



SNOHOMISH COUNTY

HAZARD MITIGATION PLAN

2025 UPDATE

VOLUME 2

Page Intentionally Left Blank

Table of Contents

Chapter 1 The Annex Development Process.....	1
Chapter 2 Snohomish County Annex.....	4
Appendix A: Acronyms and Definitions	107
Appendix B: Planning Process Documentation.....	113
Appendix C: Public Outreach Documentation	211
Appendix D: Mitigation Strategy Prioritization	227
Appendix E: Hazard Identification and Risk Assessment Methodology and Documentation	229
Appendix F: Annual Report & CRS Compliance Template	315
Appendix G: Planning Mechanism Integration	332
Appendix H: Community Wildfire Protection Plan	340

Chapter 1 The Annex Development Process

1.1 Jurisdiction Annex Development

Region 10 of the Federal Emergency Management Agency (FEMA) and the Washington Emergency Management Division (WA EMD) encourage multijurisdictional hazard mitigation planning. Chapter 44 of the Code of Federal Regulations (44 CFR) states that multijurisdictional plans are accepted as long as each jurisdiction has participated in the process and has officially adopted the plan.

The Snohomish County planning partnership was formed to pursue grant funding for the Snohomish County 2025 Hazard Mitigation Plan (HMP) update, and to meet federal Disaster Mitigation Act (DMA) requirements to include as many eligible local governments within the county as possible. The DMA defines a local government as:

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.¹

There are two types of planning partners in this process, with distinct needs and capabilities: (1) cities, towns, tribes, and the county; and (2) special purpose districts. These partners submitted Letters of Intent and were members of the Public Planning Committee. For more information about their participation in plan development see Volume 1, Chapter 2.

The Project Team developed a list of planning partner expectations, which was confirmed at the planning partner kick-off meeting held on April 10, 2025. The expectations are summarized below:

- Each partner will provide a Letter of Intent to participate.
- Each partner will support and participate in the Public Planning Committee overseeing the development of the update. Support includes allowing this body to

¹ Code of Federal Regulations. Accessed September 2025. [44 CFR 201.6](#)

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 Public Planning Committee.
- Each partner will participate in plan update development activities. Attendance will be tracked at such activities, and attendance records will be used to track and document participation for each planning partner. These activities include:
 - o Public Planning Committee meetings
 - o Public meetings or open houses
 - o Workshops and surveys
 - o Public review and comment periods prior to adoption
- Each partner will be expected to review the risk assessment and identify hazards and vulnerabilities specific to its jurisdiction.
- Each partner will be required to create its own annex based on the template provided by the Project Team.
- Each partner will be required to document at least one public outreach event and publish their annex draft for public comment prior to submission.
- Each partner will be required to formally adopt the plan.

1.2 Annex Preparation

Templates were created to help the planning partners prepare their jurisdiction specific annexes. The templates were created so that all criteria of Section 201.6 of 44 CFR would be met, based on the partners' capabilities and mode of operation. 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.

1.3 Jurisdiction Specific Risk Assessment

In addition to this countywide risk assessment, each participating jurisdiction completed a risk assessment focusing on their hazards, vulnerabilities, and impacts. These assessments are contained in each planning partner annex. These assessments will have more detail about individual jurisdiction risks and should supplement the wider lens of the risk profiles contained in the base plan. To complete their assessments, jurisdictions were provided with an informational packet with information about each identified hazard, with hazard maps containing relevant data on hazards and impacts. The data is the same as that used in the base plan risk assessments, but jurisdictions were asked to focus on impacts specific to their assets and boundaries. Jurisdictions assessed risk in two ways.

- First, jurisdictions looked at hazards that could impact them, how susceptible/vulnerable they are to those hazards, and the consequences/impacts of a hazard event.
- Second, jurisdictions were asked to consider an asset-based approach, considering their priority assets, the hazards that threaten those assets, and the consequences of losing the asset. All jurisdictions were asked to identify the Critical Infrastructure and Key Resources (CIKR) in their jurisdiction to better evaluate risk. The goal of this approach was to identify assets that needed mitigation.

In developing their risk assessments, jurisdictions held internal meetings to rank the identified hazards and to assess the relative risk of each hazard. They used the Hazard Identification and Risk Assessment survey developed for the base plan to assess their jurisdiction specific risk of each hazard. These jurisdiction-specific risk assessments are not designed to be exhaustive but should give a much clearer picture of risk and vulnerability than is normally available from countywide assessments.

1.4 Late Linking Annex Procedures

Not all eligible local governments within Snohomish County participated in the planning process to become eligible for inclusion in the 2025 update of the HMP. Some or all of these non-participating local governments may choose to “link” to the plan at some point to gain eligibility for programs under the federal Disaster Mitigation Act. Any jurisdiction seeking to link to the Snohomish County 2025 Hazard Mitigation Plan can contact Snohomish County Department of Emergency Management to initiate the process. All late linking annexes will need to meet the requirements of the most current Local Mitigation Planning Policy. In addition to the steps outlined in the annex template, any jurisdiction wanting to complete a late linking annex will need to validate that the information presented in the base plan is still current, confirm the validity and document any changes to information.

Chapter 2 Snohomish County Annex

2.1 Hazard Mitigation Points of Contact

Primary Point of Contact	Secondary Point of Contact
Amy Lucas, Resilience and Mitigation Program Manager	Rebecca Carpenter, Resilience and Mitigation Program Analyst

2.2 Snohomish County Profile

Several indigenous tribes, including the Snoqualmie, Skykomish, Sauk-Suiattle, Stillaguamish and Snohomish occupied the land that is now Snohomish County prior to the European exploration of the region by Captain George Vancouver in 1792. More intensive Euro-American settlement began in the 1840s, leading to the Treaty of Point Elliot, creating the Tulalip Reservation where many of the region’s tribes settled post treaty.

A development and population boom in the 1890s followed the construction of the Great Northern Railway into the region creating a timber and farming based economy. Additional industrial development flourished in the 1960s with the construction of the Boeing 747 plant at Paine Field in Everett, and a successful tech industry in the Puget Sound region has created even more growth in the county over the last 30 years. The Snohomish County Tomorrow Growth Monitoring Report estimates the population of Snohomish County at 867,100.²

Population and Employment

Snohomish County is the third most populous county in Washington and makes up part of the Seattle metropolitan area with King and Pierce counties located to the south. Its major cities are Everett, Edmonds, Marysville, and Lynnwood. Other cities include Arlington, Bothell (partly in King County), Brier, Gold Bar, Granite Falls, Lake Stevens, Mill Creek, Monroe, Mountlake Terrace, Mukilteo, Snohomish, Stanwood, and Sultan. Snohomish County is also home to the incorporated Towns of Darrington, Index, and Woodway, as well as the Tulalip, Stillaguamish, and Sauk-Suiattle Tribes. The Tulalip Reservation is located west of Marysville and encompasses 22,000 acres, over half in federal trust land. The Stillaguamish Reservation, designated at 64 acres, is located north of Arlington, and the 34-acre Sauk-Suiattle reservation is located in Skagit County just north of Darrington,

² 2024 Growth Monitoring Report, Snohomish County Tomorrow,
<https://www.snohomishcountywa.gov/DocumentCenter/View/123139/>

although the tribe owns and manages many properties and businesses within the Town of Darrington.

Much of the population is located along the transportation corridors, which are also interspersed with commercial and industrial operations.³

Since the 2020 Census, the Washington State Office of Financial Management (OFM) estimates that Snohomish County’s population has grown by 3.8 percent to reach 859,800 total residents as of April 1, 2023 – a gain of 31,843 persons over three years, making it the third largest of Washington’s 39 counties. The county’s largest city is Everett, with the 2020 United States Census estimating a population of 110,629. Marysville is the second largest city, with over 70,000 residents, followed by Edmonds, Lake Stevens and Lynnwood with populations over 40,000.

Table 2.1: Populations of Cities and Unincorporated Snohomish County⁴

Area	2000	2010	2020	2023	2024
Arlington	11,927	17,926	19,868	21,740	22,980
Bothell (part)	13,965	16,415	19,205	20,270	20,380
Brier	6,383	6,087	6,560	6,610	6,600
Darrington	1,136	1,347	1,462	1,505	1,515
Edmonds	39,544	39,709	42,853	43,370	43,420
Everett	91,488	103,019	110,629	114,200	114,800
Gold Bar	2,014	2,075	2,403	2,305	2,310
Granite Falls	2,347	3,364	4,450	4,775	4,775
Index	157	178	155	155	160
Lake Stevens	6,361	28,069	35,630	41,260	41,540
Lynnwood	33,847	35,836	38,568	40,790	41,500
Marysville	25,315	60,020	70,714	73,780	74,390
Mill Creek	11,525	18,244	20,926	21,630	21,630
Monroe	13,795	17,304	19,699	20,590	20,830
Mountlake Terrace	20,362	19,909	21,286	23,810	24,260
Mukilteo	18,019	20,254	21,538	21,590	21,590
Snohomish	8,494	9,098	10,126	10,330	10,350
Stanwood	3,923	6,231	7,705	8,585	8,865
Sultan	3,344	4,651	5,146	6,730	7,160
Woodway	936	1,307	1,318	1,340	1,345
Incorporated Total	314,882	411,043	460,241	485,365	490,400
Unincorporated	291,142	302,292	367,716	374,435	376,700
Total	606,024	713,335	827,957	859,800	867,100

³ Boeing Company. Accessed July 2025. “[Everett Production Facility](#).”

⁴ Snohomish County Tomorrow. 2025. “[2024 Growth Monitoring Report](#).”

A full demographic breakdown of the County can be found in Section 3.6 in the Hazard Mitigation base plan including age, sex, race, income and populations at risk.

Snohomish County's economy is strongly based in the biotech industry, clean technology, and aerospace engineering and production, and possesses many assets that contribute to the economic vitality of the region. The county is in the heart of the Puget Sound basin and is adjacent to the Seattle metropolitan area. Major private employers include Boeing (with an estimated 40,000 employees), Providence Medical Center, Premera-Blue Cross, and the Tulalip Tribes. Major public employers in Snohomish County include the U.S. Naval Station, the State of Washington, and Snohomish County. Management and professional occupations, sales, and manufacturing are important base industries in the county. Snohomish County is the home of the Boeing Company's largest aerospace assembly plant, which is the largest manufacturing building in the world.⁵

A full breakdown of job sector growth and industry trends can be found in Volume 1, Section 3.7.

Development Trends

Development in unincorporated Snohomish County is regulated by Snohomish County Code Title 30, the Unified Development Code (UDC). Incorporated cities and towns within the county implement their own development codes and regulations. Snohomish County follows the Growth Management Act of Washington (RCW 36.70A), which requires counties to direct the majority of development into urban areas where infrastructure exists. It also requires counties to limit growth in rural areas and protect critical areas and farmland. Growth in the county is monitored by Snohomish County Planning and Development Services (PDS) and published in regular Growth Monitoring Reports as required under the Countywide Planning Policies.

According to the 2024 Growth Monitoring Report, multi-family and townhouse housing represent the majority of residential units permitted countywide for five of the last six years, ranging from 53 percent in 2019 and 2024 to 61 percent in 2021. Between 2020 and 2024, 34 percent of residential building permits have been issued in unincorporated Snohomish County and 66 percent have been issued within the cities.

Fifteen percent of the total housing units permitted since 1990 have been in the Rural/Resource areas. Parts of these areas experience flooding. They also encompass most of the Wildland Urban Interface (WUI) area, the places where houses, farms and businesses stand amid or adjacent to large tracts of trees. However, PDS has seen a

⁵ Boeing Company. Accessed July 2025. "[Everett Production Facility](#)."

decline in the percentage of housing units in the Rural/Resource areas; in the last six years it has remained below 10 percent consistently.⁶

An emerging trend is the recent increase in Rural Cluster subdivision applications. A Rural Cluster subdivision is an alternative to the lot subdivision process in the Rural/Resource areas where developers can group lots into compact clusters as long as they preserve restricted open space within the development. Depending on how much open space the developer proposes to designate, they can receive between a 15 percent to 35 percent density bonus within the subdivision. For example, in certain areas of the Rural Residential 5 (1 home per 5 acres) zone, a developer could purchase a 50-acre lot and subdivide it into six 5-acre lots under regular zoning regulations. Under the Rural Cluster Subdivision process, that developer could designate 45 percent of the total acreage as open space and qualify for a residential density of 1 lot per 200,000 square feet plus a 15 percent density bonus. This would allow the developer to fit an extra lot into the subdivision. Between 2008 and 2023, the county averaged 40 rural cluster lot applications per year. In 2024, that number spiked to 505 rural cluster lot applications, which was the largest annual total since 2007 according to PDS.

More details of the permitting process and permits issued on parcels intersecting or containing hazard areas can be found in Section 3.5 of the Hazard Mitigation base plan.

Geography and Climate

Snohomish County is located on Puget Sound in Western Washington and is the 13th largest county in Washington by total area, with a total area of 2,196 square miles (2,089 square miles of land and 107 square miles of water). It is located between Skagit County to the north and King County to the south and borders Chelan County to the east and Island County to the west with the water of Puget Sound.

Many of the geologic features of Western Washington are shaped by plate tectonics and historic glacial activity.⁷ The county's varied topography ranges from saltwater beaches, rolling hills, and rich river bottom farmlands in the west to dense forest and alpine wilderness in the mountainous east. Glacier Peak, at 10,541 feet, is the highest point in the county and one of the highest in the state. With many peaks reaching elevations over 6,000 feet, the alpine landscape in the eastern portion of the county caused the bulk of Snohomish County's development and population growth to occur along the narrow,

⁶ Snohomish County Planning and Development Services, 2024

⁷ Bourgeois, J. and Johnson, S. Geological Society of America Bulletin. 2001. "[Geologic evidence of earthquakes at the Snohomish delta, Washington, in the past 1200 yr](#)".

westernmost Puget Sound lowlands near primary transportation corridors including Interstate-5, State Route-9, US Highway-2, and State Route-530.

Snohomish County also hosts multiple railways connecting the communities to Puget Sound and Canada. Many sections of the historic railways have been converted to recreational trail systems, such as the Interurban Trail and Centennial Trail, while others are used for the Sound Transit commuter train and freight trains.

Washington State Department of Ecology identified that Snohomish County has five Water Resource Inventory Areas (WRIAs) and two major river basins⁸:

Table 2.2: Snohomish County Watershed Inventory Resource Areas and river basins

Name	Description
Watershed Resource Inventory Areas	Lower Skagit/Samish Upper Skagit Stillaguamish Snohomish Cedar/Sammamish
Snohomish River Basin	Covers approximately 1,856 square miles in King and Snohomish Counties and contains over 2,700 miles of streams, making it the second largest basin draining to Puget Sound. The Skykomish and Snoqualmie Rivers originate in the Cascade Mountains and flow west before meeting near the City of Monroe where they become the Snohomish River. The Snohomish River continues to the estuary near the City of Snohomish and reaches Puget Sound between the cities of Everett and Marysville.
Stillaguamish River Basin	Covers approximately 700 square miles in area, with about 3,100 miles in stream length. Located in the northern half of the county, the Stillaguamish River drains approximately one-half of the county's land area. With basin streams originating in Skagit and Snohomish County, the "Stilly" is the fifth largest tributary draining into Puget Sound.

As Snohomish County's landscape varies significantly between the valleys and the neighboring mountains, so does its climate. Locations along Puget Sound are generally characterized as a moderate year-round climate, with average temperatures ranging from about 75 degrees Fahrenheit in July to about degrees Fahrenheit in January. Since 1900, the average annual air temperature in the Puget Sound region has increased by 1.3 degrees

⁸ WA State Department of Ecology. Accessed July 2025. "[In your watershed.](#)"

Fahrenheit and is projected to be 5.5 degrees Fahrenheit warmer in the 2050s. Extreme heat events are forecast to worsen in Snohomish County. By mid-century the county is projected to experience between eight to 20 more days of extreme heat each year, which means drier forests and increased heat stress on native trees along with the human impacts of increased calls for emergency services, hospital visits, and increased energy usage.⁹

The Olympic Mountains to the west, across Puget Sound, shelter the area from excessive precipitation coming off the Pacific Ocean. Annual precipitation in the western part of the county is 35 inches but increases sharply as the elevation climbs into the Cascade Mountains (Index, 110" - 120"). This precipitation is concentrated between October and May, with June through August typically receiving less than 1.5 inches per month. The frequency of extreme precipitation events from atmospheric rivers is projected to increase across the Northwest and their impacts are projected to reach farther inland with increased intensity.¹⁰ Snohomish County is dominated by a moist vegetation zone where most rainfall occurs in the winter and higher elevations receive a large snowpack that can persist until June and July. This provides an ideal environment for long term, large tree growth with a robust understory. The coastline of the county sometimes experiences fog or low clouds in the summer that can mitigate the effects of heat and drought. Strong wind driven storms typically occur in the winter during the higher precipitation season. However high heat events in the summer can trigger synoptic east wind events that can bring strong winds to the western slopes of the Cascades.¹¹

Governance

The Snohomish County Council is the legislative authority for the County. The five members of the Council are elected to four-year terms and will assume responsibility for the adoption and implementation of this plan. Each member represents a specific geographic district. The Council's duties include identifying and articulating the needs of the residents of Snohomish County and providing a framework for the County's administration to carry out its work efficiently, ensuring that County government responds effectively to the community's needs. The County Council adopts and enacts ordinances, resolutions, and motions; levies taxes; appropriates revenue; and adopts budgets. The Snohomish County Executive supervises executive departments; enforces all ordinances and state statutes within the county; presents an annual statement of governmental affairs

⁹ Snover, A.K., C.L. Raymond, H.A. Roop, H. Morgan, 2019. "[No Time to Waste](#)".

¹⁰ U.S. Global Change Research Program, 2023. "[U.S. Global Change Research Program \(USGCRP\): Overview and Considerations for Congress](#)."

¹¹ Reilly, Matthew J., et. al, 2021. "[Cascadia Burning: The historic, but not historically unprecedented, 2020 wildfires in the Pacific Northwest](#)."

of the County to the Council; prepares and presents the proposed budget and budget message; prepares and presents to the Council comprehensive plans, including capital improvement plans for present and future development within the County; and nominates members of County boards and commissions. The County Executive is elected to a four-year term. Regional countywide services include prosecution, courts, jails, medical examiner services, voter registration, elections, recording, licensing, property assessment, tax collection, and coordination of human services, public health, and veteran assistance programs. Snohomish County also maintains regional facilities such as parks, the fairgrounds, and the County airport. Local services provided in the unincorporated areas include law enforcement, animal control, road maintenance, land use regulation, and permitting. The County Council will assume responsibility for the adoption of this plan.

2.3 Snohomish County Risk Summary

Table 2.3 lists the history of disaster declarations by hazard event for Snohomish County.

Table 2.3: Snohomish County Previous Hazard Events

Type of Event	FEMA Disaster Number (if applicable)	Date of Declaration	Casualties
Flood	DR-185-WA	December 29, 1964	–
Earthquake	DR-196-WA	April 29, 1965	6 deaths
Flood	DR-492-WA	December 1, 1975	–
Flood	DR-545-WA	December 10, 1977	–
Flood	DR-612-WA	December 31, 1979	–
Volcanic Eruption	DR-623-WA	May 21, 1980	57 deaths
Flood	DR-784-WA	December 15, 1986	–
Flood	DR-883-WA	November 26, 1990	–
Flood	DR-896-WA	March 8, 1991	–
Severe Storm	DR-981-WA	March 4, 1993	–
Severe Storm	DR-1079-WA	January 3, 1996	–
Flood	DR-1100-WA	February 9, 1996	–
Severe Storm	DR-1159-WA	January 17, 1997	–
Flood	DR-1172-WA	April 2, 1997	–
Earthquake	DR-1361-WA	February 28, 2001	400 injuries
Severe Storm	DR-1499-WA	November 7, 2003	–
Severe Storm	DR-1641-WA	May 17, 2006	–
Severe Storm	DR-1671-WA	December 12, 2006	–
Severe Storm	DR-1682-WA	February 14, 2007	–
Severe Storm	DR-1734-WA	December 8, 2007	–
Flood	DR-1817-WA	January 7, 2009	–
Severe Storm	DR-1825-WA	March 2, 2009	–
Severe Storm	DR-4056-WA	March 5, 2012	–

Type of Event	FEMA Disaster Number (if applicable)	Date of Declaration	Casualties
Landslide/Mudslide	EM-3370-WA	March 24, 2014	43 deaths/12 injuries
Landslide/Mudslide	DR-4168-WA	April 2, 2014	–
Severe Storm	DR-4242-WA	October 15, 2015	–
Severe Storm	DR-4249-WA	January 15, 2016	–
Severe Storm	DR-4418-WA	March 4, 2019	–
Biological	EM-3427-WA	March 13, 2020	–
Biological	DR-4481-WA	March 22, 2020	–
Severe Storm	DR-4539-WA	April 23, 2020	–
Severe Storm	DR-4593-WA	April 8, 2021	–
Fire	FM-5455-WA	September 10, 2022	–
Severe Storm	DR-4682-WA	January 12, 2023	–
Severe Storm	DR-4906-WA	April 7, 2026	1 death

Table 2.4 lists the history of severe weather events resulting in deaths, injuries or property damage for Snohomish County.

Table 2.4: Severe Weather Events Resulting in Deaths/Injuries or Property Damage¹²

Date	Type	Death	Injuries	Property Damage*
11/24/1970	Tornado	0	0	25.00K
10/26/1971	Tornado	0	0	25.00K
9/15/1996	Lightning	1	0	0.00K
4/10/1997	Lightning	0	0	35.00K
5/31/1997	Flood	0	0	5.00K
8/6/2004	Heavy Rain	0	0	20.00K
9/1/2004	Lightning	0	0	5.00K
5/18/2005	Tornado	0	0	6.00K
9/9/2005	Lightning	0	0	2.00K
10/1/2005	Lightning	0	0	2.00K
3/8/2006	Strong Wind	0	0	50.00K
11/4/2006	Flood	0	0	3.300M
11/26/2006	Heavy Snow	0	0	2.000M
12/14/2006	High Wind	0	0	5.400M
1/5/2007	Strong Wind	0	0	500.00K
2/28/2007	Heavy Snow	0	0	5.00K
3/11/2007	Strong Wind	0	0	2.00K
10/18/2007	High Wind	0	0	750.00K
12/3/2007	Heavy Rain	0	0	10.000M
11/4/2008	Lightning	0	0	25.00K

¹² Source: NOAA Storm Event Database.

Date	Type	Death	Injuries	Property Damage*
11/12/2008	Flood	0	0	100.00K
12/17/2008	Heavy Snow	0	0	500.00K
12/20/2008	Heavy Snow	0	0	200.00K
12/21/2008	Heavy Snow	0	0	3.000M
1/7/2009	Flood	0	0	6.500M
3/15/2009	Strong Wind	0	0	10.00K
3/20/2009	Strong Wind	1	1	20.00K
10/23/2009	Strong Wind	0	0	15.00K
1/18/2010	High Wind	0	0	18.00K
3/16/2010	Strong Wind	0	0	40.00K
4/2/2010	High Wind	0	0	15.00K
5/3/2010	Strong Wind	0	0	5.00K
12/12/2010	Flood	0	0	1.100M
12/14/2010	Thunderstorm Wind	0	0	30.00K
1/16/2011	Flood	0	0	50.00K
3/13/2011	Debris Flow	0	0	100.00K
9/25/2011	Strong Wind	0	0	20.00K
11/22/2011	Strong Wind	0	0	50.00K
2/22/2012	Debris Flow	0	0	200.00K
6/23/2012	Thunderstorm Wind	0	0	5.00K
11/19/2012	Debris Flow	0	0	2.00K
12/16/2012	Debris Flow	0	0	50.00K
12/17/2012	Coastal Flood	0	0	200.00K
1/9/2014	Debris Flow	0	0	2.00K
1/11/2014	Strong Wind	0	0	100.00K
3/22/2014	Debris Flow	43	12	60.000M
10/25/2014	Strong Wind	1	0	250.00K
10/25/2014	High Wind	0	0	500.00K
11/6/2014	Strong Wind	0	1	100.00K
11/11/2014	High Wind	0	0	4.000M
11/29/2014	Strong Wind	0	0	80.00K
12/11/2014	Strong Wind	0	0	500.00K
8/29/2015	High Wind	0	0	1.500M
9/20/2015	Strong Wind	1	0	0.00K
10/10/2015	Strong Wind	0	0	50.00K
11/17/2015	Strong Wind	1	0	1.500M
11/17/2015	Flood	0	0	250.00K
11/17/2015	High Wind	0	0	3.500M
12/9/2015	Strong Wind	0	0	50.00K
1/1/2016	Avalanche	1	0	0.00K
3/1/2016	Strong Wind	0	0	200.00K
3/10/2016	High Wind	0	0	1.000M
3/13/2016	High Wind	0	0	200.00K
1/8/2017	High Wind	0	0	351.00K

Date	Type	Death	Injuries	Property Damage*
2/1/2017	High Wind	0	0	500.00K
9/4/2017	Wildfire	0	0	4.500M
10/18/2017	High Wind	0	0	50.00K
11/13/2017	High Wind	0	0	1.500M
11/13/2017	High Wind	1	1	2.000M
11/13/2020	Strong Wind	0	0	500.00K
11/17/2020	Strong Wind	0	0	1.000M
1/12/2021	Flood	0	0	329.00K
10/24/2021	High Wind	2	0	0.00K
11/12/2021	Flood	0	0	2.420M
1/9/2023	Strong Wind	1	0	0.00K
11/19/2024	High Wind	1	0	0.00K

*Note – 0.00K property damage estimates recorded in the NOAA database may not reflect actual storm damage values.

Table 2.5 discusses the specific hazard risk and vulnerability summary for Snohomish County. The risk, vulnerability and impact summaries as well as the probability of future occurrence have been determined using information from the countywide Hazard Identification and Risk Assessment (HIRA) and Volume 1, Chapters 6 through 18.

Table 2.5: Snohomish County Hazard Risk and Vulnerability Summary

Hazard Rank	Hazard	Hazard Risk, Vulnerability, and Impact Summary	Probability of Future Occurrence
1	Earthquake and Tsunami	Very High risk The Puget Sound region is seismically active, with hundreds of earthquakes occurring each year; however, most are so small that only sensitive instruments can detect them. While many of these events register a magnitude of 3 or lower on the Richter scale, earthquakes measuring up to 7.1 magnitude have been recorded. Crustal (shallow) earthquakes centered on a local fault line such as the Southern Whidbey Island Fault could cause extensive	High Frequency of the event is likely, with between 10 percent and 100 percent probability in the next year, or at least one chance in the next 10 years. The secondary impacts of earthquakes could be magnified by climate change. Soils saturated by repetitive storms could fail during seismic activity due to the increased saturation. Steep slope failure may increase where changes in river hydrology or sea-level weakens slope stability. Dams storing increased

Hazard Rank	Hazard	Hazard Risk, Vulnerability, and Impact Summary	Probability of Future Occurrence
		casualties and property damage. The Cascadia Subduction Zone (CSZ) Faultline is capable of producing a catastrophic 9.0 magnitude or greater quake which could create several minutes of earth movement leading to structural damage. Although Snohomish County would feel the effects of an earthquake located in the CSZ, a tsunami originating from that earthquake would pose a moderate risk. However, the Southern Whidbey Island fault (SWIF) and Seattle fault pose the greater danger from a tsunami. An earthquake along the SWIF or Seattle fault could produce a tsunami with the ability to reach shores in 30 minutes, giving emergency management officials little time to warn and evacuate people.	volumes of water due to increased seasonal precipitation could fail during seismic events.
2	Wildfire	High risk The wildland fire season in Snohomish County usually begins in May and ends in the fall with the rain, typically in September or October. However, fires have occurred in every month of the year in the county, influenced by drought, limited snowpack, and local weather conditions. DNR has determined that 85 percent of all wildfire ignitions in the	High Frequency of the event is likely, with between 10 percent and 100 percent probability in the next year, or at least one chance in the next 10 years. According to the Washington State DNR Large Fire Dataset (1973 – 2023) there have been 12 large wildfire events in Snohomish County. The four largest fires have occurred in

Hazard Rank	Hazard	Hazard Risk, Vulnerability, and Impact Summary	Probability of Future Occurrence
		state are human caused and of those approximately 52 percent were negligently or intentionally started.¹³ Wildfire impacts can be significant to individuals and communities and strain the resources of local fire agencies. Neighborhoods and communities can become cut off by road closures for fire response or be cut off by the fire itself. Power shut-offs during red flag warnings to prevent ignition or during fire response can impact individuals who rely on powered medical equipment. People without vehicles may have difficulty evacuating for a fire. The economic impact of a wildfire can be significant including loss of timber stands and supply chain shortages from long-term highway closures. Between 2020 and 2024, people in Snohomish County experienced 21 days of air quality index numbers that were unhealthy for sensitive groups, 14 days of unhealthy air quality for everyone, four days of very unhealthy air quality and one day of	the last five years.¹⁵ Historic records have shown that wildfires have raged through the Snoqualmie and Skykomish valleys in the past. Fire in western ecosystems is determined by climate variability, local topography, and human intervention. As the climate changes, it is expected to lengthen the fire season and increase the likelihood of more wildfire in Western Washington. Prolonged summer heat, combined with high density forests and areas of poor forest health, is increasing fire risk.

¹³ Washington State Department of Natural Resources. Accessed September 2025. "[Investigations.](#)"

¹⁵ Washington State Department of Natural Resources. Accessed August 2025. "[Washington Large Fires 1973-2023.](#)"

Hazard Rank	Hazard	Hazard Risk, Vulnerability, and Impact Summary	Probability of Future Occurrence
		hazardous air quality from wildfire smoke. ¹⁴	
3	Dam Failure	High risk There are 65 dams in Snohomish County regulated by the Washington Department of Ecology (Washington Department of Ecology 2019), with 23 in a hazard class that threaten human life. The most likely disaster-related causes of dam failure in Snohomish County are earthquakes, excessive rainfall, and landslides.	Medium Frequency of the event is possible, with between one percent and 10 percent probability in the next year, or at least one chance in the next 100 years. Climate change could increase the frequency of storm events and warmer temperatures allow clouds to hold more moisture leading to high precipitation events like cloud bursts which can trigger landslides or overtopping.
4	Volcano	High risk Glacier Peak in eastern Snohomish County is a major Cascade stratovolcano thought to have erupted as recently as the 18th century. With the exception of Mount St. Helens, Glacier Peak has produced larger and more explosive eruptions than any other Washington volcano. Glacier Peak is the only volcano capable of producing a lahar within the county and there is currently only 1 seismometer on the volcano to monitor activity. Populations vulnerable to respiratory distress brought on by ash could experience the disruption of daily life, with ash being a major threat	Medium Frequency of the event is possible, with between 1 percent and 10 percent probability in the next year, or at least one chance in the next 100 years. Climate change is not expected to impact volcanic activity, but volcanic activity can create microclimate changes at a regional level. Extreme eruptions like the 1815 eruption of Mount Tambora in Indonesia can create temporary disruptions in global climate.

¹⁴ Puget Sound Clean Air Agency. 2025. "[Air Quality Data Summary](#)."

Hazard Rank	Hazard	Hazard Risk, Vulnerability, and Impact Summary	Probability of Future Occurrence
		to people with medical vulnerabilities. The Darrington area would be significantly impacted by a lahar economically as 13.1 percent of residents live below the poverty level and property damage may be significant.	
5	Mass Earth Movement	High risk The most common slide in Snohomish County is the shallow debris slide, occurring particularly in response to intense, short duration storms. Less common is the largest and most destructive type of slide, the deep-seated slides. The county's shoreline contains many large, deep-seated dormant landslides. Most landslides occur in January after the water table has risen during the wet months of November and December and are most prevalent in areas where post-glacial erosion has created steep slopes in glacial deposits. In addition to the coastal bluffs, landslides are most prevalent around the slopes of the county's steep, linear hills. Water is involved in nearly all cases, and human influence has been identified in more than 80 percent of reported slides.	Medium Frequency of the event is possible, with between 1 percent and 10 percent probability in the next year, or at least one chance in the next 100 years. Due to the region's topography and geological conditions, the probability of landslides in Snohomish County will continue to be moderate to high in specific areas, especially following heavy rainfall, snowmelt, or other destabilizing events. As the climate warms, the frequency of heavy rainfall events and extreme weather may increase, leading to more frequent landslides, particularly in fire impacted and urbanized areas.
6	Disease Outbreak	Moderate risk	Medium

Hazard Rank	Hazard	Hazard Risk, Vulnerability, and Impact Summary	Probability of Future Occurrence
		All of Snohomish County is susceptible to human health hazards/epidemics. Communicable diseases can cause exposure to the County from outside the local region. Local residents who travel or commute can become exposed and bring diseases back into the County. Vulnerable populations, especially young children, elderly and immune compromised adults are more susceptible to acquiring communicable diseases. Outbreaks can strain Fire/EMS response and medical facilities. Disease outbreaks can impact the economy by reduction in workforce due to absenteeism and preventative lockdowns as occurred during the COVID-19 pandemic. Lower income individuals and those with high housing costs are more vulnerable to work reductions and stoppages during disease outbreaks.	Frequency of the event is possible, with between 1 percent and 10 percent probability in the next year, or at least one chance in the next 100 years. Warming temperatures due to climate change and increased globalization of the population are increasing the risk of disease outbreaks for humans, livestock and crops.
7	Hazardous Materials	Moderate risk Accidental releases of petroleum, toxic chemicals, gases and other hazardous materials occur frequently throughout Snohomish County. They occur on transportation corridors that include highways, railroads, air/flight paths, pipelines, and navigable waterways.	High Frequency of the event is likely, with between 10 percent and 100 percent probability in the next year, or at least one chance in the next 10 years. Given the widespread use and distribution of hazardous materials across the county, including in residential

Hazard Rank	Hazard	Hazard Risk, Vulnerability, and Impact Summary	Probability of Future Occurrence
		Certain areas are more prone to hosting or interacting with hazardous substances, such as distribution centers, ports, industrial zones, Tier II facilities, and transportation networks (including highways, rail lines, and pipelines).	homes, medical facilities, and industrial sites, the risk of a hazmat release within the next year is inevitable. Hazardous waste sites near rivers and marine waters are tentatively at highest risk because extreme storms and higher water levels resulting from climate change could release pollution into the environment.
8	Flood	Moderate risk Flooding can impact anyone who lives, works, or travels in or near floodplains. For those situated within the 100-year floodplain, there is a 26 percent likelihood of experiencing flooding over a 30-year period, the length of a typical mortgage. Hazus analysis determined that in a 100-year flood scenario impacting all river systems in the county, there would be approximately 1,381 buildings moderately damaged and an estimated 313 buildings that would be a total loss with 10,995 households displaced and 1,851 people seeking temporary shelter. Under this scenario, there would be \$95.4 million in residential building loss, \$8.8 million in commercial building losses, \$9.9 million in Industrial building losses and \$20.9 million in “Other” building category losses. Additionally,	High Frequency of the event is likely, with between 10 percent and 100 percent probability in the next year, or at least one chance in the next 10 years. Large, damaging floods have typically occurred every two to 10 years and projections indicate that both the frequency and severity of these events will likely increase due to the broader impacts of climate change. River flooding is expected to increase due to the combined effects of wetter winters, more intense heavy rain events, and more winter precipitation falling as rain rather than snow in mountain watersheds. Sea level rise will also increase the frequency and extent of coastal flooding.

Hazard Rank	Hazard	Hazard Risk, Vulnerability, and Impact Summary	Probability of Future Occurrence
		a total of three fire stations would experience moderate damage with one a total loss, one police station would experience moderate damage and another a total loss, and three schools would also experience at least moderate damage with another three at a total loss. Flooding also affects those who work in flood-prone areas or commute through them. In a flood event, most deaths occur from people driving through floodwaters and being swept away in their cars. ¹⁶	
9	Cybersecurity	Moderate risk Snohomish County owns a large IT infrastructure system and manages a wide range of public, sensitive, and confidential data. A cybersecurity attack could lead to operational disruptions, financial harm and public confidence damage. A complex attack could significantly impact continuity of operations.	High Frequency of the event is likely, with between 10 percent and 100 percent probability in the next year, or at least one chance in the next 10 years.
10	Severe Weather Events	Moderate risk Severe weather events have the potential to happen anywhere in Snohomish County. Communities in low-lying areas next to streams, lakes, or shorelines are more susceptible to flooding. The north Puget Sound region,	High Frequency of the event is likely, with between 10 percent and 100 percent probability in the next year, or at least one chance in the next 10 years. The frequency of extreme weather events has increased

¹⁶ National Weather Service. Accessed September 2025. "[Turn Around Don't Drown.](#)"

Hazard Rank	Hazard	Hazard Risk, Vulnerability, and Impact Summary	Probability of Future Occurrence
		particularly areas along the Strait of Juan de Fuca, regularly experience high winds during the winter. While the region typically receives moderate snow, heavy snowfalls and ice storms have the potential to disrupt transportation, power, and emergency services. Tornadoes and extreme hailstorms are rare in Snohomish County.	steadily over the last century. Historical data show that the probability for severe weather events increases in a warmer climate. Climate change can affect the intensity and frequency of precipitation. Warmer oceans increase the amount of water that evaporates into the air, and warmer air can hold more moisture.
11	Aircraft Accident	Low risk All aircraft accidents are considered severe although most accidents that have occurred in Snohomish County have been non-fatal. Boeing performs test flights out of Paine Field from its Everett manufacturing center, and the airport also provides public and private air service for small planes to large commercial jets. A large commercial accident could strain fire response and medical facility resources and result in multiple casualties.	Medium Frequency of the event is possible, with between one percent and 10 percent probability in the next year, or at least one chance in the next 100 years.
12	Extreme Heat and Drought	Low risk Extreme hot temperatures are a danger to all humans when nighttime temperatures do not cool down enough for a long enough period for a human body to cool itself. Most homes in Western Washington lack air conditioning and the population is not	Medium Frequency of the event is likely, with between a 10 percent and 100 percent probability in the next year, or at least one chance in the next 10 years. All climate scenarios predict hotter summers in the region. By the 2080s, the average maximum summer

Hazard Rank	Hazard	Hazard Risk, Vulnerability, and Impact Summary	Probability of Future Occurrence
		accustomed to hot summer temperatures. Vulnerable populations such as small children, elderly adults and people with genetic or autoimmune diseases have a harder time regulating internal body temperatures. Extreme heat also puts stressors on pets, livestock, wildlife, crops and forests. Pets and livestock have the same body temperature regulation issues as people and crops and forests can become sunburned and singed leading to introduction of pests, diseases or loss of production. Drought impacts water supply by reducing the amount of snowpack and water compounded in the uplands by wetlands and natural beaver dams that is slowly released to the streams and aquifers in the summer months. A drought can impact water available for crops, livestock and human consumption.	temperature is expected to increase by 10.5°F (with a range of 7.4°F to 13.0°F). The number of days above 90°F will also rise substantially, with projections indicating a median of 41 days per summer by the 2080s. Additionally, nighttime temperatures are expected to increase.
13	Active Assailant	Low risk There have been two active assailant incidents in Snohomish County in the last 25 years. Incidents historically occur at populated locations and will likely have an immediate strain on law enforcement	Medium Frequency of the event is likely, with between a 10 percent and 100 percent probability in the next year, or at least one chance in the next 10 years.

