecca C. Polizzotto, City Manager)

REPORTS:

D. Mayor/Council

E. City Manager

AUDIENCE COMMUNICATION:

F. Public comment on items on or not on the agenda

ADJOURNMENT

CITY OF Mill Creek WASHINGTON

Agenda Item # B
Meeting Date: ~~March 22, 2016~~ APRIL 5, 2016 KC

CITY COUNCIL AGENDA SUMMARY

City of Mill Creek, Washington

AGENDA ITEM: **HAZARD MITIGATION PLAN – STUDY SESSION.**

KEY FACTS AND INFORMATION SUMMARY: The federal Disaster Mitigation Act of 2000 established certain requirements for hazard mitigation planning, including the requirement to update Hazard Mitigation Plans (HMPs) every five years (approximately). The City of Mill Creek has twice before participated in the development of a HMP, both times through the Emergency Coordinating Services Agency (ESCA). The last HMP update was adopted by Resolution 2011-459 on February 1, 2011. For the most recent HMP update, the City partnered with Snohomish County, a team of consultants from the University of Washington, and 32 other cities, tribes, districts and agencies throughout the county. This process took two years to complete, and was interrupted for 6-months by the Oso disaster. That event also had some bearing on the direction and emphasis of the final plan. The HMP is composed of Volumes 1 and 2, with Volume 1 containing much of the county-wide background information and analysis, and Volume 2 containing an "annex" of information specific to each city, tribe or district that participated. The entire HMP is many hundreds of pages long and can be viewed in its entirety on the Snohomish County website at:

http://www.snohomishcountywa.gov/2429/Hazard-Mitigation-Plan

Attached to this summary is the Executive Summary which outlines the partnership and annex preparation process and the annex specific to Mill Creek.

CITY MANAGER RECOMMENDATION: This agenda item is presented as a study session to review and discuss the material presented. The attached resolution adopting the Hazard Mitigation Plan is scheduled for action on the April 5, 2016 agenda unless the Council desires to take earlier action.

ATTACHMENTS:

Proposed Resolution
Select sections of Snohomish County Hazard Mitigation Plan

Respectfully Submitted:

Rebecca C. Polizzotto

Rebecca C. Polizzotto
City Manager

RESOLUTION NO. 2016 -

A RESOLUTION OF THE CITY OF MILL CREEK, WASHINGTON ADOPTING THE UPDATED AND REVISED SNOHOMISH COUNTY HAZARD MITIGATION PLAN

WHEREAS, The Disaster Mitigation Act of 2000 (Public Law 106-390) established new requirements for pre- and post-disaster hazard mitigation programs; and

WHEREAS, all of Snohomish County has exposure to natural hazards that increase the risk to life, property, environment, and the County's economy; and

WHEREAS, pro-active mitigation of known hazards before a disaster event can reduce or eliminate long-term risk to life and property; and

WHEREAS, the City of Mill Creek ("City") recognizes the benefits and necessity of hazard mitigation planning and cooperation; and

WHEREAS, a coalition of Snohomish County, Tribes, Cities, and Special Purpose Districts with like planning objectives has been formed to pool resources and create consistent mitigation strategies within the county; and

WHEREAS, the 2010 edition of the Snohomish County Hazard Mitigation Plan has been updated, the coalition has completed a planning process that engages the public, assesses the risk and vulnerability to the impacts of natural hazards, develops a mitigation strategy consistent with a set of uniform goals and objectives, and creates a plan for implementing, evaluating, and revising this strategy; and

WHEREAS, the coalition has completed a planning process that reviewed and/or revised the risk assessment, goals and objectives, action plan, and reengaged the public; and

WHEREAS, the Federal Emergency Management Agency (FEMA) has completed pre-adoption review of the revised Snohomish County Hazard Mitigation Plan pursuant to 44 CFR Part 201, and City Council adoption must occur for the City of Mill Creek to have a FEMA approved Natural Hazards Mitigation Plan; and

WHEREAS, it has been found that the proposed Plan is consistent with the City of Mill Creek Comprehensive Plan, and other State, Federal, and local regulations.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MILL CREEK, WASHINGTON AS FOLLOWS:

A. The Mill Creek City Council hereby;

1. Adopts Volume 1 in its entirety and adopts the following portions of Volume 2: Part 1, the City of Mill Creek jurisdictional annex in Part 2; and all Volume 2 appendices of the Snohomish County Hazard Mitigation Plan (SC HMP). A copy of said documents shall be available for review and inspection at the Office of the City Clerk.

2. Will use the adopted portions of the SC HMP to guide pre- and post-disaster mitigation of the hazards identified.

3. Will coordinate the strategies identified in the SC HMP with other planning programs and mechanisms under its jurisdictional authority.

B. It is the purpose of the Resolution to provide for the health, welfare, and safety of the general public, and not to create or otherwise establish or designate any particular class or group of persons who will or should be especially protected or benefited by the terms of this Resolution. No provision or term used in this Resolution is intended to impose any duty whatsoever upon the City or any of its officers, agents, or employees for whom the implementation of this Resolution shall be discretionary and not mandatory.

C. Nothing contained in this Resolution is intended to be, nor shall be construed to create or form the basis for, any liability on the part of the City or its officers, agents, and employees for

any inquiry or damage resulting from the failure to comply with the provisions of this Resolution or be a reason or a consequence of any inspections, notice, or order, in connection with the implementation or enforcement of the Resolution, or by reason of any action of the City related in any manner to enforcement of this Resolution by its officers, agents, or employees.

PASSED in open meeting this ____ day of _____, 2016 by a vote of _____for, _____ against, and _____ abstaining.

APPROVED:

_____
MAYOR PAM PRUITT

ATTEST/AUTHENTICATED:

_____
CITY CLERK KELLY M. CHELIN

APPROVED AS TO FORM:

_____
SCOTT MISSALL, CITY ATTORNEY

FILED WITH THE CITY CLERK:_____
PASSED BY THE CITY COUNCIL:_____
EFFECTIVE DATE:_____
RESOLUTION NO._____

Reference: Snohomish County Hazard Mitigation Plan Update (2015)

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Snohomish County

HAZARD MITIGATION PLAN UPDATE
VOLUME 1: PLANNING-AREA-WIDE ELEMENTS

September 2015

Prepared for:
Snohomish County
3000 Rockefeller Avenue
M/S 607
Everett, WA 98201

Prepared by:

Institute for Hazards Mitigation Planning and Research
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EXECUTIVE SUMMARY

WHAT IS NEW WITHIN THIS UPDATE

This Update builds on the scope and actions of the 2010 plan. During a period of severely limited budgets in the aftermath of the Great Recession, the planning partnership was able to complete or initiate actions on 42 percent of the initiatives identified in the 2010 plan. Many of the mitigation strategies included within this Update are similar and support the overall direction offered by the 2010 plan.

Those hazards of most concern remained Earthquakes, Flooding, Landslides and Severe Weather.

The county grew in population, and with growth, those exposed to natural hazards increased; however, there is little evidence that vulnerability or those at risk, actually increased. New homes were built to higher earthquake and flood risk reduction standards and the Snohomish County planning policy, following guidance offered by the State Growth Management Act, steered development to safer areas.

However, this Update does contain changes, yet they seem to affect more an increased awareness than actual changes in risk.

In March of 2014 a landslide along Highway 530, between Arlington and Darrington, killed 43 residents, thereby raising awareness of the dynamic nature of county landscapes. Landslide risks were recognized within the 2010 Plan, but this disaster brought an increased awareness of this risk.

Climate change was considered a risk in the 2010 Hazards Mitigation Plan, however better climate science was available in support of this Update, as was an understanding of the expected impacts from climate change. Accordingly, this plan could address climate change adaptation in much greater detail.

Because best available tsunami modeling science was not able to be incorporated into this Update, tsunami hazard information is presented as a secondary hazard to the Earthquake Hazard section. The County is building the tsunami modeling capacity so that updated and improved information can be presented in the 2020 Update.

The 2010 Update recognized the importance of natural and beneficial environmental values. This Update incorporated recent research documenting the benefits of such natural values through the use of economic models to assess "values." This Update acknowledges, and builds on, the importance of county ecosystem services.

Mitigation strategies offered here are similar to those included within the 2010 plan. Older homes and facilities, especially un-reinforced masonry structures, should be retrofitted when possible. Structures in floodplains, along with those in other high-risk areas, should be retrofitted where possible. Where life safety cannot be reasonably assured, removing such structures, including repetitive loss structures, should be a priority.

This Update, however, strengthens and offers context to many of these strategies by introducing the concept of resilience as a risk reduction goal. Resilience, defined as the ability for a community to self-organize following a disturbance, expands our understanding of risk reduction, disaster recovery, and the role played by mitigation.

Mitigation remains a process where vulnerabilities are relocated, risks accommodated, or property protected—thereby reducing the need to prepare, respond or recover from a disaster. However, an underlying mitigation assumption has been that the more structures are mitigated, the safer a community. The goal was to mitigate all that was vulnerable. The concern by FEMA and others is that this is an impossible goal because all vulnerabilities cannot be mitigated. Some mitigation efforts are just not cost effective, considering the risk. With resilience, mitigation still plays a major role, but thinking in terms of resilience recognizes the importance of social capital (networks) and the ecosystem services provided by functioning natural capital. The concept of resilience recognizes that extreme events may target critical systems that have a very low frequency of interruption, where mitigation was determined not to be cost effective. There is always an element of randomness to any disaster. A resilient community would have the ability to exploit other capital during their response and recovery efforts. This Update recognizes the importance of resilience, social networks and the ecosystem services provide by the County's natural capital.

WHY PREPARE THIS PLAN?

Prior to 2000, federal disaster funding in the U.S. focused on relief and recovery, with limited funding for hazard mitigation planning. In 2000, the federal Disaster Mitigation Act required state and local governments to develop hazard mitigation plans as a condition for receiving disaster-related federal grant assistance (Public Law 106-390, approved by Congress on October 10, 2000). Commonly known as the DMA or the 2000 Stafford Act amendments, the act emphasizes the importance of community hazard mitigation planning before disasters occur.

PURPOSES FOR PLANNING

DMA compliance is only one of multiple objectives driving this planning effort. Snohomish County and its planning partners have a long-standing tradition of proactive, progressive planning and program implementation, which is enhanced by the development of this plan. Elements and strategies in this plan were selected because they meet a program requirement and because they best meet the needs of the planning partnership and its citizens.

This hazard mitigation plan identifies resources, information, and strategies for reducing risk from natural hazards. It will help guide and coordinate mitigation activities throughout Snohomish County. The plan was developed to meet the following objectives:

- Meet or exceed program requirements specified under the DMA.
- Enable all planning partners to continue using federal grant funding to reduce risk through mitigation.
- Meet the needs of each planning partner as well as state and federal requirements.
- Perform a risk assessment for all Snohomish County hazards of concern.
- Create a single planning document to integrate all planning partners into a framework that supports partnerships in the County and puts all partners on the same cycle for future updates.
- Meet the planning requirements of FEMA's Community Rating System (CRS), allowing partners that participate in the CRS program to maintain or enhance their CRS classifications.

- Coordinate existing plans and programs so that high-priority initiatives and projects to mitigate possible disaster impacts are funded and implemented.

WHY UPDATE?

44CFR stipulates that hazard mitigation plans must describe the method and schedule for monitoring, evaluating, and updating the plan. Prescribing an update schedule establishes an opportunity to reevaluate recommendations, monitor the impacts of actions that have been accomplished, and determine if there is a need to change the focus of mitigation strategies. DMA compliance is contingent on meeting the plan update requirement. A jurisdiction covered by a plan that has expired is not able to pursue elements of federal funding under the Robert T. Stafford Act, which requires a current hazard mitigation plan for eligibility.

WHO WILL BENEFIT FROM THIS PLAN?

The citizens and businesses of the entire Snohomish County planning area are the ultimate beneficiaries of this hazard mitigation plan. The plan strives to reduce risk for those who live in, work in, and visit Snohomish County. It provides a viable planning framework for all foreseeable natural hazards that may impact the county. Participation in development of the plan by key stakeholders in the county will help ensure mutually beneficial outcomes. The resources and background information in the plan are applicable countywide, and the plan's goals and recommendations can lay groundwork for the development and implementation of local mitigation activities and partnerships.

HOW TO USE THIS PLAN

FEMA encourages multi-jurisdictional planning under its guidance for the DMA, and 44CFR establishes criteria for multi-jurisdictional plans (Section 206.1). One of the benefits of multi-jurisdictional planning is the ability to pool resources and eliminate redundant activities within a planning area that have uniform risk exposure and vulnerabilities. Volume 1 includes all the required elements of 44CFR Section 201.6 that apply to the entire planning area. This includes the description of the planning process, public involvement strategy, goals and objectives, countywide hazard risk assessment, and a plan maintenance strategy. Maps cited in each chapter are provided at the end of the chapter. The following appendices are provided at the end of Volume 1.

Volume 2 includes all jurisdiction and tribal-specific elements required by 44CFR Section 201.6. The planning partnership includes cities, tribal nations, the County, and special purpose districts participating in this process and adopting this plan. Jurisdiction-specific elements are included in annexes for each planning partner. Volume 2 also includes a description of the participation requirements for planning partners established by the Planning Committee, as well as instructions and templates that the partners used to complete their annexes. It also includes "linkage" procedures for eligible, non-participating jurisdictions that wish to adopt the Snohomish County Hazard Mitigation Plan in the future.

All planning partners will adopt Volume 1 in its entirety, the overview chapter of Volume 2 (Chapter 1), and their own jurisdictional annex.

CONFIRMATION OF THE PLANNING PARTNERSHIP

The 2015 Update was prepared by a partnership of 33 jurisdictions in Snohomish County (14 municipal governments, 2 tribal governments, 16 special purpose districts and the County). Since the performance period of the 2010 updated plan, mergers and consolidations impacted some of the partners. Jurisdictions that had participated in the Emergency Services Coordination Area (ESCA) planning effort for the 2010 update chose instead to join the partnership for this plan. Additionally, some planning partners struggled with the progress reporting process due to changes in personnel, or a lack of understanding of planning partner participation requirements.

TABLE ES-1. SNOHOMISH COUNTY PARTNERS

CITY/TRIBAL/COUNTY PLANNING PARTNERS	SPECIAL DISTRICT PLANNING PARTNERS
Arlington	Alderwood Water and Wastewater District
Darrington	Cross Valley Water District
Gold Bar	French Slough Flood Control District
Granite Falls	Highland Water District
Index	Marshland Flood Control District
Lake Stevens	Mukilteo Water and Wastewater District
Lynnwood	Silver Lake Water and Sewer District
Marysville	Snohomish County Dike District #2
Mill Creek	Snohomish County Fire District #1
Monroe	Snohomish County Fire District #3
Mountlake Terrace	Snohomish County Fire District #5
Snohomish	Snohomish County Fire District #12
Stanwood	Snohomish County Fire District #24
Stillaguamish Tribe of Indians	Snohomish Health District
Sultan	Snohomish Public Utility District
Tulalip Tribes	Sultan School District
Snohomish County	

PUBLIC INVOLVEMENT

Broad public participation in the planning process helps ensure that a diverse range of points of view about the planning area's needs will be considered and addressed. 44CFR requires that the public have opportunities to comment on disaster mitigation plans during the drafting stages and prior to plan approval (Section 201.6.b.1). The Community Rating System expands on these requirements by making CRS credits available for optional public involvement activities.

MITIGATION STRATEGIES

The Planning Committee drafted a comprehensive public involvement strategy using multiple media sources available to the County. The strategy for involving the public in this plan update emphasized the following elements:

- Include broad stakeholder representation on the Planning Committee.
- Use a questionnaire to determine the public's perception of risk and support of hazard mitigation.
- Attempt to reach as many planning area residents as possible by using multiple media.
- Identify and involve planning area stakeholders.

The following are the mitigation goals for the 2015 Update:

- Goal 1—Reduce natural hazard-related injury and loss of life.
- Goal 2—Reduce property damage.
- Goal 3—Promote a sustainable economy.
- Goal 4—Maintain, enhance, and restore the natural environment's capacity to absorb and reduce the impacts of natural hazard events.
- Goal 5—Increase public awareness and ability to respond to disasters.

TABLE ES.2. Objectives for Natural Hazard Mitigation Plan Update		
Objective Number	Objective Statement	Goals for which it can be applied
O-1	**Discourage growth within high risk areas,** where risks cannot be reduced to a tolerable level and within flood high risk areas where land uses are not water dependent, and encourage in designated low risk areas.	1, 2, 3, 4
O-2	**Relocate uses** where safety to life or vital ecosystem services cannot be assured.	1, 2, 3, 4
O-3	**Support risk reduction mitigation measures** on lands where life safety and ecosystem services can be assured to a tolerable level..	1, 2, 3, 4, 5
O-4	**Strengthen tools** such as the transfer and purchase of development rights (TDRs and PDRs) to remove threatened uses from hazardous areas or uses that degrade natural and beneficial functions.	1, 2, 3, 4
O-5	**Support actions that mitigate the causes of climate change** and adapt to expected impacts.	1, 2, 3, 4
O-6	**Provide incentives that support the mitigation of impacts** to critical manufacturing and manufacturing support facilities and operations.	1, 2, 3, 4
O-7	**Reduce the adverse impacts** of disasters on isolated communities.	1, 2, 3, 4, 5
O-8	Reduce the adverse impacts and **exploit the beneficial functions** of natural hazards to resource lands.	2, 3, 4
O-9	**Increase the resilience of critical infrastructures** to hazards (examples: roads, non-redundant facilities, pipelines, water and sewage treatment facilities, healthcare facilities, schools and emergency support facilities).	1, 2, 3

HOW WILL THIS PLAN BE IMPLEMENTED?

The effectiveness of the hazard mitigation plan depends on the implementation of the plan and incorporation of the outlined action items into existing partnership plans, policies, and programs. The updated plan includes a range of action items that, if implemented, would reduce losses from hazard events in the Snohomish County planning area. Together, the action items in the plan update provide the framework for activities that the partnership can choose to complete over the next 5 years. The planning team and Planning Committee have established goals and objectives, and have prioritized identified mitigation actions that will be implemented through existing plans, policies, and programs.

INCORPORATING INTO EXISTING PLANNING MECHANISMS

The information on hazard, risk, vulnerability, and mitigation contained in this plan update is based on the best science and technology currently available. This information can be invaluable in making decisions required through other planning efforts, such as critical areas planning, growth management planning, and capital facilities planning. All partners will use information from this updated plan as the best available science and data on natural hazards impacting Snohomish County. Information in the updated plan can be used as a tool in other programs, such as the following:

- Land use planning
- Critical areas regulation
- Growth management
- Capital improvements
- Water Resource Inventory Area planning
- Basin planning.

As information becomes available from other planning mechanisms that can enhance this plan, that information will be incorporated via the update process.

RISK ASSESSMENT

Risk assessment is the process of measuring the potential loss of life, personal injury, economic injury, and property damage resulting from natural hazards. It allows emergency management personnel to establish early response priorities by identifying potential hazards and vulnerable assets. The process focuses on the following elements:

- Hazard identification—Use all available information to determine what types of disasters may affect a jurisdiction, how often they can occur, and their potential severity.
- Vulnerability identification—Determine the impact of natural hazard events on the people, property, environment, economy, and lands of the region.
- Cost evaluation—Estimate the cost of potential damage or cost that can be avoided by mitigation.

The risk assessment for this hazard mitigation plan evaluates the risk of natural hazards prevalent in Snohomish County and meets requirements of the DMA (44CFR, Section 201.6(c)(2)).

Based on the review, the 2015 Update addresses the following hazards of concern:

TABLE ES.3
HAZARDS OF CONCERN

Climate Change	Landslide and other mass movements
Avalanche	Severe weather
Dam /levee failure	Volcano
Earthquake	Wildland fire
Flooding	Tsunami/Seiche

COUNTY WIDE STRATEGIES

Hazard Mitigation Action Plan Matrix	
Item	**Description**
CW-1	Retrofit critical facilities that cannot be moved to low risk areas.
CW-2	Enhance and improve capital improvement programs, taxing, zoning and development approaches to promote mitigation and reduce exposure/vulnerability to natural hazards.
CW-3	Create and enhance public information programs that will result in actionable preparedness and mitigation measures.
CW-4	Promote community's ability to self-organize by developing social capital through strengthening of community networks. Strong neighborhoods can help promote risk reduction.
CW-5	Research the possibility of developing functional neighborhood based micro infrastructure networks (micro grids) including the diversification, decentralization and redundancy of utilities. Such systems have increased operational resilience, decreased carbon emissions and decreased life cycle costs.
CW-6	Preserve and strengthen communications systems.
CW-7	Support HMP and integrate HMP with other planning mechanisms such as the Growth Management Act.
CW-8	Develop Departmental continuity of operations plans and neighborhood-based continuity plans (small businesses and neighborhoods).
CW-9	Provide incentives for eligible non-profits and private entities, including homeowners, to adapt to risks through structural and nonstructural retrofitting.
CW-10	Assure that services provided by critical facilities, including medical and emergency services, are available to at risk communities with special emphasis on communities at risk of isolation.
CW-11	Map avalanche hazard areas and determine risk to residential, business, and public buildings and transportation routes.
CW-12	Increase public awareness of the avalanche hazard and promote instructional (actionable) guidance.
CW-13	Demonstrate leadership in greenhouse gas emissions reductions through leading by example and working with stakeholders.
CW-14	When updating the Comprehensive Plan and other plans, evaluate decisions through a climate change impact lens. (Many plans are based on historic information. This is particularly evident with flood projections. This practice can lead to inaccurate projections and plans that do not address future needs.)
CW-15	Adopt and implement land use and transportation policies, termed "Centers" in the General Policy Plan that reduce greenhouse gas emissions.
CW-16	Plan and prepare for climate impacts using best available science.
CW-17	Improve hazard mitigation planning for dam and levee failure.
CW-18	Improve dam and levee failure warning for vulnerable communities.
CW-19	Consider flood control structure maintenance that restores and maintains hydrologic ecosystems services of flood plains where feasible.
CW-20	Maintain levees where accommodation though elevation and other flood risk reduction measures is not possible.
CW-21	Support improved data collection and distribution for Glacier Peak seismic activity.
CW-22	Update and improve County flood hazard risk assessment data and methodology.
CW-23	Improve community ability to respond to a flood event.
CW-24	Promote strategies that accommodate flooding with minimal consequences within flood prone areas were risks are not life threatening.
CW-25	Enable communities to recover development value of properties as they become more frequently flooded resulting from reduced upstream storage (e.g. increased development, reduced snow pack caused by climate change).
CW-26	Preserve and restore floodplain and watershed ecosystem functions and services. Functioning ecosystems provide flood risk reducing co-benefits. Such benefits can include storing water, reducing damaging flows, containing debris, recharging aquifers and removing pollutants.
CW-27	Utilize innovative methods to reduce increasing peak flood flows.
CW-28	Develop coordinated flood control district that has the ability to tax for flood control improvements.
CW-29	Isolate wastewater infrastructure from storm and flood waters.
CW-30	Develop an acquisition program for homes or other uses located within high risk hazard areas (e.g. flooding, landslide, lahar, etc.)
CW-31	Enable communities to recover development value of properties in prioritized hazard areas (e.g. landslide and tsunami).
CW-32	Reduce risk to utility networks.
CW-33	Promote water conservation to minimize impacts of drought. Climate change projections warn of increasing summer drought risks.
CW-34	Improve communities' abilities to respond to a severe weather event.
CW-35	Revise existing plans to address updated assessments of tsunami risks from the Seattle and South Whidbey Island faults.
CW-36	Evaluate increased landslide potential from a tsunami and need for increased setback in high risk areas.
CW-37	Create evacuation routes for communities at risk of a lahar.
CW-38	Promote Firewise Program in communities and encourage Firewise risk reduction methods for parcels adjacent to forest resource lands. Firewise encourages and empowers neighbors to work together in reducing their wildfire risk.

Volume 2, Part 1

1 PLANNING PARTNER PARTICIPATION

1.1 BACKGROUND

Region X of the Federal Emergency Management Agency (FEMA) and the Washington Emergency Management Division both encourage multi-jurisdictional hazard mitigation planning. Chapter 44 of the Code of Federal Regulations (44CFR) states the following regarding multi-jurisdictional planning (Section 201.6.a (4)):

> Multi-jurisdictional plans (e.g., watershed plans) may be accepted, as appropriate, as long as each jurisdiction has participated in the process and has officially adopted the plan.

For the preparation of this update to the Snohomish County Hazards Mitigation Plan, the Snohomish County Planning Partnership was formed to pursue grant funding for the update and to meet requirements of the federal Disaster Mitigation Act (DMA) for as many eligible local governments in Snohomish County as possible. The DMA defines a local government as follows:

> Any county, municipality, city, town, township, public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a nonprofit corporation under State law), regional or interstate government entity, or agency or instrumentality of a local government; any Indian tribe or authorized tribal organization, or Alaska Native village or organization; and any rural community, unincorporated town or village, or other public entity.

There are two types of planning partners in this process, with distinct needs and capabilities: cities and the County; and special purpose districts.

1.2 THE PLANNING PARTNERSHIP

1.2.1 INITIAL SOLICITATION AND LETTERS OF INTENT

Based on input received during the plan maintenance progress reporting, it was anticipated that not all planning partners from the initial hazard mitigation plan would participate in the plan update. All planning partners were asked to re-commit to the process by submitting letters of intent to participate. A plan update "kick-off" meeting was held on October 24, 2013, at which this "reenlistment" process was explained. All eligible local governments in the planning area were invited to attend, along with various agency and citizen stakeholders. The goals of the meeting were as follows:

- Provide an overview of the Disaster Mitigation Act.
- Provide an update on the planning grant.
- Outline the Snohomish County plan update work plan.

- Describe the benefits of multi-jurisdictional planning.
- Solicit planning partners.
- Confirm a Planning Committee.

The planning team received letters of intent to participate from 32 jurisdictions, as listed in Table 1-1.

TABLE 1-1.
PLANNING PARTNERS

City of Arlington	Alderwood Water & Wastewater District
Town of Darrington	Cross Valley Water District
City of Gold Bar	French Slough Flood Control District
City of Granite Falls	Highland Water District
Town of Index	Marshland Flood Control District
City of Lake Stevens	Mukilteo Water & Wastewater District
City of Lynnwood	Silver Lake Water & Sewer District
City of Marysville	Snohomish County Dike District #2
City of Mill Creek	Snohomish Co. Fire District #1
City of Monroe	Snohomish Co. Fire District #3
City of Mountlake Terrace	Snohomish Co. Fire District #5
City of Snohomish	Snohomish Co. Fire District #12
City of Stanwood	Snohomish Co. Fire District #24
City of Sultan	Snohomish County Health District
Stillaguamish Tribe of Indians	Snohomish County Public Utility District (PUD)
Tulalip Tribes	Sultan School District
Snohomish County	

Maps 1-1 and 1-2 at the end of this chapter show the location of participating special-purpose districts. Maps for participating cities are provided in the individual annex for each city. These maps will be updated periodically as changes to the partnership occur, either through linkage or by a partner dropping out.

1.2.2 PLANNING PARTNER EXPECTATIONS

The planning team developed a list of planning partner expectations, which were confirmed at a planning partner meeting held on October 24, 2013. These are detailed in Appendix A and summarized below:

- Each partner will provide a "Letter of Intent to Participate."