Hazard Rank	Hazard	Hazard Risk, Vulnerability, and Impact Summary	Probability of Future Occurrence
		and fire response resources as well as medical facilities. Failure to protect the public from an active assailant or appropriately respond to an event could lower public confidence. There is a higher risk to vulnerable populations from an active assailant as they may be specifically targeted due to age, race, religion, ethnicity, gender identity, sexual orientation, or other protected characteristics.	

Identifying and implementing pre-disaster risk reduction activities can minimize the physical, social, and economic impacts to the county when disasters occur. Building resilience into capital facilities and implementing mitigation strategy projects for existing capital facilities can strengthen the ability of such facilities to bounce back after disasters, especially as climate change affects hazards over time. Factoring in hazard information as new capital facilities are designed makes financial sense and can alleviate disaster impact costs and reduce time out of service.

County facilities also play a key role in disaster response and recovery, and it is important to plan, update, retrofit, and build these facilities in a way that is resilient to the impacts of climate change. Ensuring new facilities are resilient, including building to earthquake standards, locating facilities in low-risk areas, and equipping them with resilient infrastructure including communications, power, and water is an integral part of effective post-disaster response and recovery. Completing a hazard analysis of proposed Capital Improvement Plan (CIP) projects using GIS layers developed during the update of the HMP will provide the information needed to ensure projects meet those standards. The proposed changes to the CIP process to include natural hazard and climate change screening can be found in Appendix G.

Table 2.6 is an assessment of the exposure of critical infrastructures and facilities within the county organized by the 16 critical infrastructure sectors designated by the

Cybersecurity and Infrastructure Security Agency (CISA).¹⁷ Data is collected by voluntary submission from partner agencies and may not be accurately tracked or mapped. As such, some data may be incomplete. Risk summaries were based on the locations of the known facilities in the database.

Table 2.6: Snohomish County Assets at Risk

Critical Infrastructure Sector	Number of Structures in County GIS Data*	Hazard Risks Summary
Chemical	28	Primary – Hazmat Secondary – Dam Failure, Earthquake, Flood, Mass Earth Movement, Severe Weather Events, Wildfire
Commercial Facilities	1	Primary – Active Assailant, Cybersecurity, Earthquake, Severe Weather Events Secondary – Disease Outbreak, Hazmat
Communication	15	Primary – Active Assailant, Cybersecurity, Dam Failure, Earthquake, Flood, Mass Earth Movement, Severe Weather Events, Volcano, Wildfire Secondary – Extreme Heat and Drought
Critical Manufacturing	6	Primary – Active Assailant, Cybersecurity, Earthquake, Hazmat, Severe Weather Events Secondary – Disease Outbreak
Dams	36	Primary – Dam Failure, Earthquake, Flood Secondary – Cybersecurity, Hazmat, Severe Weather Events
Defense Industrial Base	0	Not tracked in database
Emergency Services	119	Primary – All Hazards
Energy	159	Primary – Cybersecurity, Earthquake, Extreme Heat and Drought, Dam Failure, Flood, Mass Earth Movement, Severe Weather Events, Volcano, Wildfire

¹⁷ Cybersecurity & Infrastructure Security Agency. Accessed September 2025. “[Critical Infrastructure Sectors](#).”

Critical Infrastructure Sector	Number of Structures in County GIS Data*	Hazard Risks Summary
		Secondary – Active Assailant, Disease Outbreak, Hazmat
Financial Services	0	Not tracked in database
Food and Agriculture	4	Primary – Extreme Heat and Drought, Disease Outbreak, Severe Weather Events Secondary – Earthquake, Flood, Hazmat
Government Services and Facilities	445	Primary - Active Assailant, Cybersecurity, Earthquake, Dam Failure, Flood, Mass Earth Movement, Severe Weather Events, Volcano, Wildfire Secondary – Disease Outbreak, Extreme Heat and Drought, Hazmat
Healthcare and Public Health	97	Primary - Active Assailant, Cybersecurity, Disease Outbreak, Earthquake, Extreme Heat and Drought, Hazmat Secondary – Dam Failure, Flood, Severe Weather Events, Wildfire
Information Technology	2	Primary – Cybersecurity, Earthquake Secondary – Extreme Heat and Drought, Severe Weather Events
Nuclear Reactors, Materials, and Waste	0	Not tracked in database
Transportation Systems	666	Primary – Aircraft Accident, Dam Failure, Earthquake, Extreme Heat and Drought, Flood, Mass Earth Movement, Severe Weather Events, Volcano Secondary – Hazmat, Wildfire
Water and Wastewater Systems	293	Primary - Active Assailant, Cybersecurity, Earthquake, Extreme Heat and Drought, Dam Failure Secondary - Flood, Mass Earth Movement

*Note – Some sectors may not be tracked in County GIS system databases

2.4 Snohomish County Plan Update Process

The Snohomish County update process included engagement of County staff, partner agencies, and the public. The process began with facilitating Snohomish County lead mitigation planning meetings with County leadership and staff assigned to the Emergency Management Coordination Committee (EMCC) and the Emergency Management Working Group (EMWG). A core Snohomish County planning team was identified and met to review inputs, outreach, and deliverables. DEM worked with staff from PDS for land use and capital improvement content, the Integrated Floodplain Management (IFM) Core Group for floodplain content, and the Interdepartmental Climate Resiliency Committee (ICRC) for climate change content. Team members worked within their respective programs to develop content and perform outreach throughout the planning process. The EMCC and the Climate Action Advisory Committee (CAAC) were briefed and asked for feedback at a steering committee level.

Table 2.7 shows the internal planning team for Snohomish County.

Table 2.7: Snohomish County Planning Team

Name	Title	Organization	Contribution
Lucia Schmit	Director	Snohomish County Department of Emergency management (DEM)	Project Sponsor
Rebecca Carpenter	Program Analyst	Snohomish County DEM	Project Manager
Amy Lucas	Program Manager	Snohomish County DEM	Project Oversight
Rob Thurston	Program Manager	Snohomish County DEM	GIS Oversight
Drew Schwitters	Principal GIS Analyst	Snohomish County DEM	GIS Analysis – Hazard mapping
Melody Ovard	Senior GIS Analyst	Snohomish County DEM	GIS Support – Hazard mapping
Gi-Choul Ahn	Principal GIS Analyst	Snohomish County Surface Water Management (SWM)	GIS Analysis – Hazus
Eileen Canola	Senior Planner	Snohomish County Planning and Development Services (PDS)	Planning support – Comprehensive Plan and Development Regulations

Name	Title	Organization	Contribution
Matthew Siddons	Senior Planner	Snohomish County PDS	Planning support – Capital Improvement Plan
Beth Liddell, CFM	Senior Environmental Planner	Snohomish County PDS	NFIP and CRS support
Josh Monaghan	Floodplain Coordinator	Snohomish County SWM	Floodplain Management Support
Jessica Hamill	Project Specialist IV	Snohomish County SWM	Floodplain Management Support
Scott North	Public Information Officer	Snohomish County DEM	Executive Summary and Project Communications
Sammie Keller	Community Outreach Coordinator	Snohomish County DEM	Community Outreach and Graphics

Subject Matter Experts

Snohomish County has benefited through the years from partnerships and collaboration in all phases in emergency management (prevention, mitigation, preparedness, response, and recovery). The following discipline partners provided subject matter expertise throughout this mitigation planning effort:

- Snohomish County Department of Emergency Management
- Snohomish County Fire Chiefs Association
- Snohomish County Emergency Management Coordination Committee & subcommittees
- Snohomish County Departments (Department of Conservation and Natural Resources, Health Department, Human Services, Planning and Development Services, Public Works, Office of Energy and Sustainability)
- Washington State departments (Emergency Management Division, Department of Natural Resources, Department of Ecology, Washington Geological Survey, Department of Transportation)
- Federal agencies (National Oceanic and Atmospheric Administration (NOAA), National Weather Service (NWS), United States Army Corp of Engineers, United States Forest Service)

All subject matter experts were directly invited to participate in the planning process.

Table 2.8 details the major milestones and meeting details in the plan update timeline for Snohomish County.

Table 2.8: Snohomish County Plan Update Timeline

Date	Planning Activity	Summary	Attendees
1/21/2025	Kick-off meeting	Planning Team members were briefed on the HMP document and the planning process and timeline.	EMWG
3/18/2025	HIRA Survey	Planning Team members were briefed on the HIRA methodology and scoring rubric and given a link to the HIRA survey for scoring.	EMWG
4/1/2025	Floodplain Subject Matter Experts	Core group members were briefed on the HIRA methodology and scoring rubric and given a link to the HIRA survey for scoring.	IFM Core Group
4/16/2025	HIRA Survey	Committee members were briefed on the HIRA methodology and scoring rubric and given a link to the HIRA survey for scoring.	ICRC
5/6/2025	Goals and Objectives	Core group members were briefed on the 2020 flood mitigation focused goals and objectives and were given the opportunity to give feedback on new language for 2025 Goals and Objectives.	IFM Core Group
05/20/2025	Goals and Objectives	Planning Team members were briefed on the 2020 goals and objectives and were given the opportunity to give feedback on new	EMWG

Date	Planning Activity	Summary	Attendees
		language for 2025 Goals and Objectives.	
07/15/2025	Mitigation Strategies Briefing	Planning Team members were briefed on the proposed changes to the CIP process and given an overview of the mitigation strategy process and the action item template.	EMWG
7/16/2025	Briefing - Proposed Changes to the CIP Process	Committee members were briefed on the proposed changes to the CIP process and given an opportunity to provide feedback on the climate change screening procedures.	ICRC
7/24/2025	Briefing - Proposed CIP Process	Committee members were briefed on the proposed changes to the CIP process and given an opportunity to provide feedback on the climate change screening procedures.	CAAC
7/29/2025	CIP Mitigation Strategy Workshop	Attendees were briefed on the proposed changes to the CIP process and given a chance to provide updates on the 2020 CIP oriented action items. Staff also reviewed the action item template and held discussions on new mitigation strategy action items.	County Staff responsible for CIP development
7/30/2025	Technology/GIS Mitigation Strategy Workshop	Attendees were given a chance to provide updates on the 2020 technology and data collection and analysis focused action items.	County Staff from IT, DEM, SWM, PDS, Public Works, Assessor's Office, Airport

Date	Planning Activity	Summary	Attendees
		Staff also reviewed the action item template and held discussions on new mitigation strategy action items.	
7/30/2025	Public Safety Mitigation Strategy Workshop	Attendees were given a chance to provide updates on the 2020 public safety and facilities focused action items. Staff also reviewed the action item template and held discussions on new mitigation strategy action items.	Facilities
7/31/2025	Vulnerable Populations and Sheltering Mitigation Strategy Workshop	Attendees were given a chance to provide updates on the 2020 sheltering and mass care focused action items. Staff also reviewed the action item template and held discussions on new mitigation strategy action items.	Human Services, Public Health, Auditor (Animal Services), Fair Park Management, Agriculture, and Office of Energy and Sustainability
8/28/2025	Briefing	Committee members were briefed on the mitigation strategy workshops.	CAAC
9/4/2025	Briefing	Organization members were briefed on the HMP update and mitigation strategy workshops.	SOAR4
9/16/2025	Briefing and Discussion	Planning Team members reviewed the unincorporated annex mitigation strategies and held a feedback discussion prior to finalization.	EMWG

Table 2.9 shows the public outreach efforts for Snohomish County.

Table 2.9: Snohomish County Public Outreach

Date	Event/Activity	Summary	Attendees
May – September 2025	HMP Public Survey	The public survey asked respondents to help identify hazards in the community and what activities and projects should be prioritized.	133 responses
May – September 2025	Public Outreach Events	Snohomish County DEM staff attended multiple public outreach events between May and September of 2025 including two Community Wildfire Protection Plan (CWPP) open houses, National Night Out, the Communitywide Climate Resilience Plan open house, and five days at the Evergreen State Fair. Attendees were given a chance to respond to the HMP Public Survey and discuss their concerns around hazards in the county.	Snohomish County residents and visitors
October 1-31, 2025	HMP Public Comment Period	Community members were provided with the draft HMP from October 1 st to October 31 st , 2025 on the county's website and informed of the availability of the plan through the DEM newsletter which was sent to over 14,000 subscribers, and announcements on DEM's social media accounts.	(Update after Public Comment Period ends 10/31)

2.5 Snohomish County Hazard Mitigation Program

Hazard mitigation strategies were developed through a two-step process. Each jurisdiction met with an internal planning team to identify a comprehensive range of mitigation strategies. These strategies were then prioritized using a process established by the Public Planning Committee and documented in the base plan.

Hazard mitigation strategies in Snohomish County were developed by the Planning Team and subject matter experts. DEM conducted a series of mitigation strategy workshops in July of 2025 to review progress and completion of the 2020 mitigation strategies and develop new strategies for the 2025 update. Staff responsible for capital improvement planning and other subject matter experts were invited to participate in the following focused workshops:

- Capital Facilities/Capital Improvement Plan Workshop – July 29, 2025
- Technology/GIS Workshop – July 30, 2025
- Public Safety Workshop – July 30, 2025
- Sheltering and Vulnerable Populations Workshop – July 31, 2025

Hazard Mitigation Authorities, Responsibilities, and Capabilities

Planning and regulatory capabilities include the plans, policies, codes, and ordinances that mitigate the impacts of hazards. Table 2.10 outlines the County’s planning and regulatory capabilities.

Table 2.10: Snohomish County Plans, Programs, Policies, and Processes

Name	Responsible Agency	Relationship to Hazard Mitigation Plan
Comprehensive Plan	Planning and Development Services	Provides the framework for the long-range vision of the County while balancing the planning goals of the Growth Management Act. Planning for growth in consideration of hazards, environmental protection and enhancement, and climate change fit into the holistic approach to development and sustainability for a high quality of life for our community. The Natural Environment and Land Use elements cover shoreline management, environmental protection, priority habitats, and hazards- including wildfire. The Surface Water Management section of the Capital Facilities and Utilities Element addresses flood mitigation and stormwater management. The Climate Change and Resiliency Element focuses on reduction of greenhouse gas emissions and bolstering climate resiliency.

Name	Responsible Agency	Relationship to Hazard Mitigation Plan
Comprehensive Emergency Management Plan	Emergency Management	The HIRA identifies the hazards the CEMP should consider and use to prioritize actions according to their overall risk ratings. Information in the HMP is used to develop annexes to the CEMP.
Community Wildfire Protection Plan	Emergency Management	The CWPP provides detailed information about wildfire risks, response capabilities and mitigation strategies to inform the Hazard Mitigation Plan update. The CWPP is an appendix to the HMP and can be referenced as the official wildfire chapter of the HMP.
COOP/COG Plan	Emergency Management	Identifies impacts to the staff, facilities and systems necessary to execute essential functions and alternative solutions for continuing essential operations and services during an emergency event with significant interruptions to daily functions. Identifies gaps and actions that can increase resilience for continuity of government and operations.
Local Emergency Operations Plan	Emergency Management	Provides county-wide coordination for preparedness, mitigation, response and recovery efforts including public information, alert and warning; and liaison with state and federal government. Details roles and responsibilities in the County's emergency operations center. Training and exercise of plan identifies gaps and improvement processes that can be included as mitigation strategies.
Recovery Framework	Emergency Management	Offers two primary options for coordination of recovery based on an incident's size and impact: 1) Recovery Team for localized focused recovery efforts; and 2) the establishment of an Office of Recovery for larger or catastrophic disasters. Training and exercise of plan identifies gaps and improvement processes that can be included as mitigation strategies.

Name	Responsible Agency	Relationship to Hazard Mitigation Plan
Capital Facilities Plan	Planning and Development Services	As an element of the comprehensive plan, provides a current inventory and status of the County’s facilities and infrastructure including the transportation network. Identifies needs and improvements for the 20-year planning horizon and considers population growth and climate change impacts.
Capital Improvement Plan and Biennial Budget	Finance and Planning and Development Services	The CIP includes a six-year capital construction and investment program for specific projects. The CIP incorporates by reference the annual Transportation Improvement Program (TIP) for the surface transportation capital construction program. The CIP also includes a determination, for GMA facilities, as to whether probable funding and other measures fall short of meeting existing needs as determined by the adopted minimum level of service standards. A new process is being developed to ensure CIP projects consider potential hazards, including increasing access for population growth in hazardous areas and impacts from climate change.
Integrated Floodplain Management Program	Surface Water Management	Basin-wide plans identify community flood hazard risks including locations of repetitive loss areas and mitigation strategies the county and individuals can implement to reduce flood risk and damages. The HMP includes strategies to update the plans, collect and implement new data and modeling, and develop a framework for a future comprehensive flood hazard mitigation plan.
Communitywide Climate Resiliency Plan	Office of Energy and Sustainability	Identifies the risks of climate change on county services and residents. Includes mitigation strategies to reduce their impacts and informs the HMP update.

Name	Responsible Agency	Relationship to Hazard Mitigation Plan
Shoreline Management Program	Planning and Development Services	Establishes a state-local partnership for managing, accessing, and protecting Washington’s shorelines. Establishes allowed uses and guides development regulations in designated Shoreline Management areas within the county.
Snohomish County Conservation District	Snohomish County Conservation District	A political subdivision of state government with no regulatory authority, informs the wildfire and flood planning efforts in the county, and implements public outreach and mitigation strategies with private landowners for both hazards.
Building Codes	Planning and Development Services	Snohomish County will adopt the 2021 state building codes as adopted by the State Building Code Council. The County will adopt the Wildland Urban Interface code six months after the statewide wildfire hazard map and base-level wildfire risk map is completed by the DNR.
Land Use Planning and Zoning	Planning and Development Services	Guided by the goals and policies in the Comprehensive Plan and in the Growth Management Act of Washington, land use planning and zoning in Snohomish County considers the value and function of critical areas and protects these natural systems that can help buffer the impacts of natural hazards. The permitting process considers all hazards present on the parcel and the location of the proposed structures during the permit review.
National Flood Insurance Program (NFIP)	Planning and Development Services and Surface Water Management	The county's flood hazard management activities include participation in the National Flood Insurance Program (NFIP) , adoption of floodplain development regulations that meet NFIP requirements, participation in an NFIP Incentive Program and the Community Rating System (CRS) , maintaining emergency flood preparedness plans, and maintenance of comprehensive flood hazard management plans for the

Name	Responsible Agency	Relationship to Hazard Mitigation Plan
		main rivers, which propose actions to minimize future flood damage.
NFIP Community Rating System	Surface Water Management	The CRS program rewards communities that have established exceptional floodplain management programs and undertaken certain activities to reduce flood risk. The program provides NFIP policyholders in floodplains with a discount on their insurance.
StormReady	Emergency Management	StormReady is an NWS planning tool to become better prepared for hazardous weather events. To become StormReady, the county had to meet specific criteria, such as having a 24-hour emergency operations center, providing severe weather notifications to residents, conducting public awareness programs, and maintaining a trained team of weather spotters. The goal is to enhance the county's readiness to respond to severe weather events, ensuring public safety and effective communication during storms.
Threats and Hazard Identification and Risk Assessment (THIRA)	Emergency Management	The Threats and Hazard Identification and Risk Assessment (THIRA) is a three step process which helps a region to identify and evaluate risks posed by hazards, provides context on those threats and hazards for planning purposes, identifies potential impacts to the region, and identifies current and desired capabilities for responding to and recovering from those threats and hazards.

Administrative and technical capabilities include staff and their skills and resources that may be leveraged for mitigation planning and implementation. Table 2.11 shows the administrative and technical capabilities for Snohomish County.

Table 2.11: Snohomish County Administrative and Technical Capabilities for Hazard Mitigation

Name/Title	Point of Contact	Responsibility
Local Emergency Planning Committee (LEPC)	Department of Emergency Management	The LEPC works in coordination with facilities that utilize / store hazardous materials, emergency responders, and various community stakeholders to prepare hazardous material emergency plans, serve as the repository for reports filed under Title III, and work to increase awareness, understanding, and compliance with the Emergency Planning and Community Right-to-Know Act of 1986.
GIS	Multiple County Departments	GIS Analysts in various departments update and maintain databases for land use, critical areas, natural hazards, critical infrastructure, transportation systems and perform hazard analysis.
Building and Fire Inspection	Planning and Development Services	Ensures structures are built to code and according to permit plans including floodplain, seismic, snow load and potential WUI requirements.
Interdepartmental Climate Resilience Committee	Office of Energy and Sustainability	County departments collaborate monthly to identify updates in environmental and climate science and studies, update on department programs and projects, and develop content for the Communitywide Climate Resiliency Plan.
Emergency Management Coordination Committee	Department of Emergency Management	This body, identified in Snohomish County Code 2.36.085, is the coordinating body for emergency management issues concerning Snohomish County government. It is comprised of departmental/office leadership or their designee. The committee acts in an advisory capacity to DEM to promote, advise, assist, and review emergency management issues and to enhance preparedness for employees, departments, and separately elected offices.
Emergency Management Working Group	Department of Emergency Management	A collaborative committee of County staff from multiple departments that meet monthly to work on content of emergency management plans and are briefed on

Name/Title	Point of Contact	Responsibility
		emergency operations. Functions as the Planning Team for the County's Unincorporated Annex.
Integrated Floodplain Management (IFM) Core Group and Advisory Committee	Surface Water Management	The IFM Core Group meets monthly to develop a framework for integrated flood management across basins. The group makes recommendations to the Advisory Committee on policy, prioritizing basin wide flood hazard management plan updates. The Advisory Committee reviews recommendations and provides guidance on prioritizing work on flood hazard management plan updates and providing a platform for a future comprehensive flood hazard mitigation plan.
Grant Writing/Management	Snohomish County OpEx	Provides a collaborative platform for County staff to share grant opportunities, discuss contracting issues and work on collaborative grant applications.
Hazus Analysis	Surface Water Management	Performed prior to updating the HIRA, informs the hazard descriptions for scenarios modeled. Critical Infrastructure and building inventories are updated and input into selected hazard scenarios for modeling estimated structural damages and economic losses.
Rave (IPAWS)	Emergency Management	Rave is the platform used in Snohomish County to send messages via the Integrated Public Alert and Warning System (IPAWS). IPAWS is FEMA's national system for local alerting that provides authenticated emergency and life-saving information to the public through mobile phones using Wireless Emergency Alerts (WEA), to radio and television via the Emergency Alert System (EAS), and on the National Oceanic and Atmospheric Administration's Weather Radio.

Table 2.12 discusses the status of the National Flood Insurance Program for Snohomish County.

Table 2.12: National Flood Insurance Program (NFIP) Compliance

NFIP Criteria	Description
What department is responsible for floodplain management in your community?	Snohomish County Department of Planning and Development Services (PDS).
Who is your community's floodplain administrator? (title/position)	Per Snohomish County Code (SCC) Section 35.65.070, the director of PDS, currently Michael McCrary, is designated as the floodplain administrator. SCC 35.65.070 allows the floodplain administrator to delegate authority to implement the county's floodplain regulations. Since October 2023, this authority has been delegated to Beth Liddell, Senior Environmental Planner, Certified Floodplain Manager (CFM).
What is the date of adoption of your flood damage prevention ordinance?	March 15, 1984
When was the most recent Community Assistance Visit or Community Assistance Contact?	The most recent completed Community Assistance Visit (CAV) was in 2019.
Does your community have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are?	Unknown.
Do your flood hazard maps adequately address the flood risk within your community? If so, please state why.	The county partnered with FEMA to produce updated Preliminary Digital Flood Insurance Rate Maps (DFIRMs) for Snohomish County. FEMA issued a Final Letter of Determination regarding the DFIRMs on December 19, 2019. The DFIRMs were adopted by the county in June 2020.¹⁸ See the FEMA Map Service Center to view the current DFIRMS.¹⁹ Flood hazard mapping is getting updated throughout the county, but some maps are still based on outdated Flood Information Studies so do not accurately reflect flood risk within the community (i.e. because they do not include changes in hydrology that may impact flood risks in the future). However, recent modeling and mapping sought to characterize current floodplain hydraulic

¹⁸ Snohomish County Surface Water Management. Accessed May 2026. "[DFIRM Floodplain Maps](#)."

¹⁹ [FEMA Flood Map Service Center](#)

NFIP Criteria	Description
	conditions in the Snohomish River watershed and assess the projected impacts of climate change on flood depths and inundation extents along the Skykomish, Snoqualmie, and Snohomish rivers. The study area included the Skykomish River as far upstream as Gold Bar, the Snoqualmie River as far upstream as the King-Snohomish County Line, and the entire length of the Snohomish River from near Monroe to Possession Sound. Hydrologic and hydraulic analyses were conducted to characterize floodplain conditions within the study area for historical, mid-century (2040-2069), and late-century (2070-2099) time periods. USGS streamflow records were used to perform flow frequency analyses and create balanced hydrographs representing historical hydrologic conditions. Climate scalars were developed from hydrologic modeling of climate projections and used to scale the historical balanced hydrographs to represent floodplain hydraulic conditions for each of the two future time periods. A detailed two-dimensional HEC-RAS hydraulic model was developed, calibrated, and applied to evaluate river-related flooding throughout the study area, with a particular focus on the Skykomish and Snohomish Rivers. The model was configured to directly use observed streamflow data as its hydrologic inputs, allowing users to simulate any flood event in the historical record. For the Stillaguamish, the study area included approximately 18 miles of the mainstem Stillaguamish River from its mouth near Port Susan to the confluence of the North and South Forks near Arlington, approximately 35 miles of the North Fork Stillaguamish River from the confluence to a location colloquially called “River’s End”, and approximately 5 miles of the South Fork Stillaguamish River from the confluence to Rivers Meadows County Park. Two separate two-dimensional HEC-RAS hydraulic models were developed, calibrated, and applied to evaluate hydraulic conditions throughout the study area.

NFIP Criteria	Description
	One model covers the mainstem Stillaguamish River from the confluence of the North and South Forks to the mouth near Port Susan, and a second model covers the Forks of the Stillaguamish upstream of their confluence.
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of training/assistance is needed?	Not at this time.
Does your community participate in the Community Rating System (CRS)? If so, what is your CRS Classification and are you seeing to improve your rating? If not, is your community interested in joining CRS?	Yes, Snohomish County participates in the CRS program. The County joined the CRS program in 2006, currently has a CRS rating of Class 5. This means that flood insurance premiums for properties located in unincorporated Snohomish County are automatically discounted 25 percent.
How many Severe Repetitive Loss (SRL) and Repetitive Loss (RL) properties are located in your jurisdiction?	SRL: Unknown RL: 55 (estimated based on 2018 FEMA Repetitive Loss data, subtracting HMGP/state/locally funded buyouts of RL properties since 2018). Note: Snohomish County has been unable to access FEMA data on Severe Repetitive Loss (SRL) and Repetitive Loss (RL) properties within its jurisdiction since 2018 due to conflicts between federal privacy laws and the state Public Records Act (PRA).
Has your community ever conducted an elevation or buy out of a flood-prone property? If so, what fund source did you use? If not, are you interested in pursuing buyouts of flood prone properties?	Yes, we have done buyouts of several flood prone properties over the years. We purchased several properties located in the floodway with WA State Floodplains by Design funding. We have also used FEMA HMGP funding for past buyouts of flood-prone properties as well as properties at risk from channel migration/erosion.

Plan Monitoring, Implementation, and Future Updates

Snohomish County leads the mitigation plan monitoring and update process and schedules the annual plan check-ins. Updates on mitigation projects are solicited by the county for inclusion in the countywide Annual Progress Report. As part of participating in

the 2025 update to the Hazard Mitigation Plan, every jurisdiction agrees to attend an annual meeting of the Public Planning Committee to review their progress on hazard mitigation strategies and to update the plan based on new data or recent disasters.

DEM will continue to work with PDS, Finance and staff responsible for updating the Capital Improvement Plan to implement natural hazard and climate change impact screening as described in Appendix G. It is the intent that hazard mitigation is performed during the design process, but the CIP screening ensures that the FEMA requirements for monitoring the development of infrastructure and land use are met. The CIP is a six-year plan updated every two years as part of the County budget process. CIP projects also identified as HMP mitigation strategies will be monitored for progress as part of the HMP Annual Report.

As part of leading a countywide planning effort, Snohomish County Department of Emergency Management (DEM) will distribute to planning partners any federal notices of funding opportunity for the Hazard Mitigation Assistance Grant Program. Proposals from partners will be assessed according to the prioritization process identified in this plan and the county will, where possible, support those partners submitting grant proposals. This will be a key strategy to implement the plan.

The next plan update is expected to be due in 2030. All jurisdictions will submit letters of intent by 2028, at least two years prior to plan expiration. The county will lead the next countywide evaluation and revision effort, beginning at least 18 months before the expiration of the 2025 plan.

Continued Public Participation

Snohomish County and its partner cities already maintain substantial public outreach capabilities, focusing on personal preparedness and education. Information on ongoing progress in implementing the hazard mitigation plan will be integrated into public outreach efforts. This will provide Snohomish County residents, already engaged in personal preparedness efforts, with context and the opportunity to provide feedback on the county's progress and priorities in large-scale mitigation. In the vertical integration of risk-reduction activities from personal to local to state and federal, it is important that the public understand how its activities support, and are supported by, larger-scale efforts.

2.6 Snohomish County Hazard Mitigation Strategies

Table 2.13 summarizes the status of the 2020 Hazard Mitigation Strategies for Snohomish County.

Table 2.13: 2020 Hazard Mitigation Strategies Status

ID	Description	Priority	Update Status	2025 Status
SnoCo-1	Adapt, retrofit, and/or develop redundancy in, critical infrastructure and systems located in high-hazard areas or that support response, recovery, or continuity of operations plans.	High	Complete	Removed
SnoCo-2	Enhance and improve capital improvement programs, taxing, zoning, and development approaches to promote mitigation and reduce exposure/vulnerability to hazards.	High	Complete	Removed
SnoCo-3	Create and enhance coordinated public information programs that increase hazard awareness and that support actionable preparedness and mitigation measures and are inclusive of individuals with limited English proficiency and those with access and functional needs.	High	Complete	Removed
SnoCo-4	Promote individual community's ability to respond and recover from an event through the developing of social capital and strengthening of community networks.	High	Complete	Removed
SnoCo-5	Enhance and improve support for risk reduction programs and capabilities including supporting efforts through programs, processes, regulations, and funding.	High	Complete	Removed
SnoCo-6	Integrate HMP with other planning and regulatory documents and mechanisms through a coordinated County-wide approach while considering regional partners.	High	Complete	Removed
SnoCo-7	Develop and implement a Countywide risk reduction program that supports comprehensive, all-hazards strategies.	High	Complete	Removed
SnoCo-8	Provide incentives for eligible non-profits and private entities, including homeowners, to adapt to risks through structural and nonstructural mitigation measures.	Medium	Complete	Removed

SnoCo-9	Develop and implement metrics that identify the most at-risk communities, especially those at risk of isolation or “islanding”, to ensure that critical services and facilities are resilient.	High	Complete	Removed
SnoCo-10	Promote earthquake risk reduction and resilience methods including specific planning for identified geographic islands through the improved data collection, education and outreach, and planning for seismic activity.	High	Complete	Removed
SnoCo-11	Promote wildfire mitigation and risk reduction methods in areas identified in medium and high-risk areas.	Medium	Complete	Removed
SnoCo-12	Consider flood control structure maintenance and restoration.	Medium	Complete	Removed
SnoCo-13	Plan and prepare for climate impacts using best available science.	High	Complete	Removed
SnoCo-14	Identify and implement a comprehensive dam and levee mitigation and response program with a lens on climate change, the most vulnerable communities, and highest risk structures.	Medium	Complete	Removed
SnoCo-15	Update and improve County flood hazard risk assessment data and methodology and identify innovative methods to reduce the impacts of flooding to the community while preserving and restoring ecosystem functions and services.	High	Complete	Removed
SnoCo-16	Support the development of a regional, comprehensive, and equitable acquisition, development, and redevelopment strategy for areas that experience substantial, severe or repetitive loss, are in high-hazard areas.	High	Complete	Removed
SnoCo-17	Support improved data collection, education and outreach, and planning for tsunami activity.	Low	Complete	Removed
SnoCo-18	Revise existing plans to address updated assessments of risks identified in refined methodology, mapping, and analysis.	High	Complete	Removed
SnoCo-19	Support local, tribal, state, and federal mitigation efforts, when feasible, and	High	Ongoing	Updated to

	ensure alignment with County mitigation efforts to support a comprehensive and regional mitigation strategy.			CW-5
--	--	--	--	------

Table 2.14 summarizes the 2025 Hazard Mitigation Strategies and shows the priority calculated using the Mitigation Action Prioritization Matrix, located in Appendix D.

Table 2.14: 2025 Hazard Mitigation Strategies

ID	Description	Lead Agency	Timeline	Priority
SnoCo-1	Business Sector Outreach	DEM	<u>2026</u> Complete CEMP update <u>2027-30</u> Disaster Recovery Framework update	Low
SnoCo-2	CASPER	Public Health	<u>2026-27</u> CASPER Survey <u>2027-30</u> CASPER Report integration	Low
SnoCo-3	CIKR GIS Data Management	DEM	<u>2026-27</u> Funding request and scope of work <u>2028-30</u> CIKR database development and maintenance	Medium
SnoCo-4	Community Floodplain Solutions	SWM	<u>2026-27</u> Phases 2 and 3 <u>2028-30</u> Phases 3 and 4; Seek funding for phase 5 and expand to Stillaguamish basin	Medium
SnoCo-5	CWPP Implementation and Fuel Reduction Strategies	DCNR	<u>2026-27</u> Data collection and framework for forest health plan; Feasibility studies for fuel treatments; Recreation/Tourism education campaign and targeted enforcement <u>2028-30</u>	Medium

ID	Description	Lead Agency	Timeline	Priority
			Complete forestland modeling and fuel treatment plans	
SnoCo-6	Cybersecurity Tabletop	IT	<u>2026-27</u> Plan, host and facilitate Cybersecurity tabletop exercise	Low
SnoCo-7	Drainage and Fish Passage Projects	SWM	<u>2026-27</u> Construct the fish passage barrier removal projects listed in the 2-year objectives <u>2027-30</u> Construct the fish passage barrier removal projects listed in the 5-year objectives	Medium
SnoCo-8	Emergency Management Community Outreach and Education	DEM	<u>2026-27</u> Regular outreach and collaboration with immigrant and Access and Functional Needs (AFN) community leaders; Rebuild Public Safety Hub pages <u>2027-30</u> Continue outreach and collaboration; Build a Community Points of Distribution (CPOD) resiliency network	Medium
SnoCo-9	Expand Extreme Weather Facilities and Shelter Operations	Human Services	<u>2026-27</u> Construct year-round shelter and expand contracts with new locations <u>2027-30</u> Expand capacities of year-round shelters	High
SnoCo-10	Extreme Weather Events Long-term Planning	PDS	<u>2026-27</u> Identify CIKR resources and priority habitats vulnerable to extreme weather events	High

ID	Description	Lead Agency	Timeline	Priority
			Implement hazard screening into CIP process Update development regulations <u>2027-30</u> Implement mitigation action items for priority infrastructure Secure funding for Urban Tree canopy implementation	
SnoCo-11	FAST	Human Services	<u>2026-27</u> Acquire trailer and supplies; Develop CONOPs; Deliver FAST training <u>2027-30</u> Conduct FAST exercise	Medium
SnoCo-12	Flooding – Shoreline – CAR	PDS	<u>2026-27</u> CAR Implementation; SMP Update; Urban tree canopy policy funding and implementation <u>2027-30</u> Adopt updated SMP and begin implementation; Continue implementation of urban tree canopy policies	Medium
SnoCo-13	Hazard Viewer 3.0	DEM	<u>2026-27</u> Generate new content from 2025 HMP; Launch and promote Hazard Viewer 3.0 <u>2027-30</u> Maintain high community engagement and begin plans for 2030 v4.0 update	High
SnoCo-14	Hazus Analysis	SWM	<u>2026-27</u> Update technology; Extract Hazus-ready UDF data; Update Hazus base layers; Train new staff	Medium

ID	Description	Lead Agency	Timeline	Priority
			<u>2027-30</u> Update and maintain essential facilities data in CDMS; Complete Hazus modeling for earthquake and flood scenarios; Expand modeling to additional hazard scenarios	
SnoCo-15	HHPD	DEM	<u>2026-27</u> Host HHPD workshop or tabletop exercise; Create tourism outreach materials <u>2027-30</u> Dam feasibility inventory; Tourism signs/kiosks and marked inundation lines if feasible	Low
SnoCo-16	Hydraulic Modeling	SWM	<u>2026-27</u> Acquire funding and complete Snohomish estuary and Pilchuck River models <u>2027-30</u> Identify underserved or unmodeled areas and complete smaller models	Low
SnoCo-17	Implement @snoco.gov	IT	<u>2026-27</u> Complete phase 2 of roll-out by Quarter 2 of 2026	Low
SnoCo-18	Integrated Floodplain Management	SWM	<u>2026-27</u> Complete flood management study; Secure funding to update Stillaguamish plan <u>2027-30</u> Complete Stillaguamish CFHMP action plan update and secure funding for Snohomish plan update	Low

ID	Description	Lead Agency	Timeline	Priority
SnoCo-19	Mass Care Planning and Response	Human Services	<u>2026-27</u> Publish mass care response plans; Provide shelter and disaster behavioral health training to county and Voluntary Organizations Active in Disaster (VOAD) staff <u>2027-30</u> Develop mass care task forces	Medium
SnoCo-20	Population Island Operational Preparedness	DEM	<u>2026-27</u> Determine pre-deployed trailer locations; Alternate Emergency Operations Center (EOC) plan; Localize CPOD Concept of Operations (CONOPs) and Standard Operating Procedure (SOP) <u>2027-30</u> Develop and conduct trailer training; Perform last-mile logistical analysis	Medium
SnoCo-21	Public Health Response Capabilities	Public Health	<u>2026-27</u> Develop communications playbook; Map hospital generator locations <u>2027-30</u> Conduct 2 preparedness exercises; Update ESF-8 annex	Low
SnoCo-22	Relic Armor	SWM	<u>2026-27</u> Identify risks from private of abandoned flood control structures <u>2027-30</u>	Low

ID	Description	Lead Agency	Timeline	Priority
			Test pilot bank armor removal; Potential acquisitions	
SnoCo-23	Residential and Commercial Weatherization Programs	OES	<u>2026-27</u> Weatherize qualified residences; Facilitate commercial efficiency / resiliency projects <u>2027-30</u> Evaluate program success and expansion feasibility	Medium
SnoCo-24	Seismic Bridge Resilience	Public Works	<u>2026-27</u> Bridge inspections; Annual Bridge Report; Complete projects listed in 2-year objectives <u>2027-30</u> Annual Bridge Report; Complete Transportation Improvement Plan (TIP) projects listed in the 5-year objectives	Medium
SnoCo-25	Solid Waste Infrastructure Modernization and Improvements	Public Works	<u>2026-27</u> Update Disaster Debris Management Plan; Begin construction of phase I and II projects; Replace Building M <u>2027-30</u> Complete design and begin construction of North County Recycling and Transfer Station (NCRTS); New HHW facility planning; Finalize improvement plans for Dubuque Road drop box	Medium
SnoCo-26	The Capital Improvement Program Hazard Screening	PDS DEM	<u>2026-27 Continue to develop and finalize the process before implementation during the next Capital Improvement Program update cycle.</u>	High

SnoCo-1: Business Sector Outreach

Lead Points of Contact (Dept)	Partner Points of Contact (Dept or Agency)	Hazards Mitigated	Funding Sources and Estimated Costs
DEM Cross Sector Program Manager	Snohomish County Economic Development Economic Alliance of Snohomish County Water/waste districts SnoPUD #1	All hazards Goals and Objectives Supported Goals: 1, 2, 6 Objectives: 1.3, 2.1, 2.2, 6.4	General Fund Grant Sources Cost: \$200,000 annually
Strategy Vision/Objective Support mitigation actions that reduce impacts on the private sector through preparedness, capability building, and supply chain resilience. Strengthen public-private partnerships to reduce exposure and vulnerability to all hazards to fast-track local economy restoration post-disaster.			
Mitigation Strategy - External planning - Encourage the development of private sector COOP planning through local the chambers of commerce - Internal alignment and planning - Align County EOC Situation Report and SnoCOP to accommodate private sector information - Build out process for incorporating private sector perspectives into the EOC, especially within the Community Lifelines Framework - Update and redevelop the Disaster Recovery Framework - Utility Providers - Develop relationships with water/wastewater treatment, electrical providers, and other utilities providers to find areas of alignment and coordination			
2-Year Objectives - Coordinate with Everett Water/wastewater and PUD for training opportunities and blue-sky coordination - Update CEMP and other critical plans to include private sector components - ESF 14 updates to the CEMP, to include Community Lifeline updates and information	5-Year Objectives - Work with Economic Development on disaster preparedness workshops for local chambers of commerce - Update the Disaster Recovery Framework	Long-Term Objectives Better integration between the private sector, public utilities, and county emergency management	

Implementation Plan/Actions

1. In coordination with Economic Development Alliance of Snohomish County provide business preparedness and continuity planning information to Snohomish County chambers of commerce
2. Build out the ESF 14 – Private Sector role within the EOC. Including identifying areas of communications, support, and resources to fast-track response and recovery areas
3. Incorporate ESF 14 and Water/Wastewater partners into Snohomish County EOC trainings and exercises

Performance Measures

- Complete ESF 14 annex
- Number of trainings coordinated with private sector partners

SnoCo-2 Community Assessment for Public Health Emergency Response (CASPER) Survey

Lead Department and Points of Contact Health Department – PHEPR	Partner Points of Contact DEM University of Washington	Hazards Mitigated Disease Outbreak Wildfire Goals and Objectives Supported Goals: 1, 3, 4, 5, 6 Objectives: 1.1; 3.3; 4.3; 5.3; 5.4, 6.4	Funding Sources and Estimated Costs State grant (Foundational Public Health Services FPHS) about \$200,000
Strategy Vision Conduct a Community Assessment for Public Health Emergency Response (CASPER) survey to rapidly assess and better understand household-level preparedness and perceptions related to public health emergencies in Snohomish County. The information gathered will help us better understand local preparedness levels and guide future outreach and planning efforts.			
Mitigation Projects Conduct a CASPER			
2-Year Objectives - Conduct a CASPER - Complete and publish a CASPER report on findings	5-Year Objectives Integrate findings from the CASPER into current and future preparedness and mitigation plans	Long-Term Objectives A Snohomish County where residents are prepared and resilient toward emergencies that impact health and well-being	
Implementation Actions: - Environmental Scan and background analysis - Develop survey and sample design. - Recruit and train volunteers - Conduct survey - Analyze results - Write recommendations and final report.			
Performance Measures: - Recruit and train volunteers to administer the CASPER survey. - Completed report with recommendations.			