- Each partner will support and participate in the selection and function of the Planning Committee overseeing the development of the update. Support includes allowing this body to make decisions regarding plan development and scope on behalf of the partnership.
- Each partner will provide support for the public involvement strategy developed by the Planning Committee in the form of mailing lists, possible meeting space, and media outreach such as newsletters, newspapers, or direct-mailed brochures.
- Each partner will participate in plan-update development activities such as:
  - Planning Committee meetings
  - Public meetings or open houses
  - Workshops and planning partner training sessions
  - Public review and comment periods prior to adoption

  Attendance will be tracked at such activities, and attendance records will be used to track and document participation for each planning partner. No minimum level of participation will be established, but each planning partner should attempt to attend all such activities.
- Each partner will be expected to perform a "consistency review" of all technical studies, plans, and ordinances specific to hazards identified within the planning area to determine the existence of plans, studies, or ordinances not consistent with the equivalent documents reviewed in preparation of the county plan. For example, if a planning partner has a floodplain management plan that makes recommendations that are not consistent with any of the County's basin plans, that plan will need to be reviewed for probable incorporation into the plan for the partner's area.
- Each partner will be expected to review the risk assessment and identify hazards and vulnerabilities specific to its jurisdiction. Contract resources will provide jurisdiction-specific mapping and technical consultation to aid in this task, but the determination of risk and vulnerability will be up to each partner.
- Each partner will be expected to review the mitigation recommendations chosen for the overall county and determine if they will meet the needs of its jurisdiction. Projects within each jurisdiction consistent with the overall plan recommendations will need to be identified, prioritized, and reviewed to determine their benefits and costs.
- Each partner will be required to create its own action plan that identifies each project, who will oversee the task, how it will be financed, and when it is estimated to occur.
- Each partner will be required to sponsor at least one public meeting to present the draft plan at least two weeks prior to adoption.
- Each partner will be required to formally adopt the plan.

It should be noted that by adopting this plan, each planning partner also agrees to the plan implementation and maintenance protocol established in Chapter 7 of Volume 1. Failure to meet these criteria may result in a partner being dropped from the partnership by the Planning Committee, and thus losing its eligibility under the scope of this plan.

1.2.3 LINKAGE PROCEDURES

Eligible local jurisdictions that did not participate in development of this hazard mitigation plan update may comply with DMA requirements by linking to this update following the procedures outlined in Appendix B.

1.3 ANNEX-PREPARATION

1.3.1 TEMPLATES

Templates were created to help the planning partners prepare their jurisdiction-specific annexes. Since special-purpose districts operate differently from towns or cities, separate templates were created for the two types of jurisdictions. The templates were created so that all criteria of Section 201.6 of 44CFR would be met, based on the partners' capabilities and mode of operation. Each partner was asked to participate in a technical assistance workshop during which key elements of the template were completed by a designated point of contact for each partner and a member of the planning team. The templates were set up to lead each partner through a series of steps that would generate the DMA-required elements that are specific for each partner. The templates and their instructions can be found in Appendices C and D to this volume of the hazard mitigation plan update.

1.3.2 WORKSHOP

A workshop was held on January 1, 2015 for planning partners to learn about the templates and the overall planning process. The session provided technical assistance and an overview of the template completion process. Attendance at this workshop was mandatory under the planning partner expectations established by the Planning Committee. Topics discussed included the following:

- DMA
- Snohomish County plan background
- The templates
- Risk ranking
- Developing your action plan
- Cost/benefit review

In the risk-ranking exercise, each planning partner was asked to rank each risk specifically for its jurisdiction, based on the impact on its constituency or facilities. Cities were asked to base this ranking on probability of occurrence and the potential impact on people, property, and economy. Special-purpose districts were asked to base this ranking on probability of occurrence and the potential impact on their constituency, their vital facilities, and the facilities' functionality after an event. The methodology followed that used for the county-wide risk ranking presented in Volume 1, though the countywide risk ranking and partner risk rankings were quantified differently. The end result was the same: the highest ranks denoted the highest risks. A principal objective of this exercise was to familiarize the partnership with how to use the risk assessment as a tool to support other planning and hazard mitigation processes. Tools utilized during these sessions included:

- The Snohomish County Risk Assessment results
- Hazard maps for all hazards of concern
- Special district boundary maps that illustrated the sphere of influence for each special purpose district partner

- STAPLEE matrix (a matrix to help evaluate action strategies based on social, technical, administrative, political, legal, economic, and environmental criteria)
- Hazard mitigation catalogs and matrix
  - Federal funding and technical assistance catalog
  - Copies of partners' prior annexes (if applicable)
  - Progress reports

1.3.3 BENEFIT/COST REVIEW

Each jurisdiction's annex includes an action plan of prioritized initiatives to mitigate natural hazards. 44CFR requires the prioritization of the action plan to emphasize a cost/benefit review of the proposed projects (Section 201.6.c.3iii). Planning partners were asked to weigh the estimated benefits of a project versus the estimated costs to establish a parameter to be used in prioritization. This benefit/cost review was qualitative and did not include the level of detail required under certain FEMA grant programs. This qualitative approach was used because projects may not be implemented for up to 10 years, and the associated costs and benefits could change dramatically in that time. Each project was assessed by assigning subjective ratings (high, medium, and low) to costs and benefits as follows:

COSTS

- **High:** Existing funding levels are not adequate to cover the costs of the proposed project, and implementation would require an increase in revenue through an alternative source (for example, bonds, grants, and fee increases).
- **Medium:** The project could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.
- **Low:** The project could be funded under the existing budget. The project is part of or can be part of an existing, ongoing program.

BENEFITS

- **High:** Project will have an immediate impact reducing risk exposure to life and property.
- **Medium:** Project will have a long-term impact reducing risk exposure to life and property or will provide an immediate reduction in the risk exposure to property.
- **Low:** Long-term benefits of the project are difficult to quantify in the short term.

Using this approach, projects with positive benefit-versus-cost ratios (such as high over high, high over medium, medium over low, etc.) are considered cost-beneficial and are prioritized accordingly.

For many of the initiatives identified in the action plans, planning partners may seek financial assistance under FEMA's hazard mitigation grant programs such as:

- Hazard Mitigation Grant Program (HMGP)

- Pre-Disaster Mitigation (PDM) grant program
- Flood Mitigation Assistance (FMA) grant program
- Repetitive Flood Claims (RFC) grant program
- Emergency Management Performance Grant (EMPG) program
- Severe Repetitive Loss (SRL) grant program.

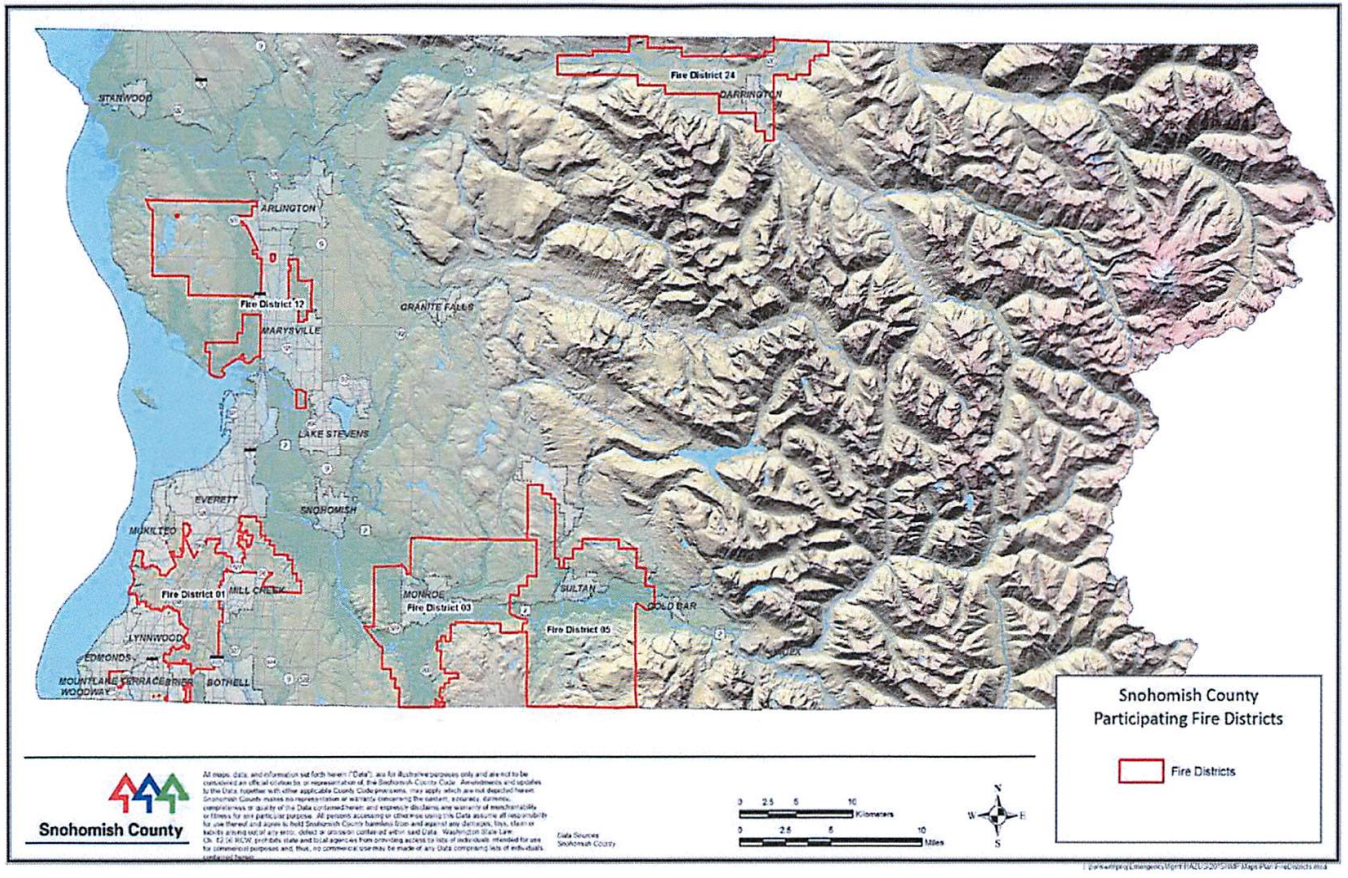
Most of these programs will require detailed benefit/cost analysis as part of the application process. These analyses will be performed when funding applications are prepared, using the FEMA model process. The partners are committed to implementing mitigation strategies with benefits that exceed costs. For projects not seeking financial assistance from grant programs that require this sort of analysis, the partners reserve the right to define "benefits" according to parameters that meet their needs and the goals and objectives of this plan.

1.4 PARTNER ANNEX COMMON ACRONYMS

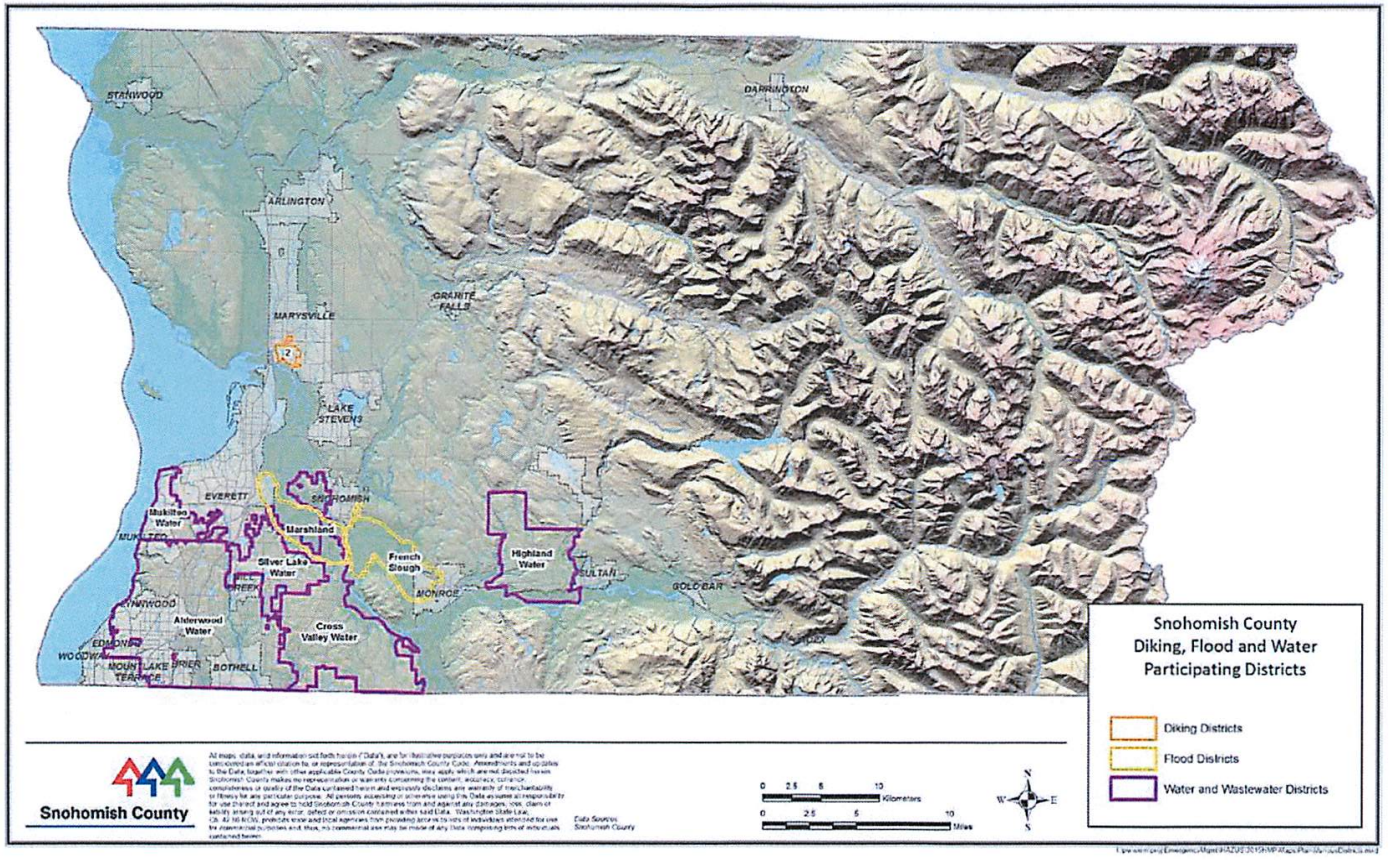
Acronyms and abbreviations used in the partner annexes in this volume are listed for convenience in Table 1-2.

TABLE 1-2.
COMMON ACRONYMS USED IN PLANNING PARTNER ANNEXES

44CFR—Chapter 44 of the Code of Federal Regulations	NFIP—National Flood Insurance Program
AWWD—Alderwood Water and Wastewater District	NPRSA—Northshore Parks and Recreation Service Area
CDBG—Community Development Block Grant program	OFM—Washington State Office of Financial Management
CEMP—Comprehensive Emergency Management Plan	OSPI—Washington State Office of the Superintendent of Public Instruction
CIP—Capital Improvement Program	P&R—Snohomish County Parks and Recreation
CRS—Community Rating System	PDM—Pre-Disaster Mitigation grant program
CTED—Washington Department of Community, Trade and Economic Development	PDS—Snohomish County Planning and Development Services
DCVA—Double check valve assembly	PLS—Public Land Surveyor
DEM—Snohomish County Department of Emergency Management	PRV—Pressure-reducing valve
DNR—Washington Department of Natural Resources	PUD—Public Utility District
EMPG—Emergency Management Performance Grant program	PW—Snohomish County Public Works
EMS—Emergency Medical Services	PWTF—Public Works Trust Fund
EOC—Emergency Operations Center	RCW—Revised Code of Washington
EOP—Emergency Operations Plan	REET—Real Estate Excise Tax
ERP—Emergency Response Plan	RFC—Repetitive Flood Claims grant program
FEMA—Federal Emergency Management Agency	SCADA—Supervisory Control and Data Acquisition
FMA—Flood Mitigation Assistance grant program	SCC—Snohomish County Code
GMA—Washington State Growth Management Act	SHSG—State Homeland Security Grant program
HIVA—Hazard Identification and Vulnerability Analysis	SRL—Severe Repetitive Loss grant program.
HMGP—Hazard Mitigation Grant Program	SWM—Snohomish County Surface Water Management Division
IAC—Interagency Committee	UBC—Uniform Building Code
IBC—International Building Code	UGA—Urban Growth Area
MWWD—Mukilteo Water and Wastewater District	WRIA—Water Resource Inventory Area
NEHRP—National Earthquake Hazard Reduction Program	WSDOT—Washington State Department of Transportation



Map 1-1. Snohomish County Participating Fire Districts



Map 1-2. Participating Diking, Flood and Water Districts

13 CITY OF MILL CREEK ANNEX

13.1 HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact

Tom Gathmann, Public Works Director
15728 Main Street
Mill Creek, WA 98012
Telephone: 425-921-5722
e-mail Address: tomg@cityofmillcreek.com

Alternate Point of Contact

Christi Amrine, Senior Planner
15728 Main Street
Mill Creek, WA 98012
Telephone: 921-5738
e-mail Address: christi@cityofmillcreek.com

13.2 JURISDICTION PROFILE

The following is a summary of key information about the jurisdiction and its history:

- **Date of Incorporation**—1983
- **Current Population**—18,780 as of April 1, 2014, per the Washington State Office of Financial Management (OFM).
- **Population Growth**—Population growth in the past decade has been largely due to several annexations of existing residential areas. The US Census population figures for Mill Creek are 11,525 in 2000 and 18,244 in 2010. The 2014 OFM population is 18,780 and the Snohomish County 2035 target population is 20,196, an increase of 0.8% over the current population. Unless significant annexations occur, the population growth in the foreseeable future is very low.
- **Location and Description**—The City of Mill Creek is located approximately 22 miles north of Seattle, east of Interstate 5. The nearest seaport is the Port of Everett, which is located approximately 13 miles to the northwest. The City limits are generally bound by 132nd Street SE to the north, Seattle Hill Road and 35th Avenue SE to the east, 168th Street SE and 175th Place SE to the south, and 3rd Avenue SE and 7th Avenue SE to the west. The City of Mill Creek is located east of Interstate-5 (I-5) and north of Interstate-405 (I-405) and encompasses 4.68 square miles. Mill Creek is situated between the communities of Bothell to the south, Lynnwood to the west and Everett to the north.
- **Brief History**—The Mill Creek area was settled as the lumber industries drew settlers to the territory in the 1850s to early 1900s. The relevant history of Mill Creek began with the purchase of 300 acres by Dr. Garhart in the 1930s, which would later become the major portion of the City of Mill Creek. The Garhart property was surrounded by several families on smaller tracts of 20-60 acres. In 1965 Northwestern Properties purchased the Garhart property for the intention of developing a planned community. This land passed through several developers until in 1973 Tokyu Land Development Limited acquired the land and successfully rezoned the land through Snohomish County to include a

Master Development Plan in 1975. Over the next eight years, all nine sector plans were planned and approved. The final sector plan anticipated a city wide total of over 4,600 dwelling units with a population of 12-14,000 when complete. The City of Mill Creek incorporated in 1983 with 1.81 square miles. Since that time the City has expanded its municipal area 250% to 4.68 square miles through seventeen annexations and has a 2014 population of 18,780.

- **Climate—** Mill Creek's weather is typical of the Pacific Northwest with mild summers and cool and wet winters. The City averages 49 inches of rain and 8 inches of snow per year. The average number of days with measurable precipitation is 184, and 160 days have some sunshine. The July high is typically around 77°F and the January low averages 33°F. The comfort index, which is based on humidity during the hot months, is a 72 out of 100, where higher is more comfortable. The US average on the comfort index is 44.
- **Governing Body Format—**The City of Mill Creek operates within the council–manager form of government and through these legislative actions the council establishes priorities for the City Manager and staff. The council consists of seven council members elected at large to four-year terms. Every two years, the City Council elects a mayor and mayor pro tem from its members. The mayor serves as the chair of the council.
- **Development Trends—**Over 90% of the land area within the existing city limits of Mill Creek is either developed or unavailable for development due to natural resource preservation requirements. The development that is now occurring is primarily residential, with the majority of that being high density multifamily. There is limited potential for redevelopment of some of the older (30+ years) existing commercial areas.

13.3 JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Table 13-1 lists all past occurrences of natural hazards within the jurisdiction. Repetitive loss records are as follows:

- Number of FEMA Identified Repetitive Flood Loss Properties: The City has no Repetitive Flood Loss Properties.
- Number of Repetitive Flood Loss Properties that have been mitigated: Not applicable.

13.4 HAZARD RISK RANKING

Table 13-2 presents the ranking of the hazards of concern.

13.5 CAPABILITY ASSESSMENT

The assessment of the jurisdiction's legal and regulatory capabilities is presented in Table 13-3. The assessment of the jurisdiction's administrative and technical capabilities is presented in Table 13-4. The assessment of the jurisdiction's fiscal capabilities is presented in Table 13-5. Classifications under various community mitigation programs are presented in Table 13-6.

13.6 HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED INITIATIVES

Table 13-7 lists the initiatives that make up the jurisdiction's hazard mitigation plan. Table 13-8 identifies the priority for each initiative. Table 13-9 summarizes the mitigation initiatives by hazard of concern and the six mitigation types.

13.7 STATUS OF PREVIOUS PLAN INITIATIVES

Table 13-10 summarizes the initiatives that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

13.8 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

N/A

13.9 INTERNAL PLANNING PROCESS

The internal planning process is described in Appendix E of this document.

13.10 ADDITIONAL COMMENTS

In the opinion of the City of Mill Creek staff members that worked on the 2015 NHMP update, there is a serious disconnect between the stated NHMP "Plan Goals" and the "Plan Objectives." Although all of the proposed Mill Creek initiatives very clearly met one or more of the Plan Goals (most met two or three), it was difficult to match the initiatives to the Plan Objectives, and none of the initiatives met more than one. That indicates there is a serious dissonance between the Goals and Objectives. The Objectives were very focused on land use regulations or actions. Although that focus can be very effective in hazard mitigation, the range of objectives was not balanced when considering all the communities within the County. A good example is Plan Goal #5: "increase public awareness and ability to respond to disasters." It is a stretch to find even one Plan Objective that clearly aligns with the Plan Goal. Future updates of the Snohomish County NHMP need to have better integration of the goals and objectives.

TABLE 13-1.
NATURAL HAZARD EVENTS

Type of Event	FEMA Disaster # (if applicable)	Date	FEMA Reimbursement
Severe Wind Storm	DR-981	Jan. 20, 1993	$19,693
Severe Wind Storm	DR-1682	Dec.12, 2006	$22,974
Severe Snow Storm	DR-1825	Dec., 2008	$24,312

TABLE 8-2.
HAZARD RISK RANKING

Rank	Hazard Type	Risk Rating Score (Probability x Impact)	Description of Risk (Describe the community impacts)
1	Earthquake	39	The majority of the community was built prior to current seismic building standards. A severe earthquake could dislodge a high percentage of both the commercial and residential structures from their foundations and result in severe damage.
2	Severe Weather	24	Severe storms, especially high wind events, routinely topple large trees in the city. A typical year has 2 or 3 events of varying severity, most requiring some type of emergency public works crew response.
3	Flood	15	The core business area in Mill Creek is adjacent to North Creek. A large debris blockage at the 164th St SE bridge over North Creek would result flooding and damage to many structures in this business area. Several major roads in Mill Creek are subject to flooding and closure during heavy rainfall events.
4	Climate Change	10	The forecast climate change impacts to this region are more severe storms and drying. The first exacerbates our most common disaster – wind storms – and the second increases the risk of urban interface wildfires in our large, heavily treed open space areas surrounded by residential structures.
5	Volcano	8	The city is located within 100 miles of the potential ash plume of several volcanos.
6	Landslide/Mass Movement	6	Several residential subdivisions within Mill Creek at built on or adjacent to steep slopes that have the potential for landslides. This would especially be true in the wet season after a long period of rain and even a minor earthquake.
7	Urban Wildland Fire	5	A 2010 survey of roofing materials in the city by the fire district documented that 50% of all homes have wood shake/shingle roofs. Mill Creek fits the definition of an occluded community very well with several large areas of mature, dense forest canopy. With the high percentage of wood roofs combined and changing climate (drier trending here), firebrands could be a mechanism for widespread residential fires. At the encouragement of the fire district, many Home Owner Associations have recently changes requirements to allow less combustible roofs.
N/A	Avalanche	0	
N/A	Tsunami/Seiche	0	
N/A	Dam Failure	0	

TABLE 13-3.
LEGAL AND REGULATORY CAPABILITY

	Local Authority	State or Federal Prohibitions	Other Jurisdictional Authority	State Mandated	Comments
Codes, Ordinances & Requirements					
Building Code	Yes	No	Yes	Yes	Ordinance No. 2013-760
Zonings	Yes	No	No	Yes	Ordinance No. 2014-515
Subdivisions	Yes	No	No	Yes	Ordinance No. 2009-702
Stormwater Management	Yes	No	Yes	Yes	Ordinance No. 2009-702
Post Disaster Recovery	Yes	No	No	Yes	Ordinance No. 2009-702 & 2011-459
Real Estate Disclosure	No	Yes	No	No	N/A
Growth Management	Yes	No	No	Yes	Ordinance No. 2013-758
Site Plan Review	Yes	No	No	Yes	Ordinance No. 2014-778
Special Purpose (flood management, critical areas)	Yes	No	Yes	Yes	Ordinance No. 2004-603 & 2006-633
Planning Documents					
General or Comprehensive Plan	Yes	No	No	Yes	Ordinance No. 2013-758
Floodplain or Basin Plan	Yes	No	No	Yes	Ordinance No. 2004-603 & 2006-633
Stormwater Plan	Yes	No	Yes	Yes	Ordinance No. 2013-765
Capital Improvement Plan	Yes	No	No	Yes	Ordinance No. 2014-513
Habitat Conservation Plan	Yes	Yes	Yes	Yes	Ordinance No. 2004-603
Economic Development Plan	No	No	No	No	None adopted
Emergency Response Plan	Yes	No	Yes	Yes	None adopted
Shoreline Management Plan	Yes	No	No	Yes	Ordinance No. 2013-758 (Note: City has no shorelines of the State)
Post Disaster Recovery Plan	No	No	No	Yes	Resolution No. 2009-435 & 2011-459
Other					

TABLE 13-4.
ADMINISTRATIVE AND TECHNICAL CAPABILITY

Staff/Personnel Resources	Available?	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes	Department of Community Development (DCD) & Public Works (PW)/Community Development Director, Senior Planners, City Engineer, Public Works Director
Engineers or professionals trained in building or infrastructure construction practices	Yes	DCD, PW/City Engineer, PW Director, Building Official, Building Inspectors
Planners or engineers with an understanding of natural hazards	Yes	DCD, PW/Directors of DCD and PW, Senior Planners, City Engineer
Staff with training in benefit/cost analysis	No	
Floodplain manager	No	
Surveyors	No	
Personnel skilled or trained in GIS applications	Yes	DCD, Public Works/Senior Planner, Engineering Technician
Scientist familiar with natural hazards in local area	No	
Emergency manager	No	
Grant writers	No	

TABLE 13-5.
FISCAL CAPABILITY

Financial Resources	Accessible or Eligible to Use?
Community Development Block Grants	No
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	No
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	No
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	No