SnoCo-3 CIKR GIS Data Management

Lead Points of Contact (Dept)	Partner Points of Contact (Dept or Agency)	Hazards Mitigated	Funding Sources and Estimated Costs
DEM	SWM Fire depts Sno911 Other depts and public safety agencies	All hazards Goals and Objectives Supported Goals: 1, 4, 5, 6 Objectives: 1.1, 1.4, 1.5, 4.1, 4.3, 5.1, 5.3, 5.4, 6.1, 6.2, 6.4	State Grants Federal Grants Local Funds Cost: \$150,000 annually
Strategy Vision/Objective Development of an accurate, current, and relevant CIKR GIS data layer. This project involves developing a single, authoritative, curated and current collection of critical infrastructure and key resources throughout Snohomish County. It will also seek to develop a definition for those resources and determine how granular data should be (for example, should potable water delivery systems include all valve locations or an approximation of delivery networks)? This dataset will reflect that critical infrastructure is an interdependent network and not stand-alone resources. This data will be used for planning and response efforts for many partners, primarily SNO911, fire agencies, and Snohomish County DEM. Use cases include improving situational awareness for first responders in CAD, improving the accuracy and usefulness of analytics, and helping the EOC maintain a ready state for the next large scale activation (several days had to be spent during the initial response period of the COVID-19 pandemic updating old school and medical care facility data).			
Mitigation Strategy An FTE employee would be funded and assigned to this task, including gathering all relevant data, maintaining critical relationships, data stewardship, metadata creation, and process automation by the passage of a proposed public safety tax, which was rejected by voters in November 2024. Due to the nature of critical infrastructure data (with privacy concerns, public and private stewardship, questions of ownership, etc), keeping such a layer current and collecting all relevant information from data providers is a monumental task. The benefits of having such a layer include the ability for DEM to provide better inputs for analytics programs used by Fire Agencies, better inputs for HAZUS simulation data, and better preparing the EOC for incident response. Development and maintenance of this critical database will also help inform land use analysis by Planning and Development services for products like the Buildable Lands Report and Comprehensive Plan updates.			

This program would involve at least one FTE equivalent operating solely on this task for quite some time, ideally creating processes and automated methods for maintaining the data, or at least determining recommended intervals for refreshing data from available sources.		
2-Year Objectives Identify a viable funding source and personnel to implement the strategy	5-Year Objectives The creation and generally automated maintenance and upkeep of an accurate, robust CIKR GIS data layer	Long-Term Objectives Maintain funding for FTE employee and updates to the database and processes
Implementation Plan/Actions This is pending, as no funding or personnel are currently delegated to the task. - Grant applications and funding requests will be submitted to potential grantors when available and approved by DEM leadership - Once funding for the FTE position is secured DEM will hire a Senior GIS Analyst to develop a database template broken down by industry sectors, ownership, and types of infrastructure and facilities along with other pertinent information needed for analysis - Once the template is approved by the EESCS manager, the employee will work with County departments, special districts and jurisdictions to update and collect new critical infrastructure data - Data that can be displayed publicly will be placed on a Critical Infrastructure and Key Resources map that will be updated once a year - Every four years, the staff member will work the Principal GIS Analyst in Surface Water Management, or other County GIS Analyst responsible for Hazus analysis, in preparing the database for Hazus analysis including assurance that the database has gone through the annual update process prior to the Hazus modeling runs - The Senior GIS analyst will assist the Hazus Analyst with preparing Hazus reports and any requested maps from DEM or SWM		
Performance Measures - Maintain 90 percent accuracy of data reflecting on-the-ground infrastructure and resources by Year 2 - Assessment of new buildings and facilities being reported for updating the 911 database and PDS addressing requests with a final report due by year 2 (firehouses, pump stations, dams, etc) - Adding new facilities and buildings within 4-6 weeks of addition to 911 dataset - Annual CIKR report and map to account for the features added compared to previous datasets		

SnoCo-4 Community Floodplain Services Program

Lead Points of Contact (Dept)	Partner Points of Contact (Dept or Agency)	Hazards Mitigated	Funding Sources and Estimated Costs
Surface Water Management CFS Program Manager and Integrated Project Coordinator	DCNR (office of agriculture) DPW (roads)	Flooding Goals and Objectives Supported Goals: 1, 2, 3, 4, 5, 6 Objectives: 1.2, 1.5, 1.7, 2.3, 2.4, 3.2, 4.2, 4.4, 5.1, 6.1, 6.4	Floodplains by Design Cost: ~\$2.5m/year
Strategy Vision/Objective The goal of CFS is to keep local farms viable, reduce flood impacts for residents, and restore habitat for threatened salmon. The program includes programmatic, planning, data assessment, and capital actions.			
Mitigation Strategy Programmatic/Planning/Data Assessment Snohomish Implementation Team (IT) – This is an ongoing collaborative between county and external partners around integrated capital project development and implementation. This group develops the CFS package of projects that we apply for FbD grant funding for receiving 4 awards, totaling \$33M. Capital - Chinook Marsh Restoration Project (SWM CIP) – Project will restore 430 acres of habitat while working with the City of Everett and BP on design/relocation options that improve the resiliency of critical infrastructure during a flood event. This project is phased and is in the early stages of design. - Shinglebolt Slough Restoration Project (SWM CIP) – project looks at nature-based solutions that restore habitat while mitigating flood risk to the City of Sultan and adjacent roadway/bridge infrastructure. - South Slough Floodplain Buyout (SWM CIP) – The first phase of this project (and is complete) purchased several properties in the floodway, removed the development rights, and relocated three tenants from the floodway to safe and sanitary housing. This phase also involved leasing out some of the acreage for silage to help local farmers. The second phase involves capital actions that will restore and reconnect the floodplain. - Thomas’ Eddy Restoration Project (SWM CIP) – The goal of the project is to implement actions that improve floodplain connectivity and restore habitat while			

upgrading existing infrastructure (i.e. culverts) to be more resilient to flood conditions. This project also includes actions to strengthen existing recreational infrastructure. Project is phased with phase 1 being complete and phase 2 in the works. • Fern Bluff Integrated Project (SWM CIP) – The first phase of this project (still ongoing) involves purchasing the property and removing the development rights (this one had four development rights on it), relocating SWM’s native plant nursery, and leasing out the tillable acreage to support local agriculture. The second phase of this project involves feasibility and early (30 percent designs for actions that reduce flood risk and restore habitat. • Ben Howard Roadway Elevation Project (DPW TIP – funding for 60 percent) – Project will look at roadway elevations to improve emergency access during floods. • Swan’s Trail Slough Restoration and Resilience Project (SCD Partner project – at 60 percent) – This is a phased effort with the goal of providing resilient infrastructure (pump station, tide gates, culverts, and levees) options for DD13 farmers/residents while restoring the habitat in the adjacent fish-bearing stream. • Tualco Valley Water Connectivity Project (Tulalip Tribes Partner Project – 30 percent to 60 percent design status) – This is a large reach-scale phased capital effort with the goal of providing resilient infrastructure options (culverts and levees) for neighboring farming and residents while restoring floodplain connectivity and habitat in the adjacent side channels. This project involves 3 small projects (Riley Slough at the Confluence, Foye Creek, and Haskel Slough Levee) within the Tualco Valley project umbrella. • Al Borlin Side Channel Restoration Project (AASF – 30 percent design status) – Project will investigate the feasibility of creating side channels within the City of Monroe’s 90-acre Al Borlin Park to restore habitat while reducing flooding to farms and downstream landowners. • High Bridge and Getchell Ranch Drainage Improvements Projects (Ducks Unlimited – early stages) – projects enhance wetlands on farms, creating seasonal habitat, improving water quality, and helping to manage nutrients. Actions involve resilient infrastructure upgrades like tide gates and culverts.		
2-Year Objectives • Implement CFS Phases 2 and 3, including the capital projects listed above	5-Year Objectives • Implement CFS Phases 3-4, including all the capital projects listed above • Seek funding for phase 5 and expand CFS program to Stillaguamish (if awarded, phase 1 would begin summer 2027)	Long-Term Objectives • Complete the capital actions listed above and work with partners to build a pipeline of additional capital actions with similar goals/ objectives

Implementation Plan/Actions

See descriptions above and all these projects are multi-year, multi-million-dollar efforts that will span through 2030. Phases of SWM projects can be provided via the individual PM's and we can work with partners to see if they have a phased timeline.

Performance Measures

See CFS Phase 4 list of compiled metrics. This list is provided by project (if needed) but these are the compiled metrics for visibility. The metrics list includes things like number of structures removed and length and depth of levee setback.

SnoCo-5 CWPP Implementation and Fuel Reduction Strategies

Lead Points of Contact (Dept)	Partner Points of Contact (Dept or Agency)	Hazards Mitigated	Funding Sources and Estimated Costs
DCNR (Parks) – County Forester Parks – Operations Supervisor OES – Funding Coordinator OES – Project Specialist II	DEM Partner jurisdictions in WUI areas	Wildfire Goals and Objectives Supported Goals: 1, 3, 5, 6 Objectives: 1.1, 1.6, 3.1, 3.2, 3.5, 5.1, 5.3, 5.4, 6.1, 6.2, 6.4	Grants from DNR, USDA, FEMA, WA RCO, Unknown Forestland mapping and prioritization: \$250,000 Forest Management and Treatment Plan - \$250,000 Invasive species plan - \$75,000 Summer emphasis patrol - \$50,000 annually Tourism wildfire education - \$10,000 Goat Rental - \$1,000 per acre
Strategy Vision/Objective • Map and model forestland managed by Snohomish County • Create and maintain a countywide forest health and fuel treatment plan • Reduction of fire loading in Wildland urban interface and in escape/access corridors			
Mitigation Strategy The County will seek funding to monitor, map and analyze forest health and fuel loads on County managed forestlands with the following activities: • Conduct stand unit mapping and modeling for County managed forestlands • Develop a Countywide forest management and fuel treatment plan for County managed forestlands • Work with a contractor/consultant to create an inventory of high fire danger areas which threaten infrastructure or homes • Identify invasive species mitigation strategies for reducing the highly flammable plant matter adjacent to threat areas including Scotch boom, arborvitae and dead lower branches of live trees • Use prescribed burning and brush clearing to reduce the intensity and duration of wildfires • Use ruminants to reduce and maintain low fire loading in rural and urban areas • Enforce recreation rules to reduce ignition sources • Develop a wildfire education tourism campaign			

2-Year Objectives	5-Year Objectives	Long-Term Objectives
• Begin to document and model County managed forestlands into a forest health database • Identify high priority treatment areas • Begin the planning process for a countywide forest management and fuel treatment plan • Beginning a county owned/operated fuels reduction herd of ruminants (goats, cows, etc.) • Design and publish a wildfire education brochure for county visitors and distribute to hotels in WUI areas • Design and publish a wildfire education poster for posting at campground and trailhead kiosks and sign boards • Find funding to dedicate a part-time or seasonal ranger to conduct emphasis patrols on trails and at campgrounds during red flag warnings and burn bans to educate visitors on fire safety	• Begin route clearing and fuels reduction in high priority areas • Complete countywide County managed forestland modeling • Complete countywide forest management and fuel treatment plan • Design kiosks for Healthy Forests and other forest health harvests and treatments • Find funding to continue publishing wildfire education brochures and replace posters as needed • Find funding to continue wildfire safety emphasis patrols	• Maintain the county forestland database • Update and maintain the countywide forest management and fuel treatment plan • Create a long term maintenance program to reduce the reemergence of invasives. • Fund summer wildfire emphasis patrols long term
Implementation Plan/Actions 1. As funding allows, conduct a Snohomish County forest health analysis on County managed lands, including stand unit mapping and treatment prescriptions for each County forested property. Prioritize those at higher risk for forest health complications, such as lands which were harvested relatively recently or were previously owned by a timber company and exist either as a monoculture of Douglas-fir or even-aged alder stands. – PVCA, Lord Hill, Corcoran, etc.		

2. Develop a Countywide forest management and fuel treatment plan on a sub-basin watershed level, and conduct modeling for fire resilience and forest health. Add all county managed forests and potential forest plot treatments from County Forester and hire contractor for County lands to perform forest stand surveys and timber cruises.
3. Prioritize fuels reduction and maintenance on county-owned park/land to use as model for replication and informing engaged communities. Consider a contract with Team Rubicon or other volunteer agencies to assist County crews with conducting fuels reduction on county properties, including: Centennial Trail corridor, Meadowdale Beach Park*, Lord Hill Park*, Paradise Valley Conservation Area (PVCA)*, Flowing Lake Park, Kayak Point Park*, and Robe Canyon Park (*Park is part of the Healthy Forest Program)
4. Develop a fuels treatment database using Department of Conservation and Natural Resources (DCNR) forest projects, Planning and Development Services (PDS) clearing/grading and forest practice permits data and request timber sales and treatment data from DNR and USFS. Update annually and use to coordinate projects across the Local, State and Federal levels to reduce fuels within Wildland Urban Interface (WUI) boundaries*.
5. Perform regular maintenance consisting of monitoring, mowing and spot removal of treated areas as a long-term goal, however it will take more than a decade to get to the point of maintenance rather than area treatment.
6. Partner with DNR, USFS, local fire districts, and local mills, local agricultural producers to identify local areas for fuels treatment, produce wood products from harvests, train community volunteers to remove invasive species, and find ruminants such as goats to treat areas thick with invasives like Himalayan blackberry hedges.
7. Maintain trails, enforce trail rules and regulations including prohibition of motorized vehicle use. Enforce burn bans in campgrounds.
8. Fund, develop, and disseminate a guide for tourists with basic safety information (evacuation zones, fire safety, even bear safety) that they can get at hotels, short term rentals, hiking permit desks, etc.; Expand public education on red flag warnings including burn bans and throwing sparks from vehicles and equipment, and promote through local media and social media.

*Or support the development of the WA DNR database if funded at the state level by 2027.

Performance Measures

- Percent completed timber cruises or other type of stand modeling for prioritized county forestlands
- Completed countywide forest health and fuel treatment plan
- Number of acres treated for invasive species
- Number of acres treated for selective harvesting
- Routes cleared for evacuation
- Database of treated, harvested, and/or cleared forestlands

- Number of trail and campground emphasis patrols during burn bans and red flag warnings
- Wildfire education brochures and posters for visitors to Snohomish County and for posting at trailheads and campgrounds in WUI areas

SnoCo-6 Cybersecurity Table Top

Lead Points of Contact Information Technology	Partner Points of Contact	Hazards Mitigated: Cybersecurity Goals and Objectives Supported: Goals: 1, 6 Objectives: 1.3, 1.4, 1.5, 6.4	Funding Sources and Estimated Costs 2025/2026 IT 505 Fund HMA Cost: \$15,000
Strategy Vision/Objective Perform a cybersecurity tabletop exercise as not only a strategic initiative but also as part of our posture for hazard mitigation and cybersecurity threats. In addition, foster a cyber-aware and prepared organization where leadership and staff can confidentially respond to threats, protect public data and maintain continuity of essential services.			
Mitigation Strategy The overarching strategy is to build cyber resilience by simulating realistic cyber incidents in a controlled, discussion-based setting. This allows us to practice decision making under pressure. Identify gaps in our incident response plans. Improve coordination across the county and perhaps the region.			
2-Year Objectives • Test incident response • Improve communications protocols • Clarify roles & responsibilities • Identify gaps and weaknesses • Enhance decision making • Validate escalation procedures • Build team confidence • Support compliance & cyber insurance	5-Year Objectives • Test incident response • Improve communications protocols • Clarify roles & responsibilities • Identify gaps and weaknesses • Enhance decision making • Validate escalation procedures • Build team confidence • Support compliance & cyber insurance	Long-Term Objectives • Compliance with cybersecurity frameworks such as NIST, ISO 27001 • Public trust in government operations • Culture of proactive risk management	
Implementation Plan/Actions Department of IT is actively working with a third party to engage with professional services through the next series of cybersecurity hardening efforts, of which one is tabletop exercise. The scenario and details are in the process of being coordinated.			

Performance Measures

- Incident response time | time taken to detect, assess, report and contain simulated incident
- Decision making effectiveness | quality and timeliness of decision made under pressure
- Communication flow | clarity, accuracy and timeliness including escalation protocols

SnoCo-7 Drainage and Fish Passage Projects

Lead Points of Contact	Partner Points of Contact	Hazards Mitigated	Funding Sources and Estimated Costs
Surface Water Management (SWM)	All Departments Neighborhood Associations Washington Department of Fish and Wildlife Tribal Governments	Earthquake Severe Weather Flood Goals and Objectives Supported Goals: 1, 4, and 6 Objectives: 1.4, 1.5, 4.2, 4.3, 6.2, 6.4	SWM Funds REET Funds State Grants Federal Grants HMA Cost: \$90,000,000
Strategy Vision/Objective Replace failing drainage infrastructure and fish passage barriers with infrastructure that is designed to satisfy current industry standards. These standards include withstanding earthquakes and storm events influenced by climate change.			
Mitigation Strategy - Design and construct fish passage barrier removal projects requiring structure spans over 20 feet to withstand earthquakes, ground settlement and movement - Design and construct all fish passage barrier removal projects to withstand and safely convey the standard 100-year design storm as well as the 100-year design storm that accounts for climate change - Design and construct drainage improvement projects that reduce flooding due to severe weather			
2-Year Objectives Construct the following fish passage barrier removal and drainage improvement projects: - Elliot Rd. Flood Reduction Project - CR Near 9116 Grandview - CR Near 7203 Interurban Blvd - CR Near 10101 167th Ave - CR Near 2310 S. Machias Rd - CR Near 6304 19th Ave NE	5-Year Objectives Complete 2-Year Objective Projects Construct the following fish passage barrier removal and drainage improvement projects: - CR on 163rd at Panther Crk - CR Near 16916 Ash Way - CR Near 27104 127th Ave NE - CR Near 1700 Magnolia Rd. - CR Near 3415 220th St. NW	Long-Term Objectives - Continue replacing fish passage barriers across the County - Continue replacing failing culverts with fish passages across the County - Continue resolving drainage and flooding issues across the County	

• CR Near 9415 Grandview • CR Near 26622 Monroe Camp Rd • CR Near 19224 Marine Dr • CR Near 123 Ave SE • 2026 Drainage Improvement Projects Package • 2027 Drainage Improvement Projects Package	• CR Near MP 0.03 Swans Slough Rd • CR Near 3801 220th St. NW • CR Near 15325 84th St. NE • CR Near 25622 4th NW • CR Near 1211 Sunday Lake Rd • CR Near 29816 Mountain Loop Highway • CR on 28th near MP 0.91 • CR on Pioneer Hwy Near 236th St. NW • CR Near 8632 Lakewood Rd • CR Near 7405 Skipley Rd. • CR on Mountain Loop Highway, near Ice Caves • 2028 Drainage Improvement Projects Package • 2029 Drainage Improvement Projects Package • 2030 Drainage Improvement Projects Package	
Implementation Plan/Actions 1. Complete design analysis and report development for the proposed projects 2. Complete grant funding application(s) for the proposed projects 3. Complete construction documents (plans/provisions/etc.) for the proposed projects 4. Complete, submit and obtain applicable permit applications for the proposed projects [WDFW Hydraulic Project Approval (HPA), US Army Corps 404 Permit, Water Quality Certification 401, Construction Stormwater General Permit, Land Disturbance Activity (LDA) Permit, State Environmental Policy Act (SEPA), Shoreline Permit, etc.] 5. Advertise, bid, award, and construct the proposed projects		
Performance Measures • Obtain all required permits needed to construct the proposed projects • Complete construction of proposed projects in accordance with the currently approved SWM Capital Improvement Plan (CIP)		

- Obtain sufficient grant funding to pay for the design and construction of the proposed projects without needing to use saved SWM fund balance (spend only the funding that is collected for the calendar year)

SnoCo-8 Emergency Management Community Outreach and Education

Lead Points of Contact (Dept)	Partner Points of Contact (Dept or Agency)	Hazards Mitigated	Funding Sources and Estimated Costs
DEM	County Departments Partner Jurisdictions Sno911 Community Groups VOADs	All Hazards Goals and Objectives Supported Goals: 1, 2, 3, 5, 6 Objectives: 1.6, 2.4, 3.1, 3.2, 3.4, 3.5, 5.4, 6.2, 6.4	General Funds 911 Funds CWDG HMA Cost: ~ \$100,000
Strategy Vision/Objective Create and enhance coordinated and inclusive public outreach programs that increase hazard awareness and that support actionable preparedness and mitigation measures in the community.			
Mitigation Strategy - Support community groups with individual and community preparedness through existing outreach programs (Two weeks ready, Great Shake Out, Community Safety Ambassadors) and community-based groups (CERT, Connect Casino Road, RISNW) - Continue to improve multi-language management on Snohomish County Public Safety Hub			
2-Year Objectives - Regular outreach and preparedness trainings/meetings with the RISNW and Connect Casino Road communities - Collaborate with AFN community leaders on emergency preparedness planning and handouts - Rebuild Snohomish County Public Safety Hub landing page to increase awareness of on-the-fly translation capability - Rebuild seven hazard landing pages on the Snohomish County Public	5-Year Objectives - Coordinate communication pathways through refugee and immigrant communities - CPOD and resiliency network building/strengthening for AFN and minority communities	Long-Term Objectives - Build out partnerships with refugee, AFN, and other minority communities to have regular outreach/education Create regular outreach meetings communities can come to each quarter Coordinate with CERT volunteers to work on having them also do outreach events - Document at least 15 attempts each year to explore with partners	

Safety Hub to increase utility of on-the-fly translation capability		potential funding for translation and/or technical options to make the Snohomish County Public Safety Hub more accessible to people with limited English proficiency
Implementation Plan/Actions Community Outreach 1. Work with neighborhood and community-based organizations to schedule outreach and trainings 2. Maintain partnerships with communities and create regular outreach opportunities 3. Work with volunteer group leadership (CERT) to coordinate outreach Public Safety Hub 1. From March 1-31, 2026, rebuild Snohomish County Public Safety Hub landing page to increase awareness of on-the-fly translation capability 2. Between April and December 2026, rebuild seven hazard landing pages on the Snohomish County Public Safety Hub to increase utility of on-the-fly translation capability 3. Starting Jan. 1, 2026, document at least 15 attempts each year to explore with partners potential funding for translation		
Performance Measures Outreach Event Metrics (See SMART objectives for Hazard Viewer and Hub entries above.)		

SnoCo-9 Expand Extreme Weather Facilities and Shelter Operations

Lead Points of Contact	Partner Points of Contact	Hazards Mitigated	Funding Sources and Estimated Costs
Human Services Program Planner	LINC NW Volunteers of America Everett Gospel Mission DCNR Fair Park Red Cross	Extreme Heat, Flood, Severe Weather, Wildfire Goals and Objectives Addressed Goals: 1, 2, 4, 5, 6 Objectives: 1.4, 2.3, 4.3, 5.3, 5.4, 6.1, 6.4	HMA funding or other grant sources Year-round Facility Surge Cost: \$4,000,000 Local human services funding Temporary Sheltering Cost: \$671,637 annually
Strategy Vision/Objective Adequate overnight shelter capacity to provide a shelter bed to all unsheltered individuals during extreme weather and harmful air quality events.			
Mitigation Strategy Increase emergency shelter capacity with the following strategies: • Ability to surge additional overnight shelter beds at existing year-round shelter locations during extreme weather and harmful air quality events • Overnight shelter at temporary locations during extreme weather and harmful air quality events • Retrofit Fair Park Buildings to serve as shelter locations during evacuations, extreme weather and harmful air quality events • Assist Red Cross with locating and securing additional facilities to be used for evacuation shelters			
2-Year Objectives • Construct year-round shelter facility that has ability to surge additional beds during extreme weather and harmful air quality events • Include centralized HVAC system with MERV13 filters • Develop extreme weather policies and procedures	5-Year Objectives • Evaluate program outcomes and consider replicating model in other parts of the county • Reduce reliance on temporary shelter locations by expanding capacity of year-round shelters	Long-Term Objectives • Sufficient year-round shelter capacity to rapidly provide a shelter bed to anyone experiencing unsheltered homelessness • Sufficient temporary shelter capacity to rapidly deploy and meet	

including activation thresholds • Develop contracts with non-profit agencies to operate overnight extreme weather shelters • Recruit churches and community facilities to serve as temporary extreme weather shelter locations		the needs of displaced individuals and families
Implementation Plan/Actions Year-round Shelter Surge: 1. Develop MOU with the City of Everett to provide capital funding to the City 2. City of Everett contracts with Everett Gospel Mission to provide capital funding 3. Everett Gospel Mission conducts capital project 4. Facility opens by October 2026 Temporary Sheltering: 1. Negotiate and execute extreme weather shelter contracts 2. Develop extreme weather shelter management plans for each location 3. Conduct volunteer recruitment campaigns with extreme weather shelter providers 4. Work with cities and shelter providers to recruit locations 5. Expand outreach campaigns to raise awareness of extreme weather shelter locations		
Performance Measures Year-round Shelter Surge: • Number of new extreme weather shelter beds • Number of new extreme weather shelter facilities Temporary Sheltering: • Number of individuals served • Number of extreme weather shelter bed nights • Number of extreme weather shelter beds • Number of extreme weather shelter providers • Number of temporary extreme weather shelter locations		

SnoCo-10 Extreme Weather Events Longterm Planning

Lead Points of Contact	Partner Points of Contact	Hazards Mitigated	Funding Sources and Estimated Costs
PDS – LRP	County communities (in particular overburdened) WA State Dept of Health WA State Dept of Emergency Management Utilities (PUD, PSE) Extreme weather shelters (Snolsle Libraries, Everett Library, Senior Centers) Private property owners WSDOT Special Purpose Districts (Flood Control, Diking Districts) Ag Community Snohomish Conservation District WSU WA State Dept of Ecology	Severe Weather Events (Extreme Heat, Storms, Intense Rain) Flood Goals and Objectives Supported Goals: 1, 2, 3, 4, 5, 6 Objectives: 1.1, 1.2, 1.4, 1.5, 1.6, 2.3, 2.4 2.5, 3.3 4.1, 4.3, 5.3, 5.4, 6.2, 6.4	General Fund Potential Grants HMA Appx \$15,000 per building Spatial Analysis and Plan Cost: ~\$150,000
Strategy Vision/Objective To develop, pursue, and implement strategies to help people, ecosystems, the built environment, and economy be resilient to the severe weather events.			
Mitigation Strategy Increase the County’s resilience to severe weather events with the following activities: • Assist other County departments and special purpose districts identify funding opportunities for energy backup storage for critical public services, where needed • Continue implementation of urban residential tree regulations • Support community centers, libraries, and other facilities in their role as extreme weather shelters by helping to secure funding • Implement policies in the Subarea Plan Element that address urban heat island effect by regulations that ensure developments include shading, native vegetation and trees • Implement policies in the Climate Change and Resiliency Element to increase the county’s resiliency including increased coordination interdepartmentally and among relevant agencies and special purpose districts • Update and implement the County’s SMP, which now requires analysis of sea level rise			

2-Year Objectives • Adopt development regulations to implement comprehensive plan policies • Leverage interdepartmental coordination efforts to prioritize actions to increase county resilience, such as through the completion and implementation of strategies in the County's Communitywide Climate Resiliency Plan	5-Year Objectives • Begin implementing actions from the list of priority infrastructure identified as vulnerable to extreme weather events • Seek sustainable funding for implementation of specific urban tree canopy policies that are unfunded • Continue to support and help secure funding for community-based organizations (CBOs) that serve as shelters for extreme weather events	Long-Term Objectives • Communities, ecosystems, built environment, are resilient to the extreme weather events by having long-term shelters, built and natural shading, open spaces and water parks, energy back-up systems, shaded and vegetated aquatic / riverine systems, natural and built systems to manage stormwater, highly developed system of community anchors / resiliency centers
Implementation Plan/Actions 1. Implement policies in the Climate Change and Resiliency Element to increase the county's resiliency including increased coordination interdepartmentally a. Leverage interdepartmental coordination efforts to prioritize actions to increase county resilience		
Performance Measures • Completing the plan • Implementing the plan alignment measures		

SnoCo-11 FAST

Lead Points of Contact Human Services Program Planner	Partner Points of Contact DEM	Hazards Mitigated All hazards Goals / Objectives Addressed Goals: 2, 6 Objectives: 2.5, 6.4	Funding Sources and Estimated Costs UASI HMA \$25,000
Strategy Vision/Objective General populations shelters and other emergency service sites are more accessible and effective in serving individuals with access and functional needs.			
Mitigation Strategy Equip and train Functional Assessment Service Teams (FAST).			
2-Year Objectives - Acquire FAST storage trailer and supplies - Develop FAST concept of operations - Offer FAST training to County, City, and voluntary organization staff	5-Year Objectives Conduct FAST exercise	Long-Term Objectives Secure funding for program and establish program maintenance plans	
Implementation Plan/Actions - Acquire FAST storage trailer and supplies - Develop FAST concept of operations - Offer FAST training to county, city, and voluntary organization staff - Conduct FAST exercise			
Performance Measures - Number of FAST trained individuals - Number of equipped FAST storage trailers			

SnoCo-12 Flood and Landslide (FHA regs, CAR, SMP)

Lead Points of Contact PDS (LRP, Permitting)	Partner Points of Contact DCNR-SWM, OES, Parks, DPW Community living in or near shoreline jurisdiction and critical areas, flood hazard areas	Hazards Mitigated / Flooding, landslide hazards Goals and Objectives Supported Goals: 1, 3, 4, 5, 6 Objectives: 1.1, 3.2, 3.4, 4.1, 4.2, 4.3, 5.1, 5.3, 5.4, 6.2, 6.4	Funding Sources and Estimated Costs General Fund; Permitting Fees; Potential Ecology grant; HMA; Appx. \$350,000 per project
Strategy Vision/Objective Protecting public health and safety; wildlife habitat; adapting to and mitigating sea-level rise and storm surge, and flooding			
Mitigation Strategy Update the following plans and regulations to consider updated data and information including natural hazards and climate change impacts: • PDS is leading the effort on behalf of the County in updating its Critical Areas Regulations (CAR). Once adopted, PDS Permitting will implement the County’s CAR for development proposals. • PDS is leading the effort on behalf of the County to update its Shoreline Master Program (SMP) by 2029 to incorporate consideration of sea-level rise. Once adopted PDS Permitting will implement the County’s SMP. • PDS is implementing the County’s flood hazard regulations through permitting and also works with property owners on the Voluntary Floodplain Home Buyout Program. • PDS is working to implement its urban tree canopy policies in the Natural Environment Element of the Comprehensive Plan.			
2-Year Objectives • Work with community, key agencies, partners, and staff to implement CAR • Public outreach and engagement on SMP update process and best available science for delineating shoreline	5-Year Objectives • Adopt County’s SMP and work with staff and community to implement – continue efforts to increase nature-based shoreline solutions to managed storm surge and SLR. Having completed a	Long-Term Objectives • Reduce negative impacts of flood, landslides on safety, public health, and property • Increase resiliency of wildlife habitat	

jurisdiction and sea level rise • Early interdepartmental coordination to review and consider budgetary needs to implement urban tree canopy policies – where there is a gap. Address NPDES requirements related to urban tree canopy policies	shoreline hazards vulnerability assessment, consider actions to safeguard or relocate critical infrastructure and community assets • Continue near-term implementation of urban tree canopy policies, work on sustainable funding sources, creation of a tree board, draft an urban tree management plan	• Improve public health and overall community resiliency
Implementation Plan/Actions 1. Education and outreach Partners: WSU, Snohomish Conservation District, Community Stewards, Marine / Coastal Stewards 2. Planting and maintenance of green infrastructure (native trees and vegetation) to mitigate flood /stormwater where feasible – co-benefit of meeting NPDES permit requirements 3. Consider long-term plan for relocating and identified critical infrastructure that may be vulnerable to sea-level rise, flooding, or landslide hazards		
Performance Measures • Number of voluntary home buyouts every five years • Amount of green infrastructure including trees and native vegetation serving to address stormwater management • Health of priority habitats (using Puget Sound Partnerships indicators) • Acres of natural shoreline • Number of elevated homes/buildings in the flood area • Acres of land in permanent conservation		

SnoCo-13 Hazard Viewer v3

Lead Points of Contact) Emergency Management	Partner Points of Contact PIO network Community Outreach	Hazards Mitigated: Earthquake/ Tsunami Severe Weather Flood Dam Failure Wildfire Mass Earth Movement Volcano Goals and Objectives Supported Goals: 1, 2, 3, 5, 6 Objectives: 1.4, 1.7, 2.4, 2.5, 3.1, 3.2, 3.3, 3.4, 5.1, 5.2, 5.3, 5.4, 6.4	Funding Sources and Estimated Costs General Fund 911 Funding HMA ~\$20,000
Strategy Vision/Objective Inform the public and planning partners about the type and severity of hazards through the development and launch of a new public facing Snohomish County Hazard Viewer (version 3) to align with the 2025 HMP. This application will inform residents on practical steps they can take to prepare for and mitigate their risks from these hazards.			
Mitigation Strategy PIO and GIS staff from DEM will work to incorporate new content into the existing Hazard Viewer: • The current version 2 was a vast architectural improvement from V1 which will allow staff to manage and update content internally, without the need for IT involvement • Content will prioritize text over graphics to adhere to web accessibility standards • Development of new content in English will be a relatively easy task, but providing content in additional languages would require a significant investment in time and cost • New content will continue to improve interactivity, education, and improving community preparedness and resilience • This application will be in the form of an ArcGIS StoryMap • If possible, it would also include content translated into additional languages spoken in the county other than English, or incorporated tools or widgets to allow for live language translation			

2-Year Objectives	5-Year Objectives	Long-Term Objectives
• Generate new content relevant from the 2025 HMP • Launch Hazard Viewer 3.0 to reflect the 2025 update to the county's Hazard Mitigation Plan • Promote Hazard Viewer 3.0 using social and earned media, gaining at least 1,000 page views to the site per month	• Begin development of Hazard Viewer 4.0, anticipating content changes for the 2030 update to the county's Hazard Mitigation Plan as part of ongoing effort to maintain public use and 1,000 page views to the site per month • Maintain high community engagement with the application • Improve community knowledge, resilience, and preparedness	• Maintain high community engagement with the application • Improve community knowledge, resilience, and preparedness • Document at least 15 attempts each year to explore with partners potential funding for translation and/or technical options to make Hazard Viewer 3.0 more accessible to people with limited English proficiency
Implementation Plan/Actions 1. Begin PIO and GIS content and application development shortly after publication of the 2025 HMP 2. By March 31, 2026, soft launch Hazard Viewer 3.0 to reflect the 2025 update to the county's Hazard Mitigation Plan a. This will add new content focused on extreme heat and drought in the viewer's Identify, Learn and Act sections, increasing site page views by at least 100 visits per month 3. Work towards socialization and launch of Hazard Viewer 3 shortly thereafter. a. Beginning April 15, 2026, promote Hazard Viewer 3.0 4. Starting March 15, 2029, begin development of Hazard Viewer 4.0, anticipating content changes for the 2030 update to the county's Hazard Mitigation Plan 5. Starting Jan. 1, 2026, document at least 15 attempts each year to explore with partners potential funding for translation and/or technical options		
Performance Measures • Page views (version 2 had 11K views in the past year, and significantly more at launch in 2022) • Community feedback		

SnoCo-14 Hazus Analysis

Lead Points of Contact SWM	Partner Points of Contact Communities within the County DEM Assessor's Office IT Various planning groups Cities State FEMA	Hazards Mitigated Flood and Earthquake Goals and Objectives Supported Goals: 1, 3, 4, 5, 6 Objectives: 1.1, 1.4, 1.5, 3.1, 3.2, 3.4,3.5, 4.1, 4.3, 5.1, 5.3,5.4, 6.1, 6.2, 6.4	Funding Sources and Estimated Costs SWM utility fees; General fund; Hazard Mitigation Assistance; Cost: \$200,000 per cycle
Strategy Vision/Objective The primary vision is to enhance the resilience and safety of the county by effectively mitigating the impacts of natural disasters, specifically floods and earthquakes. This will be achieved through comprehensive hazard modeling, data analysis, and updating essential facilities to ensure they are prepared for potential hazards.			
Mitigation Strategy Enhance community resilience, improve data accuracy and availability, and reduce vulnerability. The mitigation strategy involves using Hazus-MH software to develop and analyze flood and earthquake scenarios. This includes: • Processing User Defined Facilities (UDF) for flood simulations • Utilizing the Advanced Engineering Building Module (AEBM) for earthquake simulations • Developing six earthquake scenarios and two flood scenarios • Updating the county's essential facilities in the Comprehensive Database Management System (CDMS) with the latest data			
2-Year Objectives • Work with IT to get necessary technology supports • Work with Assessors to extract Hazus-ready UDF data • Update Hazus base layer (Soils, landslide susceptibility,	5-Year Objectives • Complete the development and analysis of six earthquake scenarios and two flood scenarios using Hazus-MH software • Update the essential facilities in the CDMS	Long-Term Objectives • Achieve a significant reduction in the county's vulnerability to natural disasters • Foster a culture of preparedness and resilience within the community • Continuously improve hazard mitigation	

liquefaction, and water depth) • Train team members on the use of Hazus-MH software and data processing techniques	with the most current data • Implement findings from the hazard scenarios into county planning and emergency response strategies • Conduct regular updates and maintenance of the CDMS to ensure data accuracy • Expand the use of Hazus-MH models to include additional hazard types and scenarios	strategies based on new data and technological advancements
Implementation Plan/Actions Timeline and Stages: • <u>Year 1-2:</u> Work with IT to get necessary technology supports; work with Assessors to extract Hazus-ready UDF data; Update Hazus base layers • <u>Year 3-5:</u> Develop and analyze flood and earthquake scenarios, update CDMS, and train team members; Integrate scenario findings into planning and response strategies, conduct regular CDMS updates, and expand hazard modeling • <u>Long-Term:</u> Maintain and improve hazard mitigation strategies, foster community resilience, and adapt to new data and technologies Implementation Stages: 1. Initial Setup: Acquire necessary software and data, and train team members 2. Scenario Development: Create and analyze flood and earthquake scenarios 3. Data Integration: Update CDMS with new data and findings 4. Strategy Integration: Incorporate scenario results into county planning and emergency response 5. Ongoing Maintenance: Regularly update data and refine strategies based on new information		
Performance Measures • Completion of Scenarios: Number of flood and earthquake scenarios developed and analyzed • Data Accuracy: Regular updates and accuracy checks of the CDMS • Training Effectiveness: Number of team members trained and their proficiency in using Hazus-MH software • Community Resilience: Reduction in vulnerability metrics and improved preparedness levels		

- Strategy Integration: Successful incorporation of hazard scenario findings into county planning and emergency response strategies

SnoCo-15 High Hazard Potential Dams

Lead Points of Contact DEM	Partner Points of Contact SWM PUD High Hazard Potential Dam Owners King County Dam Coordinator Department of Ecology US Army Corp of Engineers	Hazards Mitigated Dam Failure Goals and Objectives Addressed Goals: 1,2, 3, 4, 5, 6 Objectives: 1.4, 1.5, 1.6, 2.1, 2.4, 2.5, 3.1, 3.2, 3.3, 3.4, 3.5, 4.3, 5.2, 5.3, 5.4, 6.1, 6.4	Funding Sources and Estimated Costs HHPD Grant Program HMA Cost: ~\$200,000
Strategy Vision/Objective Reduce community risk to high hazard potential dams through increasing public awareness of where dam risk is located and coordinate preparedness and response.			
Mitigation Strategy - Public Outreach and Education - Tourism/Visitor program to make people aware of the risk when they are visiting areas within an inundation zone - Add inundation depth lines to roads/bridges for dam failure (or signage) - Training and Exercise - Dam owners and public safety agencies host dam failure related workshops and trainings - Data Collection - Create an inventory that includes both public and private dams and modeling - Support High Hazard Potential Dam (HHPD) Owners - During Hazard Mitigation Plan updates, continue to meet the HHPD requirements of the Local Mitigation Planning Policy so that HHPD owners in the county are eligible for HHPD specific funding			
2-Year Objectives - Work with Public Safety agencies and dam owners to host workshop or TTX for dam failure, alert and warning, and evacuation - Work with tourism to create brochures that can be used for visitor	5-Year Objectives - Work with Parks to create kiosks or signs where visitors may recreate in inundation zones - Determine feasibility of adding signage and/or inundation depth lines to roads and bridges in the county	Long-Term Objectives - Educate residents on their specific dam failure risk in the county and how to be prepared - Support dam owners by meeting HHPD requirements in the HMP opening	

areas in inundation zones	Determine feasibility of dam inventory	up HHPD specific funding sources
Implementation Plan/Actions - Public Outreach and Education events and materials - Convene a group of local dam owners to participate in planning these events - Partner with local dam owners to advertise that residents in inundation zones sign up for SnoCoAlerts - Training and Exercise - Convene local dam owners and public safety entities to coordinate training and exercise		
Performance Measures - Public attendance at events - Public Safety attendance at exercises - Meeting the HHPD requirements in the HMP		

SnoCo-16 Hydraulic Modeling

Lead Department and Points of Contact: DCNR SWM Floodplain Services Group	Partner Points of Contact: SnoCo PW SnoCo PDS SnoCo DEM USACE	Hazards Mitigated: Flood Goals and Objectives Supported: Goals: 1, 3, 4, 5, 6 Objectives: 1.1, 3.2, 4.2, 4.3, 4.4, 5.1, 5.3, 5.4, 6.2, 6.4	Funding Sources and Estimated Costs: General Budget Federal Grants State Grants Regional Grants Cost: \$3 Million
Strategy Vision: Update the FEMA flood model for the Snohomish Estuary. Evaluate the current tidal flooding risks for the Snohomish Estuary and include that information in new Comprehensive Flood Hazard Management Plan. Update 2-D hydraulic models for out-of-date river reaches.			
Mitigation Projects: - Modernize the Snohomish Estuary FEMA model - Hold initial discussions regarding feasibility and partnership with USACE (COMPLETED) - Enter partnership with USACE to update estuary flood insurance rate maps - Fund or conduct new 2- Dimensional hydraulic models of underserved river reaches - Lower and Middle Pilchuck River - Pilchuck Creek - Canyon Creek - Evaluate if need is present in Little Pilchuck Creek due to repetitive loss areas. - Collaborate with cities in south county (WRIA 8). Evaluate if need for hydraulic modeling is present in urban streams - Identify gaps in river flooding monitoring along the Stillaguamish basin and Snohomish basin and implement better monitoring methods - Flood monitoring system – Flood watchers/drones			
2-Year Objectives: - Acquire funding for Snohomish Estuary FEMA model & Pilchuck River models - Complete Snohomish estuary and Pilchuck River Models	5-Year Objectives: With stakeholders and in-county departments identify underserved or unmodeled areas within the county and prioritize action	Long-Term Objectives: Develop systems of partnerships and baseline models to create repository of regularly updated hydraulic models	

	• Complete smaller models according to need and funding	
Implementation Actions: 1. Seek funding for, and complete Snohomish Estuary and Pilchuck hydraulic models 2. Develop better intra-county coordination and coordination with municipal and tribal groups to better manage existing models and identify areas a. Fund and complete two-dimensional hydraulic models in under-modeled areas such as Pilchuck Creek and Canyon creek b. Identify needs in urban growth areas and cities at nexus between streams and stormwater. Assess and model as needed 3. River Flooding Monitoring – Identify where gauges aren’t calibrated, identify gaps in river monitoring data collection methods		
Performance Measures: • Completed models • Establishment of local relationships and data sharing protocols between key stakeholders		

SnoCo-17 Implement snoco.gov

Lead Points of Contact Information Technology	Partner Points of Contact	Hazards Mitigated: Cybersecurity Goals and Objectives Supported: Goals: 1, 6 Objectives: 1.5, 6.4	Funding Sources and Estimated Costs: Internal IT resources only ~\$20,000
Strategy Vision/Objective Increase public trust in government operations with residents through use of an additional email (SMTP) alias, @SNOCO.GOV			
Mitigation Strategy This implementation for all county employees will not replace current email/domain alias such as snoco.gov but add to the options. In addition, the State of Washington recently passed a bill requiring Elections processes to have .gov domains in place in order to spark additional trust with residents, citizens, reduce risk of impersonation, etc. as the .gov domain can only be used by certified US Government entities.			
2-Year Objectives - Compliance with State Election services, specifically, RCW 29A.12.050, 29A.12.180 and new section to chapter 29A.12 RCW - Further fortification of the county security posture - Enhanced trust from the public	5-Year Objectives Maintain county security posture and compliance with State laws.	Long-Term Objectives - Compliance with State Election services, specifically, RCW 29A.12.050, 29A.12.180 and new section to chapter 29A.12 RCW - Further fortification of the county security posture - Enhanced trust from the public	
Implementation Plan/Actions - First phase: by end of Q3 2025 Auditor’s Office and specifically Elections will have full access to the @snoco.gov domain - Second phase: make the @snoco.gov alias available to all county employees completed by end of Q1 2026			
Performance Measures Reduction of phishing incidents. Track the number of phishing or spoofing attempts before and after implementation			

- Email delivery success rate. Measure bounce rates and delivery failures. Ensures reliable communication
- Support ticket volume. Monitor tickets related to email issues. Over time these should decrease implying fortification of the domain and user adoption

NOTE: because the default send to and send from will remain snoco.org for a large part of the organization the above measures may not be applicable

SnoCo-18 Integrated Floodplain Management

Lead Points of Contact	Partner Points of Contact	Hazards Mitigated	Funding Sources and Estimated Costs
Surface Water Management - Integrated Floodplain Coordinator	PDS DEM PW	Flooding Goals and Objectives Supported Goals: 1, 2, 3, 4, 5, 6 Objectives: 1.2, 1.5, 1.7, 2.3, 2.4, 3.2, 4.2, 4.4, 5.1, 6.1, 6.4	SWM Fees General Fund HMA \$1 million total: \$250k for Flood Study (from SWM fees); \$750k for CFHMPs- (not funded currently)
Strategy Vision/Objective Alignment with County Strategic Plan: County Goal 3- Preserve our Natural Areas- Forests, Water, and Agricultural Lands by Adopting Integrated Floodplain Management as our Standard Practice. Actions include: - Study options for developing a watershed-level floodplain management framework - Study the county's existing flood management structure and recommend improvements to governance - Develop or update comprehensive flood hazard management plans			
Mitigation Actions/Projects Flood Management Governance and Funding Study (Action 2 above)- Surface Water Management (SWM) is partnering with the Ruckelshaus Center to study the county's existing flood management structure and co-develop options and recommendations for improvements to governance and funding. Phased development of County-wide CFHMP The Floodplain Management Advisory Committee (Directors of PW, PDS, DCNR, DEM) directed staff to work on a phased development of a countywide comprehensive flood hazard mitigation plan. The County will update basin wide plans as resources and funding are available.			
2-Year Objectives - Complete Flood Mgt Study - Secure funding for Stilly CFHMP Action Plan Update	5-Year Objectives - Complete Stilly CFHMP Action Plan update - Secure funding for Snohomish CFHMP work and make substantial progress on update	Long-Term Objectives Complete all CFHMP updates and incorporate in HMP as Flood Chapter	

Implementation Plan/Actions

Flood Management Study

This 15-month study will help the County to gain a greater understanding of how local cities, districts, utilities, and the County coordinate on the issue of flood management, specifically how it is governed and funded and what opportunities might exist to strengthen coordinated governance and funding. The timeline for the project is June 25, 2025 – September 25, 2026. The project is managed by the Snohomish County Integrated Floodplain Management Program.

The County is working in partnership with the Ruckelshaus Center interviewing County staff and stakeholders. The information will be compiled into a report and a presentation when completed.

Phased development of County-wide CFHMP

Two-year funding is committed from the SWM Utility fee.

Implementation through Watershed-scale plan updates (Actions 1 and 3 above). This will start by building off recent [Floodplain Vulnerability Analysis Report](#) to develop an Action Plan(s) with partners that can be added to existing CFHMPs as an Addendum. The existing CFHMPs will be updated to integrate the new action plan and to consider inclusion of new data/science or other studies developed since each plan was approved. Lessons learned from the Stillaguamish Watershed would be adapted to inform the approach for future Watershed CFHMP updates. Will seek grant funding for this work from FCCAP/ other sources. Goal to complete all updates to align with next HMP update (2030).

1. Watershed-Scale Action Plan Update to Stillaguamish Watershed
2. Follow up with update to Snohomish Watershed
3. Continue with updates to other sub-basins

Performance Measures

- Flood Management Study completed with published report and presentation
- Stillaguamish Watershed and Snohomish Watershed action plan updated completed
- Other basin action plans prioritized for completion

SnoCo-19 Mass Care Planning & Response

Lead Points of Contact	Partner Points of Contact	Hazards Mitigated	Funding Sources and Estimated Costs
Human Services Program Planner	DEM Red Cross Public Health DCNR	All hazards Goals and Objectives Addressed Goals: 1, 2, 3, 4, 5, 6 Objectives: 1.4, 2.4, 3.3, 4.3, 5.3, 6.1, 6.4	Community Services Block Grant HMA Cost: \$100,000
Strategy Vision/Objective Enhance Snohomish County’s ability to provide rapid, coordinated, and effective mass care services following a disaster or emergency event.			
Mitigation Strategy - Develop mass care response plans for sheltering, feeding, individual and family assistance center operations, and disaster behavioral health - Seek funding and grant opportunities to perform retrofits and resilience improvements at mass care facilities such as shelters and food distribution sites			
2-Year Objectives - Publish mass care response plans for sheltering, feeding, individual and family assistance center operations, and disaster behavioral health - Provide shelter and disaster behavioral health training to county and voluntary organization staff	5-Year Objectives Develop task forces for sheltering, feeding, and disaster behavioral health	Long-Term Objectives Increase countywide resilience to disaster through preparedness	
Implementation Plan/Actions - Collect information from public agencies and voluntary organizations on their capabilities within mass care functional areas - Convene public agencies and voluntary organizations involved in mass care functions to foster shared understating of roles and responsibilities - Seek input from partner organizations and the broader community - Research best practices and model plans published by federal and state agencies, and outside jurisdictions - Seek funding and grant opportunities to retrofit facilities that serve as disaster or extreme weather shelter, i.e., HVAC maintenance or improvements, emergency power supplies, upgrading fire systems, improving accessibility, and installing pet-friendly features - Seek funding and grant opportunities to improve resilience and ability of Food Banks to improve their capacity following a disaster, i.e., emergency power supplies,			

refrigerated and non-refrigerated food trucks, and increased food storage space
7. Create training and onboarding for task force members
Performance Measures • Published plans • Functional task forces • Number of individuals participating in training • Grants received for mass care facility retrofits • Mass care facility retrofits completed

SnoCo-20 Population Islands Operational Preparedness

Lead Points of Contact DEM	Partner Points of Contact ILA Partners	Hazards Mitigated Earthquake Mass Earth Movement Flood Wildfire Volcano Goals and Objectives Supported Goals: 1, 2, 4, 5, 6 Objectives: 1.3, 1.4, 1.5, 1.6, 2.2, 2.3, 2.4, 2.5, 4.1, 4.3, 5.3, 6.1, 6.4	Funding Sources and Estimated Costs General Fund HMA Funding Cost: ~\$100,000 for trailer project ~\$500,000 for retrofit ~\$75,000 for CPOD analysis ~\$10 million for new EOC facility
Strategy Vision/Objective Use 2019 Regional Catastrophic Preparedness Grant Program (RCPGP) project islanding results to refine operational plans and strategies in a population island scenario and Snohomish County Department of Emergency Management needs a facility that can support extended operations after a catastrophic disaster prevents staff from easily going home after their shift.			
Mitigation Strategy Increase community resilience by implementing the following projects: • Pre-deployed trailer project • Pre-identify alternate EOC and retrofit project • Perform a logistical analysis and identify needs and gaps in the CPOD delivery and distribution process to build a framework towards a population island based last-mile network plan • Identify a new facility for the County's EOC (and DEM staff) that would be rated to withstand disasters and still be functional. The facility should also have the capacity to support numerous staff for 24x7 operations for extended periods			
2-Year Objectives • Finish the buildout of all trailers • Determine pre-deployed trailer locations based on population island maps and staff locations • Develop alternate EOC plan • Localize the regional CPOD CONOPs and implement the CPOD Standard Operating Procedures as part of the CEMP • Identify the needs of a	5-Year Objectives • Develop and conduct training including logistical aspects • Perform a logistical analysis based on WA EMD and FEMA distribution plans and the CPOD annex to the CEMP to identify needs and gaps in the emergency distribution network based on a scenario that creates population islands • Conduct a full-scale	Long-Term Objectives • Maintain equipment and training to set up an alternate EOC anywhere available after a disaster • Ability to stand up and support emergency distribution at CPOD sites • Build out a new EOC facility that can function for 24x7 operations for no less than 60 consecutive days with no less than	

new EOC facility that would support long-term operations Identify multiple locations in the county that could support an EOC with as few hazards as possible	alternate EOC operation with DEM staff (accounting for staff at various sites after a disaster limiting movement throughout the county)	60 personnel
Implementation Plan/Actions - Pre-deploy trailers to other areas of the county, ensuring equipment can be accessed in the North and East parts of the county in a disconnected environment - Work with host agencies to train their staff on the deployment of the trailers to better assist DEM staff if needed - Use the data available on the RCPT population island map to identify preferred CPOD locations for each feasible island - Find potential warehousing sites and use the prioritized transportation network to determine gaps and needs in the distribution system from federal and state debarkation/distribution points to CPOD locations - Review other agencies who have recently retrofit or build a new EOC facility to identify plans and efforts worth pursuing - Create a list of facility requirements for a new EOC facility - Identify multiple locations in the county that would work for a new EOC facility (areas in lower hazard risk areas, areas that work well for communications, etc.) - Work with grant streams and the County Council to identify funding sources for a new EOC facility		
Performance Measures - Equipment staged and staff trained on the deployment of equipment to set up an EOC away from SCDEM - Preferred CPOD and warehouse locations - Gaps and needs analysis for last mile emergency distribution		

SnoCo-21 Public Health Response Capabilities

Lead Department and Points of Contact Health Department – PHEPR	Partner Points of Contact DEM Northwest Health Care Response Network	Hazards Mitigated All hazards with specific emphasis on disease outbreak Goals and Objectives Supported: Goals: 1, 4, 6 Objectives: 1.4; 4.3, 6.4	Funding Sources and Estimated Costs HMA State grant (Foundational Public Health Services FPHS) about \$200,000
Strategy Vision Improve the ESF-8 Taskforce’s work to include co-developed playbooks, plans, and exercises to increase mitigation for impacts from disease outbreaks and other hazards that impact community health and well-being.			
Mitigation Projects • Convene an ESF-8 taskforce to coordinate preparedness and response efforts related to all emergencies • Facilitate exercises specifically addressing preparedness for a future pandemic			
2-Year Objectives • Develop a communications playbook to coordinate messaging among ESF-8 partners • Complete a map of hospital generators throughout Snohomish County	5-Year Objectives • Conduct 2 exercises related to pandemic preparedness and response • Complete updates to the ESF-8 annex	Long-Term Objectives • A network of public health, healthcare, social services, and emergency services partners aligned in mitigation and preparedness goals and able to respond quickly to new threats and hazards	
Implementation Actions 1. Convene regular meetings of the ESF-8 taskforce that contain relevant partners such as Department of Emergency Management, Healthcare, Dentist, Mortuary Services, Medical Examiner, Veterinary Services, Long Term Care, Hospital Coalitions, EMS, and Fire 2. Map locations of hospitals with generators. Use this information to prioritize patient divert status and power resupply during emergencies 3. Develop a communications playbook a. Use the playbook to decrease mis/disinformation in the community especially around emergencies 4. Conduct two exercises related to pandemic preparedness			

Performance Measures

- Number of Taskforce meetings with representation of at least four different areas of the taskforce. Taskforce areas are: Public Health, Healthcare coalition, healthcare, Emergency management, human services, Fire/EMS, Long term care facilities,
- Number of Taskforce meetings per year with a goal of four
- The Health Department conducts two exercises on pandemic preparedness for ESF-8 partners
- Completion of the communication playbook

SnoCo-22 Relic Armor

Lead Department and Points of Contact	Partner Points of Contact	Hazards Mitigated	Funding Sources and Estimated Costs
DCNR SWM Floodplain Services Group	SnoCo PW SnoCo DEM	Flood Goals and Objectives Supported Goals: 1, 4, and 6 Objectives: 1.2, 4.1, 4.2, 4.3, 4.4, 6.4	General Budget Federal Grants State Grants Regional Grants HMA Cost: \$100,000 initial evaluation & prioritization Individual project costs will vary. (\$800,000 for currently identified Lower Pilchuck River projects)
Strategy Vision: Identify utility and possible environmental and property hazards posed by current Snohomish County flood control structures. Identify and target relic flood infrastructure for removal where armored banks or other abandoned infrastructure contributes to hazards to current infrastructure and private property. Identify privately owned parcels in the floodplain that currently inhibit a given river's geomorphic processes the most. Prioritize vacant or structureless property. Explore options to add habitat benefits and identify opportunities for Snohomish County Public Works to mitigate for current projects.			
Mitigation Projects: - Coordinate with Snohomish County Public Works to explore the use of floodplain reconnection, and bank armor removal as environmental mitigation credit for current infrastructure projects - Identify County owned flood control structures and evaluate current management of each structure (COMPLETED) - Identify privately owned and abandoned structures and evaluate for hazard or other negative effect (IN PROGRESS) - Evaluate areas highlighted in geomorphic and channel migration studies for abandoned bank armoring that may prevent natural river processes and cause hazards in other areas - Completed possible projects identified in 2018 Lower Pilchuck River Assessment - Complete other projects that do not overlap with in-progress CFS programs or identify smaller scale opportunities that may benefit from Public Works mitigation involvement or small project funding			
2-Year Objectives: Identify risks from private or abandoned	5-Year Objectives: Test approach with bank armor removal and key	Long-Term Objectives: Develop support for habitat and hazard	

levees, dikes and armoring Evaluate feasibility of SWM & PW collaboration	acquisitions in Lower and Middle Pilchuck River	reduction projects that may be too small for traditional SWM projects
Implementation Actions: - Evaluate feasibility of using Public Works' mitigation needs to conduct removal of small-scale bank armor or other channel alterations - Specifically target projects that may not necessarily be competitive in seeking grant funding for habitat projects. Especially where hazard to infrastructure and private property exist - Remove relic bank armor where vacant land may be protected at expense of utilized land		
Performance Measures: - Remove bank armor to improve river processes and improve riparian habitat - Lower erosion in areas of high river dynamism where vacant or low value land may be protected by relic structures		

SnoCo-23 Residential and Commercial Weatherization Programs

Lead Points of Contact Office of Energy and Sustainability Manager	Partner Points of Contact Human Services Health Dept DEM	Hazards Mitigated Extreme Heat Severe Weather Wildfire Goals and Objectives Addressed Goals: 1, 2, 4, 5, 6 Objectives: 1.4, 2.3, 4.3, 5.3, 5.4, 6.1, 6.4	Funding Sources and Estimated Costs Low Income Home Energy Assistance Program (LIHEAP), PUD, PSE, Matchmaker, HMA Cost: \$3,000,000
Strategy Vision/Objective Commercial Property Assessed Clean Energy & Resiliency (C-PACER) Program Residential Weatherization: • Reduce negative health effects of extreme weather, power outages, and harmful air quality on low-income individuals and households • Increase residential home durability, reducing environmental impacts, and preserving affordable housing stock Commercial Weatherization: • Reduce greenhouse gas emissions, improve energy efficiency, increase renewable energy, promote water conservation, and encourage resiliency in commercial buildings			
Mitigation Strategy Reduce energy costs, enhance health and safety, increase comfort and resiliency in the built environment to promote conservation and support the local economy through job creation. Provide safe environments for residents who might otherwise experience homelessness or ill effects due to heat/extreme weather and/or related air quality issues.			
2-Year Objectives • Weatherize up to 200 low-income qualified residences • Facilitate up to 25 Commercial Efficiency / Resiliency projects	5-Year Objectives • Evaluate program outcomes and consider expanding program and/or including multi-family home weatherization		Long-Term Objectives • Find funding to continue the program to increase resilience in the county
Implementation Plan/Actions 1. (Weatherization / Residential) Weatherize homes for qualified residential clients. Clients must be at or below 150 percent of the federal poverty level 2. (Weatherization/Commercial) Facilitate the approval of loans to qualified commercial building owners			

Performance Measures

- Number of residences weatherized
- Number of CPACER projects completed

SnoCo-24 Seismic Bridge Resilience

Lead Points of Contact Public Works - (Engineering Services – County Bridge Engineer)	Partner Points of Contact (Dept or Agency) Emergency Services WSDOT FHWA Cities/ Tribes within SnoCo	Hazards Mitigated Earthquakes Flooding Mass Earth Movement Severe weather Wildfire Goals and Objectives Supported: Goals: 1, 2, 4, 5, 6 Objectives: 1.3, 1.4, 1.5, 1.6, 2.3, 4.1, 4.3, 4.4, 5.1, 5.2, 5.3, 5.4, 6.1, 6.2, 6.3, 6.4	Funding Sources and Estimated Costs: FHWA Federal Grants WSDOT/State Grants FEMA - HMA County Road Fund Cost: Varies \$5-\$20M
Strategy Vision/Objective: Construct, retrofit, inspect, monitor, and replace all vulnerable bridges within the county so they meet seismic standards and mitigate the threat of flood, scour, and severe weather events. Build additional capabilities to mitigate, prepare for, respond to and recover from future emergencies impacting our bridge infrastructure.			
Mitigation Strategy - Inspect all bridges every two years - Monitor bridges for scour and if needed, develop a scour plan of action - Monitor and prioritize scour risk bridges - Monitor and prioritize seismic risk bridges - Fund and replace or rehab bridges that are in “poor” condition - Fund and replace or rehab priority bridges that are seismically vulnerable - Fund and replace or rehab priority bridges that are scour vulnerable - Additional planning and improvements to prepare, respond, and recover from emergencies impacting bridge infrastructure			
2-Year Objectives: - Continue to inspect bridges every two years per the National Bridge Inspection Standards - Continue with bridge replacement and rehabilitation plan - Complete an annual bridge	5-Year Objectives: Complete projects on the TIP including: - Bridge 102 - Pilchuck Creek Bridge 626 - Larson Bridge 101 - Snohomish River Bridge 1 - Complete bridge inventory hazard mitigation scoping - Complete required underwater bridge inspections per NBIS	Long-Term Objectives: - Continue to inspect bridges every two years per the National Bridge Inspection Standards - Retain and train county bridge inspection staff to NBIS standards - Ongoing – leverage existing resources	

- report • Complete following Bridge projects: - o Swamp Creek Bridge 503 - o Jordan Bridge 214 • Complete one bridge hazard mitigation scoping: - o Sultan Bridge 94		- with new funding opportunities to further emergency preparedness planning, response and recovery efforts • Retrofit, inspect & monitor, and complete bridge projects with scour and seismic upgrades
Implementation Plan/Actions 1. Support appropriate bridge replacement and retrofitting using best available science to assure life safety and the functionality of critical facilities pre and post disaster 2. Implement structural and non-structural mitigation measures to reduce risk to vulnerable assets 3. Maintain and train Public Works inspection staff to NBIS standards for bridge inspections 4. Reporting inspections to WSDOT and FHWA 5. Compile annual bridge report 6. Apply for funding 7. Prioritize seismic rehab and replacement projects 8. Prioritize scour rehab and replacement projects 9. Align the annual bridge report with the Hazard mitigation plan goals and objectives 10. Conduct additional emergency preparedness planning for our bridge program as funding and resources become available		
Performance Measures • Number of bridge inspections completed each year • Annual bridge report completed each year • Number of major work orders completed year over year • Number of projects completed on the TIP every 5 years		

SnoCo-25 Solid Waste Infrastructure Modernization and Improvements

Lead Points of Contact	Partner Points of Contact	Hazards Mitigated	Funding Sources
Public Works Solid Waste Director or Operations Manager	Interlocal Cities (Solid Waste Comp Plan) Snohomish County Health Department Department of Ecology Puget Sound Clean Air Agency BNSF Railway Amtrak WSDOT	Earthquake Flood Severe Weather Wildfire Human-Caused and Technological Hazards Goals and Objectives Supported Goals: 1, 2, 4, 5, 6 Objectives: 1.3, 1.4, 1.5, 2.1, 2.3, 4.1, 4.3, 5.3, 6.1, 6.4	Solid Waste Fund 402 State and Federal Grants HMA Bonds Cost: Estimated \$100,000,000
Strategy Vision: Ensure the Solid Waste Division's capacity to deliver efficient, environmentally responsible, and fiscally sustainable services, maintaining uninterrupted operations and robust emergency responsiveness throughout all phases of hazard response and recovery. Objectives: • Modernize aging solid waste facility infrastructure by bringing it up to current standards, ensuring capacity for future processing needs, and integrating advanced technologies, thereby enhancing operational efficiency and sustainability • Identify, plan, and implement improvements in solid waste facilities, focusing on designing and building future-ready infrastructure that supports uninterrupted operations and robust emergency responsiveness • Accommodate new waste streams in compliance with regulatory mandates, ensuring the capability to accept and process new materials efficiently and sustainably • Build additional capabilities to mitigate, prepare for, respond to and recover from future emergencies impacting our solid waste infrastructure and operations			

Mitigation Projects • Design and construct the North County Recycling and Transfer Station (NCRTS) • Improve Intermodal Facility (IM) container storage capacity, processing ability and track realignment • Replace the Household Hazardous Waste Facility (HHW) • Replace Building M on the Cathcart Way Operations Center • Dubuque Road Drop Box redevelopment and improvements • Reimagining of the Disaster Debris Management plan • Additional infrastructure and site improvements to prepare for, respond to, and recover from future emergencies		
2-Year Objectives • Complete the updates to the Disaster Debris Management Plan • Begin construction on Phase I and II of the IM improvements • Complete replacement of Building M	5-Year Objectives • Complete the design and begin construction of NCRTS • Locate and begin planning for a new HHW facility • Finalize plans for improvements to the Dubuque Road Drop Box	Long-Term Objectives • Complete phase III of the IM project with the realignment of the BNSF Rogers main line track • Ongoing - leverage existing work and resources with new funding opportunities to further other emergency preparedness planning, response and recovery efforts
Implementation Plan/Actions: Conduct additional emergency preparedness planning for our solid waste program as funding and resources become available. Each project will be designed and consider a variety of the following project management principles 1. Define Clear Objectives and Scope 2. Stakeholder Engagement and Communication 3. Resource Allocation and Management 4. Risk Management 5. Timeline and Milestone Planning 6. Budget Management 7. Quality Assurance and Control 8. Change Management 9. Sustainability and Environmental Considerations 10. Continuous Improvement		
Performance Measures: • Align with individual project milestones		

SnoCo-26 The Capital Improvement Program Hazard Screening

Lead Points of Contact	Partner Points of Contact	Hazards Mitigated	Funding Sources
PDS – LRP DEM – RAMP	County Depts participating in the CIP	Dam Failure, Earthquake & Tsunami, Extreme Heat & Drought, Flood, Mass Earth Movement, Severe Weather Events, Volcano, Wildfire Climate Change Impacts: Drought; Extreme Heat; Extreme Precipitation; Flooding; Reduced Snowpack; Sea Level Rise; and, Wildfire Goals: 1, 4, 5, 6 Objectives: 1.1, 1.2, 1.4, 1.5, 4.1, 4.2, 4.3, 5.3, 6.1, 6.2, 6.3, 6.4h	General Fund Potential Grants Hazard Mitigation Assistance
Strategy Vision/Objective			
Integrate hazard mitigation screening into the County’s Capital Improvement Program (CIP) to improve the resilience of publicly funded projects and infrastructure to natural hazards and climate change impacts. This will comply with the climate change and resiliency requirements in RCW 36.70A.020 (14) and (15) and RCW 36.70A.095 as well as land use and capital planning considerations required in the FEMA Local Mitigation Planning Guide (Element D3).			
Mitigation Strategy			
• Incorporate into the Capital Improvement Program (CIP) process, a step to document natural hazard screening and mitigation planning • Develop a clearinghouse or hub site of single points of truth data sources for screening • Include a list of common screening questions for departments to consider • Use screening results to document mitigation progress in the Annual Progress Report and to develop new mitigation strategies			

2-Year Objectives	5-Year Objectives	Long-Term Objectives
• Integrate natural hazard and climate change impact screening into the County's CIP as part of the biennial budget • Document hazard and climate change screening for projects listed in the 2027-28 CIP • List hazard mitigation measures included in project designs and programs in the HMP section of the CIP	• Track mitigation measures in project designs and programs within the CIP and included in HMP mitigation action items • Prepare the next HMP update with upcoming CIP projects that have been screened and considered for the impacts of natural hazards and climate change	• Screening for hazard impacts during the design process results in publicly funded projects and infrastructure that are resilient to known hazards and the effects of climate change
Implementation Plan/Actions 1. Integrate Hazard Mitigation Planning with the Capital Improvement Plan a. Leverage interdepartmental coordination efforts to prioritize actions to increase county resilience 2. Screening Process a. Socialize the developed process and screening method with departments b. Departments can choose to use their own internal screening process and document their existing process instead		
Metric • Implementing the plan alignment measures into the CIP and Comp Plan update process • Documentation of mitigation efforts and potential mitigation projects in the 2027-28 CIP • Inclusion of 2027-28 CIP projects and programs in the 2030 HMP Update		

Appendix A: Acronyms and Definitions

Acronym	Definition	Acronym	Definition
BFE	Base Flood Elevation	MCE	Maximum Creditable Earthquake
CEMP	Comprehensive Emergency Management plan	MM	Modified Mercalli Scale
CIP	Capital Improvements Plan	NEHRP	National Earthquake Hazards Reduction Program
CFR	Code of Federal Regulations	NFIP	National Flood Insurance Program
CRS	Community Rating System	NCDC	National Climatic Data Center
DEM	Department of Emergency Management	NGVD	National Geodetic Vertical Datum
DHS	Department of Homeland Security	NOAA	National Oceanic and Atmospheric Administration
DMA	Disaster Mitigation Act	NWS	National Weather Service
DNR	Department of Natural Resource	OFM	Office of Financial Management
DSO	Dam Safety Office	PDM	Pre-Disaster Mitigation Grant Program
EAP	Emergency Action Plan	PHMSA	Pipeline and Hazardous Materials Safety Administration
EPA	U.S. Environmental Protection Agency	PGA	Peak Ground Acceleration
ESCA	Emergency Services Coordinating Agency	PUD	Planned Unit Developments
ESA	Endangered Species Act	RCW	Revised Code of Washington
FCAAP	Flood Control Account Assistance Program	SCNHMP	Snohomish County Natural Hazard Mitigation Plan
FCD	Flood Control District	SFHA	Special Flood Hazard Area
FEMA	Federal Emergency Management Agency	SHELDUS	Special Hazard Events and Losses Database for the US
FERC	Federal Energy Regulatory Commission	SMA	Shoreline Management Act
FIRM	Flood Insurance Rate Map	UBC	Uniform Building Code
GIS	Geographic Information System	UDC	Unified Development Code
GMA	Growth Management Act	UGA	Urban Growth Area
HAZUS-MH	Hazards, United States-Multi Hazard	USGS	United States Geological Survey
HIVA	Hazard Inventory and Vulnerability Analysis	WAC	Washington Administrative Code
HMGP	Hazard Mitigation Grant Program	WAEMD	Washington Emergency Management Division
IBC	International Building Code	WRIA	Water Resource Inventory Area
IRC	International Residential Code	WSDOT	WA State Department of Transportation

Definitions

100-Year Floodplain—The area flooded by the flood that has a 1 percent chance of being equaled or exceeded each year. This is a statistical average only; in fact, a 100-year flood can occur more than once in a short period of time. The 1-percent annual chance flood is the standard used by most federal and state agencies.

500-year Floodplain—Also known as the 0.2 percent annual chance flood. The area inundated by floodwaters that has a 0.2 percent chance of being equaled or exceeded each year.

Active Assailant—An individual actively engaged in killing or attempting to kill people in a confined and populated area. In most cases, active shooters use firearms and there is generally no pattern or method to their selection of victims.

Active Shooter—One or more individuals actively engage in killing or attempting to kill people in a populated area using one or more firearms.

Aircraft Accident—An occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight and all such persons have disembarked, and in which any person suffers death or serious injury, or in which the aircraft receives substantial damage.

Aircraft Incident—An occurrence other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operations.

Ash fall—Volcanoes tend to erupt lavas so thick and charged with gases that they explode into ash rather than flow.

Asset—An asset is any manmade or natural feature that has value, including, but not limited to, people; buildings; infrastructure, such as bridges, roads, sewers, and water systems; lifelines, such as electricity and communication resources; and environmental, cultural, or recreational features such as parks, wetlands, and landmarks.

Benioff Earthquake—Sometimes called “deep quakes,” these occur in the Pacific Northwest when the Juan de Fuca plate breaks up underneath the continental plate, approximately 30 miles beneath the earth’s surface.

Building—A building is defined as a structure that is walled and roofed, principally aboveground, and permanently fixed to a site. The term includes manufactured homes on permanent foundations on which the wheels and axles carry no weight.