TABLE 13-6.
COMMUNITY CLASSIFICATIONS

	Participating?	Classification	Date Classified
Community Rating System	No	N/A	N/A
Building Code Effectiveness Grading Schedule	Yes	2	2011
Public Protection	No	N/A	N/A
Storm Ready	No	N/A	N/A
Firewise	No	N/A	N/A
Tsunami Ready	No	N/A	N/A

TABLE 13-7.
HAZARD MITIGATION ACTION PLAN MATRIX

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Department & Position	Estimated Cost	Sources of Funding	Timeline	Included in Previous Plan?
Initiative MC-01: Perform a structural seismic retrofit of the City's Annex Building.							
Existing	Earthquake	#9 and Plan Goals #1 & #2	Facilities, Parks & Rec. Director	$150,000	City, grant(s)	Short term	Yes
Initiative MC-02: Perform a structural seismic retrofit of the City's public works maintenance buildings planned for purchase in Q2 2015.							
New	Earthquake	#9 and Plan Goals #1 & #2	Facilities, Parks & Rec. Director	$50,000	City, grant(s)	Short term	Yes
Initiative MC-03: Perform a structural seismic retrofit of the Mill Creek Library building.							
Existing	Earthquake	#9 and Plan Goals #1 & #2	Facilities, Parks & Rec. Director	$100,000	City, grant(s)	Short term	Yes
Initiative MC-04: Actively promote and engage in public education and outreach to city residents and businesses on topics of natural hazards, mitigation measures and preparedness.							
Both	All hazards	#5 and Plan Goal #5	Public Safety Dept.	$50,000	City	Short term	Yes
Initiative MC-05: Develop and implement policy for maintaining critical city vehicles and equipment during and after an ash fall event.							
Existing	Volcano	#9 and Plan Goal #2	Facilities, Parks & Rec. Director	$10,000	City	Short term	Yes
Initiative MC-06: Add emergency back-up generators to designated emergency housing facilities.							
Existing	All hazards except Climate Change	#9	Facilities, Parks & Rec. Director	$100,000	City	Short term	No

TABLE 13-8.
MITIGATION STRATEGY PRIORITY SCHEDULE

Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/Budgets?	Priority[a]
1	1	High	Medium	Yes	Yes	Yes	Medium
2	1	High	Low	Yes	Yes	Yes	Medium
3	1	High	High	Yes	Yes	No	Medium
4	1	Medium	Medium	Yes	No	No	Medium
5	1	High	Low	Yes	No	Yes	Medium
6	1	High	High	Yes	No	No	Medium

a. Explanation of priorities

- High Priority: Project meets multiple plan objectives, benefits exceed cost, funding is secured under existing programs, or is grant eligible, and project can be completed in 1 to 5 years (i.e., short-term project) once funded.
- Medium Priority: Project meets at least 1 plan objective, benefits exceed costs, requires special funding authorization under existing programs, grant eligibility is questionable, and project can be completed in 1 to 5 years once funded.
- Low Priority: Project will mitigate the risk of a hazard, benefits exceed costs, funding has not been secured, project is not grant eligible, and timeline for completion is long term (5 to 10 years).

TABLE 13-9.
ANALYSIS OF MITIGATION INITIATIVES

	Initiative Addressing Hazard, by Mitigation Type					
Hazard Type	1. Prevention	2. Property Protection	3. Public Education and Awareness	4. Natural Resource Protection	5. Emergency Services	6. Structural Projects
Earthquake		1, 2, 3, 5	4		1, 2, 6	
Severe Storm			4		6	
Flooding			4		6	
Climate Change			4			
Volcano		5	4		6	
Landslide			4		6	
Wildland Fire			4		6	

Notes:

1. Prevention: Government, administrative or regulatory actions that influence the way land and buildings are developed to reduce hazard losses. Includes planning and zoning, floodplain laws, capital improvement programs, open space preservation, and stormwater management regulations.
2. Property Protection: Modification of buildings or structures to protect them from a hazard or removal of structures from a hazard area. Includes acquisition, elevation, relocation, structural retrofit, storm shutters, and shatter-resistant glass.
3. Public Education and Awareness: Actions to inform citizens and elected officials about hazards and ways to mitigate them. Includes outreach projects, real estate disclosure, hazard information centers, and school-age and adult education.
4. Natural Resource Protection: Actions that minimize hazard loss and preserve or restore the functions of natural systems. Includes sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
5. Emergency Services: Actions that protect people and property during and immediately after a hazard event. Includes warning systems, emergency response services, and the protection of essential facilities.
6. Structural Projects: Actions that involve the construction of structures to reduce the impact of a hazard. Includes dams, setback levees, floodwalls, retaining walls, and safe rooms.

TABLE 13-10.
PREVIOUS ACTION PLAN IMPLEMENTATION STATUS

Action #	Action Status: Completed	Action Status: Carry Over to Plan Update	Action Status: Removed; No Longer Feasible	Comments
MC-01-MH-ST: Identify City equipment necessary for safety and operations.	X			All elements within this action item have been completed except for a front glass wall at the main City Hall reception counter.
MC-02-MH-ST: Continue and enhance hazard education programs.		X		Public education regarding hazard preparedness is never complete so this ongoing action item is included in Table 13-7 as initiative MC-04.
MC-03-D-ST: Work with Alderwood Water and Wastewater and Silver Lake Water and Sewer Districts to educate consumers about drought impacts and ways to minimize water waste.	X			The City water and sewer service is provided by two private water and sewer districts. They actively promote water conservation and will continue to do so. In addition, it is the primary responsibility of the districts to carry out this action.
MC-04-E-ST: Conduct non-structural retrofit activities in City facilities.	X			All practicable elements of this 2010 NHMP item have been completed.
MC-05-E-ST: Encourage reduction of nonstructural and structural earthquake hazards in homes, schools, businesses, and government offices.	X	X		Activities were undertaken since the 2010 NHMP, but this is ongoing public education and is included in Table 13-7 as initiative MC-04.
MC-06-E-ST: Identify public buildings and infrastructure that require structural retrofitting.		X		In Table 13-7 as initiatives MC-01, MC-02, MC-03.
MC-07-E-ST: Identify funding sources for structural and nonstructural retrofitting of structures that are identified as seismically vulnerable.		X		In Table 13-7 as initiatives MC-01, MC-02, MC-03.

TABLE 13-10.
PREVIOUS ACTION PLAN IMPLEMENTATION STATUS

Action #	Action Status: Completed	Action Status: Carry Over to Plan Update	Action Status: Removed; No Longer Feasible	Comments
MC-08-E-LT: Integrate new earthquake hazard mapping data for the City of Mill Creek and improve technical analysis of earthquake hazards.			X	Adopted building code already defines seismic zones for design purposes. Technical analysis beyond that more appropriate for a regional, state or federal agency.
MC-09-F-ST: Identify surface water drainage obstructions within the City of Mill Creek	X			Surface water structures that could lead to flooding have been identified.
MC-10-F-LT: Enhance data and mapping for floodplain information within the city, and identify and map flood-prone areas outside of designated floodplains.	X			Public works policy addresses flood prone areas outside of designated floodplains.
MC-11-F-LT: Develop acquisition and management strategies to preserve open space for flood mitigation, fish habitat, and water quality in the floodplain.	X			Completed North Creek stream-bank restoration projects. Existing regulations preserve critical areas.
MC-12-L-ST: Improve knowledge of landslide hazard areas and understanding of vulnerability and risk to live and property in hazard-prone areas.	X	X		Adopted critical-area regulations require geotechnical analysis. Technical knowledge beyond what is currently best practice will be incorporated into regulations when available and accepted by appropriate federal/state agencies or national organizations.

TABLE 13-10.
PREVIOUS ACTION PLAN IMPLEMENTATION STATUS

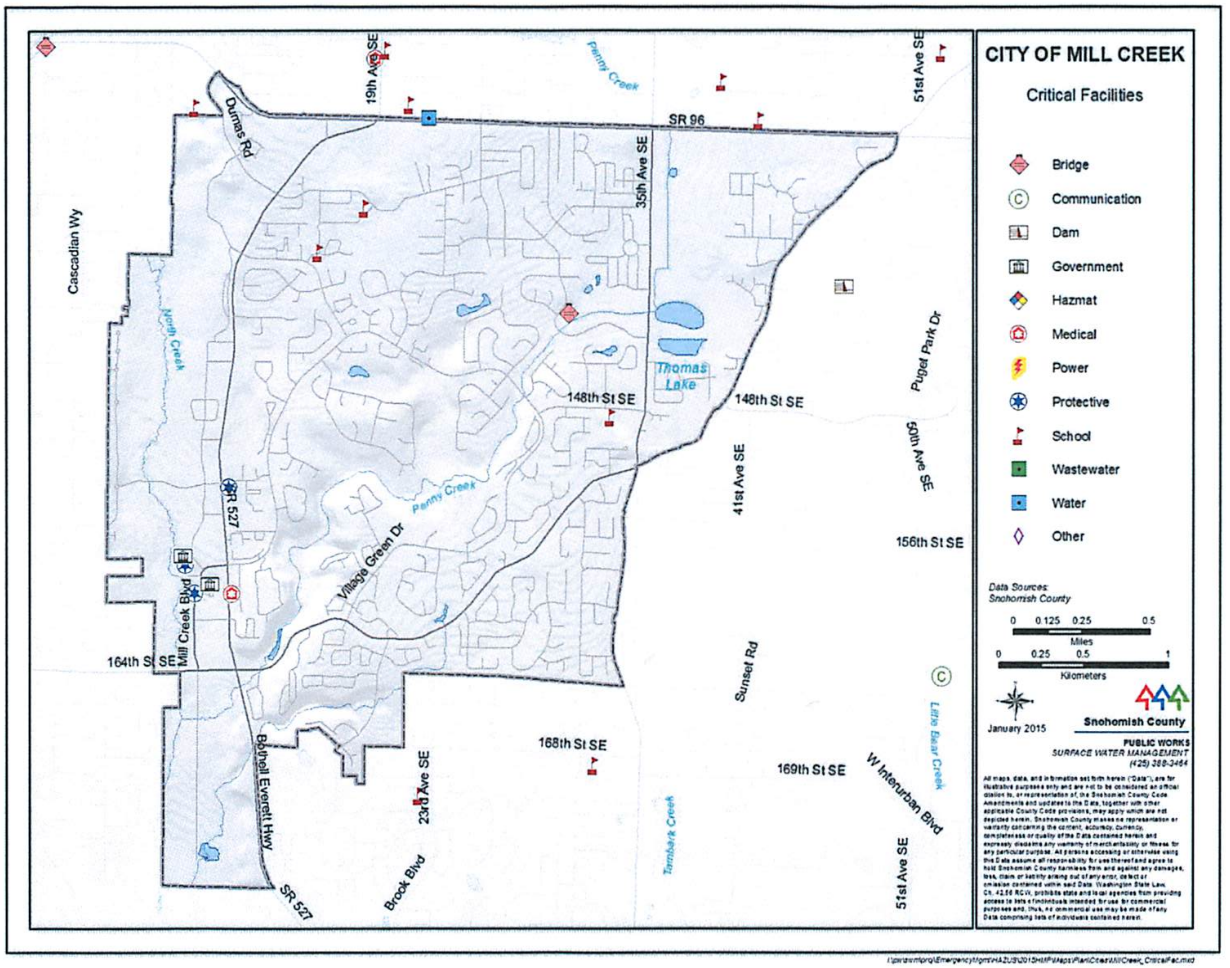
Action #	Action Status: Completed	Action Status: Carry Over to Plan Update	Action Status: Removed; No Longer Feasible	Comments
MC-13-L-ST: Encourage construction and subdivision design that can be applied to steep slopes to reduce the potential adverse impacts from development.	X	X		Adopted critical-area regulations require geotechnical analysis. Technical knowledge beyond what is currently best practice will be incorporated into regulations when available and accepted by appropriate federal/state agencies or national organizations.
MC-14-L-ST: Limit activities in identified potential and historical landslide areas through regulation and public outreach.	X	X		Adopted critical-area regulations require geotechnical analysis. Technical knowledge beyond what is currently best practice will be incorporated into regulations when available and accepted by appropriate federal/state agencies or national organizations.
MC-15-S-ST: Enhance strategies for public safety during severe storm events.	X	X		Public works policies in place to address most common severe storm situations, but public education is included in Table 13-7 as initiative MC-04.
MC-16-S-ST: Develop and implement programs to coordinate maintenance and mitigation activities to reduce risk to public infrastructure from severe storms.	X			Public works policies in place to address most common severe storm situations.
MC-17-S-ST: Increase public awareness of severe storm mitigation activities.		X		Ongoing public education program that is included in Table 13-7 as initiative MC-04.
MC-18-S-ST: Enhance weather monitoring to attain earlier severe storm warnings.			X	More appropriate for regional agencies, not a small city in an urbanized metropolitan region.