Cluster—An aggregation of cases grouped in place and time that are suspected to be greater than the number expected.

Community Rating System (CRS)—The CRS is a voluntary program under the NFIP that rewards participating communities (provides incentives) for exceeding the minimum requirements of the NFIP and completing activities that reduce flood hazard risk by providing flood insurance premium discounts.

Critical Area—An area defined by state or local regulations as deserving special protection because of unique natural features or its value as habitat for a wide range of species of flora and fauna. A sensitive/critical area is usually subject to more restrictive development regulations.

Critical Facility—Those facilities and infrastructure that are critical to the health and welfare of the population.

Crustal Earthquake—Crustal quakes occur at a depth of 5 miles to 10 miles beneath the earth's surface and are associated with fault movement within a surface plate.

Cubic Feet per Second (cfs)—Discharge or river flow is commonly measured in cfs. One cubic foot is about 7.5 gallons of liquid.

Dam Failure—An uncontrolled release of impounded water due to structural deficiencies in the water barrier.

Dam—Any artificial barrier and/or any controlling works, together with appurtenant works, that can or do impound or divert water.

Debris Flow—A moving mass of loose mud, sand, soil, rock, water, and air moving down a slope under the influence of gravity.

Disaster Mitigation Act of 2000 (DMA)—The DMA is Public Law 106-390 and is the latest federal legislation enacted to encourage and promote proactive, pre-disaster planning as a condition of receiving financial assistance under the Robert T. Stafford Act.

Drainage Basin—A basin is the area within which all surface water (whether from rainfall, snowmelt, springs, or other sources) flows to a single water body or watercourse.

Earthquake—The shaking of the ground caused by an abrupt shift of rock along a fracture in the earth or a contact zone between tectonic plates. Earthquakes are typically measured in both magnitude and intensity.

Ecosystem Services—Ecosystem services are the benefits people obtain from the ecosystem. They are grouped in four broad categories: (1) provisioning, such as the production of food and water; (2) regulating, such as control of the climate and disease; (3) supporting, such as the nutrient cycles and crop pollination; and (4) cultural, such as spiritual and recreational benefits.

Endemic—Refers to the constant presence and/or usual prevalence of a disease or infectious agent in a population within a geographic area.

Epicenter—The point on the earth's surface directly above the hypocenter of an earthquake. The location of an earthquake is commonly described by the geographic position of its epicenter and by its focal depth.

Epidemic—An increase, often sudden, in the number of cases of a disease above what is normally expected in that population in that area.

Fault—A fracture in the earth's crust along which two blocks of the crust have slipped with respect to each other. Most common is a strike-slip, normal, or thrust fault.

Flood—Inundation of normally dry land resulting from rising and overflowing of a body of water.

Floodplain—Land area along the sides of a river that becomes inundated with water during a flood.

Hazardous Substance—Those substances listed in Appendix A of 49 CFR §172.101; does not include petroleum, natural gas, liquefied natural gas, or fuel.

Hazardous waste—Materials subject to 40 CFR §262.

Hazards U.S. Multi-Hazard (Hazardus-MH) Loss Estimation Program—Hazardus-MH is a GIS-based program used to support the development of risk assessments as required under the DMA.

High Hazard Potential Dam—Dams assigned the high hazard potential classification are those where failure or operational issues will probably cause loss of human life.

Interface Area—An area susceptible to wildfires and where wildland vegetation and urban or suburban development occur together. An example would be smaller urban areas and dispersed rural housing in forested areas.

Inundation Area—The area of land that would be flooded following a dam failure.

Lahar—A rapidly flowing mixture of water and rock debris that originates from a volcano. While lahars are most commonly associated with eruptions, heavy rains, and debris accumulation, earthquakes may also trigger them.

Landslide—The sliding movement of masses of loosened rock and soil down a hillside or slope. Slope failures occur when the strength of the soils forming the slope is exceeded by the pressure, such as weight or saturation, acting upon them.

Lava Flow—The least hazardous threat posed by volcanoes. Cascades volcanoes are normally associated with slow moving andesite or dacite lava.

Local Government—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.

Mass killings—Three or more killings in a single incident.

Mass Earth Movement—A collective term for landslides, debris flows, falls and sinkholes.

Medical Countermeasures—life-saving medicines and medical supplies that can be used to diagnose, prevent, protect from, or treat conditions associated with chemical, biological, radiological, or nuclear threats, emerging infectious disease, or natural disaster.

Mitigation—A preventive action that can be taken in advance of an event that will reduce or eliminate the risk to life or property.

Mitigation Actions—Mitigation actions are specific actions to achieve goals and objectives that minimize the effects from a disaster and reduce the loss of life and property.

Mudslide (or Mudflow)—A river of rock, earth, organic matter, and other materials saturated with water.

Outbreak—The same definition of epidemic but is often used for a more limited geographic area, jurisdiction, or group of people.

Pandemic—An epidemic that has spread over several countries or continents, usually affecting many people.

Preparedness—Actions that strengthen the capability of government, residents, and communities to respond to disasters.

Probability of Occurrence—The probability of occurrence is a statistical measure or estimate of the likelihood that a hazard will occur. This probability is generally based on past hazard events in the area and a forecast of events that could occur in the future. A probability factor based on yearly values of occurrence is used to estimate probability of occurrence.

Pyroclastic Flow—Pyroclastic flows are avalanches of hot (570–1470° F) ash, rock fragments, and gas that move at high speeds down the sides of a volcano during explosive eruptions or when the edge of a thick, viscous, lava flow or dome breaks apart or collapses. Speeds range from 20 mph to

more than 200 mph.

Return Period—The average period of time in years between occurrences of a particular hazard (equal to the inverse of the annual frequency of occurrence).

Risk—Risk is the estimated impact that a hazard would have on people, services, facilities, and structures in a community. Risk measures the likelihood of a hazard occurring and resulting in an adverse condition that causes injury or damage. Risk is often expressed in relative terms such as a high, moderate, or low likelihood of sustaining damage above a particular threshold due to occurrence of a specific type of hazard. Risk also can be expressed in terms of potential monetary losses associated with the intensity of the hazard.

Runup—A measurement of the height of the water onshore observed above a reference sea level.

Seiche—A standing wave in an enclosed or partly enclosed body of water, normally caused by earthquake activity; can affect harbors, bays, lakes, rivers, and canals.

Severe Local Storm—Small atmospheric systems including tornadoes, thunderstorms, and windstorms. Typically, major impacts from a severe storm are on transportation infrastructure and utilities. These storms may cause a great deal of destruction and even death, but their impact is generally confined to a small area.

Significant Hazard Dam—Those dams where failure or operational issues result in no probable loss of human life but can cause economic loss, environmental damage, disruption of lifeline facilities, or can impact other concerns.

Sinkhole—A collapse depression in the ground with no visible outlet. Its drainage is subterranean. It is commonly vertical-sided or funnel-shaped.

Sporadic—Refers to a disease that occurs infrequently or irregularly.

Stafford Act—The Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 100-107, was signed into law on November 23, 1988. This law amended the Disaster Relief Act of 1974, Public Law 93-288. The Stafford Act is the statutory authority for most federal disaster response activities, especially as they pertain to FEMA and its programs.

Stakeholder—Business leaders, civic groups, academia, non-profit organizations, major employers, managers of critical facilities, farmers, developers, special purpose districts, and others whose actions could impact hazard mitigation.

Stratovolcano—Typically steep-sided, symmetrical cones of large dimension built of alternating layers of lava flows, volcanic ash, cinders, blocks, and bombs, rising as much as 8,000 feet above their bases. The volcanoes in the Cascade Range are all stratovolcanoes.

Stream Bank Erosion—Stream bank erosion is common along rivers, streams, and drains where banks have been eroded, sloughed, or undercut.

Sustainable Hazard Mitigation—This concept includes the sound management of natural resources, local economic and social resiliency, and the recognition that hazards, and mitigation must be understood in the largest possible social and economic context.

Thunderstorm—Typically 15 miles in diameter and lasting about 30 minutes, thunderstorms are underrated hazards. Lightning, which occurs with all thunderstorms, is a serious threat to human life. Heavy rains over a small area in a short time can lead to flash flooding. Strong winds, hail, and tornadoes are also dangers associated with thunderstorms.

Tsunami—Comes from the Japanese words for harbor (“tsu”) and wave (“nami”); a long high sea

wave caused by an earthquake, submarine landslide, or other disturbance.

Virus—A program that infects computer files by inserting a copy of itself into the file

Volcano—A vent in the planetary crust.

Vulnerability—Vulnerability describes how exposed or susceptible an asset is to damage. Vulnerability depends on an asset's construction, contents, and the economic value of its functions.

Watershed—A watershed is an area that drains downgradient from areas of higher land to areas of lower land to the lowest point, a common drainage basin.

Wildfire—Fires that result in uncontrolled destruction of forests, brush, field crops, grasslands, and real and personal property in non-urban areas. Because of their distance from firefighting resources, they can be difficult to contain and cause a great deal of destruction.

Windstorm—A storm featuring violent winds. Southwesterly winds are associated with strong storms moving onto the coast from the Pacific Ocean. Southern winds parallel to the coastal mountains are the strongest and most destructive winds. Windstorms tend to damage ridgelines that face into the winds.

Winter Storm—A storm having significant snowfall, ice, and/or freezing rain; the quantity of precipitation varies by elevation.

Zoning Ordinance—The zoning ordinance designates allowable land use and intensities for a local jurisdiction. Zoning ordinances consist of two components: a zoning text and a zoning map.

Appendix B: Planning Process Documentation

Table B.1: The Public Planning Committee Members

Role	Name	Organization
Annex Partner Planning Team	Amitava Michael Kundu	Alderwood Water & Wastewater
Annex Partner Planning Team	Paul Ellis	City of Arlington
Annex Partner Planning Team	Shawn Friang	City of Arlington
Annex Partner Planning Team	Bill Ferry	City of Brier
Annex Partner Planning Team	Lee Michaelis	City of Brier
Annex Partner Planning Team	Loi Dawkins	City of Edmonds
Annex Partner Planning Team	Denise Beaston	City of Gold Bar
Annex Partner Planning Team	Rich Norris	City of Gold Bar
Annex Partner Planning Team	Brent Kirk	City of Granite Falls
Annex Partner Planning Team	Charles White	City of Granite Falls
Annex Partner Planning Team	Amber Brokenshire	City of Lake Stevens
Annex Partner Planning Team	Maximilian Roth	City of Lake Stevens
Annex Partner Planning Team	Brian Kirk	City of Lynnwood
Annex Partner Planning Team	Zack Spencer	City of Lynnwood
Annex Partner Planning Team	Eric Chartrand	City of Mill Creek
Annex Partner Planning Team	Stan White	City of Mill Creek
Annex Partner Planning Team	Jeffrey Jolley	City of Monroe
Annex Partner Planning Team	Paul Ryan	City of Monroe
Annex Partner Planning Team	Carolyn Hope	City of Mountlake Terrace
Annex Partner Planning Team	Gary Schimek	City of Mountlake Terrace
Annex Partner Planning Team	Gael Fisk	City of Mukilteo
Annex Partner Planning Team	Matt Nienhuis	City of Mukilteo
Annex Partner Planning Team	Ann Ray	City of Snohomish
Annex Partner Planning Team	Shari Ireton	City of Snohomish
Annex Partner Planning Team	Amanda Slattery	City of Stanwood
Annex Partner Planning Team	Scott Black	City of Stanwood
Annex Partner Planning Team	Greg Piland	City of Sultan
Annex Partner Planning Team	Nate Morgan	City of Sultan
Annex Partner Planning Team	Tyler Christian	City of Sultan
Annex Partner Planning Team	Ryan Zavala	Community Transit
Annex Partner Planning Team	Scott Eastman	Community Transit
Annex Partner Planning Team	Amanda Worzella	Cross Valley Water
Annex Partner Planning Team	Christine Lamb	Cross Valley Water
Annex Partner Planning Team	Maria Foster	Diking District #1
Annex Partner Planning Team	Stan Rothfuss	Diking District #1
Annex Partner Planning Team	Ruth Brandal	Diking District #2
Annex Partner Planning Team	Tara Luckie	Diking District #2
Annex Partner Planning Team	Ben Krause	Drainage District #13
Annex Partner Planning Team	Dean Pakinas	Drainage District #13
Annex Partner Planning Team	Michelle Canfield	French Slough Flood Control District
Annex Partner Planning Team	Scott Lane	French Slough Flood Control District

Role	Name	Organization
Annex Partner Planning Team	Mariah Low	Lake Stevens Sewer District
Annex Partner Planning Team	Rosalind Gorc	Lake Stevens Sewer District
Annex Partner Planning Team	Don Bailey	Marshland Flood Control District
Annex Partner Planning Team	Gary Brandstetter	Marshland Flood Control District
Annex Partner Planning Team	Jennifer Egger	Marysville Fire
Annex Partner Planning Team	Ned Vander Pol	Marysville Fire
Annex Partner Planning Team	Tom Maloney	Marysville Fire
Annex Partner Planning Team	Dave Barnes	Mukilteo Water & Wastewater
Annex Partner Planning Team	Kendra Hovis	Mukilteo Water & Wastewater
Annex Partner Planning Team	Aaron Hansen	Olympic View Water & Sewer
Annex Partner Planning Team	Billy Ward	Olympic View Water & Sewer
Annex Partner Planning Team	Bob Danson	Olympic View Water & Sewer
Annex Partner Planning Team	Angela Harris	Port of Edmonds
Annex Partner Planning Team	Brittany Williams	Port of Edmonds
Annex Partner Planning Team	Brandon Whitaker	Port of Everett
Annex Partner Planning Team	Laura Gurley	Port of Everett
Annex Partner Planning Team	Curt Brees	Silver Lake Water & Sewer
Annex Partner Planning Team	Hawk Radosevich	Silver Lake Water & Sewer
Annex Partner Planning Team	Amy Lucas	Snohomish County
Annex Partner Planning Team	Rebecca Carpenter	Snohomish County
Annex Partner Planning Team	Eric Andrews	Snohomish County Fire District #26 - Sky Valley
Annex Partner Planning Team	Robert Thurston	Snohomish County Fire District #26 - Sky Valley
Annex Partner Planning Team	Jim Fulcher	Snohomish County Fire District #5 - Sultan
Annex Partner Planning Team	Seth Johnson	Snohomish County Fire District #5 - Sultan
Annex Partner Planning Team	Hunter Burchard	Snohomish County Public Utility District No 1
Annex Partner Planning Team	Lisa Jackson	Snohomish County Public Utility District No 1
Annex Partner Planning Team	Scott Parker	Snohomish County Public Utility District No 1
Annex Partner Planning Team	Elsa Sexton	Snohomish Regional Fire & Rescue
Annex Partner Planning Team	Michael McConnell	Snohomish Regional Fire & Rescue
Annex Partner Planning Team	Elaris Perez	Stillaguamish Tribe of Indians
Annex Partner Planning Team	Matt Ecker	Stillaguamish Tribe of Indians
Annex Partner Planning Team	Bob Eastman	South Snohomish County Fire and Rescue
Annex Partner Planning Team	Craig Willis	South Snohomish County Fire and Rescue
Annex Partner Planning Team	Dan Rankin	Town of Darrington
Annex Partner Planning Team	Dianne Davis	Town of Darrington
Annex Partner Planning Team	Kim Peterson	Town of Index

Role	Name	Organization
Annex Partner Planning Team	Norman Johnson	Town of Index
Annex Partner Planning Team	Collin Harlow	Town of Woodway
Annex Partner Planning Team	Heidi Napolino	Town of Woodway
Emergency Management Working Group	David Byrd	Snohomish County Auditor's Office
Emergency Management Working Group	Maxim Corona	Snohomish County Auditor's Office
Emergency Management Working Group	Cynthia Foley	Snohomish County Council
Emergency Management Working Group	Sharon Walker	Snohomish County Department of Conservation and Natural Resources - Parks and Recreation
Emergency Management Working Group	Kit Crump	Snohomish County Department of Conservation and Natural Resources - Surface Water Management
Emergency Management Working Group	Anjelah Boyd	Snohomish County Department of Emergency Management
Emergency Management Working Group	Brett Garriss	Snohomish County Department of Emergency Management
Emergency Management Working Group	Daria Gruzdeva	Snohomish County Department of Emergency Management
Emergency Management Working Group	David Fine	Snohomish County Department of Emergency Management
Emergency Management Working Group	Drew Schwitters	Snohomish County Department of Emergency Management
Emergency Management Working Group	Jarrold Dibble	Snohomish County Department of Emergency Management
Emergency Management Working Group	Jayne Haselow	Snohomish County Department of Emergency Management
Emergency Management Working Group	Krystal Craig	Snohomish County Department of Emergency Management
Emergency Management Working Group	Melody Ovard	Snohomish County Department of Emergency Management
Emergency Management Working Group	Rachel Smith	Snohomish County Department of Emergency Management
Emergency Management Working Group	Sammie Keller	Snohomish County Department of Emergency Management
Emergency Management Working Group	Jason Biermann	Snohomish County Executive's Office
Emergency Management Working Group	Wil Johnson	Snohomish County Executive's Office
Emergency Management Working Group	Ian Andrews	Snohomish County Facilities
Emergency Management Working Group	Paul Cailotto	Snohomish County Facilities

Role	Name	Organization
Emergency Management Working Group	Jennifer Reid	Snohomish County Health Department
Emergency Management Working Group	Mandy Iverson	Snohomish County Human Resources
Emergency Management Working Group	Nathan Marti	Snohomish County Human Services
Emergency Management Working Group	Tyler Verda	Snohomish County Human Services
Emergency Management Working Group	Lisa Hillman	Snohomish County IT
Emergency Management Working Group	Eileen Canola	Snohomish County Planning and Development
Emergency Management Working Group	Geoff Enns	Snohomish County Prosecutor's Office
Emergency Management Working Group	Kole Braaten	Snohomish County Public Works
Emergency Management Working Group	Manuela Winter	Snohomish County Public Works
Emergency Management Working Group	Raulie Robertson	Snohomish County Sheriff's Office
Emergency Management Working Group	Steven McDonald	Snohomish County Sheriff's Office
Snohomish County Tomorrow Planning Advisory Committee	Amy Rusko	City of Arlington
Snohomish County Tomorrow Planning Advisory Committee	Jason Greenspan	City of Bothell
Snohomish County Tomorrow Planning Advisory Committee	Shane Hope	City of Edmonds
Snohomish County Tomorrow Planning Advisory Committee	Yorik Stevens-Wajda	City of Everett
Snohomish County Tomorrow Planning Advisory Committee	Rich Norris	City of Gold Bar
Snohomish County Tomorrow Planning Advisory Committee	Brent Kirk	City of Granite Falls
Snohomish County Tomorrow Planning Advisory Committee	Russ Wright	City of Lake Stevens
Snohomish County Tomorrow Planning Advisory Committee	David Kleitsch	City of Lynnwood
Snohomish County Tomorrow Planning Advisory Committee	Karl Almgren	City of Lynnwood
Snohomish County Tomorrow Planning Advisory Committee	Angela Gemmer	City of Marysville
Snohomish County Tomorrow Planning Advisory Committee	Jeff Ryan	City of Mill Creek
Snohomish County Tomorrow Planning Advisory Committee	Lance Bailey	City of Monroe

Role	Name	Organization
Snohomish County Tomorrow Planning Advisory Committee	Christy Osborn	City of Mountlake Terrace
Snohomish County Tomorrow Planning Advisory Committee	Andrew Galuska	City of Mukilteo
Snohomish County Tomorrow Planning Advisory Committee	Brooke Eidem	City of Snohomish
Snohomish County Tomorrow Planning Advisory Committee	Patricia Love	City of Stanwood
Snohomish County Tomorrow Planning Advisory Committee	Mike McCrary	Snohomish County
Snohomish County Tomorrow Planning Advisory Committee	Dan Rankin	Town of Darrington
Snohomish County Tomorrow Planning Advisory Committee	Jenny Johnson	Town of Index
Snohomish County Tomorrow Planning Advisory Committee	Bill Trimm	Town of Woodway
Snohomish County Tomorrow Planning Advisory Committee	Julia Gold	Tulalip Tribes
Snohomish County Organizations Advancing Readiness, Response, Recovery, and Resiliency (SOAR4)	Group of government, nonprofit, and other community organizations with an interest in promoting effective disaster recovery in Snohomish County	Coordinator – Tyler Verda, Snohomish County Department of Human Services

Table B.2: High Hazard Potential Dam Workshop Attendees

Role	Name	Organization
Organizer and Facilitator	Rebecca Carpenter	Snohomish County Department of Emergency Management
Co-Facilitator	Amy Lucas	Snohomish County Department of Emergency Management
Support	Jarrold Dibble	Snohomish County Department of Emergency Management
Subject Matter Expert	Otis Hatfield	US Army Corp of Engineers
Dam Owner	Orin Barlund	Barlund Dairy Lagoon
Dam Owner	Bette Barlund	Barlund Dairy Lagoon
Dam Owner	Russell Larmay	Boeing
Dam Owner	Jeff Marrs	City of Everett
Dam Owner	Sierra Magnuson	City of Everett
Dam Owner	Sarah LaVelle	City of Marysville
Dam Owner	David Jackson	City of Marysville
Dam Owner	Molly Graham	Lake Kayak Dam
Dam Owner	Eric Blankenship	Snohomish County Surface Water Management
Dam Owner	Jodeen Lind	Snohomish County Surface Water Management
Dam Owner	Scott Parker	Snohomish PUD
Dam Owner	Hunter Burchard	Snohomish PUD
Dam Owner	Lisa Jackson	Snohomish PUD

Table B.3: Public Planning Committee Meetings

Date	Meeting	Summary	Attendees
9/18/2024	Coordinated Diking Council	Provided the diking districts represented on the council an overview of the HMP planning process and timeline and invited them to join the planning team.	Project Team, County Depts, Coordinated Diking Council
1/21/2025	Emergency Management Working Group (EMWG)	Kick-off meeting for County departments who were briefed on the HMP document and the planning process and timeline.	Project Team, EMWG
2/13/2025	Snohomish County Tomorrow Planning Advisory Committee (SCT PAC)	Gave the SCT PAC representatives an overview of the HMP planning process and explained the update methodology and update timeline.	Project Team, SCT PAC
3/18/2025	EMWG	Introduced Hazard Identification and Risk Assessment (HIRA) survey to County department representatives. Planning Team members were briefed on the HIRA methodology and scoring rubric and given a link to the HIRA survey for scoring.	Project Team, EMWG
3/26/2025	HIRA Survey Kick-Off	Email was sent out with the full HIRA survey to all planning members with invites to eight office hour meetings with the Project Team for any questions.	All Public Planning Committee Members
4/1/2025	Integrated Floodplain Management (IFM) Advisory Group	Committee members were briefed on the HIRA methodology and scoring rubric and given a link to the HIRA survey for scoring.	Project Team, Subject Matter Experts
4/10/2025	Annex Partner Planning Team	Kick-off meeting for annex planning partners. Gave planning partners an overview of the HMP planning process and explained the update methodology and update timeline. Reviewed their initial HIRA survey results.	Project Team, Annex Planning Partners

Date	Meeting	Summary	Attendees
4/16/2025	Interdepartmental Climate Resiliency Committee (ICRC)	Committee members were briefed on the HIRA methodology and scoring rubric and given a link to the HIRA survey for scoring.	Project Team, Subject Matter Experts
5/6/2025	IFM Advisory Group	Core group members were briefed on the 2020 flood mitigation focused goals and objectives and were given the opportunity to give feedback on new language for 2025 Goals and Objectives.	Project Team, Subject Matter Experts
5/8/2025	Annex Partner Planning Team	Discussed all Goals and Objectives and proposed updates.	Project Team, Annex Planning Partners
5/8/2025	SCT PAC	Reviewed the HIRA survey results and changes to the identified hazards.	Project Team, SCT PAC
5/20/2025	EMWG	Planning Team members were briefed on the 2020 goals and objectives and were given the opportunity to give feedback on new language for 2025 Goals and Objectives.	Project Team, EMWG
6/12/2025	Annex Partner Planning Team	Finalized suggested changes for the updated draft Goals and Objectives. Discussed the updated hazards and held a workshop to identify potential impacts and cascading impacts for each hazard.	Project Team, Annex Planning Partners
6/12/2025	SCT PAC	Finalized suggested changes for the updated draft Goals and Objectives.	Project Team, SCT PAC
6/25/2025	High Hazard Potential Dam Workshop	Invited a combination of public dam owners, private dam owners, WA Dam Safety Office, and US Army Corp of Engineers to attend a hybrid workshop. The workshop included a discussion of all dam risk, specific identified risks for each dam	Project Team, Dam Owners, Subject Matter Experts

Date	Meeting	Summary	Attendees
		represented, potential funding sources in the future, and mitigation projects that could be included in the HMP.	
7/10/2025	Annex Partner Planning Team	Reviewed the methodology used to collect updated Critical Infrastructure and Key Resources data. Discussed how the County would be integrating hazard mitigation planning with the Capital Improvement Plan. Reviewed and approved the questions for the Public Survey.	Project Team, Annex Planning Partners
7/10/2025	SCT PAC	Reviewed the methodology used to collect updated Critical Infrastructure and Key Resources data. Discussed how the County would be integrating hazard mitigation planning with the Capital Improvement Plan.	Project Team, SCT PAC
7/15/2025	EMWG	Planning Team members were briefed on the proposed changes to the CIP process and given an overview of the mitigation strategy process and the action item template.	Project Team, EMWG
7/16/2025	ICRC	Committee members were briefed on the proposed changes to the CIP process and given an opportunity to provide feedback on the climate change screening procedures.	Project Team, ICRC
7/29/2025	County Department Mitigation Strategy Workshop - Infrastructure	Attendees were briefed on the proposed changes to the CIP process and given a chance to provide updates on the 2020 CIP oriented action items. Staff also reviewed the action item template and held discussions on new mitigation strategy action items.	Project Team, County Departments

Date	Meeting	Summary	Attendees
7/30/2025	County Department Mitigation Strategy Workshop – GIS/Technology	Attendees were given a chance to provide updates on the 2020 technology and data collection and analysis focused action items. Staff also reviewed the action item template and held discussions on new mitigation strategy action items.	Project Team, County Departments
7/30/2025	County Department Mitigation Strategy Workshop – Public Safety	Attendees were given a chance to provide updates on the 2020 public safety and facilities focused action items. Staff also reviewed the action item template and held discussions on new mitigation strategy action items.	Project Team, County Departments
7/31/2025	County Department Mitigation Strategy Workshop – Sheltering and Vulnerable Populations	Attendees were given a chance to provide updates on the 2020 sheltering and mass care focused action items. Staff also reviewed the action item template and held discussions on new mitigation strategy action items.	Project Team, County Departments
8/11/2025	Critical Infrastructure and Key Resources (CIKR) Update Tool Kick-Off Email	Email was sent out with the instructions for how to update CIKR information. Partners had two options: update the information manually using the tool (for partners without GIS capabilities) or submit the data to the Project Team.	Project Team, Annex Planning Partners
9/4/2025	SOAR4	Reviewed the progress on the HMP. Discussed the proposed Human Services mitigation strategies.	Project Team, SOAR4, Subject Matter Experts, Community Members
9/11/2025	Annex Partner Planning Team	Discussed countywide mitigation strategies and approved the strategies. Reviewed the timeline for completing the Base Plan.	Project Team, Annex Planning Partners

Date	Meeting	Summary	Attendees
9/11/2025	SCT PAC	Discussed the methodology for developing the mitigation strategies for the county. Reviewed the proposed countywide mitigation strategies.	Project Team, SCT PAC
9/16/2025	EMWG	Planning Team members reviewed the unincorporated annex mitigation strategies and held a feedback discussion prior to finalization.	Project Team, EMWG
10/9/2025	Annex Partner Planning Team	Reviewed and discussed partner comments for the draft plan. Discussed the timeline and process for annex development.	Project Team, Annex Planning Partners
10/16/2025	Snohomish County Local Emergency Planning Committee (LEPC)	Briefed committee on the HMP status and planning process. Requested feedback on hazardous materials chapter.	Project Team, LEPC
10/16/2025	SCT PAC	Briefed committee on public survey results and annex development timeline and process.	Project Team, SCT PAC
11/13/2025	Annex Partner Planning Team	Reviewed any public comments that were submitted during the public comment period and how they were integrated into the plan. Approve the final draft of the base plan.	Project Team, Annex Planning Partners

Figure B.1: Public Planning Committee Meeting Agendas

Snohomish County Department of Emergency Management

**Snohomish County EMWG Monthly Meeting**

Date: January 21, 2025 Time: 2.00-3.00PM Recorder: Daria Gruzdeva	Members ☒ Marianne Boggie ☒ Anjelah Boyd ☒ Kole Braaten ☒ David Byrd ☒ Paul Cailotto ☒ Rebecca Carpenter ☒ Geoff Enns ☒ David Fine ☒ Brett Garris ☒ Amy Lucas ☒ Nathan Marti ☒ Melody Ovard	☒ Raulie Robertson ☒ Dara Salmon ☒ Lucia Schmit ☒ Scott Honaker ☒ Rachel Smith ☒ Robert Thurston ☒ Eileen Canola
--	--	--

AGENDA TOPICS

1. Southern Whidbey Island Fault (SWIF) 2027 Functional Exercise Plan		
Item	Description	Actions / Decisions / Notes
Presented by Brett Garris	Initial planning meeting – February 27 th , training – October 2027	
2. ESF annexes Q&A		
Item	Description	Actions / Decisions / Notes
ESF Annex Update	Wrapping up in first quarter	Contact Dara with questions or to discuss in detail.
3. HMP progress		
Item	Description	Actions / Decisions / Notes
Presented by Amy Lucas and Rebecca Carpenter	An additional hazard - extreme heat and drought	High risk surveys will be sent out to partners.

NEXT MEETING PARKING LOT:

Date Captured	Reported by / Owner	Parking Lot Item



Snohomish County Department of Emergency Management

Action items highlighted
Decision items highlighted

Next meeting: February 18th



Planning Advisory Committee
 Thursday, February 13, 2025
 1:00 p.m. - 3:00 p.m.
 Zoom Meeting Link

A G E N D A

Zoom: <https://us02web.zoom.us/j/82949003218?pwd=WwEXXAsk03VuwwnpBzUez0i6cTNjPM.1>

1. Call to Order
2. Roll Call
3. Approval of Minutes [1-9-25](#) (Co-chair, 2 min.)
4. Public Comments (3 min.)
5. Action Items (10 min.)
 - a. Election of Representative and Alternate to PSRC Regional Staff Committee (Co-chair, 10 min.)
6. Discussion/Update Items (1 hr. 15 min.)
 - a. [Communitywide Climate Resiliency Planning Update](#) (Energy & Environmental Sustainability Manager Molly Beeman & PDS Senior Planner Eileen Canola, 20 min.)
 - b. [Hazard Mitigation](#), Snohomish County Department of Emergency Management (DEM), (Deputy Director Dara Salmon, Program Manager Amy Lucas & Program Analyst Rebecca Carpenter, 20 min.)
 - c. [Light Rail Community \(LRC\) Zone](#) Presentation, Long Range Planning, Senior Planner (Matthew Siddons, 25 min.)
 - d. Work Group: developing a middle housing category for tracking residential development trends in the Growth Monitoring Report, PDS Principal Demographer (Steve Toy, 5 min.)
 - e. PSRC Update, Principal Planner (Liz Underwood-Bultmann, AICP, 5 min.)
7. Go-Round (time permitting)
8. Next Meeting Date:
 - o March 13, 2025
9. Adjourn

Snohomish County Administration Building, M/S 604, 3000 Rockefeller Avenue, Everett, WA 98201



Emergency Management Working Group Agenda

March 18, 2025 – 2:00 to 3:30 PM

Via Microsoft Teams: [Join the meeting now](#)
Meeting ID: 233 033 171 987
Passcode: HQx54i
[+1 425-262-2000, 425732439#](#) United States, Everett
Phone conference ID: 425 732 439#

1. Welcome – DEM 2:00-2:05
 - a. Meeting Notes Acceptance

2. Planning Update
 - a. HIRA Survey (Rebecca Carpenter) 2:05-3:00
 - b. Bomb Cyclone Improvement Plan (Brett Garris) 3:00-3:20

3. Good of the Order 3:20-3:30
 - a. Partner Updates
 - b. DEM Updates

Next Meeting in 2025
April 15th

IFM Staff Advisory Group (Core Team) Meeting Agenda

April 1, 2025

2:00pm-3:30pm

[Microsoft Teams Meeting](#)

~ Meeting Goals~

- Floodplain Management Advisory Committee- Planning next meetings
 - Reflections on Launch Meeting
 - Review/Input on Draft Agenda for 2nd FMAC
- Hazard Mitigation Plan- Hazard ID and Risk Assessment (Flood Hazard)

~ AGENDA~

Time	Activity
2:00->	Welcome- agenda review; March Meeting Notes Reflections on FMAC Launch Meeting • What worked (what didn't); what did we learn; what is needed next • HOLDS for Meetings 3 and 4 Draft Process Agenda for 2nd FMAC Meeting- Review/ Input 1. Welcome 2. Reflection 3. Flood District Governance and Funding Project Highlight 4. Review Framework Elements 5. Shared Vision into Draft Charter (Synthesis Steps) 6. Introduce Charter; trial decision tool 7. Review Comprehensive Flood Hazard Management Plan Guidance, prep for Decision at next FMAC 8. Up Next (includes draft topics for Mtg 3 and 4) Hazard Mitigation Plan- Hazard ID and Risk Assessment (HIRA) • Key element of our Hazard Mitigation Plan development • Together, we will help DEM by ranking Flood Hazard Risks with these tools: Hazard Information.pdf, HIRA Worksheet County.xlsx, Instructions and Ranking Rubric County.pdf
-> 3:30	Review Up Next Project List - What level of engagement/ role? (Lead, Help, Consulted On, Informed)

SharePoint: [Integrated Floodplain Management - Home](#)

Looking Ahead- Topics for IFM Staff Advisory Group for 2025

- FMAC Meetings- Third and Fourth meetings scheduled (6/17 at 3pm and 10/29 at 1pm)
- IFM Charter- review, input
- Ongoing Interdepartmental coordination on roles- update Roles Table, more
- CFHMP next steps
 - HMP and CFHMP Pathway...
- Integrate Nature-Based Solutions in HMP
- Collaborative Communication Plan/ Approaches
- Flood Study
- Collaborative Grant Applications –FMAC

IFM Staff Advisory Group (Core Team) Meeting Agenda

May 6, 2025

2:00pm-3:30pm

[Teams Meeting](#)

~ Meeting Goals~

- Floodplain Management Advisory Committee- Planning next meetings
 - Reflections on Launch Meeting
 - Review/Input on Charter next steps
 - Next Steps for CFHMP
 - Identify Communication Plan development interests
- Hazard Mitigation Plan discussion
- Review proposal for IFM Staff Advisory Group meeting approach through end of 2025

~ AGENDA~

Time	Activity
2:00->	Welcome- agenda review; April Meeting Notes Reflections on FMAC Launch Meeting • PDS Update- on follow up with leadership • Reflections- What worked (what didn't); what did we learn; what is needed next Charter Revision: "Refine the DRAFT Charter for the FMAC" Seeking Concurrence on Next Steps: • Project Approach- Goal, Process, and Roles (based on FMAC voting) • Invite guidance, insights, concurrence Comprehensive Flood Hazard Management Plan (CFHMP): "Scope alternatives for CFHMP, including funding" Input on Next Steps: • Discussion of CFHMP Options • Q: Initial staff ranking of Options (can we narrow?) • Review list of interested folks ○ LEAD (5): SWM (Josh, Ann, ?) ○ PARTNER (4): DEM, PDS, Molly, Jason Communication Plan (Should we build our DRAFT comm plan for IFM Program?) • See Placeholder on page 11 of DRAFT Charter • Consent voting: Gather initial support/interest in this project • Who else should help? Hazard Mitigation Plan

-> 3:30	- Two flood related objectives and general plan alignment Proposal for IFM Staff Advisory Group meeting approach thru end of 2025 ➤ June- FMAC prep ➤ July- Project session (Comm Plan?) ➤ August- TBD ➤ September- FMAC meeting prep ➤ October- Project session (TBD) ➤ November- Year in Review ➤ December- Project session (TBD) Q: Input/Thoughts?
---------	---

SharePoint: [Integrated Floodplain Management - Home](#)

Looking Ahead- Topics for IFM Staff Advisory Group for 2025

- FMAC Meetings- Third and Fourth meetings scheduled (6/17 at 3pm and 10/29 at 1pm)
- IFM Charter- review, input
- Ongoing / expanded CIP/ TIP Interdepartmental coordination
- Updates to Roles Table
- CFHMP next steps- mapping out options and bringing back to FMAC for next decision
- Draft Communication Plan/ Approaches
- Flood Study
- Collaborative Grant Applications –FMAC

Consent Decision Making

The consent-based decision-making process has three phases:

- Context,
- Clarification, and
- Call for consent

When voting, participants choose one of the following options:

5—Lead: The proposal serves our IFM Program well, and I would like to be one of the leaders in implementing it.

4—Partner: The proposal serves our IFM Program well, and I will partner to support the leaders in implementing it.

3—Follow: The proposal may serve our IFM Program, but I can't offer any capacity toward implementation.

2—Concern: I have concerns about the proposal and will be tracking as implementation moves forward.

1—Caution: I have major concerns about the proposal creating harm and would like to discuss further.

0—Oppose: The proposed course of action is outside a range of tolerance and requires changes before any action is taken.

The proposal goes forward as outlined if there are only 2s and above. The voting also helps identify who to include in the project team.



Emergency Management Working Group Agenda

May 20, 2025 – 2:00 to 3:30 PM

Via Microsoft Teams: [Join the meeting now](#)
 Meeting ID: 233 033 171 987
 Passcode: HQx54i
 +1 425-262-2000, 425732439# United States, Everett
 Phone conference ID: 425 732 439#

Welcome	2:00 – 2:10
• Meeting Notes Acceptance	
New Business	2:10 – 2:30
• Business Re-Entry Concept – ESF 14 (David Fine) • Tsunami Alerts (Lucia Schmit & Scott North)	
Old Business	2:30 – 3:20
• Hazard Mitigation Plan – Goals & Objectives (Amy Lucas & Rebecca Carpenter) ○ Community Wildfire Protection Plan – Open Houses Brief Out	
Good of the Order	3:20-3:30
• Partner Updates • DEM Update ○ Denial of November '24 Disaster Declaration	

Next Meeting in 2025
 June 17th



Snohomish County
2025 HAZARD MITIGATION PLAN
Annex Partner Planning Team
AGENDA

Thursday, June 12, 2025
10:00 AM – 11:30 AM
Virtual via Teams

WELCOME AND SIGN-IN Please sign in at: HTTPS://FORMS.OFFICE.COM/G/KXM3FDQI4X	10:00 AM Amy Lucas & Rebecca Carpenter, RAMP
RAMP UPDATES RAMP and policy updates and questions	10:05 AM Amy Lucas & Rebecca Carpenter, RAMP
GOALS & OBJECTIVES UPDATE Finalizing goals and objectives and next steps	10:15 AM Rebecca Carpenter, Resilience and Mitigation Program Analyst
ALL HAZARDS IMPACTS & MITIGATION DISCUSSION Discussion on impacts, cascading impacts, and countywide mitigation action items	10:35 AM All Planning Team
CROSS SECTOR PLANNING PROGRAM Intro to the Comprehensive Emergency Management Plan	11:10 AM Jayme Haselow, Cross Sector Planning Program Analyst
NEXT STEPS AND QUESTIONS Upcoming asks for Annex Partners	11:20 AM All Planning Team
ADJOURN	11:30 AM



Planning Advisory Committee

Thursday, June 12, 2025

1:00 p.m. - 3:00 p.m.