TABLE 13-10.
PREVIOUS ACTION PLAN IMPLEMENTATION STATUS

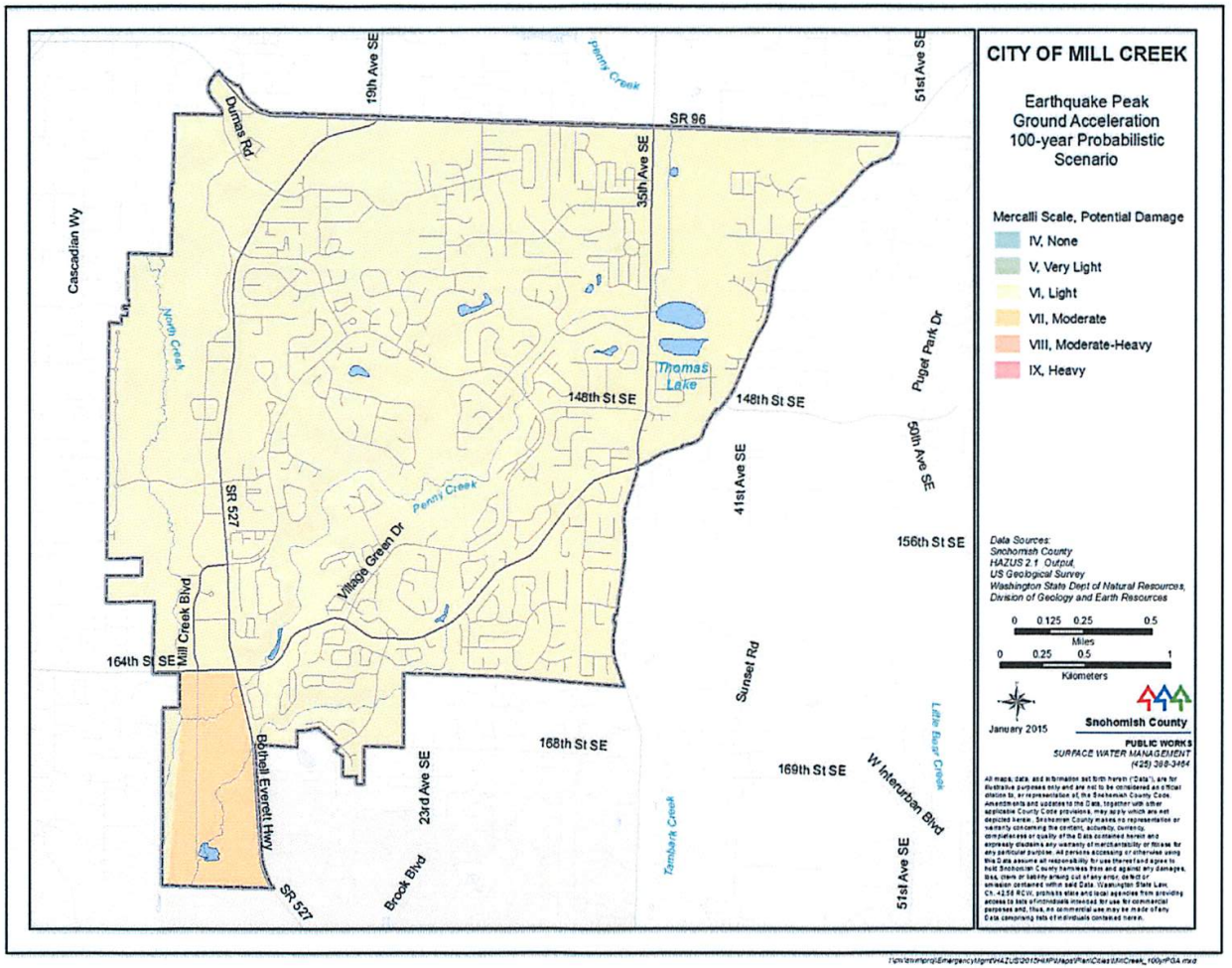
Action #	Action Status: Completed	Action Status: Carry Over to Plan Update	Action Status: Removed; No Longer Feasible	Comments
MC-19-S-ST: Encourage development and enforcement of wind-resistant building siting and construction codes.			X	City adopts most recent editions of national building codes that recommend current best design practice to address these issues.
MC-20-S-ST: Develop and implement programs to keep trees from threatening lives, property, and public infrastructure during severe storm events.		X		Ongoing public education program that is now included in Table 13-7 as initiative MC-04.
MC-21-S-LT: Require electrical utilities to use underground construction methods where possible to reduce power outages from severe storms.	X			Existing development regulations include this requirement.
MC-22-V-LT: Collaborate to develop ash fall models that are specific to the north King and south Snohomish County areas.			X	More appropriate for regional or state agency with appropriate technical resources.
MC-23-V-LT: Develop and implement policy for maintaining stock of filters for key vehicles and pieces of equipment.		X		Included in Table 13-7 as initiative MC-05.

TABLE 13-10.
PREVIOUS ACTION PLAN IMPLEMENTATION STATUS

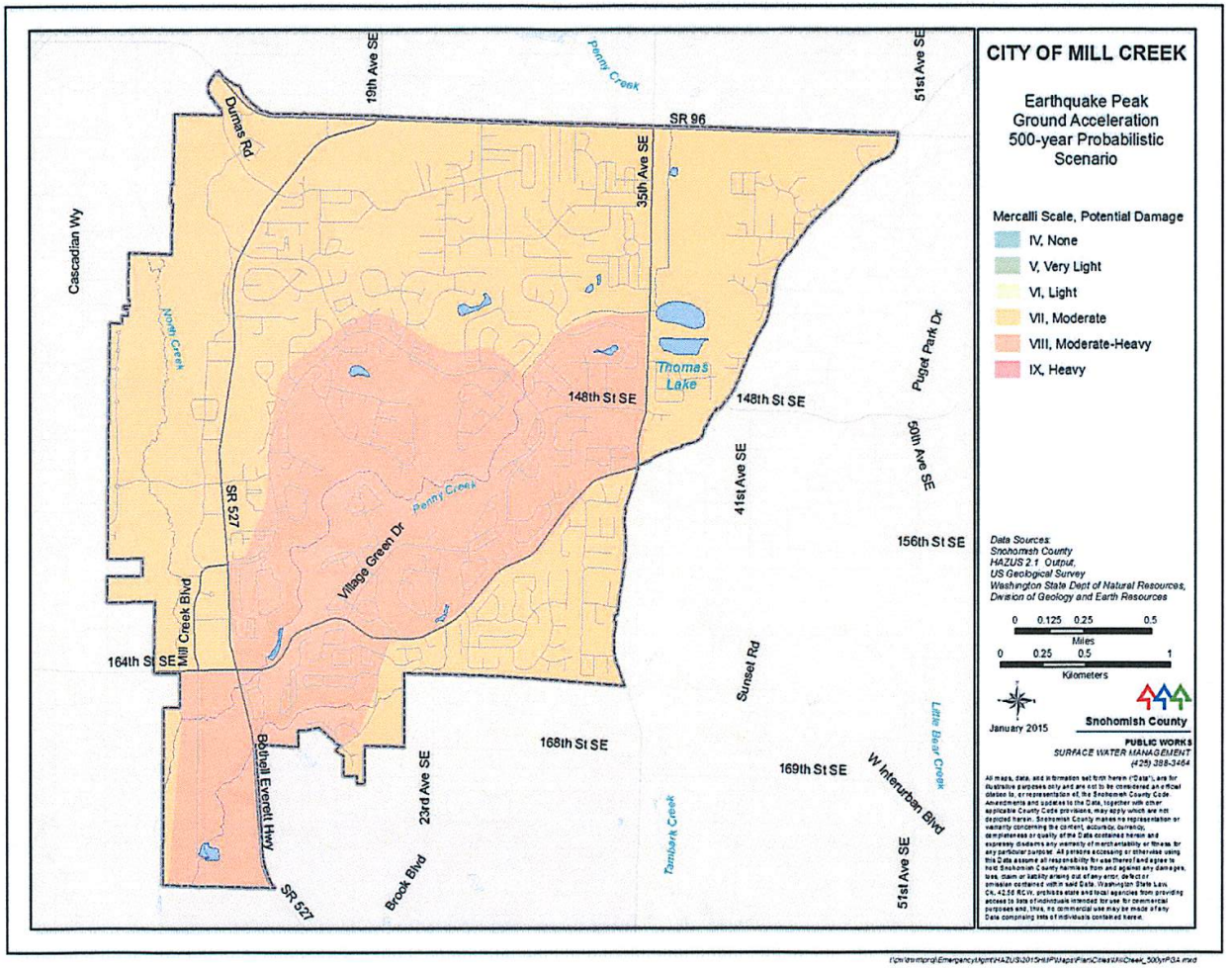
Action #	Action Status: Completed	Action Status: Carry Over to Plan Update	Action Status: Removed; No Longer Feasible	Comments
MC-24-W-LT: Enhance outreach and education programs aimed at mitigating wildland–urban interface fire hazards and reducing or preventing the exposure of citizens, public agencies, private property owners, and businesses to natural causes.		X		Although Mill Creek is not considered a rural area subject to wildland fires, the City has unusually large, forested open space areas that could be subject to "forest" fires with climate change. Ongoing public education program that is included in Table 13-7 as initiative MC-04.
MC-25-W-LT: Increase communication, coordination, and collaboration between wildland–urban interface property owners, city planners, fire prevention crews, and city officials to address risks, existing mitigation measures, and federal assistance programs.		X		Although Mill Creek is not considered a rural area subject to wildland fires, the City has unusually large forested open space areas that could be subject to "forest" fires with climate change. Ongoing public education program that is now included in Table 13-7 as initiative MC-04.



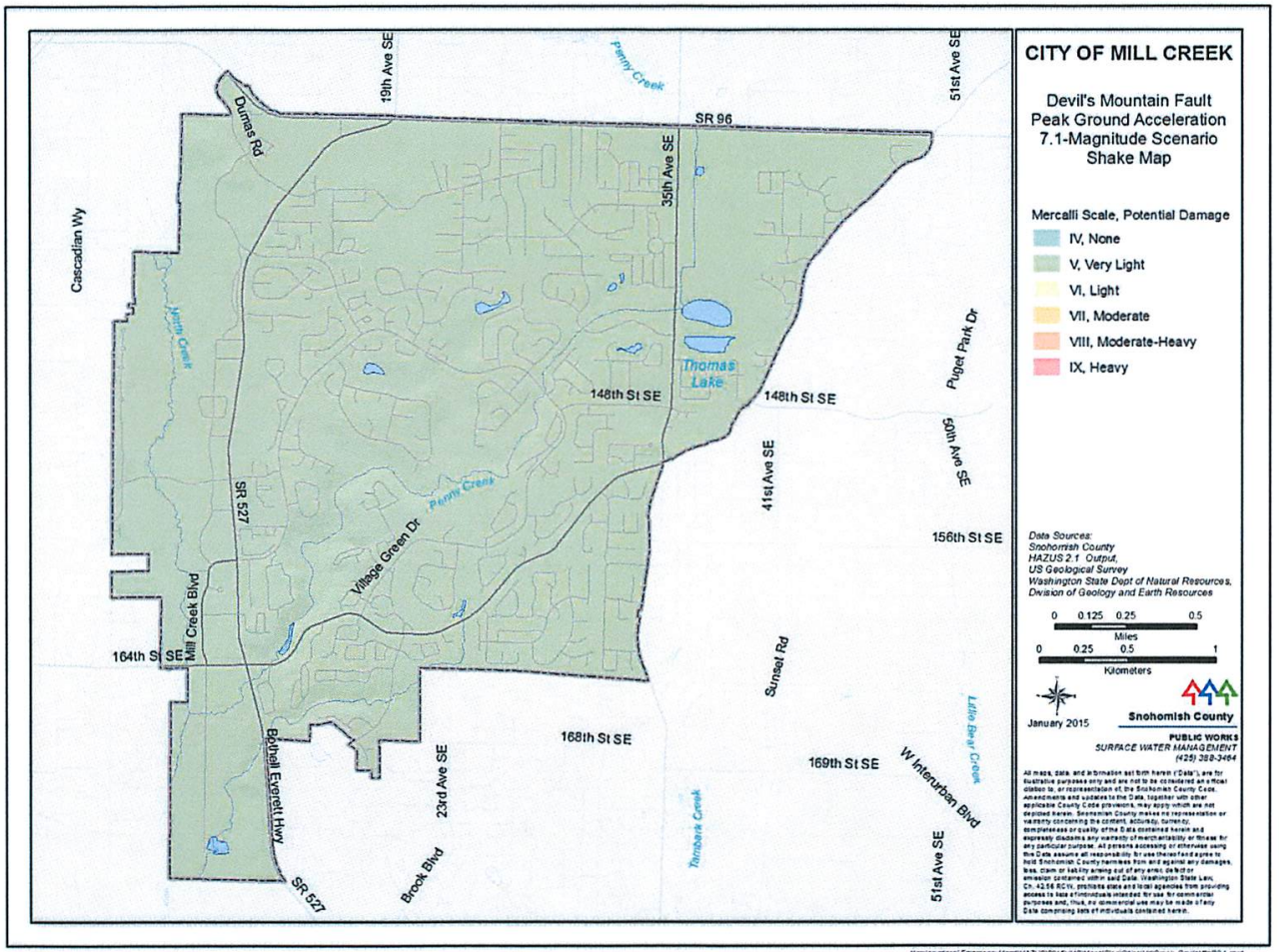
Map 13-1. City of Mill Creek Critical Facilities



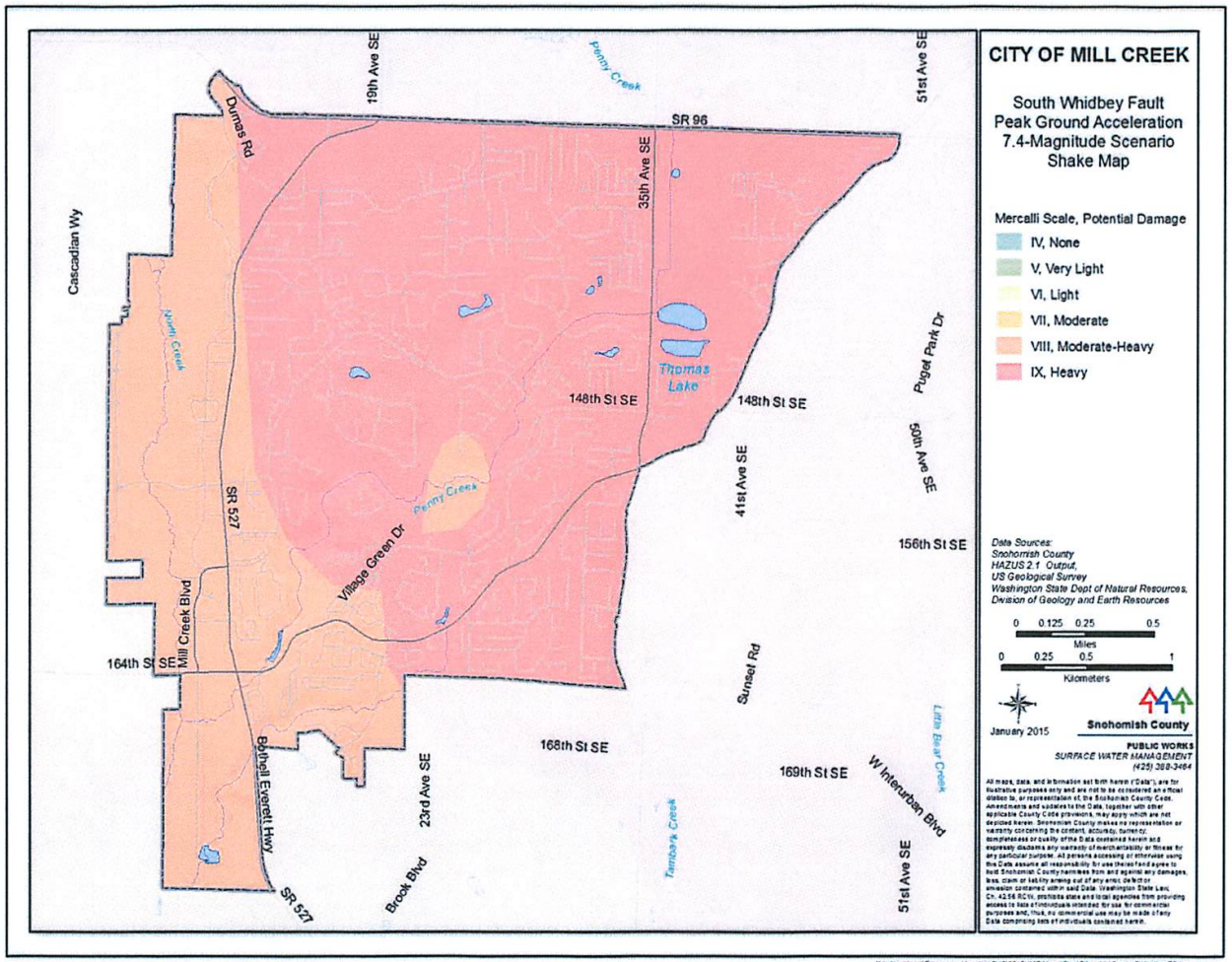
Map 13-2. City of Mill Creek 100-Year Probabilistic Earthquake Scenario



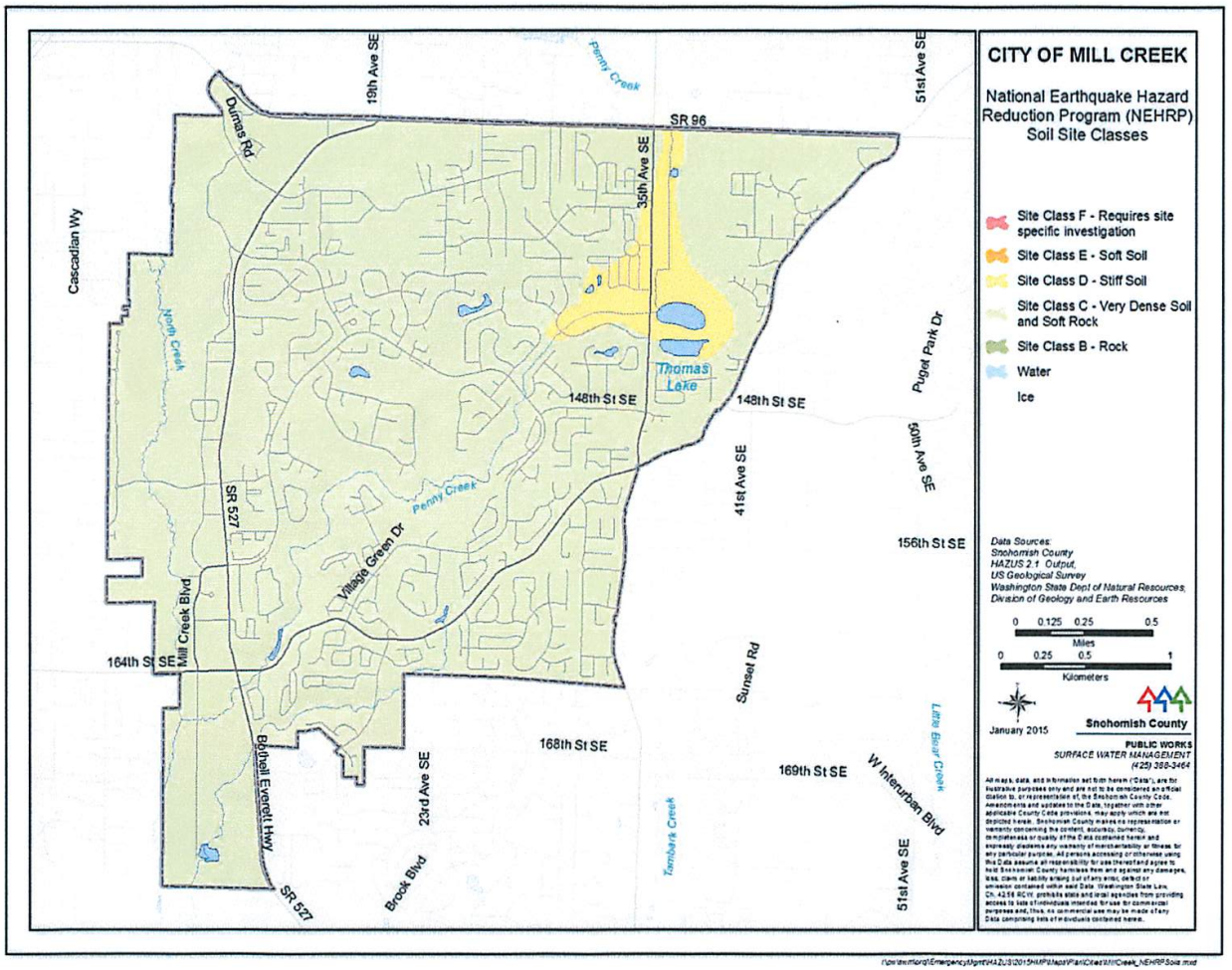
Map 13-3. City of Mill Creek 500-Year Probabilistic Earthquake Scenario



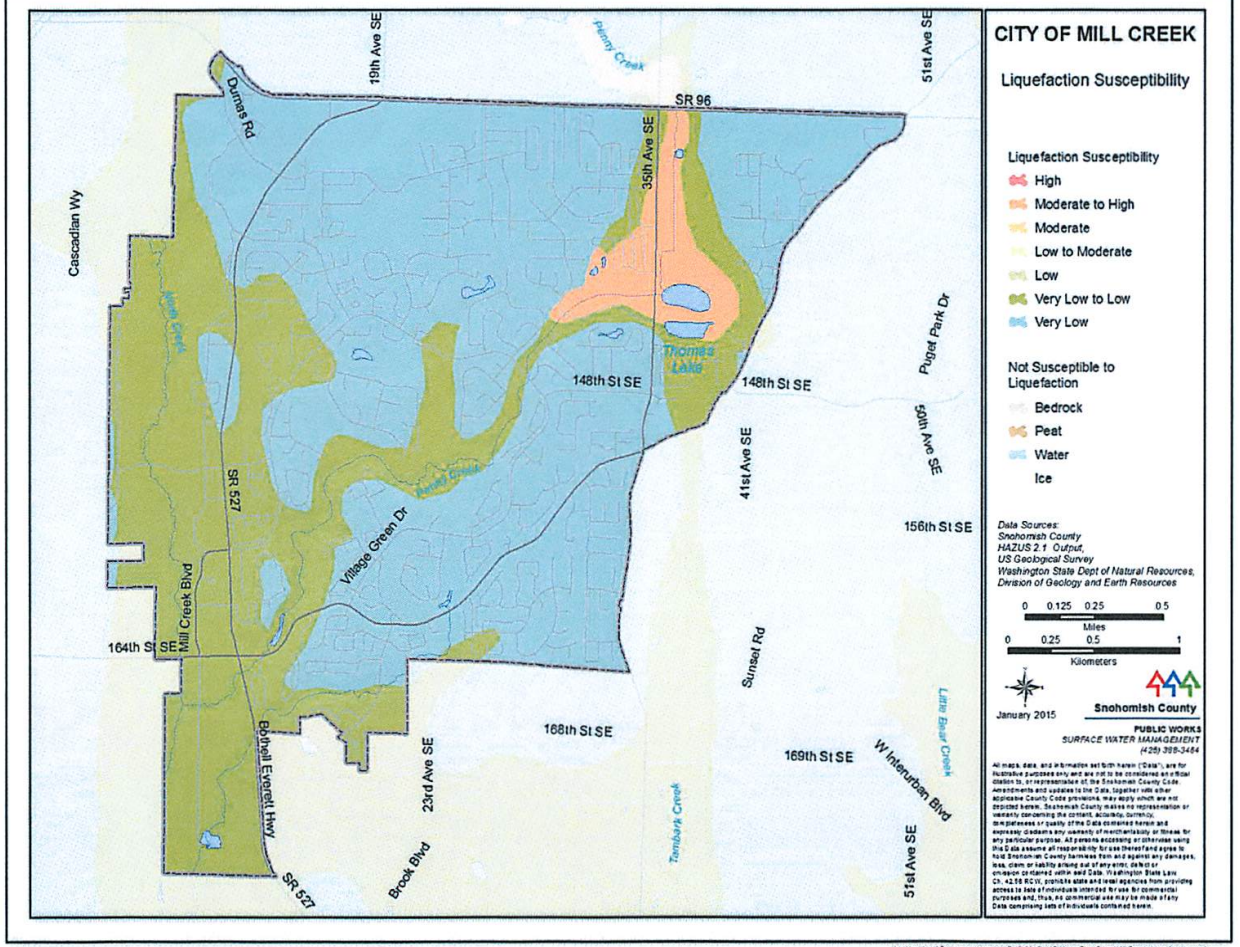
Map 13-4. City of Mill Creek Devil's Mountain Fault 7.1 Magnitude Earthquake Scenario



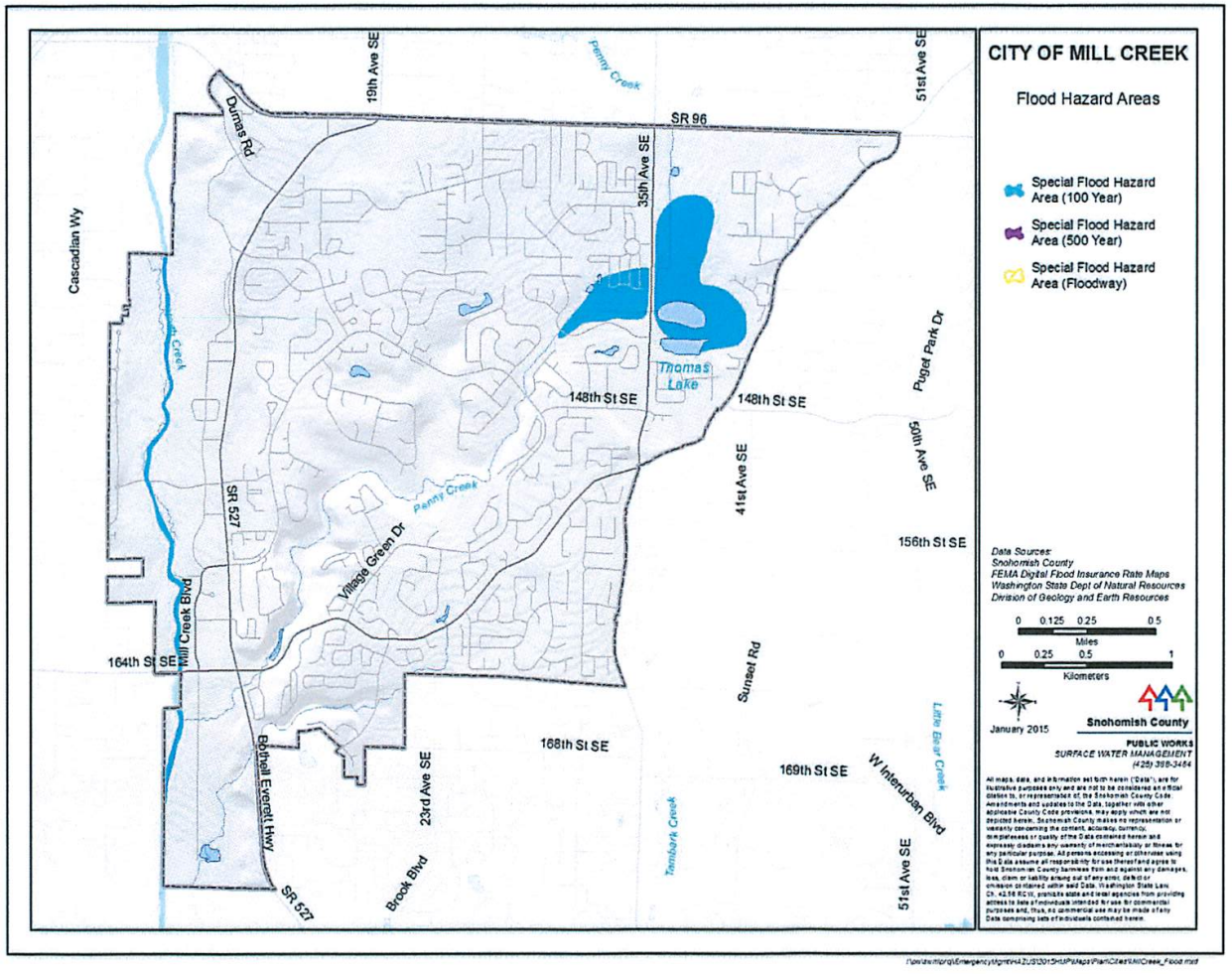
Map 13-5. City of Mill Creek South Whidbey Fault 7.4 Magnitude Earthquake Scenario