Zoom Meeting Link

A G E N D A

Zoom:

<https://us02web.zoom.us/j/84249748635?pwd=PxdwN1lnqMmDYOV6GVfaKnJkS1kQq.1>

1. Call to Order
2. Roll Call
3. Approval of Minutes [5-8-25](#) (Co-chair, 2 min.)
4. Public Comments (3 min.)
5. Discussion/Update Items (1 hr. 30 min.)
 - a. Conclusion of Legislative Session Report, Government Affairs Senior Analyst (Annika Vaughn, 10 min.)
 - b. [New Starts Centers](#), Office of Recovery and Resiliency, Chief Recovery and Resilience Officer (Kara Main-Hester, 20 min.)
 - c. 2025 SCT Target Reconciliation, Principal Demographer (Steve Toy, 20 min)
 - d. [DEM Hazard Mitigation Progress Update](#) (Program Manager Amy Lucas & Program Analyst Rebecca Carpenter, 20 min.)
 - e. [Cost of Parking on Housing](#), Planner (Jennifer Cao, 20 min.)
6. Go-Round (time permitting)
7. Next Meeting Date:
 - o July 10, 2025
8. Adjourn

Snohomish County Administration Building, M/S 604, 3000 Rockefeller Avenue, Everett, WA 98201



Snohomish County
2025 HAZARD MITIGATION PLAN
Annex Partner Planning Team
AGENDA

Thursday, July 10, 2025
10:00 AM – 11:30 AM
Virtual via Teams

WELCOME AND SIGN-IN Please sign in at: https://forms.office.com/g/te7tL8REaf	10:00 AM Amy Lucas & Rebecca Carpenter, RAMP
RAMP UPDATES RAMP and policy updates and questions	10:05 AM Amy Lucas & Rebecca Carpenter, RAMP
CIKR UPDATE TOOL Critical Infrastructure and Key Resources background and introduction to the update tool	10:15 AM Rebecca Carpenter, Resilience and Mitigation Program Analyst
COUNTY ALIGNMENT PROCESS Overview of proposed updates to the County CIP process	10:35 AM Amy Lucas, Resilience and Mitigation Program Manager
PUBLIC SURVEY REVIEW Review Public Survey draft	10:55 AM Rebecca Carpenter, Resilience and Mitigation Program Analyst
NEXT STEPS AND QUESTIONS Upcoming asks for Annex Partners	11:20 AM All Planning Team
ADJOURN	11:30 AM



Planning Advisory Committee
 Thursday, July 10, 2025
 1:00 p.m. - 3:00 p.m.
 Zoom Meeting Link

A G E N D A

Zoom:

<https://us02web.zoom.us/j/84249748635?pwd=PxdwN1lnqMmDYQV6GVfaKnJkS1kQq.1>

1. Call to Order
2. Roll Call
3. Approval of Minutes [6-12-25](#) (Co-chair, 2 min.)
4. Public Comments (3 min.)
5. Discussion/Update Items (1 hr. 25 min.)
 - a. [Department of Commerce: Critical Areas Protection Guidance](#), Program Manager, AICP Ecosystems (Angela San Filippo, 25 min.)
 - b. [Municipal Code Update Project, City of Stanwood](#) (Patricia Love, 10 min.)
 - c. [DEM Hazard Mitigation Progress Update](#) (Program Manager Amy Lucas & Program Analyst Rebecca Carpenter, 20 min.)
 - d. [Economic Development Update](#), Snohomish County Executive's Office (Tourism Senior Fiscal Analyst Trudy Soriano & Workforce Development Manager Samantha Paxton, 20 min.)
 - e. Puget Sound Regional Council, Senior Planner (Nancy Ferber, 5 min.)
 - f. Washington State Department of Commerce, Senior Planner (Jeff Aken, 5 min.)
6. Go-Round (time permitting)
7. Next Meeting Date:
 - September 11, 2025 (No August meeting)
8. Adjourn

Snohomish County Administration Building, M/S 604, 3000 Rockefeller Avenue, Everett, WA 98201



2:00-2:15

- 2:15-2:45**

- 2:45-3:00**

- Next Meeting in 2025**
August 19th

ICRC All-Member Meeting Agenda

Snohomish County Interdepartmental Climate Change & Resiliency Committee (ICRC)

Location: Teams / Invite on Page 2

Date: Wednesday, July 16, 2025

Time: 11:00 am – 12:00 noon

11:00 AM - 11:15 AM

Hilary McGowan – Planning and Development Services

- Tree Canopy Implementation

11:15 AM - 11:35 AM

Amy Lucas/Rebecca Carpenter – Emergency Management

- Community Wildfire Protection Plan (CWPP)
- Capital Improvement Plan (CIP) Process

11:35 AM – 11:45 AM

Joshua Monaghan – Surface Water Management

- Integrated Floodplain Management Update

11:50 AM - NOON

Molly Beeman– Office of Energy & Sustainability

- [Communitywide Climate Resiliency Plan \(CwCRP\) Open House](#)

ICRC All-Member Meeting Dates for 2025

(3rd Wednesday of each month unless it is a holiday)

Month	Date	Time
July	16	11:00 a.m. - 12:00 p.m.
August	20	11:00 a.m. - 12:00 p.m.

September	17	11:00 a.m. - 12:00 p.m.
October	15	11:00 a.m. - 12:00 p.m.
November	19	11:00 a.m. - 12:00 p.m.
December	No Meeting	

Microsoft Teams [Need help?](#)

[Join the meeting now](#)

Meeting ID: 270 684 125 827

Passcode: Kt3Ko9xM

Dial in by phone

[+1 425-262-2000,820206094#](#) United States, Everett

[Find a local number](#)

Phone conference ID: 820 206 094#

For organizers: [Meeting options](#) [Reset dial-in PIN](#)

SOAR4

Snohomish County Organizations Advancing Readiness, Response, Recovery, and Resiliency
Snohomish County COAD (Community Organizations Active in Disaster)

Regular Meeting

Date: Thursday, September 4th from 1:30PM to 3:00PM

Location: Virtual Meeting via Teams

Agenda

I. Welcome & Introductions

- Name, organization, position.
- What's your favorite Halloween costume?

II. August Heat Event

- County Report Out – Tyler Verda, Human Services Program Planner, Snohomish County Human Services
- Group Discussion – Are you aware of any community impacts from the heat event? Did your organization take any actions?

III. Hazard Mitigation Plan

- Rebecca Carpenter, Resilience and Mitigation Program Analyst, Snohomish County Department of Emergency Management.

IV. Community Wildfire Protection Plan

- Amy Lucas, Resilience and Mitigation Program Manager, Snohomish County Department of Emergency Management.
- Rebecca Carpenter, Resilience and Mitigation Program Analyst, Snohomish County Department of Emergency Management.

V. Good of the order

VI. Adjourn – 3:00

[SOAR4 | Snohomish County, WA - Official Website \(snohomishcountywa.gov\)](https://www.snohomishcountywa.gov)



Snohomish County
2025 HAZARD MITIGATION PLAN
Annex Partner Planning Team
AGENDA

Thursday, September 11, 2025
10:00 AM – 11:30 AM
Virtual via Teams

WELCOME AND SIGN-IN Please sign in at: HTTPS://FORMS.CLOUD.MICROSOFT/G/AVFPZGCQW3	10:00 AM Amy Lucas & Rebecca Carpenter, RAMP
RAMP UPDATES RAMP and policy updates and questions	10:05 AM Amy Lucas & Rebecca Carpenter, RAMP
COUNTYWIDE MITIGATION STRATEGIES Discussion on Countywide Mitigation Strategies	10:15 AM Rebecca Carpenter, Resilience and Mitigation Program Analyst
BASE PLAN REVIEW Base Plan Review Timeline	11:00 AM Rebecca Carpenter, Resilience and Mitigation Program Analyst
NEXT STEPS AND QUESTIONS Upcoming asks for Annex Partners	11:20 AM All Planning Team
ADJOURN	11:30 AM



Planning Advisory Committee
 Thursday, September 11, 2025
 1:00 p.m. - 3:00 p.m.
 Zoom Meeting Link

A G E N D A

Zoom:

<https://us02web.zoom.us/j/84249748635?pwd=PxdwN1lnqMmDYQV6GVfaKnJkS1kQq.1>

1. Call to Order
2. Roll Call
3. Approval of Minutes 7-10-25 (Co-chair, 2 min.)
4. Public Comments (3 min.)
5. Discussion/Update Items (1 hr. 25 min.)
 - a. University of Washington, Evans School of Public Policy & Governance Presentation, Building Resilient Local Governments, Flyer (Associate Professor Steve Page & Innovation & Engagement Manager AK Sterling, 15 min.)
 - b. Community Transit, (Transit Integration Manager, Chris Simmons, 20 min.)
 - c. DEM Hazard Mitigation Progress Update (Program Manager Amy Lucas & Program Analyst Rebecca Carpenter, 15 min.)
 - d. PSRC Housing Incentives Tool Survey, Presentation (Associate Planner, David Dixon, 15 min.)
 - e. Snohomish County Council Maltby Amendment, Amended Motion (Legislative Analyst, Ryan Hembree, 10 min)
 - f. Status Update 2025 SCT Target Reconciliation (Principal Demographer, Steve Toy, 10 min.)
 - g. Puget Sound Regional Council, Senior Planner (Nancy Ferber, 5 min.)
6. Go-Round (time permitting)
7. Next Meeting Date:
 - October 16, 2025 (Note: The Oct. meeting is the 3rd Thurs. due to the WA-APA Conference)
 - December 10, 2025, SCT General Assembly
8. Adjourn

Snohomish County Administration Building, M/S 604, 3000 Rockefeller Avenue, Everett, WA 98201



Emergency Management Working Group Agenda September 16, 2025 – 2:00 to 3:30 PM

Via Microsoft Teams: [Join the meeting now](#)

Meeting ID: 233 033 171 987

Passcode: HQx54i

+1 425-262-2000, 425732439# United States, Everett

Phone conference ID: 425 732 439#

1. Welcome – DEM
 - a. *Meeting Notes Acceptance*
2. Evacuation and Shelter in Place Annex Brief
3. Hazard Mitigation Plan Strategies
4. Good of the Order
 - a. *Partner Updates*
 - b. *DEM Updates – Amended Schedule*

Next Meeting in 2025
DATE: 11/18/25



Snohomish County
2025 HAZARD MITIGATION PLAN
Annex Partner Planning Team
AGENDA

Thursday, October 9, 2025
10:00 AM – 11:30 AM
Virtual via Teams

WELCOME AND SIGN-IN Please sign in at: HTTPS://FORMS.OFFICE.COM/G/IJHEKDNMSX	10:00 AM Amy Lucas & Rebecca Carpenter, RAMP
DEM UPDATES RAMP updates, DEM leadership update	10:05 AM Amy Lucas & Rebecca Carpenter, RAMP Dara Salmon, Deputy Director
BASE PLAN STATUS Timeline, review process, approval	10:35 AM Rebecca Carpenter, Resilience and Mitigation Program Analyst
ANNEX DEVELOPMENT Timeline, templates, process	10:45 AM Rebecca Carpenter, Resilience and Mitigation Program Analyst
NEXT STEPS AND QUESTIONS Upcoming asks for Annex Partners	11:20 AM All Planning Team
ADJOURN	11:30 AM


Snohomish County
Department of Emergency Management

 720 80th St. SW, Bldg. A
 Everett, WA 98203
 (425) 388-5060
www.snoco.org
Local Emergency Planning Committee (LEPC)
Meeting Agenda

10/16/2025 - 0900-1030

 SCSO South Precinct (9901 24th Pl. W., Ste. B Everett, WA 98204) & Virtual

<https://us02web.zoom.us/j/86437910951>

Welcome & Introductions	0900
Call To Order	0905
WA EMD Updates / Legislation	0905
David Kelley (WAEMD)	
SSB 6164 (Now RCW 70.136.080) - Type 1 & 2 HazMat Incidents	
SHB 1201 (38.52.610) - co-sheltering of animals	
Hazard Mitigation Plan Update	0925
Rebecca Carpenter/Amy Lucas (SCDEM)	
Evacuation and Shelter-In-Place Annex	0950
Dara Salmon (SCDEM)	
Topics of Concern	1020
David Kelly – World Cup	
Craig Willis – Identifying areas of concern in jurisdictions (underground parking, battery storage, etc.)	
Partner Updates	
Adjourn	

Upcoming Meetings:
January 15th, 2026 / 0900
LEPC@snoco.org

(425) 388-5060

Jarrod Dibble – LEPC Coordinator



Planning Advisory Committee

Thursday, October 16, 2025

1:00 p.m. - 3:00 p.m.

Zoom Meeting Link

A G E N D A

Zoom:

<https://us02web.zoom.us/j/84249748635?pwd=PxdwNTlmgMmDYQV6GVfaKnJjKs1kQq.1>

1. Call to Order
2. Roll Call
3. Approval of Minutes 9-11-25 (Co-chair, 2 min.)
4. Public Comments (3 min.)
5. Discussion/Update Items (1 hr. 25 min.)
 - a. Employment Security (ESD) Labor Market Update, North Sound Labor Economist, Toby Paterson (30 min.)
 - b. Climate Pollution Reduction Grants (CPRG) Presentation: funding opportunities for buildings in Snohomish County, Riley Lynch and Jenny Cooper, King County Executive Climate Office (20 min.)
 - One-pager Building Decarbonization Grants for Local Governments
 - One-pager Energize programs
 - c. Countywide Climate Resiliency Plan (CwCRP), Isa Hirata, BERK Consulting & Alyssa Rodriguez, Cascadia Consulting (20 min.)
 - d. DEM Hazard Mitigation Progress Update (Program Analyst Rebecca Carpenter, 15 min.)
 - e. Department of Commerce, Senior Planner (Jeff Aken, 5 min.)
 - f. Puget Sound Regional Council, Senior Planner (Nancy Ferber, 5 min.)
6. Go-Round (time permitting)
7. Next Meeting Date:
 - November 13, 2025
 - December 10, 2025, SCT General Assembly
8. Adjourn

Snohomish County Administration Building, M/S 604, 3000 Rockefeller Avenue, Everett, WA 98201



Snohomish County
2025 HAZARD MITIGATION PLAN
Annex Partner Planning Team
AGENDA

Thursday, November 13, 2025
10:00 AM – 11:30 AM
Virtual via Teams

WELCOME AND SIGN-IN Please sign in at: https://forms.office.com/g/1kwCr0cS2A	10:00 AM Amy Lucas & Rebecca Carpenter, RAMP
DEM UPDATES RAMP updates	10:05 AM Amy Lucas & Rebecca Carpenter, RAMP
BASE PLAN STATUS AND REVIEW Timeline, discussion on input	10:10 AM Rebecca Carpenter, Resilience and Mitigation Program Analyst
ANNEX DEVELOPMENT TEMPLATE Template questions	10:45 AM Rebecca Carpenter, Resilience and Mitigation Program Analyst
NEXT STEPS AND QUESTIONS Upcoming asks for Annex Partners	11:20 AM All Planning Team
ADJOURN	11:30 AM

Table B.4: The Steering Committee Members

Table B.4 details the delegates for each advisory board that served as members of the steering committee. Meetings were attended by either the delegate or their alternate; only the primary delegate is listed below.

Committee	Name	Jurisdiction
Snohomish County Tomorrow Steering Committee	Mayor Don Vanney	City of Arlington
Snohomish County Tomorrow Steering Committee	Councilmember Amanda Dodd	City of Bothell
Snohomish County Tomorrow Steering Committee	Mayor Dan Rankin	Town of Darrington
Snohomish County Tomorrow Steering Committee	Councilmember Jenna Nand	City of Edmonds
Snohomish County Tomorrow Steering Committee	Mayor Cassie Franklin	City of Everett
Snohomish County Tomorrow Steering Committee	Councilmember Chuck Lie	City of Gold Bar
Snohomish County Tomorrow Steering Committee	Mayor Matt Hartman	City of Granite Falls
Snohomish County Tomorrow Steering Committee	Councilmember Bert Shepardson	Town of Index
Snohomish County Tomorrow Steering Committee	Mayor Brett Gailey	City of Lake Stevens
Snohomish County Tomorrow Steering Committee	Mayor Christine Frizzell	City of Lynnwood
Snohomish County Tomorrow Steering Committee	Councilmember Peter Condyles	City of Marysville
Snohomish County Tomorrow Steering Committee	Mayor Pro Tem Stephanie Vignal	City of Mill Creek

Committee	Name	Jurisdiction
Snohomish County Tomorrow Steering Committee	Councilmember Kyle Fisher	City of Monroe
Snohomish County Tomorrow Steering Committee	Councilmember Bryan Wahl	City of Mountlake Terrace
Snohomish County Tomorrow Steering Committee	Councilmember Jason Moon	City of Mukilteo
Snohomish County Tomorrow Steering Committee	Councilmember Karen Guzak	City of Snohomish
Snohomish County Tomorrow Steering Committee	Councilmember Steve Shepro	City of Stanwood
Snohomish County Tomorrow Steering Committee	Mayor Russell Wiita	City of Sultan
Snohomish County Tomorrow Steering Committee	Councilmember Jared Mead	Snohomish County Council
Snohomish County Tomorrow Steering Committee	Councilmember Nate Nehring	Snohomish County Council
Snohomish County Tomorrow Steering Committee	Snohomish County Executive Dave Somers	Snohomish County
Snohomish County Tomorrow Steering Committee	Tribal Chairwoman Teri Gobin	Tulalip Tribes
Snohomish County Tomorrow Steering Committee	Councilmember Rajeev Thakur	Town of Woodway
Snohomish County Tomorrow Steering Committee	Mike Appleby	Community Representative
Snohomish County Tomorrow Steering Committee	Peter Batuello	Community Representative
Snohomish County Tomorrow Steering Committee	Allan Giffen	Community Representative

Committee	Name	Jurisdiction
Snohomish County Tomorrow Steering Committee	Michael Finch	Community Representative
Snohomish County Tomorrow Steering Committee	Easton Craft	Community Representative
Climate Action Advisory Committee	Stan Gent	Community Group Seat
Climate Action Advisory Committee	Linda Lyshall	Community Group Seat
Climate Action Advisory Committee	Jeanine SanClemente	Community Group Seat
Climate Action Advisory Committee	Carol McMahon	Community Group Seat
Climate Action Advisory Committee	Eddie Haugen	Business or Commercial Organization Seat
Climate Action Advisory Committee	Tom Campbell	Business or Commercial Organization Seat
Climate Action Advisory Committee	Aaron Nowack	Business or Commercial Organization Seat
Climate Action Advisory Committee	Mika Sarmiento	Underserved Community Seat
Climate Action Advisory Committee	Ryan Miller	Underserved Community Seat
Climate Action Advisory Committee	Sergey Lapin	Education or Research Institution Seat
Climate Action Advisory Committee	Jeff Fennell	Education or Research Institution Seat
Climate Action Advisory Committee	George Lapin	Student or Youth Seat
Emergency Management Coordinating Committee	Under Snohomish County Code 2.36.085, this board is comprised of Departmental/office leadership or their designee	Snohomish County
Snohomish County Emergency Management Advisory Board	Under Snohomish County Code 2.36.100, this board is comprised of the highest elected official or their designee	Cities, towns, and tribes that sign an interlocal agreement with DEM for emergency management services

Table B.5: Steering Committee Meetings

Date	Meeting	Summary	Attendees
02/25/2025	Snohomish County Tomorrow Steering Committee (SCT SC)	Kick-off for Steering Committee briefings. Gave SCT SC representatives an overview of the HMP and explain the update methodology and update timeline.	Project Team, SCT SC, Community Representatives
4/24/2025	Climate Action Advisory Committee (CAAC)	Reviewed the initial HIRA survey results and discussed climate change connections.	Project Team, CAAC, Community Representatives
5/13/2025	Snohomish County Emergency Management Advisory Board (SnoCo EM Advisory Board)	Reviewed the HIRA survey results and changes to the identified hazards.	Project Team, SnoCo EM Advisory Board
5/27/2025	Emergency Management Coordinating Committee (EMCC)	Reviewed the HIRA survey results and changes to the identified hazards.	Project Team, EMCC
6/25/2025	SCT SC	Reviewed the HIRA survey results and changes to the identified hazards. Approved the suggested changes for the updated draft Goals and Objectives.	Project Team, SCT SC, Community Representatives
7/23/2025	SCT SC	Reviewed the methodology used to collect updated Critical Infrastructure and Key Resources data. Discussed how the County would be integrating hazard mitigation planning with the Capital Improvement Plan.	Project Team, SCT SC, Community Representatives

Date	Meeting	Summary	Attendees
7/24/2025	CAAC	Discussed how the County would be integrating hazard mitigation planning with the Capital Improvement Plan.	Project Team, CAAC, Community Representatives
8/12/2025	SnoCo EM Advisory Board	Reviewed the mitigation planning work being completed by annex planning partners including the Critical Infrastructure and Key Resources data update, public outreach, and plan alignment.	Project Team, SnoCo EM Advisory Board
8/26/2025	EMCC	Discussed the methodology for developing the mitigation strategies for the county. Reviewed the proposed countywide mitigation strategies.	Project Team, EMCC
8/28/2025	CAAC	Discussed the methodology for developing the mitigation strategies for the county.	Project Team, CAAC, Community Representatives
9/24/2025	SCT SC	Discussed the methodology for developing the mitigation strategies for the county. Reviewed the proposed countywide mitigation strategies.	Project Team, SCT SC, Community Representatives
10/22/2025	SCT SC	Briefing on the draft plan and public comment period.	Project Team, SCT SC, Community Representatives
10/28/2025	Snohomish County Planning Commission	Final briefing on the final draft plan.	Project Team, Planning Commissioners

Figure B.2: Steering Committee Meeting Agendas



Steering Committee
 Wednesday, February 26, 2024
 4:00 p.m. - 6:00 p.m.
 Zoom Meeting Link

AGENDA**Zoom:**

<https://us02web.zoom.us/j/86129164736?pwd=4RxlUXC8eTBSnmsJeb6qi9XvJbaH3c.1>

1. Call to Order, Roll Call, and Opening Items (3 min.)
 - a. Introductions/Roll Call (Co-chair)
 - b. Citizen Comments (Co-chair)
2. Approval of Meeting Minutes ([1/22/25](#)) (Co-chair, 2 min.)
3. Update Items (5 min.)
 - a. [Summary of PSRC Board Actions and Activities](#) (Ben Bakkenta, 5 min.)
4. Action Items (20 min.)
 - a. [Election of Officers](#) (Co-Chair, 10 min.)
 1. Co-Chair election
 2. Vice Chair election
 - b. [Agenda Bill](#): Citizen Representative to the Community Advisory Board (Co-chair, 5 min.)
 1. Introduction, Samantha Politano, [application](#)
 - c. [PAC PSRC Regional Staff Committee Other Cities and Towns Appointments](#) (Russ Wright, 5 min)
5. Briefings, Discussion Items (1 hr. and 5 min.)
 - a. Human Services Provider Call, Snohomish County Executive Office, Executive Director (Lacey Harper, 5 min.)
 - b. Introduction & Economic Development Update, Snohomish County Executive Office, Executive Director (Mike Fong, 20 min.)
 - c. [Communitywide Climate Resiliency Planning Update](#) (Energy & Environmental Sustainability Manager Molly Beeman & PDS Senior Planner Eileen Canola, 20 min.)
 - d. Department of Emergency Management (DEM) [Hazard Mitigation](#), (Director Lucia Schmit, Program Manager Amy Lucas & Program Analyst Rebecca Carpenter, 20 min.)
6. SCT Manager's Report (Ann Larson, 5 min.)
 - a. Steering Committee Community Representative opening
 - b. [Report from SCT Committee](#)

7. Go-Round (time permitting)
8. Next Meeting Date: March 26, 2025
9. Adjournment (Co-chair)

Steering Committee members please notify Ann Larson if you are unable to attend:
Ann.Larson@snoco.org.

Snohomish County Ad Hoc Climate Action Advisory Committee (CAAC)
Thursday, April 24, 2025
5pm-7pm

Zoom link is on Page 2

**Meetings are recorded*

AGENDA

- 1. Rollcall & Membership Update – Brandi Spores SC OES**
 - Member (vacancy) update
 - [Communitywide Climate Resiliency Plan \(CwCRP\) Survey](#)
 - [Earth Day](#)
- 2. Emergency Management – Amy Lucas/Rebecca Carpenter**
 - Hazard Mitigation Plan (HMP)
 - Community Wildfire Protection Plan (CWPP)
- 3. Planning and Development Services – Eileen Canola**
 - Climate Pollution Reduction Grant (CPRG)

CAAC Meeting Dates for 2025

(4th Thursday of each month unless it is a holiday)

Month	Date	Time
January	23	5:00 p.m. - 7:00 p.m.
February	27	5:00 p.m. - 7:00 p.m.
March	27	5:00 p.m. - 7:00 p.m.
April	24	5:00 p.m. - 7:00 p.m.
May	22	5:00 p.m. - 7:00 p.m.
June	26	5:00 p.m. - 7:00 p.m.
July	24	5:00 p.m. - 7:00 p.m.
August	28	5:00 p.m. - 7:00 p.m.
September	25	5:00 p.m. - 7:00 p.m.
October	23	5:00 p.m. - 7:00 p.m.
November	20*	5:00 p.m. - 7:00 p.m.
December	No Meeting	

*November meeting was pushed back since the 4th Thursday is Thanksgiving



Snohomish County

Department of Emergency Management

720 80th St. SW, Bldg. A
Everett, WA 98203
(425) 388-5060
www.snoco.org

DEM Advisory Board

AGENDA

May 13th 2025

2:00 p.m. – 3:30 p.m.

Via Teams: [+1 425-262-2000,747876089#](https://teams.microsoft.com/join/425-262-2000-747876089)

Meeting Objective

- Inform ILA members of upcoming DEM initiatives with their jurisdictions and gather input.
-

Welcome (DEM)

2:00 – 2:15

- Approve 2/11/2025 minutes

New Business

2:15 – 3:00

- Tsunami Alerts Presentation (Reid Wolcott, NWS & Scott North, DEM)
- Integrated Floodplain Management Presentation (Josh Monaghan, SWM)
- Federal Funding Outlook & Impacts (Lucia Schmit)
 - FEMA Denial of November '24 Windstorm Disaster Declaration

Old Business

3:00 – 3:15

- Disaster Policy Group Update
- Comprehensive Emergency Management Plan Update
- Hazard Mitigation Plan & Community WF Protection Plan Update

Good of the Order

3:15 – 3:30

- Partner Updates

Adjourn (DEM)

Upcoming Meetings in 2025:
July 8
November 11

Snohomish County Emergency Management Coordinating Committee**AGENDA****May 27, 2025****2:00 – 3:30 PM****Microsoft Teams:** [+1 425-262-2000,711992577#](#)[Join the meeting now](#)

Meeting ID: 264 869 150 609

Passcode: 68KEDW

Welcome	2:00 – 2:10
• Meeting Notes Acceptance	
New Business	2:10 – 2:30
• Floodplain Management Advisory Committee (Josh Monaghan, SWM)	
Old Business	2:30 – 3:15
• Community Wildfire Protection Plan – Open Houses Brief Out (Amy Lucas) • Hazard Mitigation Plan Update (Rebecca Carpenter) • Comprehensive Emergency Management Plan Update (Dara Salmon & David Fine) ○ Updated Policy Group language (Lucia Schmit) • Denial of November '24 Disaster Declaration	
Good of the Order	3:15 – 3:30
• Partner Updates • DEM Updates	

Next Meetings in 2025:**August 26th****November 25th**



Steering Committee
 Wednesday, June 25, 2025
 4:00 p.m. - 6:00 p.m.
 Zoom Meeting Link

A G E N D A

Z o o m :

<https://us02web.zoom.us/j/86024833240?pwd=v146gWGGRkrOV1dWl6RkMvdXJZfCYu.1>

1. Call to Order, Roll Call, and Opening Items (3 min.)
 - a. Introductions/Roll Call (Co-chair)
 - b. Citizen Comments (Co-chair)
2. Approval of Meeting Minutes ([5/28/25](#)) (Co-chair, 2 min.)
3. Update Items (15 min.)
 - a. [Summary of PSRC Board Actions and Activities](#) (Ben Bakkenta, 5 min.)
 - b. Conclusion of Legislative Session Report, Government Affairs Senior Analyst (Annika Vaughn, 10 min.)
4. Action Items (30 min.)
 - a. [Agenda Bill: Regional Centers](#) (Matthew Siddons)
 1. [Draft Recommendation: Mariner Center](#) (15 min.)
 2. [Draft Recommendation: Ash Way Center](#) (15 min.)
5. Briefings, Discussion Items (1 hr. 10 min.)
 - a. [Sounds Transit, Project Director for Everett Link](#) (Eric Widstrand, 25 min.)
 - b. [DEM Hazard Mitigation Progress Update](#) (DEM Director Lucia Schmit, Program Analyst Rebecca Carpenter & Program Manager Amy Lucas, 20 min.)
 - c. Exploratory Committee Presentation: Co-chairs Mill Creek Mayor Pro Tem Stephanie Vignal & Mountlake Terrace Mayor Pro Tem Bryan Wahl (10 min.)
6. SCT Manager's Report (Mike McCrary, 5 min.)
 - a. [Report from SCT Committees](#)
7. Go-Round (time permitting)
8. Next Meeting Date: July 23, 2025
9. Adjournment (Co-chair)

Steering Committee members please notify Ann Larson if you are unable to attend:
Ann.Larson@snoco.org



Steering Committee
 Wednesday, July 23, 2025
 4:00 p.m. - 6:00 p.m.
 Zoom Meeting Link

AGENDA

Zoom:

<https://us02web.zoom.us/j/86024833240?pwd=v146gWGGRkrOV1dWl6RkMvdXJZfCYu.1>

1. Call to Order, Roll Call, and Opening Items (3 min.)
 - a. Introductions/Roll Call (Co-chair)
 - b. Citizen Comments (Co-chair)
2. Approval of Meeting Minutes (6/25/25) (Co-chair, 2 min.)
3. Update Items (5 min.)
 - a. Summary of PSRC Board Actions and Activities (Ben Bakkenta, 5 min.)
4. Briefings, Discussion Items (1 hr. 10 min.)
 - a. Cost of Parking on Housing, Planning Development Services Planner (Jennifer Cao, 20 min.)
 - b. New Starts Centers, Office of Recovery and Resiliency, Chief Recovery and Resilience Officer (Kara Main-Hester, 20 min.)
 - c. DEM Hazard Mitigation Progress Update (Dept. Director Lucia Schmit, Program Manager Amy Lucas & Program Analyst Rebecca Carpenter, 20 min.)
 - d. Exploratory Committee Presentation: Co-chairs Mill Creek Mayor Pro Tem Stephanie Vignal & Mountlake Terrace Mayor Pro Tem Bryan Wahl (10 min.)
5. SCT Manager's Report (Ann Larson, 5 min.)
 - a. Report from SCT Committees
6. Go-Round (time permitting)
7. Next Meeting Date: August 27, 2025
8. Adjournment (Co-chair)

Steering Committee members please notify Ann Larson if you are unable to attend:
 Ann.Larson@snoco.org.

Snohomish County Ad Hoc Climate Action Advisory Committee (CAAC)
Thursday, July 24, 2025
5pm-7pm

Zoom link is on Page 2

**Meetings are recorded*

AGENDA

- 1. Rollcall & Membership Update – Brandi Spores SC OES**
 - Member (vacancy) update – 5 Minutes
 - Boards & Commissions Appreciation Event – August 25 6 to 8 pm
- 2. SC Office of Energy and Sustainability – Jay Tavarez-Brown**
 - Healthy Forest Program Update
- 3. Surface Water Management – Joshua Monaghan**
 - Integrated Floodplain Management Update
- 4. Emergency Management – Amy Lucas**
 - Community Wildfire Protection Plan (CWPP)
 - Capital Improvement Plan (CIP) Process

CAAC Meeting Dates for 2025

(4th Thursday of each month unless it is a holiday)

Month	Date	Time
January	23	5:00 p.m. - 7:00 p.m.
February	27	5:00 p.m. - 7:00 p.m.
March	27	5:00 p.m. - 7:00 p.m.
April	24	5:00 p.m. - 7:00 p.m.
May	22	5:00 p.m. - 7:00 p.m.
June	26	5:00 p.m. - 7:00 p.m.
July	24	5:00 p.m. - 7:00 p.m.
August	28	5:00 p.m. - 7:00 p.m.
September	25	5:00 p.m. - 7:00 p.m.
October	23	5:00 p.m. - 7:00 p.m.
November	20*	5:00 p.m. - 7:00 p.m.
December	No Meeting	

*November meeting was pushed back since the 4th Thursday is Thanksgiving



Snohomish County

Department of Emergency Management

720 80th St. SW, Bldg. A
Everett, WA 98203
(425) 388-5060
www.snooco.org

DEM Advisory Board

AGENDA

August 12, 2025

2:00 p.m. – 3:30 p.m.

Via Teams: [+1 425-262-2000,747876089#](https://teams.microsoft.com/join/425-262-2000-747876089)

Welcome – Advisory Board Chair

- Approve 5/13/2025 minutes

Alerting Protocol – Readiness Program

- How do alerts happen?

Comprehensive Emergency Management Plan Progress – Cross Sector Planning Program; Director/Deputy

- Second Workshop formats
 - Planning Workshop (CEMP? EOP?) or Seminar or Tabletop
 - Evacuation & Shelter in Place Annex briefing

Hazard Mitigation Progress – Resilience and Mitigation Planning Program

- Community Wildfire Protection Plan and Hazard Mitigation Plan

Financial Status and Levels of Service – DEM Director

- Impacts of losing EM Performance Grant

Community Outreach – Outreach Coordinator

- Options and scheduling

Good of the Order

- Partner Updates
 - Alternate contacts

Adjourn (DEM)

Upcoming Meetings in 2025:
Nov 11

Snohomish County Emergency Management Coordinating Committee

AGENDA

August 26, 2025

2:00 – 3:30 PM

Microsoft Teams: [+1 425-262-2000,711992577#](#)

[Join the meeting now](#)

Meeting ID: 264 869 150 609

Passcode: 68KEDW

Welcome

- Meeting Notes Acceptance

New Business

- Evacuation and Shelter in Place Annex brief (Dara Salmon)

Old Business

- Community Wildfire Protection Plan Update (Amy Lucas)
- Hazard Mitigation Plan Update (Rebecca Carpenter)
- Comprehensive Emergency Management Plan Update (David Fine)
- Southern Whidbey Island Fault '27 exercise (Brett Garriss)

Good of the Order

- Partner Updates
- DEM Updates

Next Meetings in 2025:

November 25th

Snohomish County Ad Hoc Climate Action Advisory Committee (CAAC)
Thursday, August 28, 2025
5pm-7pm

Zoom link is on Page 2

**Meetings are recorded*

AGENDA

- 1. Rollcall & Membership Update – Brandi Spores SC OES**
 - Member (vacancy) update – 5 Minutes
- 2. Snohomish Conservation District – Linda Lyshall**
 - Conservation District Update
- 3. Department of Emergency Management – Amy Lucas**
 - Capital Improvement Plan Process and Mitigation Strategies
- 4. Office of Energy and Sustainability – Eric Smith**
 - Stormwater Strategic Initiative Lead Grant

CAAC Meeting Dates for 2025

(4th Thursday of each month unless it is a holiday)

Month	Date	Time
January	23	5:00 p.m. - 7:00 p.m.
February	27	5:00 p.m. - 7:00 p.m.
March	27	5:00 p.m. - 7:00 p.m.
April	24	5:00 p.m. - 7:00 p.m.
May	22	5:00 p.m. - 7:00 p.m.
June	26	5:00 p.m. - 7:00 p.m.
July	24	5:00 p.m. - 7:00 p.m.
August	28	5:00 p.m. - 7:00 p.m.
September	25	5:00 p.m. - 7:00 p.m.
October	23	5:00 p.m. - 7:00 p.m.
November	20*	5:00 p.m. - 7:00 p.m.
December	No Meeting	

*November meeting was pushed back since the 4th Thursday is Thanksgiving



Steering Committee
 Wednesday, September 24, 2025
 4:00 p.m. - 6:00 p.m.
 Zoom Meeting Link

AGENDA

Zoom:

<https://us02web.zoom.us/j/86024833240?pwd=v146gWGGRkrOV1dWl6RkMvdXJZfCYu.1>

1. Call to Order, Roll Call, and Opening Items (3 min.)
 - a. Introductions/Roll Call (Co-chair)
 - b. Citizen Comments (Co-chair)
2. Approval of Meeting Minutes (8/27/25) (Co-chair, 2 min.)
3. Update Items (5 min.)
 - a. Summary of PSRC Board Actions and Activities (Ben Bakkenta, 5 min.)
4. Briefings, Discussion Items (1 hr. 30 min.)
 - a. Community Transit, CEO (Ric Ilgenfritz, 25 min.)
 - b. Human Services Update: County's Consolidated Housing Plan, Human Services Specialist (Debra May, 20 min)
 - c. DEM Hazard Mitigation Progress Update (Deputy Director Dara Salmon, Program Manager Amy Lucas & Program Analyst Rebecca Carpenter, 20 min.)
 - d. Community Advisory Board, CAB Co-Chair (Kate Nesse, 15 min.)
 - e. Economic Development Team/ Tourism Update, Snohomish County Executive Office (Grace Yoo, Harry Birak, Richard Porter and Nick Shekeryk) 15 min
 - f. Exploratory Committee Update: Co-chairs Mill Creek Mayor Pro Tem Stephanie Vignal & Mountlake Terrace Mayor Pro Tem Bryan Wahl, 10 min.)
5. SCT Manager's Report (Ann Larson, 5 min.)
 - a. Report from SCT Committees
6. Go-Round (time permitting)
7. Next Meeting Date: October 22, 2025

Reminder: 2025 SCT General Assembly, December 10, 2025, 6:00pm-8:00pm

8. Adjournment (Co-chair)

Steering Committee members please notify Ann Larson if you are unable to attend:
Ann.Larson@snoco.org.