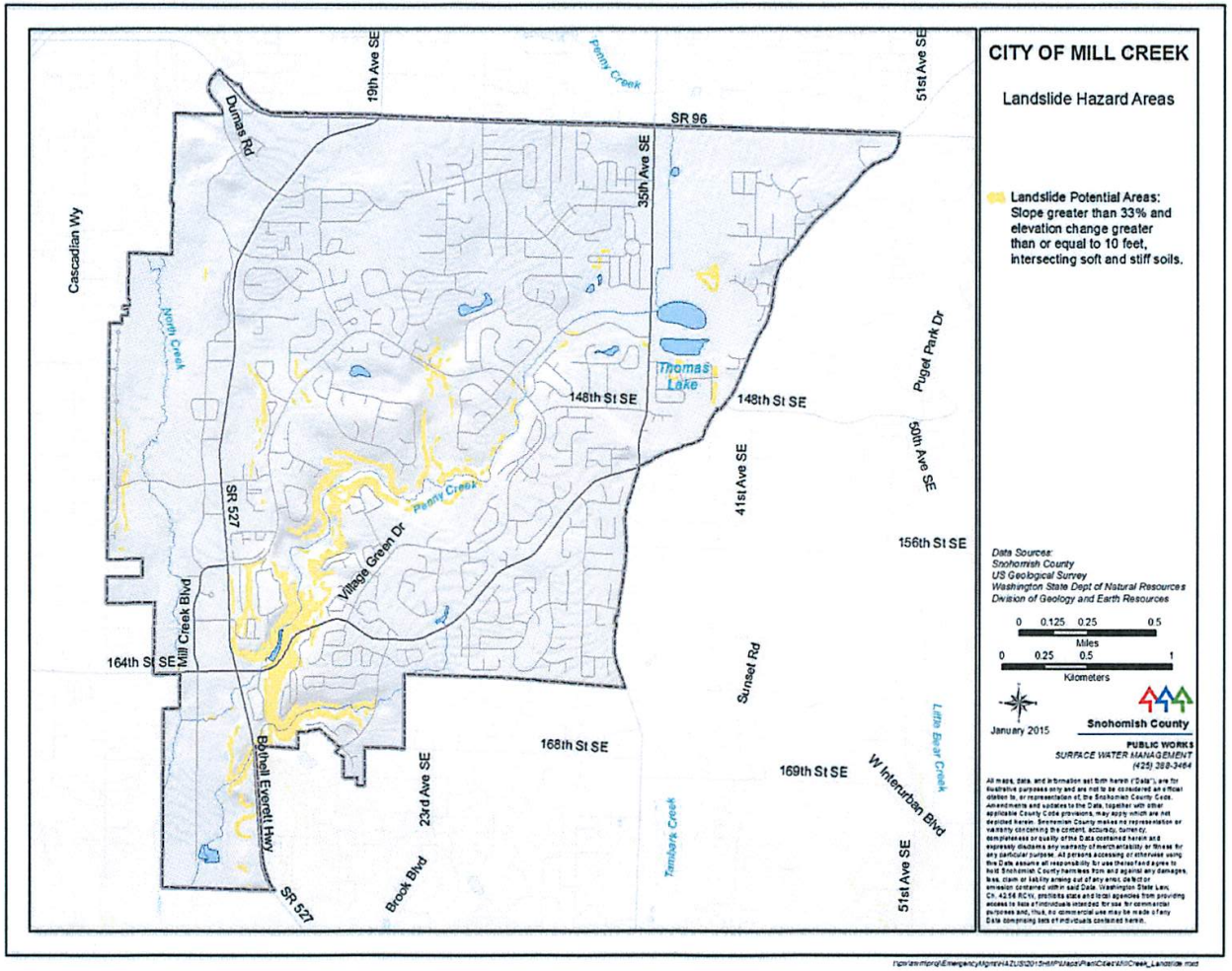
Map 13-6. City of Mill Creek National Earthquake Hazard Reduction Program Soil Classes



Map 13-7. City of Mill Creek Liquefaction Susceptibility



Map 13-8. City of Mill Creek Flood Hazard Areas



Map 13-9. City of Mill Creek Landslide Hazard Areas

CITY OF Mill Creek WASHINGTON

Agenda Item # C
Meeting Date: April 5, 2016

CITY COUNCIL AGENDA SUMMARY

City of Mill Creek, Washington

AGENDA ITEM: **CONSTRUCTION CONTRACT AWARD FOR THE 2016 CITYWIDE ASPHALT REPAIR PROJECT**

KEY FACTS AND INFORMATION SUMMARY: On March 8, 2016, The City Council approved the proposed annual work plan for the 2016 Pavement Preservation Program (PPP). The PPP includes a citywide asphalt repair project consisting of approximately 150 repair sites.

The Project was advertised for bids for three weeks in the Daily Journal of Commerce, the Everett Herald and through the Municipal Research Service Center (MRSC) contractor roster. Five bids were received and opened on March 30, 2016, and the results are summarized below. The engineer's estimate for the project was approximately $429,000, and the detailed bid tabulation sheet is attached.

Contractor	Bid Amount
Northwest Asphalt	$368,226.00
AA Asphalting	$572,487.00
Lakeridge Paving	$449,900.00
Fidalgo Paving	$438,225.00
Granite Construction	$743,198.00

Northwest Asphalt Inc. is based out of Renton and has worked for many local agencies, including recent work for King County and the Ports of Seattle and Olympia. In addition, they were the contractor for the City's 2010 and 2012 Asphalt Repair projects and did superior quality work. City staff verified that the bid prices were correct, the contractor understands job conditions and time restrictions, and can meet the insurance and bonding requirements.

Funding for the proposed Pavement Preservation Program work is included in Fund 318, which has $925,000 remaining out of the $1.5 million that was approved for the 2015-2016 budget. This amount also included the proposed asphalt overlay, chip seal and crack seal work.

CITY MANAGER RECOMMENDATION:

- The City Manager recommends adoption of the attached resolution authorizing the City Manager to execute the construction contract for the 2016 Citywide Asphalt Repair Project to Northwest Asphalt, Inc. in the bid amount of $368,226.00.

City Council Agenda Summary
Page 2

ATTACHMENTS:

- Bid tabulation sheet
- Resolution awarding the contract for the 2016 Citywide Asphalt Repair Project

Respectfully Submitted:

Rebecca C. Polizzotto
City Manager

G:\EXECUTIVE\WP\COUNCIL\SUMMARY\2016\2016 Asphalt Repairs.docx

Mill Creek
WASHINGTON

2016 Citywide Asphalt Repair Project
City of Mill Creek
Bid Tabulation

Bid Opening: 11:00AM, Wednesday, March 30, 2016

					Engineer's Estimate		Northwest Asphalt		AA Asphalting		Lakeridge Paving		Fidalgo Paving		Granite Construction	
No.	**Spec. Section**	**Item**	**Quantity**	**Unit**	**Unit Cost**	**Total Cost**	**Unit Cost**	**Total Cost**	**Unit Cost**	**Total Cost**	**Unit Cost**	**Total Cost**	**Unit Cost**	**Total Cost**	**Unit Cost**	**Total Cost**
1	1-04	Minor Changes	1	FA	$25,000.00	$25,000.00	$25,000.00	$25,000.00	$25,000.00	$25,000.00	$25,000.00	$25,000.00	$25,000.00	$25,000.00	$25,000.00	$25,000.00
2	1-09 SP	Mobilization	1	LS	$25,000.00	$25,000.00	$20,000.00	$20,000.00	$78,704.00	$78,704.00	$18,500.00	$18,500.00	$35,000.00	$35,000.00	$28,800.00	$28,800.00
3	1-10 SP	Flaggers	500	HR	$45.00	$22,500.00	$65.00	$32,500.00	$65.00	$32,500.00	$52.00	$26,000.00	$64.00	$32,000.00	$80.00	$40,000.00
4	1-10 SP	Project Temporary Traffic Control	1	LS	$5,000.00	$5,000.00	$4,200.00	$4,200.00	$11,630.00	$11,630.00	$2,500.00	$2,500.00	$15,000.00	$15,000.00	$20,000.00	$20,000.00
5	2-01 SP	Clearing and Grubbing	1	LS	$5,000.00	$5,000.00	$5,000.00	$5,000.00	$21,000.00	$21,000.00	$7,850.00	$7,850.00	$21,000.00	$21,000.00	$18,000.00	$18,000.00
6	2-03	Unsuitable Foundation Excavation Incl. Haul	25	CY	$200.00	$5,000.00	$77.76	$1,944.00	$430.00	$10,750.00	$100.00	$2,500.00	$125.00	$3,125.00	$242.00	$6,050.00
7	4-04	Crushed Surfacing Top Course	50	TON	$50.00	$2,500.00	$37.58	$1,879.00	$150.00	$7,500.00	$75.00	$3,750.00	$120.00	$6,000.00	$180.00	$9,000.00
8	4-04	Permeable Ballast	75	TON	$50.00	$3,750.00	$39.20	$2,940.00	$205.00	$15,375.00	$50.00	$3,750.00	$120.00	$9,000.00	$163.00	$12,225.00
9	5-04	Planing Bituminous Pavement	1200	SY	$25.00	$30,000.00	$23.97	$28,764.00	$46.00	$55,200.00	$7.75	$9,300.00	$19.00	$22,800.00	$23.00	$27,600.00
10	5-04 SP	Pavement Repair Excavation Inc. Haul	2200	SY	$35.00	$77,000.00	$28.77	$63,294.00	$47.00	$103,400.00	$70.00	$154,000.00	$35.00	$77,000.00	$89.00	$195,800.00
11	5-04	HMA for Pavement Repair Class 1/2 In. PG 64-22	1000	TON	$200.00	$200,000.00	$152.18	$152,180.00	$172.00	$172,000.00	$172.00	$172,000.00	$150.00	$150,000.00	$308.00	$308,000.00
12	7-05	Adjust Catch Basin	6	EA	$500.00	$3,000.00	$650.00	$3,900.00	$650.00	$3,900.00	$450.00	$2,700.00	$800.00	$4,800.00	$983.00	$5,898.00
13	8-01 SP	Temporary Erosion and Sediment Control	1	LS	$5,000.00	$5,000.00	$2,500.00	$2,500.00	$3,878.00	$3,878.00	$575.00	$575.00	$2,000.00	$2,000.00	$24,000.00	$24,000.00
14	8-04 SP	Cement Conc. Curb	325	LF	$50.00	$16,250.00	$65.00	$21,125.00	$90.00	$29,250.00	$63.00	$20,475.00	$100.00	$32,500.00	$61.00	$19,825.00
15	8-13 SP	Survey Monument	2	EA	$2,000.00	$4,000.00	$1,500.00	$3,000.00	$1,200.00	$2,400.00	$500.00	$1,000.00	$1,500.00	$3,000.00	$1,500.00	$3,000.00
					TOTAL BID =	$429,000.00	TOTAL BID =	$368,226.00	TOTAL BID =	$572,487.00	TOTAL BID =	$449,900.00	TOTAL BID =	$438,225.00	TOTAL BID =	$743,198.00

RESOLUTION NO. 2016-

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MILL CREEK, WASHINGTON, AWARDING THE CONTRACT FOR THE 2016 CITYWIDE ASPHALT REPAIR PROJECT.

WHEREAS, the City of Mill Creek has properly issued invitations to bid for the 2016 Citywide Asphalt Repair Project; and

WHEREAS, the City received responsive and responsible bids from five companies; and

WHEREAS, the City staff has evaluated the bid responses and presented that information to the City Council for review and consideration; and

WHEREAS, the cost to complete the work or improvement, including materials, supplies, and equipment required under the contract for the 2016 Citywide Asphalt Repair Project exceeds $50,000; and

WHEREAS, the City Manager has recommended the City Council select Northwest Asphalt, Inc. as the lowest responsive and responsible bidder for the 2016 Citywide Asphalt Repair Project; and

WHEREAS, the City Council agrees with and adopts the findings and recommendations set forth in the Agenda Summary memorandum dated April 5, 2016; and

WHEREAS, the City Council has determined that Northwest Asphalt, Inc. is the lowest responsive and responsible bidder on the project; and

WHEREAS, the City Council has determined it is in the public interest to award the contract for the project to Northwest Asphalt, Inc.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MILL CREEK, WASHINGTON, THAT:

Section 1. The contract for the 2016 Citywide Asphalt Repair Project is hereby awarded to Northwest Asphalt, Inc. as the lowest responsive and responsible bidder. The City Manager is authorized to execute the contract and such other documents as are pertinent to this award.

Section 2. The City Council finds that a need exists to award the bid in a timely manner to ensure the construction of the 2016 Citywide Asphalt Repair Project, and that this Resolution shall therefore be effective immediately upon adoption.

Adopted this 5th day of April, 2016, by a vote of ___ for, ___ against, and ____ abstaining.

APPROVED:

_____
PAM PRUITT, MAYOR

ATTEST/AUTHENTICATED:

_____
KELLY CHELIN, CITY CLERK

APPROVED AS TO FORM:

_____
SCOTT MISSALL, CITY ATTORNEY

FILED WITH THE CITY CLERK:
PASSED BY THE CITY COUNCIL:
RESOLUTION NO.:_____

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