Steering Committee
 Wednesday, October 22, 2025
 4:00 p.m. - 6:00 p.m.
 Zoom Meeting Link

A G E N D A

Z o o m :

<https://us02web.zoom.us/j/86024833240?pwd=v146gWGGRkrOV1dWl6RkMvdXJZfCYu.1>

1. Call to Order, Roll Call, and Opening Items (3 min.)
 - a. Introductions/Roll Call (Co-chair)
 - b. Citizen Comments (Co-chair)
2. Approval of Meeting Minutes (9/24/25) (Co-chair, 2 min.)
3. Update Items (5 min.)
 - a. Summary of PSRC Board Actions and Activities (Ben Bakkenta, 5 min.)
4. Briefings, Discussion Items (1 hr. 20 min.)
 - a. Workforce Snohomish, Chief Executive Office (Joy Emory, 25 min.)
 - o Workforce Snohomish Economic Overview
 - b. DEM Hazard Mitigation Progress Update (DEM Director Lucia Schmit, Program Analyst Rebecca Carpenter & Program Manager Amy Lucas, 20 min.)
 - c. Snohomish County Transportation Coalition (Snotrac), Executive Director (Brock Howell, 20 min.)
 - d. Exploratory Committee: Review Draft Recommendation proposal for the Steering Committee Co-chairs Mill Creek Mayor Pro Tem Stephanie Vignal & Bryan Wahl, 15 min.)
5. SCT Manager's Report (Ann Larson, 5 min.)
 - a. Report from SCT Committees
6. Go-Round (time permitting)
7. Next Meeting Date:
 Reminder: 2025 SCT General Assembly, December 10, 2025, 5:45pm-8:00pm
8. Adjournment (Co-chair)

Steering Committee members please notify Ann Larson if you are unable to attend:
Ann.Larson@snoco.org.



Snohomish County

Planning Commission

Planning and Development Services

3000 Rockefeller Avenue, M/S #604, Everett, WA 98201

Clerk Email: Taylor.Twiford@snoco.org

REGULAR MEETING AGENDA
Snohomish County Planning Commission

October 28, 2025
5:30 PM

Join the Zoom Meeting:

<https://us02web.zoom.us/j/85758761809?pwd=bqts28CRV9lucR5hbagC85CkHotVju.1>

or call (253) 215-8782

Webinar ID: 857 5876 1809

The public may participate in person at 3000 Rockefeller Ave, Administration West Building, 2nd Floor, Everett, WA and view the Planning Commission meeting via a large monitor. Planning Commissioners will be participating via Zoom and not in person. For questions, please contact Taylor Twiford, Planning Commission Clerk, at taylor.twiford@snoco.org or 425.388.7119.

Please note that the Parking Garage will not be open late and will be closing at 6 pm.

For access to supporting documents reviewed by the Planning Commission, visit the Snohomish County Planning Commission webpage at <https://snohomishcountywa.gov/164>

- A. CALL TO ORDER AND ROLL CALL**
- B. CHAIRPERSON'S REPORT**
- C. PUBLIC COMMENT**
- D. APPROVAL OF MINUTES**
 - [September 23, 2025](#): Regular Meeting
- E. STATUS OF FUTURE AGENDA ITEMS AND PAST RECOMMENDATIONS**
 - [Upcoming Planning Commission Meeting Topics](#)
 - County Council Actions on Planning Commission Recommendations
- F. UNFINISHED BUSINESS**
 - 1. Motion 25-405 Allowing reduced setbacks for covered parking structures from road elements in the Rural Village Housing Demonstration Program (Hearing)
 Ryan Hembree, Legislative Analyst, Ryan.Hembree@snoco.org

Hearing on Motion 25-405, referred to the Planning Commission, PDS, and DPW from the County Council regarding proposed code amendments to the Rural Village Housing Demonstration Program.

For further information, please review the following:

- [Staff Report dated September 8, 2025](#)



Snohomish County

Planning Commission

Planning and Development Services

- [Motion 25-405](#)
- [Presentation](#)

G. NEW BUSINESS

2. Water Code (Informational Q & A)

Terri Strandberg, Principal Planner, Terri.Strandberg@snoco.org

The county is considering adopting a water code requiring that new development needing potable water must connect to an existing public water system whenever the public water system agrees to provide reasonable and timely water service. The proposed water code contains criteria for connection and for alternative water sources when connection is unavailable. The Informational Q & A will include a brief overview of the proposed code contents and a chance for Commissioners to ask questions.

For further information, please review the following:

- [Staff Report dated August 8, 2025](#)
- [Attachment A: Background information supporting the proposed Water Code](#)
- [Attachment B: Frequently Asked Questions](#)
- [Attachment C: Planning Commission Draft Findings](#)
- [Attachment D: Draft chapter 30.30.SCC - Water Code](#)
- [Attachment E: Draft amendments to definitions](#)
- [Attachment F: Draft amendments to other chapters in Title 30 SCC](#)

3. Hazard Mitigation Plan Update (Informational Briefing)

Amy Lucas, Resilience and Mitigation Program Manager, Amy.Lucas@snoco.org
 Rebecca Carpenter, Emergency Management Program Coordinator,
Rebecca.Carpenter@snoco.org

Snohomish County and planning partners maintain a Hazard Mitigation Plan (HMP). The plan identifies resources, information, and strategies for reducing risk from natural and human-caused hazards. The plan guides and coordinates mitigation activities throughout Snohomish County. The first plan was completed in 2005 and has been updated every five years. The plan was last updated in 2020 and must be updated by the end of 2025. The CWPP was a coordination effort with 50 planning partners in the public, private and nonprofit sectors to reduce the risk of wildfire and increase the resilience of local communities to wildfires throughout Snohomish County. This document serves as a planning tool to guide residents, fire agencies, and communities to identify and implement strategies to prioritize fuel treatments and reduce structure ignitability.

For further information, please review the following:

- [Snohomish County Hazard Mitigation Plan Update: Emergency Management Staff Memo](#)
- [Snohomish County Community Wildfire Protection Plan: Emergency Management Staff Memo](#)



Snohomish County

Planning Commission

Planning and Development Services

H. ADJOURN

PLANNING COMMISSION'S RANGE OF POSSIBLE ACTIONS:

At the conclusion of its public hearing, the County Planning Commission will consider transmitting a formal recommendation to County Council concerning adoption of the proposal. The Commission may make a recommendation to adopt or to not adopt the proposal. The Commission's recommendation may also propose amendments to the proposal. The Planning Commission is an advisory body and the final decision rests with the County Council.

PARTY OF RECORD / PUBLIC TESTIMONY:

You may become a party of record for any specific topic that comes before the Planning Commission by submitting a written request or testimony to Taylor Twiford, Planning Commission Clerk, PDS, M/S 604, 3000 Rockefeller Avenue, Everett, WA 98201 or email at Taylor.Twiford@snoco.org.

WHERE TO GET COPIES OF DOCUMENTS AND WEBSITE ACCESS:

Please check www.snohomishcountywa.gov for additional information or the Snohomish County Department of Planning and Developmental Services, Reception Desk, 2nd Floor, County Administration Building East, 3000 Rockefeller Avenue, Everett, WA 98201 or email at Taylor.Twiford@snoco.org.

AMERICANS WITH DISABILITIES ACT NOTICE:

Snohomish County facilities are accessible. The county strives to provide access and services to all members of the public. Sign language interpreters and communication materials in alternate form will be provided upon request of one calendar week. Contact Angela Anderson at 425-262-2206 Voice, or 425-388-3700 TDD.

Snohomish County Planning Commissioners:

Merle Ash, District 1	Tom Campbell, District 4
Mark James, District 1	Vacant, District 4
Kimberly Busteed, District 2	Jeff Chandler, District 5
Raymond Sheldon, Jr., District 2	Karl Niemela, District 5
Robert Larsen, District 3	Angie Sievers, Executive Appointee
Layla Bush, District 3	

Commission Staff (from Planning and Development Services (PDS) Department):

Darren Groth, Commission Secretary	Taylor Twiford, Commission Clerk
------------------------------------	----------------------------------

Figure B.3: Letters of Intent





**CITY OF
BRIER**
ESTD 1965

2901 228th STREET S.W.
BRIER, WASHINGTON 98036
PHONE: 425-775-5440
FAX: 425-672-9025

June 6, 2024

Snohomish County Department of Emergency Management

c/o Planning and Resilience Program

DEMPPlanning@snoco.org

425-388-5060

720 80th Street SW, Bldg. A

Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the City of Brier is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the Mayor for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The City of Brier's primary point of contact for this process will be:

Lee Michaelis, Planner
2901 228th St SW, Brier WA 98036
425-775-5440/cell 425-866-0172
cityplanner@ci.brier.wa.us

The City of Brier's alternate point of contact for this process will be:

Bill Ferry, Public Works Lead
2901 228th St SW, Brier WA 98036
425-775-5440/cell 425-866-7759
bferry@ci.brier.wa.us

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,

Dale Kaemingk, Mayor



Town of Darrington
Darrington, WA 98241
ph. 360-436-1131
fax 360-436-0221
www.townofdarrington.com

12 June 2024

Snohomish County Department of Emergency Management
c/o Planning and Resilience Program
DEMPlanning@snoco.org
425-388-5060
720 80th Street SW, Bldg. A
Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the *Town of Darrington* is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the *Mayor* for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The *Town of Darrington's* primary point of contact for this process will be:

Dan Rankin, Mayor
P.O. Box 397, Darrington, WA, 98241
360-436-1131
Dan.rankin@darringtonwa.us

The *Town of Darrington's* alternate point of contact for this process will be:

Dianne Davis, Clerk/Treasurer
P.O. Box 397, Darrington, WA, 98241
360-436-1131
Dianne.Davis@darringtonwa.us

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,

Dan O. Rankin, Mayor



MEMORANDUM

Date: June 25, 2024

To: Snohomish County DEM Planning and Resilience Program

From: Loi Dawkins, Assistant Chief of Police, Edmonds Police Department

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the **City of Edmonds** is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the Emergency Management Contact and Assistant Chief of Police for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and to maintain compliance with the Disaster Mitigation Act of 2000.

The **City of Edmonds** primary point of contact for this process will be:

Loi Dawkins, Assistant Chief and Emergency Management Contact
205 5 Ave N,
Edmonds, WA 98020
425.771.0200 (office) | 425.275.2852 (mobile)
Loi.dawkins@edmondswa.gov

The **City of Edmonds** alternate point of contact for this process will be:

Michelle Bennett, Chief
205 5 Ave N,
Edmonds, WA 98020
425.771.0200 (office) | 425.478.7207 (mobile)
Michelle.bennett@edmondswa.gov

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,

Loi Dawkins
Assistant Chief of Police
Edmonds Police Department

City of Gold Bar

EST. 1910

107 – 5th Street, Gold Bar, WA 98251



June 5, 2024

Snohomish County Department of Emergency Management
c/o Planning and Resilience Program
720 80th St. SW Bldg. A
Everett, WA 98203

Re: Memorandum for the Snohomish County Mitigation Planning Partnership

To Whom it May Concern:

Please be advised that the City of Gold Bar will participate to the fullest extent possible in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the Public Works Director for this jurisdiction, I will commit all resources available, including staff, planning meeting representation, and time, to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The City of Gold Bar's primary point of contact for this process will be:

Rich Norris
Public Works Director
107 5th St.
Gold Bar, WA 98251
360-793-1101
r.norris@cityofgoldbar.us

The City of Gold Bar's alternate point of contact for this process will be:

Denise Beaston
Office Manager
107 5th St.
Gold Bar, WA 98251
360-793-1101
d.beaston@cityofgoldbar.us

We look forward to working with you again through the update process and enhancing our community's resilience to disasters.

Sincerely,

Rich Norris
Public Works Director



GRANITE FALLS WASHINGTON
GATEWAY TO THE MOUNTAIN LOOP

City of Granite Falls
215 S. Granite Avenue / P.O. Box 1440
Granite Falls, Washington 98252

P 360-691-6441
F 360-691-6734
www.ci.granite-falls.wa.us

Snohomish County Department of Emergency Management

c/o Planning and Resilience Program

DEMPPlanning@snoco.org

425-388-5060

720 80th Street SW, Bldg. A

Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the City of Granite Falls is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the City Manager for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The City of Granite Falls' primary point of contact for this process will be:

Eric Jensen, Community Development Director

215 S. Granite Avenue

Granite Falls, WA 98252

(360) 691-6441

Eric.jensen@ci.granite-falls.wa.us

The City of Granite Falls' alternate point of contact for this process will be:

Charles White, Public Works Operations Supervisor

215 S. Granite Avenue

Granite Falls, WA 98252

(360) 691-6441

charles.white@ci.granite-falls.wa.us

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,

Brent Kirk

City Manager



R qh# rp p xqW #Duxqg#Kh#Ddnh#

June 21st, 2024

Snohomish County Department of Emergency Management
c/o Planning and Resilience Program
720 80th Street SW, Bldg. A
Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the *City of Lake Stevens* is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the *City Administrator* for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The City of Lake Stevens' primary point of contact for this process will be:

Maximilian Roth, Risk Manager
(425) 308-3833
mroth@lakestevenswa.gov

The City of Lake Stevens' alternate point of contact for this process will be:

Carol Manus, Building Official
(360) 913-5410
cmanus@lakestevenswa.gov

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,

Gene Brazel (Jun 21, 2024 15:07 PDT)

Gene Brazel

City Administrator

City of Lake Stevens

1812 Main Street | PO Box 257 | Lake Stevens, WA 98258-0257
www.lakestevenswa.gov



August 21, 2024

VIA EMAIL

Snohomish County Department of Emergency Management
c/o Planning and Resilience Program
DEMPPlanning@snoco.org
425-388-5060
720 80th Street SW, Bldg. A
Everett, WA 98203

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Dear Ms. Carpenter,

Please be advised that the City of Lynnwood is committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the Community Planning Manager for this jurisdiction, I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The City of Lynnwood's primary point of contact for this process will be:

Zack Spencer, Planner
20816 44th Ave W, Lynnwood WA 98036
425.670.5435
zspencer@lynnwoodwa.gov

The City of Lynnwood's alternate point of contact for this process will be:

Brian Kirk, Planner
20816 44th Ave W, Lynnwood WA 98036
425.670.5409
bkirk@lynnwoodwa.gov

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,

A handwritten signature in black ink, appearing to read 'Karl Almgren'.

Karl Almgren, AICP
Community Planning Manager

CC: Jared Bond, Public Works Deputy Director
Chuck Steichen, Deputy Chief of Police
David Kleitsch, Director of Development & Business Services



15728 Main Street, Mill Creek, WA 98012
Administration 425-745-1891
Police 425-745-6175
All Other Departments 425-551-7254

MEMORANDUM

June 5, 2024

Snohomish County Department of Emergency Management
c/o Planning and Resilience Program
DEMPPlanning@snoco.org
425-388-5060
720 80th Street SW, Bldg. A
Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the City of Mill Creek is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the City Manager for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The City of Mill Creek's primary point of contact for this process will be:
Eric Chartrand-Deputy Director of Public Safety
15728 Main Street Mill Creek WA 98012
425-921-5764
Eric.chartrand@millcreekwa.gov

The City of Mill Creek's alternate point of contact for this process will be:
Stan White-Chief of Police
15728 Main Street Mill Creek, WA 98012
425-921-5762
Stan.white@millcreekwa.gov

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,

A handwritten signature in blue ink, appearing to read "Martin Yamamoto", is written over a light blue horizontal line.

Martin Yamamoto
City Manager

cityofmillcreek.com

Facebook: [Facebook.com/MillCreekWA](https://www.facebook.com/MillCreekWA)

Twitter: [@MillCreekWA](https://twitter.com/MillCreekWA)

Instagram: [@CityofMillCreek](https://www.instagram.com/CityofMillCreek)



August 26, 2024

Snohomish County Department of Emergency Management

c/o Planning and Resilience Program

DEMPPlanning@snoco.org

425-388-5060

720 80th Street SW, Bldg. A

Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the *City of Monroe* is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the *Chief of Police* for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The *City of Monroe's* primary point of contact for this process will be:

Jeffrey D. Jolley, Chief Of Police
818 W Main St Monroe, WA 98272
Main 360-794-6300 / Desk 360-863-4578
jjolley@monroewa.gov

The *City of Monroe's* alternate point of contact for this process will be:

Paul Ryan, Administrative Commander
818 W Main St Monroe, WA 98272
Main 360-794-6300 / Desk 360-863-4579
Prayan@monroewa.gov

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,


Jeffrey D. Jolley
Chief Of Police

PROFESSIONALISM • RESPECT • INTEGRITY • DEDICATION • EXCELLENCE

818 WEST MAIN STREET | MONROE, WA 98272 | 360-794-6300 | FAX: 360-794-3129



City Manager's Office

July 31, 2024

Snohomish County Department of Emergency Management
c/o Planning and Resilience Program
720 80th Street SW, Bldg. A
Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the City of Mountlake Terrace is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the Deputy City Manager for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The City of Mountlake Terrace primary point of contact for this process will be:

Carolyn Hope, Deputy City Manager & Interim Public Works Director
23204 58th Avenue West
Mountlake Terrace, WA 98043
425.744.6209 (o), 425.758.7419 (m)
chope@mltwa.gov

The City of Mountlake Terrace alternate point of contact for this process will be:

Rich Meredith, City Engineer
23204 58th Avenue West
Mountlake Terrace, WA 98043
425.744.6275
rmeredith@mltwa.gov

Mountlake Terrace City Hall | 425-776-1161 | www.cityofmlt.com
23204 58th Ave W, Mountlake Terrace, WA 98043



City Manager's Office

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,

A handwritten signature in black ink, appearing to read "CH", is positioned above the printed name.

Carolyn Hope
Deputy City Manager

*Cc: Rich Meredith, City Engineer
Jeff Niten, City Manager*



August 28, 2024

Snohomish County Department of Emergency Management
c/o Planning and Resilience Program
DEMPPlanning@snoco.org
425-388-5060
720 80th Street SW, Bldg. A
Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the City of Mukilteo is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the Public Works Director for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The City of Mukilteo's primary point of contact for this process will be:

Matt Nienhuis - Public Works Director
11930 Cyrus Way, Mukilteo, WA 98277
425-263-8171
mnienhuis@mukilteowa.gov

The City of Mukilteo's alternate point of contact for this process will be:

Gael Fisk – City Engineer
11930 Cyrus Way, Mukilteo, WA 98277
425-263-8171
gfisk@mukilteowa.gov

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,

A handwritten signature in cursive script that reads "Matt Nienhuis".

Matt Nienhuis
City of Mukilteo Public Works Director

11930 Cyrus Way • Mukilteo, Washington 98275 • mukilteowa.gov



CITY OF SNOHOMISH

116 UNION AVENUE | SNOHOMISH, WASHINGTON 98290 | (360) 568-3115 | WWW.SNOHOMISHWA.GOV

June 11, 2024

Snohomish County Department of Emergency Management

c/o Planning and Resilience Program

DEMPPlanning@snoco.org

425-388-5060

720 80th Street SW, Bldg. A

Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the City of Snohomish is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the Mayor for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The City of Snohomish's primary point of contact for this process will be:

Ann Ray, Community Service Program Coordinator

116 Union Ave, Snohomish, WA 98290

425-328-0059

ray@snohomishwa.gov

The City of Snohomish's alternate point of contact for this process will be:

Shari Ireton, Director of Community Engagement & Strategic Initiatives

116 Union Ave, Snohomish, WA 98290

425-512-1839

ireton@snohomishwa.gov

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,

A handwritten signature in blue ink that reads "Linda Redmon".

Mayor Linda Redmon, City of Snohomish



City of Stanwood

10220 270th Street NW, Stanwood, WA 98292
(360) 629-9781 | Fax: (360) 629-0867

June 12, 2024

Snohomish County Department of Emergency Management

c/o Planning and Resilience Program

DEMPPlanning@snoco.org

425-388-5060

720 80th Street SW, Bldg. A

Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the *City of Stanwood* is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the *Public Works Director* for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The *City of Stanwood's* primary point of contact for this process will be:

Kevin Hushagen, Public Works Director
10220 270th Street NW, Stanwood, WA, 98292
360-454-5230
Kevin.Hushagen@ci.stanwood.wa.us

The *City of Stanwood's* alternate point of contact for this process will be:

Amanda Slattery, Public Works Office Specialist
10220 270th Street NW, Stanwood, WA, 98292
360-454-5231
Amanda.Slattery@ci.stanwood.wa.us

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,

A handwritten signature in blue ink that reads "Kevin Hushagen". The signature is written in a cursive, flowing style.

Kevin Hushagen
Public Works Director



**STILLAGUAMISH
TRIBE OF INDIANS**

stuləgʷábš : People of the River
t: (360) 652-7362 f: (360) 659-3113

May 20, 2025

Snohomish County Department of Emergency Management
c/o Planning and Resilience Program
DEMPlanning@snoco.org
425-388-5060
720 80th Street SW, Bldg. A
Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the *Stillaguamish Tribe of Indians* is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the Emergency Manager for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The *Stillaguamish Tribe of Indians* primary point of contact for this process will be:

Matt Ecker, Police Chief
3322 236th St NE Arlington, WA 98223
(360) 391-3326
mecker@stillypd.org

The *Stillaguamish Tribe of Indians* alternate point of contact for this process will be:

Elaris Perez, Executive Assistant
3322 236th St NE Arlington, WA 98223
(360) 913-8998
eperez@stillaguamish.com

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,

Matt Ecker
Police Chief

3322 236th St NE, Arlington, WA 98223 :: stillaguamish.com



City of Sultan
Community Development Department

June 6, 2024

Snohomish County Department of Emergency Management
c/o Planning and Resilience Program
DEMPlanning@snoco.org
425-388-5060
720 80th Street SW, Bldg. A
Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the City of Sultan is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the City Administrator for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The City of Sultan's primary point of contact for this process will be:

Hal Hart, Community Development Director
319 Main Street
PO Box 1199
Sultan WA 98294-1199
360.793.1311
Hal.hart@ci.sultan.wa.us

The City of Sultan's alternate point of contact for this process will be:

Ken Marshal, Building Inspector
319 Main Street
PO Box 1199
Sultan WA 98294-1199
360.618.1352
kenneth.marshall@ci.sultan.wa.us

319 Main Street, Suite 200 • PO Box 1199 • Sultan, Washington 98294
Phone 360-793-2231 • Fax: 360-793-3344
www.ci.sultan.wa.us

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,

A handwritten signature in black ink that reads "Tyler Christian". The script is cursive and fluid.

Tyler Christian
City Administrator

27 August 2024

Town of Woodway
WASHINGTON



To: Snohomish County Department of Emergency Management
c/o Planning and Resilience Program
720 80th Street SW, Bldg. A
Everett, WA 98203

From: Michael Quinn, Mayor

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the Town of Woodway is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the Mayor for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The Town of Woodway's primary point of contact for this process will be:

Bill Trimm, FAICP Town Planner
23920 113th Place West
Woodway, WA 98020
425-754-3557
bill@townofwoodway.com

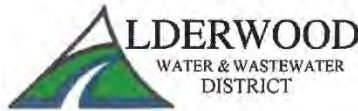
The Town of Woodway's alternate point of contact for this process will be:

Heidi Napolino, Town Clerk
23920 113th Place West
Woodway, WA 98020
206-542-4443
heidi@townofwoodway.com

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,

Michael S. Quinn Mayor
Town of Woodway



3626 - 156th Street SW • Lynnwood, WA 98087-5021 • 425-743-4605 • 425-742-4562 Fax • www.awwd.com

June 6, 2024

Snohomish County Department of Emergency Management

c/o Planning and Resilience Program

720 80th Street SW, Bldg. A

Everett, WA 98203

Via email to DEMPPlanning@snoco.org

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the **Alderwood Water & Wastewater District (AWWD)** is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the Communications and Resiliency Planner for AWWD, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

AWWD's primary point of contact for this process will be:

Mr. Amitava Michael Kundu, Communications and Resiliency Planner
Alderwood Water & Wastewater District
3626 156th Street SW, Lynnwood, WA 98087
Desk (425) 743-4605 ext 7921 or cell (425) 879-4676
mkundu@awwd.com

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,

A handwritten signature in red ink, appearing to be "MK", is written over a faint red circular stamp.

Mr. Amitava Michael Kundu, Communications and Resiliency Planner
Alderwood Water & Wastewater District



Ric Ilgenfritz, Chief Executive Officer

June 6th 2024

Snohomish County Department of Emergency Management

c/o Planning and Resilience Program

DEMPPlanning@snoco.org

425-388-5060

720 80th Street SW, Bldg. A

Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the Community Transit is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the Senior Program Manager Emergency Management & Business Continuity for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The Community Transit primary point of contact for this process will be:

Darren Branum Senior Program Manager Emergency Management & Business Continuity

2312 W Casino Rd Everett WA 98204

425-599-5050

Darren.Branum@commtrans.org

The Community Transit alternate point of contact for this process will be:

Scott Eastman Senior Manager Security & Emergency Management

2312 W Casino Rd Everett WA 98204

425-758-3189

Scott.Eastman@commtrans.org

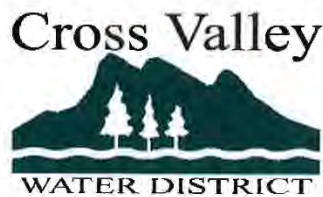
We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,

Darren Branum

Senior Program Manager Emergency Management & Business Continuity

Community Transit



June 5, 2024

Snohomish County Department of Emergency Management
c/o Planning and Resilience Program
DEMPPlanning@snoco.org
425-388-5060
720 80th Street SW, Bldg. A
Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the **Cross Valley Water District** is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the General Manager for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The **Cross Valley Water District's** primary point of contact for this process will be:

Christine Lamb, Administrative Supervisor
8802 180th ST SE Snohomish WA 98296
360-668-1875
clamb@crossvalleywater.net

The **Cross Valley Water District's** alternate point of contact for this process will be:

Amanda Worzella, Engineering Technician
8802 180th ST SE Snohomish WA 98296
360-668-6766
amandaw@crossvalleywater.net

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,

Mike Johnson
General Manager

8802 180th ST SE Snohomish WA 98296
www.crossvalleywater.net 360-668-6766 Fax: 360-668-9634

Snohomish County Dike District No. 1

3914 52nd St SE Everett, WA 98201
snohomishcountydikedistrict1@gmail.com

September 26, 2024

Snohomish County Department of Emergency Management

c/o Planning and Resilience Program
DEMPlanning@snoco.org
425-388-5060
720 80th Street SW, Bldg. A
Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership
Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that Snohomish County Dike District No. 1 is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As a Commissioner for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

Snohomish County Dike District No. 1's primary point of contact for this process will be:

Maria Foster, Secretary/Treasurer
3914 52nd St SE
Everett, WA 98201
425-345-9970
snohomishcountydikedistrict1@gmail.com

Snohomish County Dike District No. 1's alternate point of contact for this process will be:

Stan Rothfuss, Commissioner
3914 52nd St SE
Everett, WA 98201
425-239-0675
snohomishcountydikedistrict1@gmail.com

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,



Stan Rothfuss
Commissioner
Snohomish County Dike District No. 1

Snohomish County Diking District #2

September 25, 2024

Snohomish County Department of Emergency Management

c/o Planning and Resilience Program

DEMPPlanning@snoco.org

425-388-5060

720 80th Street SW, Bldg. A

Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the *Diking District #2* is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As a commissioner for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The *Diking District #2*'s primary point of contact for this process will be:

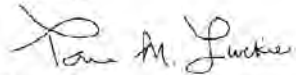
Tara Luckie, Commissioner
930 Sunnyside Blvd. Lake Stevens, WA 98258
206-291-4029
tara@luckiefarms.com

The *Diking District #2*'s alternate point of contact for this process will be:

Ruth Brandal, Commissioner
PO Box 12820 Everett, WA 98206
425-319-7657
ruth@bisonvalley.com

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,



Tara Luckie
Commissioner of Diking District #2

Drainage District 13

09/29/2024

Snohomish County Department of Emergency Management

c/o Planning and Resilience Program

DEMPlanning@snoco.org

425-383-5060

720 80th Street SW, Bldg. A

Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the *Drainage District 13* is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As a Supervisor for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The *Drainage District 13* primary point of contact for this process will be:

Dean Pakinas Drainage District 13 Supervisor

6931 Rivershore Road Snohomish, WA

425-319-1171

Dpakinas@gmail.com

The *Drainage District 13* alternate point of contact for this process will be:

Ben Krause Drainage District 13 Supervisor

7301 Rivershore Road Snohomish, WA 98290

425-355-7723

FarmerBen24@gmail.com

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,

Dean Pakinas

Drainage District 13 Supervisor

French Slough Flood Control District (FSFCD)

September 30, 2024

Snohomish County Department of Emergency Management
c/o Planning and Resilience Program
DEMPPlanning@snoco.org
425-388-5060
720 80th Street SW, Bldg. A
Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the **FSFCD** is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the **Manager** for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The FSFCD's primary point of contact for this process will be:

Scott Lane
14928 Old Sno Man RD
425 422 3266
scottlane11t@gmail.com

The **FSFCD's** alternate point of contact for this process will be:

Michelle Canfield Commissioner
Insert Address
360 770 0615
michelle@canfieldfarms.com

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,

Scott Lane
Manager



1106 Vernon Road · Suite A
Lake Stevens, WA 98258
(425) 334-8588 · Fax (425) 335-5947
Web Address: lkstevenssewer.org

June 10, 2024

Snohomish County Department of Emergency Management

c/o Planning and Resilience Program

DEMPPlanning@snoco.org

425-388-5060

720 80th Street SW, Bldg. A

Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the Lake Stevens Sewer District is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the General Manager for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The Lake Stevens Sewer District's primary point of contact for this process will be:

Rosalind (Roz) Gorc, Human Resources Manager
1106 Vernon Rd, Suite A, Lake Stevens, WA 98258
(425) 334-8588; (425) 339-3586
Rosalind.Gorc@lkssd.org

The Lake Stevens Sewer District's alternate point of contact for this process will be:

Mariah Low, General Manager
1106 Vernon Rd, Suite A, Lake Stevens, WA 98258
(425) 334-8588; (425) 339-3571
Mariah.Low@lkssd.org

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,



Mariah Low
General Manager

MARSHLAND FLOOD CONTROL DISTRICT

P.O. Box 85 · Snohomish, WA 98291-0085
360-568-6044 · marshlandfloodcontrol@gmail.com

September 24, 2024

Snohomish County Department of Emergency Management
c/o Planning and Resilience Program
DEMPPlanning@snoco.org
425-388-5060
720 80th Street SW, Bldg. A
Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the Marshland Flood Control District is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the Secretary/Manager and Legal Counsel for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The Marshland Flood Control District's primary point of contact for this process will be:

Gary W. Brandstetter, District Secretary/Manager and Legal Counsel
P.O. Box 85, Snohomish WA 98291-0085
360-568-6044
marshlandfloodcontrol@gmail.com

The Marshland Flood Control District's alternate point of contact for this process will be:

Don Bailey, Chairperson
12711 Springhetti Road, Snohomish WA 98296
360-568-8826
donbailey54@gmail.com

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,


Gary W. Brandstetter
Marshland Secretary/Manager and Legal Counsel



7824 Mukilteo Speedway, Mukilteo, WA 98275 • 425.355.3355 • www.mukilteowwd.org

August 1, 2024

Snohomish County Department of Emergency Management

c/o Planning and Resilience Program

DEMPPlanning@snoco.org

425-388-5060

720 80th Street SW, Bldg. A

Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the Mukilteo Water and Wastewater District is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As General Manager for this jurisdiction, I certify that I will commit the resources necessary, including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The District's primary point of contact for this process will be:

Dave Barnes, General Manager

dbarnes@mukilteowwd.org

425-359-8163

7824 Mukilteo Speedway, Mukilteo, WA 98275

The District's alternate point of contact for this process will be:

Kendra Hovis, Executive Assistant/HR

khovis@mukilteowwd.org

425-212-3451

7824 Mukilteo Speedway, Mukilteo, WA 98275

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,

A handwritten signature in blue ink that reads "Dave Barnes".

Dave Barnes

General Manager

**OLYMPIC VIEW WATER & SEWER DISTRICT**

8128 228th Street SW
Edmonds, WA 98026-8449
Olympicviewwater.com

P: 425.774.7769
F: 425.670.1856

Board of Commissioners

.....
John Elsasser
Judi Gladstone
Lora Petso

June 17th, 2024

Snohomish County Department of Emergency Management

c/o Planning and Resilience Program

DEMPPlanning@snoco.org

425-388-5060

720 80th Street SW, Bldg. A

Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the Olympic View Water & Sewer District is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the General Manager for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The Olympic View Water & Sewer District's primary point of contact for this process will be:

Bob Danson, General Manager
8128 228th St SW
Edmonds WA 98026
425-774-7769
bobd@ovwater.com

The Olympic View Water & Sewer District's alternate point of contact for this process will be:

Billy Ward, Operations Manager
8128 228th St SW
Edmonds WA 98026
425-774-7769
billyw@ovwater.com

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,

A handwritten signature in blue ink, appearing to read "Bob Danson", is written over the printed name.

Bob Danson
General Manager



Energizing Life in Our Communities

June 17, 2024

Snohomish County Department of Emergency Management

c/o Planning and Resilience Program

DEMPPlanning@snoco.org

425-388-5060

720 80th Street SW, Bldg. A

Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the Snohomish County Public Utility District is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As an Assistant General Manager (AGM) for the PUD, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The *Snohomish County Public Utility Districts* primary point of contact for this process will be:

Scott Parker, Manager of Security and Emergency Management

2320 California Street

Everett, WA 98201

425-783-8191

smparker@snopud.com

The *Snohomish County Public Utility Districts* alternate point of contact for this process will be:

Hunter Burchard, Emergency Management Operations Analyst

2320 California Street

Everett, WA 98201

425-783-8710

hlburchard@snopud.com

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,

Jason Zyskowski 6/17/2024

Jason Zyskowski - Assistant General Manager



June 17, 2024

Snohomish County Department of Emergency Management
c/o Planning and Resilience Program
DEMPlanning@snoco.org
425-388-5060
720 80th Street SW, Bldg. A
Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the Silver Lake Water & Sewer District is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the General Manager for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The Silver Lake Water & Sewer District's primary point of contact for this process will be:

Hawk Radosevich, Associate Engineer
15205 41st Ave SE, Bothell, WA 98012-6114
425-337-3647x314
hradosevich@slwsd.com

The Silver Lake Water & Sewer District's alternate point of contact for this process will be:

Curt Brees, General Manager
15205 41st Ave SE, Bothell, WA 98012-6114
425-337-3647x212
cbrees@slwsd.com

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,

A handwritten signature in blue ink, appearing to read "C. Brees", followed by a horizontal line.

Curt Brees, General Manager



Snohomish County Fire District #5

32905 Cascade View Drive, Sultan, Washington 98294
Phone: (360) 793-1179 Fax (360) 799-0563

June 6, 2024

Snohomish County Department of Emergency Management
c/o Planning and Resilience Program
DEMPlanning@snoco.org
425-388-5060
720 80th Street SW, Bldg. A
Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that Snohomish County Fire District #5 is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the Fire Chief for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

Snohomish County Fire District #5's primary point of contact for this process will be:

Seth Johnson, Fire Chief
32905 Cascade View Drive, Sultan, WA 98294
360-799-8070
s.johnson@snofire5.org

Snohomish County Fire District #5's alternate point of contact for this process will be:

Jim Fulcher, Deputy Chief
32905 Cascade View Drive, Sultan, WA 98294
360-793-1179
j.fulcher@snofire5.org

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,

A handwritten signature in blue ink, appearing to read "Seth Johnson", is written over a horizontal line.

Seth Johnson, Fire Chief

**Marysville Fire District***Office of the Fire Chief*

1635 Grove Street · Marysville, WA 98270

Phone: (360) 363-8500 Fax: (360) 659-1382

June 20, 2024

Snohomish County Department of Emergency Management

c/o Planning and Resilience Program

DEMPPlanning@snoco.org

425-388-5060

720 80th Street SW, Bldg. A

Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the Marysville Fire District is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the fire chief for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The Marysville Fire District primary point of contact for this process will be:

Tom Maloney, Assistant Fire Chief

1635 Grove Street

Marysville, WA 98270

tmaloney@mfdrra.org

360-363-8500

The Marysville Fire District alternate point of contact for this process will be:

Ned Vander Pol, Fire Chief

1635 Grove Street

Marysville, WA 98270

nvanderpol@mfdrra.org

360-363-8500

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,

A blue ink signature of Ned Vander Pol, consisting of stylized initials and a surname.

Ned Vander Pol, Fire Chief

SKY VALLEY FIRE

Snohomish County Fire District 26



501 Lewis Ave, PO Box #376 Gold Bar, WA 98251

SKYVALLEYFIRE.ORG

☎ (360)793-1335

📠 (360)793-8998

June 24, 2024

Snohomish County Department of Emergency Management

c/o Planning and Resilience Program

DEMPanning@snoco.org

425-388-5060

720 80 th Street SW, Bldg. A

Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that Sky Valley Fire is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the Battalion Chief of Support Services for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The Sky Valley Fire's primary point of contact for this process will be:

Robert Thurston Battalion Chief

501 Lewis Ave / P.O. Box 376 Gold Bar, WA 98251

360-913-5180

rthurston@skyvalleyfire.org

The Insert Jurisdiction's alternate point of contact for this process will be:

Eric Andrews Fire Chief

501 Lewis Ave / P.O. Box 376 Gold Bar, WA 98251

425-356-7373

eandrews@skyvalleyfire.org

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,

Robert Thurston

Battalion Chief

“Volunteering to make a difference”



**SOUTH COUNTY FIRE**

12425 Meridian Ave S., Everett WA 98208
tel (425) 551-1200 • fax (425) 551-1249
www.southsnofire.org

April 15, 2025

Snohomish County Department of Emergency Management

c/o Resilience and Mitigation Program

DEMPPlanning@snoco.org

425-388-5060

720 80th Street SW, Bldg. A

Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that South Snohomish County Fire and Rescue is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the Fire Chief for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

South County Fire's primary point of contact for this process will be:

Craig Willis, Captain - Hazmat
12425 Meridian Avenue S, Everett, WA 98208
(425) 405-2424
cwillis@southsnofire.org

South County Fire's alternate point of contact for this process will be:

Bob Eastman, Fire Chief
12425 Meridian Avenue S, Everett, WA 98208
(425) 754-7238
reastman@southsnofire.org

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,

A handwritten signature in black ink, appearing to read "Bob Eastman".

Bob Eastman
Fire Chief

SERVING SOUTH SNOHOMISH COUNTY • BRIER • EDMONDS • LYNNWOOD • MILL CREEK • MOUNTLAKE TERRACE



June 5th, 2024

Snohomish County Department of Emergency Management
c/o Planning and Resilience Program
DEMPPlanning@snoco.org
425-388-5060
720 80th Street SW, Bldg. A
Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the Snohomish Regional Fire & Rescue is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the Deputy Chief for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The Snohomish Regional Fire & Rescue's primary point of contact for this process will be:

Michael McConnell
Deputy Chief
163 Village Ct, Monroe, Wa 98272
(360) 668-5357 Phone
(360) 722-1840 Mobile
Michael.Mcconnell@srfr.org

The Snohomish Regional Fire & Rescue's alternate point of contact for this process will be:

Elsa Sexton
GIS Coordinator
163 Village Court, Monroe, WA 98272
Office: (360) 217-2131
Elsa.Sexton@srfr.org

We look forward to working through the update process and enhancing our community's resilience to disasters.

Main Office: 360-794-7666 - Email: Info@SRFR.org - Headquarters: 163 Village Court, Monroe, WA 98272



Sincerely,

A handwritten signature in black ink, appearing to read "Michael McConnell", is written over the printed name.

Michael McConnell
Deputy Chief



471 Admiral Way • Edmonds, WA 98020 • 425.774.0549 • PORTOFEDMONDS.GOV

June 17, 2024

Snohomish County Department of Emergency Management
c/o Planning and Resilience Program
DEMPPlanning@snoco.org
425-388-5060
720 80th Street SW, Bldg. A
Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership

Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the **Port of Edmonds** is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the Executive Director for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The Port of Edmonds primary point of contact for this process will be:

Angela Harris, Executive Director
471 Admiral Way, Edmonds, WA 98020
425.774.0549
aharris@portofedmonds.gov

The Port of Edmonds alternate point of contact for this process will be:

Brittany Williams, Manager of Commercial Properties & Economic Development
471 Admiral Way, Edmonds, WA 98020
425.774.0549
bwilliams@portofedmonds.gov

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,

Angela Harris
Executive Director



January 21, 2025

Snohomish County Department of Emergency Management
c/o Planning and Resilience Program
DEMPPlanning@snoco.org
425-388-5060
720 80th Street SW, Bldg. A
Everett, WA 98203

Memorandum for the Snohomish County Mitigation Planning Partnership
Subject: Formal Commitment to Participate in the 2025 Mitigation Plan Update Process

Please be advised that the Port of Everett is hereby formally committed to participating in the upcoming 2025 update of the Snohomish County Hazard Mitigation Plan. As the Chief of Planning & Development for this jurisdiction, I certify that I will commit the resources necessary including staff, planning meeting representation, and time to meet the expectations as agreed to by the planning partnership, and in order to maintain compliance with the Disaster Mitigation Act of 2000.

The *Port of Everett's* primary point of contact for this process will be:

Brandon Whitaker, Project Manager
1205 Craftsman Way, Suite 200, Everett, WA 98201
425-388-0613
BWhitaker@portofeverett.com

The Port of Everett's alternate point of contact for this process will be:

Laura Gurley, Director of Planning
1205 Craftsman Way, Suite 200, Everett, WA 98201
425-330-6564
LauraG@portofeverett.com

We look forward to working through the update process and enhancing our community's resilience to disasters.

Sincerely,
PORT OF EVERETT

Erik Gerking
Chief of Planning & Development

1205 Craftsman Way, Suite 200, Everett, WA 98201 Phone (425) 255-8164 Fax (425) 252-5166
Website: www.portofeverett.com Email: jamg@co.sno.wa.us P.O. Box 538 Everett, WA 98203

Appendix C: Public Outreach Documentation

Public Survey

Figure C.1: Public Survey Instagram Post



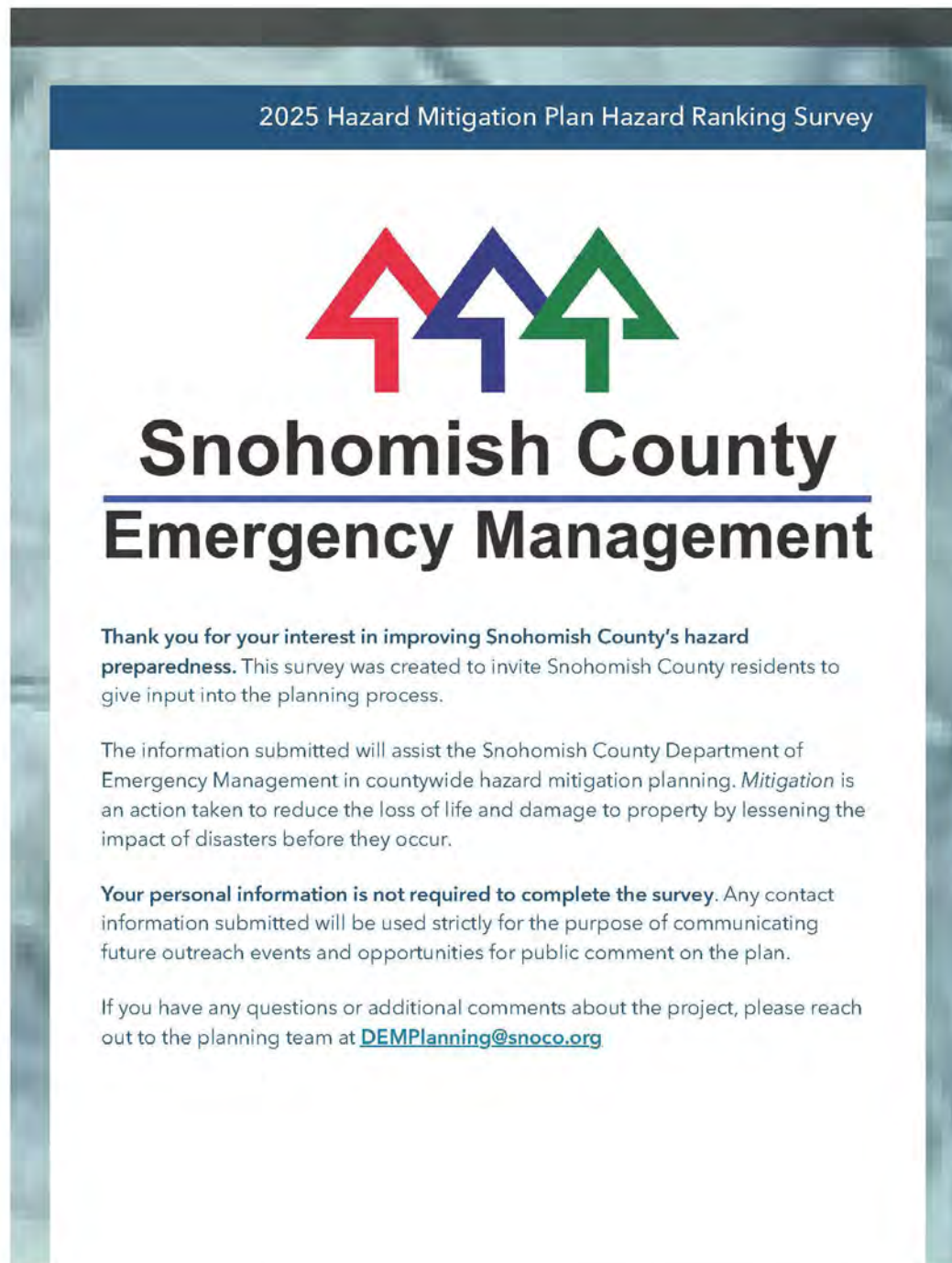
Figure C.2: Public Survey Facebook Post



Figure C.3: Public Survey X Post



Figure C.4: Public Survey Questions



Know **Your** Hazards



If you would like additional information regarding the Hazard Mitigation Plan update, please provide your preferred email address for contact:

Please select the location or nearest location of your primary residence or property:

☐ Arlington	☐ Arlington Heights	☐ Bothell	☐ Brier
☐ Cathcart	☐ Darrington	☐ Edmonds	☐ Everett
☐ Galena	☐ Getchell	☐ Gold Bar	☐ Granite Falls
☐ Index	☐ Lake Stevens	☐ Lake Roesiger	

☐ Lynnwood	☐ Maltby	☐ Marysville	☐ Mill Creek
☐ Monroe	☐ Mountlake Terrace	☐ Mukilteo	☐ Oso
☐ Robe	☐ Sauk-Suiattle Reservation	☐ Snohomish (city of)	
☐ Stillaguamish Reservation	☐ Stanwood	☐ Sultan	
☐ Startup	☐ Tulalip Reservation	☐ Verlot	
☐ Woodway	☐ Warm Beach		

Put the following hazards in order from the hazard that concerns you the most to the hazard that concerns you the least.

Drag and drop the options to order them. 1 is most concerning; 13 is least concerning

☐ Earthquake (and tsunami)
☐ Active Assailant
☐ Hazardous Materials
☐ Disease Outbreak
☐ Cybersecurity Attack
☐ Flood
☐ Mass Earth Movement (landslide)
☐ Volcano

The screenshot shows a web-based survey interface. At the top, there is a list of five hazard types, each with a radio button icon to its left: "Dam Failure", "Wildfire", "Severe Weather Events", "Aircraft Accident", and "Extreme Heat & Drought". Below this list is a "Reset" button. The main question is "In the future, if local government had \$1 million to complete a mitigation project, what kind of project should it prioritize?" followed by the instruction "Pick one." Below the question are five radio button options, each with a descriptive text box:

- ☐ Flood Control (projects that are designed to eliminate or reduce the frequency, extent and water depth of flood events and can include projects involving greenspace, water control systems such as channels or berms or other flood prevention projects which reduce flooding impacts to homes and communities)
- ☐ Project Scoping (the environmental analysis and cost determination of future risk reduction benefits of a hazard mitigation project)
- ☐ Stabilization and Restoration (projects that reduce risk to structures or infrastructure from erosion and landslides)
- ☐ Elevations (projects for raising homes so potential floodwaters may flow underneath)
- ☐ Retrofits (projects for making modifications to existing structures to reduce or eliminate the risk of future damage and to protect inhabitants)

☐ Acquisitions (the community or other eligible entity purchasing homes and/or commercial structures and the underlying property, demolishing all structures, and maintaining the property in open space)

☐ Utility/Infrastructure Protection (projects that elevate, move or improve a critical infrastructure such as elevating a pumping station or enhancing power poles to resist fire and/or wind)

☐ Other

Briefly explain your answer:

SnoCoAlerts, powered by Smart911, is the county's early warning and notification system where you can tailor alerts based on your zip code and choose what activities you want to be alerted about.

Have you signed up for SnoCoAlerts at snocoalerts.snoco.org?

☐ Yes

☐ No

What is your level of familiarity or knowledge about the hazards in Snohomish County?

☐ Not at all familiar ☐ Somewhat familiar ☐ Familiar ☐ Very familiar ☐ Expert

Select the hazards that you are most interested in learning more about.
Select all that apply.

☐ Active Assailant	☐ Aircraft Accident	☐ Cybersecurity Attack
☐ Dam Failure	☐ Earthquake (and tsunami)	
☐ Disease Outbreak	☐ Extreme Heat & Drought	☐ Flood
☐ Hazardous Materials	☐ Mass Earth Movement (landslide)	
☐ Severe Weather Events	☐ Volcano	☐ Wildfire
☐ Other		

How concerned are you about the risk from hazards where you live?

○ ——— ○ ——— ○ ——— ○ ——— ○

Unsure Not concerned Somewhat concerned Concerned Very concerned

Select the hazards that you believe threaten you the most.
Select all that apply

☐ Active Assailant	☐ Aircraft Accident	☐ Cybersecurity Attack
☐ Dam Failure	☐ Earthquake (and tsunami)	
☐ Disease Outbreak	☐ Extreme Heat & Drought	☐ Flood

☐ Hazardous Materials	☐ Mass Earth Movement (landslide)	
☐ Severe Weather Events	☐ Volcano	☐ Wildfire
☐ Other		

Briefly provide the reasons why you believe the selected hazards threaten you.

Compared to five years ago, how would you describe your level of concern regarding your safety from the hazards and the safety of your family, home, and assets?

○ ——— ○ ——— ○ ——— ○ ——— ○ ——— ○

Unsure Much less concerned Less concerned No change More concerned Much more concerned

Mitigation is an action to reduce the loss of life and property by lessening the impact of disasters before they occur. In your opinion, who is responsible for hazard mitigation where you live?

Select all that apply.

☐ Individuals

☐ Communities

☐ Local conservation organizations

☐ Local first responder agencies

☐ Local government (towns, cities, counties, tribes)☐ State government☐ Federal government land management agencies☐ Other

Briefly describe any other areas of concern or ideas for mitigation projects you have that would benefit the community.

1000 

Briefly describe what resources you use to make yourself and your family prepared for these hazards.

1000 

Do you have any additional comments or concerns that you would like to share about hazard risk, preparedness, or hazard mitigation?

The form consists of a dark gray header bar at the top. Below it is a large, empty rectangular text area. To the right of this area, there is a label '1000' followed by a small icon of a person. At the bottom center of the form is a blue button with the text 'Submit'.

Public Survey Results

The public survey was live from May 15, 2025 to September 30, 2025 and received 133 responses.

Table C.1: Number One Hazard of Concern for respondents

Ranking	Hazard
39%	Earthquake & Tsunami
15%	Wildfire
13%	Severe Weather Events
9%	Active Assailant
5%	Cybersecurity
4%	Disease Outbreak
3%	Flood
3%	Extreme Heat & Drought
3%	Aircraft Accident
2%	Dam Failure
2%	HazMat
1%	Volcano
1%	Mass Earth Movement

Figure C.5: In the future, if local government had \$1 million to complete a mitigation project, what kind of project should it prioritize?

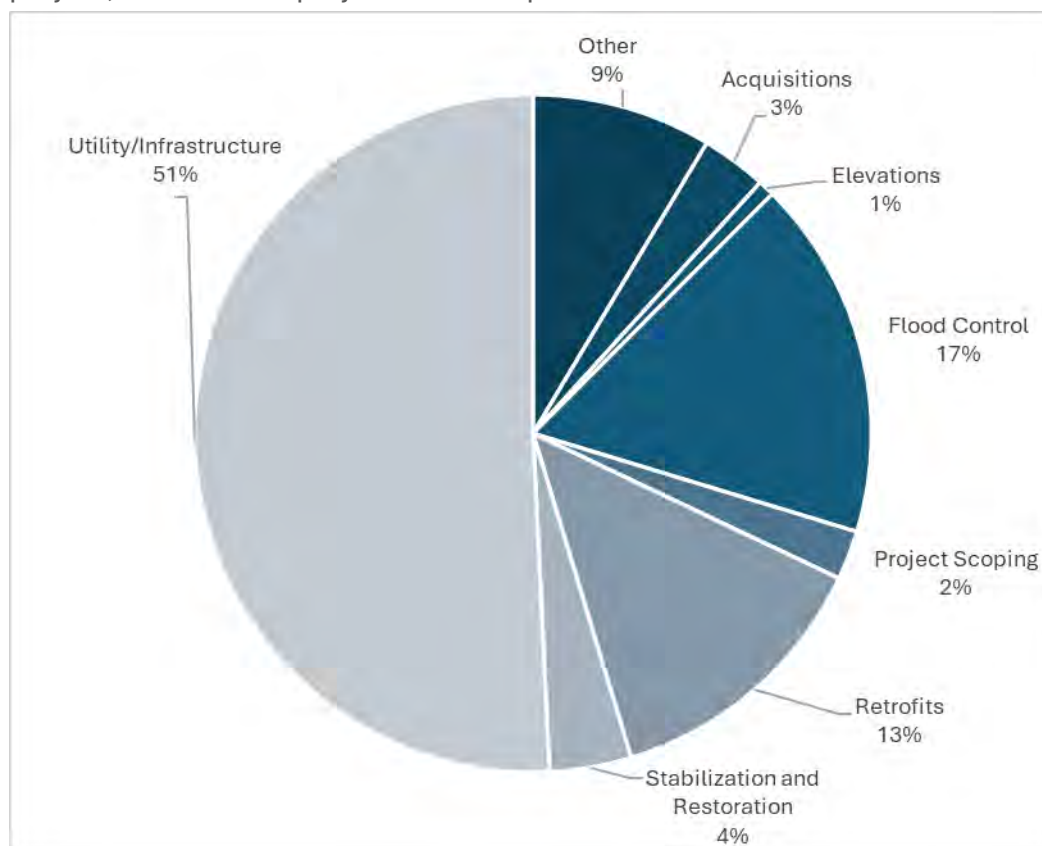
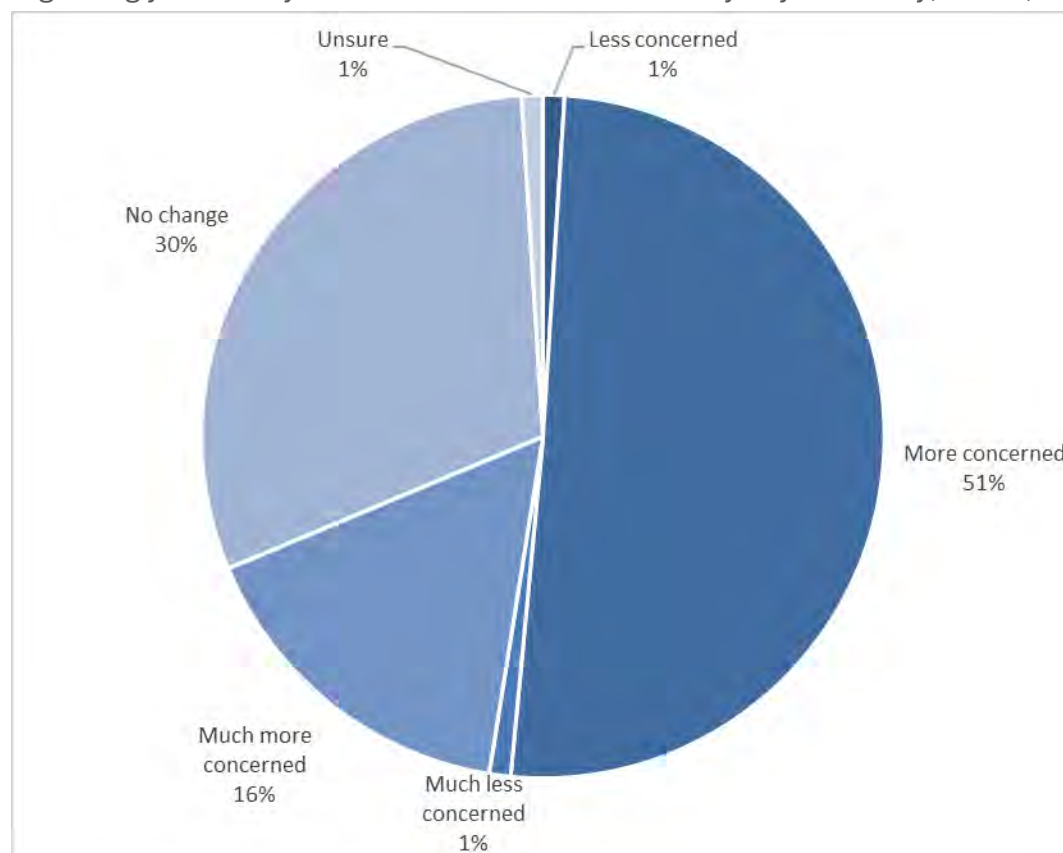


Figure C.6: Compared to five years ago, how would you describe your level of concern regarding your safety from the hazards and the safety of your family, home, and assets?



Outreach Events

Table C.2: Public Outreach Events

Date	Event/Activity	Summary	Attendees
May 15 – September 30, 2025	HMP Public Survey	The public survey asked respondents to help identify hazards in the community and what activities and projects should be prioritized	133 respondents – Public Engagement
Summer 2025	Public Outreach Events	Snohomish County DEM staff attended multiple public outreach events between May and September of 2025 including 2 CWPP open houses, National Night Out, the Countywide Climate Resilience Plan open house,	Snohomish County residents and visitors

Date	Event/Activity	Summary	Attendees
		and 5 days at the Evergreen State Fair. Attendees were given a chance to respond to the HMP Public Survey and discuss their concerns around hazards in the county.	
October 1-30 2025	HMP Public Comment Period	Community members were provided with the draft HMP from October 1 st to October 30 th , 2025 on the county's website and informed of the availability of the plan through the DEM newsletter which was sent to over 15,000 subscribers, and announcements on DEM's social media accounts	(# will update when comment period is closed) County residents who choose to provide feedback

Appendix D: Mitigation Strategy Prioritization

Table D.1: Mitigation Action Benefit-Cost Review Matrix

HIGH BENEFIT		MEDIUM BENEFIT		LOW BENEFIT		NO BENEFIT	
Description	Pts	Description	Pts	Description	Pts	Description	Pts
1. Project Cost: The total cost to implement an action or project over its lifecycle. The action's outcomes should provide a protective benefit, be sustained, and exceed the cost to implement the action. Lower cost initiatives with higher benefits should be a priority.							
Low cost, less than \$100k	5	Medium cost, \$100K-\$500K	3	High cost, more than \$500K	1	Cost far exceeds the anticipated benefits	0
2. Hazard Risk Rating: Actions that address high risk hazards or hazards that produce greater community vulnerabilities should be a community priority.							
Action addresses a jurisdiction's High-Risk Hazard	5	Action addresses a Medium-Risk Hazard	3	Action addresses a Low-Risk Hazard	1	Action Addresses a no risk hazard	0
3. Goal and Objective Fulfillment: Actions that will achieve plan goals and policies should be a community priority.							
Action strongly supports at least four objectives	5	Action supports at least two objectives	3	Action supports one objective	1	Action does not support plan objectives	0
4. Life Safety: An action's ability to protect the safety of residents, businesses, property, and community lifelines.							
Action will produce significant and lasting public safety benefits for residents, businesses, and property	5	Action will produce public safety benefits	3	Action will produce minimal public safety benefit	1	Action has no public safety benefits	0
5. Social Vulnerability ²⁰ : Does the action directly benefit underserved communities or individuals or groups that are socially vulnerable?							
Action will produce a significant and direct benefit for socially vulnerable or underserved communities	5	Action will produce a benefit	3	Action will have minimal benefit	1	Action does not benefit socially vulnerable or underserved communities	0
6. Changes in Development: Does the action directly account for changes in development due to recently completed or planned construction or changes in policies, standards, codes, or regulations that influence development patterns?							
Action includes measures that	5	Action includes measures that	3	Action includes minimal measures	1	Action does not account for	0

²⁰ Local governments have a responsibility to ensure that the plan's mitigation strategy complies with all applicable legal requirements related to civil rights, to ensure nondiscrimination. Compliance can help achieve equitable outcomes through the mitigation planning process for all communities, including underserved communities and socially vulnerable populations.

strongly account for changes in development	account for changes in development	that account for changes in development	changes in development
7. Climate Change: Does the action address a hazard that will present greater risks in the future due to the effects of climate change?			
Action strongly accounts for the effects of climate change on the hazard it addresses	5	Action accounts for the effects of climate change	3
		Action minimally accounts for the effects of climate change	1
		Action does not account for the effects of climate change	0
8. Geographic Impact: Does the action address a hazard for the entire geographic area that is affected or at risk?			
Action addresses hazard risks for the entire affected area of the community	5	Action addresses risks across at least half of the affected area	3
		Action addresses risk for a very limited portion of the affected area	1
		Action does not address risks within the affected area	0

Table D.2: Mitigation Action Benefit-Cost Review Scoring

Total Score	Prioritization
0-10 points	No benefit
11-20 points	Low benefit
21-30 points	Medium benefit
31-40 points	High benefit

Appendix E: Hazard Identification and Risk Assessment Methodology and Documentation

Table E.1: Hazard Identification and Risk Assessment Scoring Matrix

Hazard Occurrence (Severity Factor)	
Frequency A key factor in the risk of a particular hazard is the frequency with which it occurs. Some hazards have been relatively frequent in this state while others were only sporadic. For this hazard analysis, the frequency with which an event occurs is based on historical reports and query of subject matter experts from various state and local authorities.	
1 - Unlikely	<1% probability in next 100 years. No emergency declarations are likely.
2 - Possible	Between 1 to 10% probability in the next year, or at least 1 in the next 100 years. Very few emergency declarations have occurred.
3 - Likely	Between 10 and 100% probability in next year, or at least one chance in 10 years. Some emergency declarations have occurred.
4 - Highly Likely	Near 100% probability in next year. Many emergency declarations have occurred.
Duration May be defined as “time on the ground” or the time-period of response to a hazard or event. Transportation accidents may last a few hours and a flood several weeks. Duration, therefore, may not always be indicative of the degree of damage, but it remains an important planning factor.	
1 - Minimal	Less than half a day
2 - Short	12 to 24 hours
3 - Medium	1 to 7 days
4 - Long	7 to 30 days
5 - Excessive	More than 30 day
Speed of Onset May affect all other factors due to lack of warning or time to prepare for impact. The lead-time required protecting lives and property varies greatly with each event. For instance, a slow- rising riverine flood may allow time to evacuate residents and begin flood fight measures, but flash floods can occur with little warning.	
1 - Extended	More than 24 hours warning
2 - Medium	12 to 24 hours warning
3 - Short	6 to 12 hours warning
4 - None	Minimal to no warning

Magnitude	
The geographic dispersion of the hazard. For instance, comparing the number of counties impacted by a SWIF earthquake versus a transportation accident involving hazardous materials.	
1 - Localized	One jurisdiction impacted
2 - Limited	Multiple jurisdictions within the county impacted
3 - Critical	Full county impacted
4 - Catastrophic	Surrounding counties impacted

Vulnerability Impact

Impact on Business	
Refers to enduring economic impact of the hazard on the community by an event.	
1 - Minimum	Shutdown of critical facilities for less than 24 hours
2 - Low	Complete shutdown of critical facilities for one week
3 - Medium	Complete shutdown of critical facilities for two weeks
4 - High	Complete shutdown of critical facilities for 30 days or more
Impact on Humans	
This factor relates to the number of lives potentially lost to a particular hazard.	
1 - Minimum	No or minor injuries
2 - Low	Some injuries
3 - Medium	Multiple severe injuries
4 - High	Multiple deaths
Impact on Property	
This factor relates to the amount of property potentially lost to a particular hazard agent. This factor can vary between jurisdictions based on economics, geographic amount owned, and demographics of the particular populations.	
1 - Minimum	Less than 10% of property severely damaged
2 - Low	More than 10% of property severely damaged
3 - Medium	More than 25% of property severely damaged
4 - High	More than 50% of property severely damaged
Impact on Environment	
This factor considers the impacts from the hazard event to the air, water, land, and biota.	
1 - Minimum	Impact to the environment would not require remediation.
2 - Low	Impact to the environment would be minimal and only require a local response.
3 - Medium	Localized and temporary Impacts to the environment as a result of the event and/or cascading effects. No immediate health threat to people and environmental remediation would restore the environment to acceptable limits.
4 - High	Catastrophic impacts to the environment as a result of the event and/or cascading effects. Environmental impacts would have immediate and long term health effects to people. Significant resources required for remediation.

Resource Impact

Public

This category considers the overall impact to the citizens of the County caused by the hazard. The short- and long-term impacts caused by the hazard were considered in addition to efforts at the County level to mitigate, prepare for, respond to and recover from the event. The ranking is a general reflection of the County's resilience to the hazard being evaluated.

- | | |
|------------|--|
| 1 - Low | Impacts to the public would be managed at the local level. |
| 2 - Medium | Impacts to the public would likely not exceed State resources. Some casualties and injuries would occur. |
| 3 - High | Impacts to the public would likely exceed State resources and necessitate Federal assistance. Impacts would include multiple casualties. |

First Responders

This category considers the impact of the hazard event to police, fire, EMT, emergency management and other State and local officials that respond to the event. The threats to the health and safety of first responders posed by the hazard were considered in addition to staffing, training, and overall preparedness of first responders.

- | | |
|------------|--|
| 1 - Low | Threat posed by hazard would be managed at the local level. |
| 2 - Medium | Significant threat posed to first responders, but would likely not exceed State and local resources. |
| 3 - High | Extreme threat posed to first responders, which would likely exceed local and State resources. |

Continuity of Operations

This category considers the impact of the hazard event to local government's ability to continue or reestablish essential services.

- | | |
|------------|--|
| 1 - Low | Impact to essential functions would be minimal and only require a local response and local resources. |
| 2 - Medium | Impacts to essential functions as the result of the hazard event and/or cascading effects would be significant, but would likely not exceed State and local resources. |
| 3 - High | Impacts to essential functions as a result of the hazard event and/or cascading effects would be catastrophic and exceed local and State capabilities. |

Facilities & Infrastructure

This category considers the impacts of the hazard event to the built environment.

- | | |
|------------|--|
| 1 - Low | Effects to the built environment would be limited and likely not exceed the response and recovery efforts at the State and local level. |
| 2 - Medium | The hazard event would result in significant damages to the built environment and likely require the need for Federal resources to effectively recover. |
| 3 - High | The hazard event would result in catastrophic damages to the built environment. Damage to the built environment would have cascading and long-term effects. Impacts would strain Federal resources and require extensive long term recovery efforts. |

Economy	
This category considers the impact to the economy from the hazard event.	
1 - Low	Cost to respond and recover from the event would likely not exceed local resources.
2 - Medium	Cost to respond and recover from the event would likely not exceed the amount granted by State assistance.
3 - High	Cost to respond and recover from the event would quickly exceed the amount budgeted by State assistance requiring federal resources.
Environment	
This category considers the overall impact to the environment of the County caused by the hazard and the complexity of needed remediation as a result.	
1 - Low	Impact to the environment would be minimal and only require a local response.
2 - Medium	Impacts to the environment as the result of the hazard event and/or cascading effects would be localized and temporary. There would be no immediate health threat to people and environmental remediation would restore the environment to acceptable limits.
3 - High	Impacts to the environment as the result of the hazard event and/or cascading effects would be catastrophic. Environmental impacts would have immediate and long-term health effects to people. Significant resources would be required for environmental remediation.
Public Confidence	
This category considers the impact a hazard event of each type could have on the public's confidence in the government and emergency management community.	
1 - Low	Little or no impact on public trust.
2 - Medium	Some negative impact. Public trust is eroded but recoverable as the recovery ensues.
3 - High	Significant negative impact. A downturn in public trust for the government's ability to respond to or recover from disaster.

Figure E.1: HIRA Worksheet

Human Caused and Technological Hazards																	Natural Hazards																
Section Category		Occurrence Probability				Vulnerability Impact				Resource Impact																							
Scale		Frequency	Duration	Speed of Onset	Magnitude	Impact on Business	Impact on Humans	Impact on Property	Impact on Environment	Public	First Responders	Continuity of Operations	Facilities and Infrastructure	Economy	Environment	Public Confidence																	
	Scale	1 - Unlikely	1 - Minimal	1 - Extended	1 - Localized	1 - Minimum	1 - Minimum	1 - Minimum	1 - Minimum	1 - Low	1 - Low	1 - Low	1 - Low	1 - Low	1 - Low	1 - Low																	
		2 - Possible	2 - Short	2 - Medium	2 - Limited	2 - Low	2 - Low	2 - Low	2 - Low	2 - Medium	2 - Medium	2 - Medium	2 - Medium	2 - Medium	2 - Medium	2 - Medium																	
		3 - Likely	3 - Long	3 - Short	3 - Critical	3 - Medium	3 - Medium	3 - Medium	3 - Medium	3 - High	3 - High	3 - High	3 - High	3 - High	3 - High	3 - High																	
		4 - Highly Likely	4 - Long	4 - Short-None	4 - Catastrophic	4 - High	4 - High	4 - High	4 - High																								
		5 - Excessive																															
Earthquake & Tsunami		Jurisdiction																															
Extreme Heat		Countywide																															
Drought		Jurisdiction																															
Flood		Countywide																															
Mass Earth Movement		Countywide																															
Severe Weather Events		Countywide																															
Volcano		Countywide																															
Wildfire		Countywide																															
Active Aircraft		Countywide																															
Accident		Countywide																															
Cybersecurity		Countywide																															
Dam Failure		Countywide																															
Disease Outbreak		Countywide																															
Hazardous Materials		Countywide																															





FEMA

Table of Contents

Section	Page #
General Description of the Region	3
Building and Lifeline Inventory	4
Building Inventory	
Critical Facility Inventory	
Transportation and Utility Lifeline Inventory	
Earthquake Scenario Parameters	7
Direct Earthquake Damage	8
Buildings Damage	
Essential Facilities Damage	
Transportation and Utility Lifeline Damage	
Induced Earthquake Damage	14
Fire Following Earthquake	
Debris Generation	
Social Impact	15
Shelter Requirements	
Casualties	
Economic Loss	17
Building Related Losses	
Transportation and Utility Lifeline Losses	
 Appendix A: County Listing for the Region	
Appendix B: Regional Population and Building Value Data	



General Description of the Region

Hazus-MH is a regional earthquake loss estimation model that was developed by the Federal Emergency Management Agency (FEMA) and the National Institute of Building Sciences. The primary purpose of Hazus is to provide a methodology and software application to develop multi-hazard losses at a regional scale. These loss estimates would be used primarily by local, state and regional officials to plan and stimulate efforts to reduce risks from multi-hazards and to prepare for emergency response and recovery.

The earthquake loss estimates provided in this report was based on a region that includes 1 county(ies) from the following state(s):

Washington

Note:

Appendix A contains a complete listing of the counties contained in the region.

The geographical size of the region is 2,105.91 square miles and contains 173 census tracts. There are over 306 thousand households in the region which has a total population of 827,957 people. The distribution of population by Total Region and County is provided in Appendix B.

There are an estimated 310 thousand buildings in the region with a total building replacement value (excluding contents) of 99,912 (millions of dollars). Approximately 91.00 % of the buildings (and 66.00% of the building value) are associated with residential housing.

The replacement value of the transportation and utility lifeline systems is estimated to be 10,040 and 4,588 (millions of dollars), respectively.



Building and Lifeline Inventory

Building Inventory

Hazus estimates that there are 310 thousand buildings in the region which have an aggregate total replacement value of 99,912 (millions of dollars). Appendix B provides a general distribution of the building value by Total Region and County.

In terms of building construction types found in the region, wood frame construction makes up 84% of the building inventory. The remaining percentage is distributed between the other general building types.

Critical Facility Inventory

Hazus breaks critical facilities into two (2) groups: essential facilities and high potential loss facilities (HPL). Essential facilities include hospitals, medical clinics, schools, fire stations, police stations and emergency operations facilities. High potential loss facilities include dams, levees, military installations, nuclear power plants and hazardous material sites.

For essential facilities, there are 8 hospitals in the region with a total bed capacity of 898 beds. There are 278 schools, 73 fire stations, 24 police stations and 5 emergency operation facilities. With respect to high potential loss facilities (HPL), there are no dams identified within the inventory. The inventory also includes no hazardous material sites, no military installations and no nuclear power plants.

Transportation and Utility Lifeline Inventory

Within Hazus, the lifeline inventory is divided between transportation and utility lifeline systems. There are seven (7) transportation systems that include highways, railways, light rail, bus, ports, ferry and airports. There are six (6) utility systems that include potable water, wastewater, natural gas, crude & refined oil, electric power and communications. The lifeline inventory data are provided in Tables 1 and 2.

The total value of the lifeline inventory is over 14,628.00 (millions of dollars). This inventory includes over 350.45 miles of highways, 497 bridges, 8,480.47 miles of pipes.

HAZUS™**FEMA**

Table 1: Transportation System Lifeline Inventory

System	Component	# Locations/ # Segments	Replacement value (millions of dollars)
Highway	Bridges	497	2593.4517
	Segments	242	3497.1296
	Tunnels	3	11.5615
	Subtotal		6102.1428
Railways	Bridges	85	425.4250
	Facilities	2	5.3260
	Segments	121	3260.4795
	Tunnels	0	0.0000
	Subtotal		3691.2305
Light Rail	Bridges	0	0.0000
	Facilities	0	0.0000
	Segments	0	0.0000
	Tunnels	0	0.0000
	Subtotal		0.0000
Bus	Facilities	1	2.0759
	Subtotal		2.0759
Ferry	Facilities	4	5.3240
	Subtotal		5.3240
Port	Facilities	48	160.9415
	Subtotal		160.9415
Airport	Facilities	3	28.7917
	Runways	10	49.5905
	Subtotal		78.3822
Total			10,040.10



FEMA

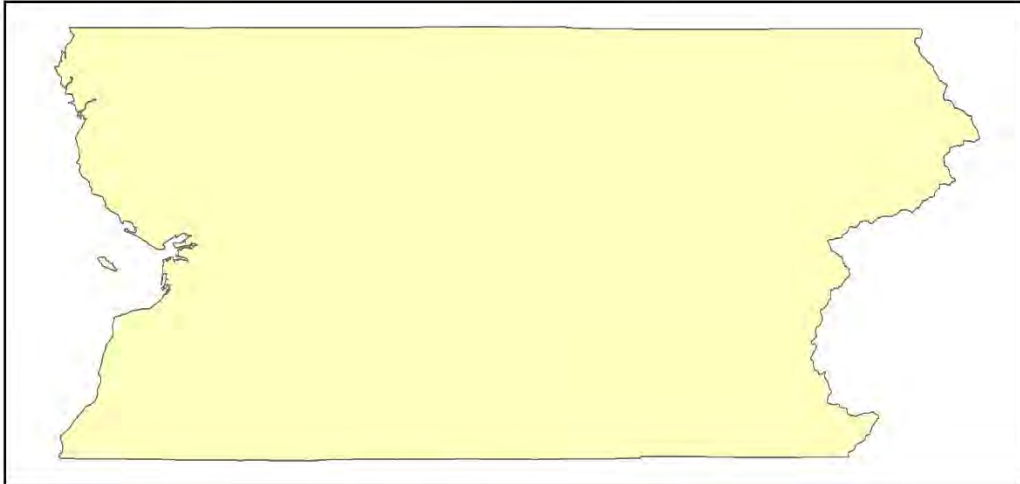
Table 2: Utility System Lifeline Inventory

System	Component	# Locations / Segments	Replacement value (millions of dollars)
Potable Water	Distribution Lines	NA	169.0892
	Facilities	4	146.5200
	Pipelines	0	0.0000
	Subtotal		315.6092
Waste Water	Distribution Lines	NA	101.4535
	Facilities	17	2571.2667
	Pipelines	0	0.0000
	Subtotal		2672.7222
Natural Gas	Distribution Lines	NA	67.6357
	Facilities	1	69.8360
	Pipelines	8	426.0423
	Subtotal		563.5140
Oil Systems	Facilities	2	0.2200
	Pipelines	0	0.0000
	Subtotal		0.2200
Electrical Power	Facilities	3	1035.7656
	Subtotal		1035.7656
Communication	Facilities	4	0.4400
	Subtotal		0.4400
		Total	4,588.30



Earthquake Scenario

Hazus uses the following set of information to define the earthquake parameters used for the earthquake loss estimate provided in this report.



Scenario Name	M9.0-M9.0 Cascadia, median ground motion
Type of Earthquake	
Fault Name	NA
Historical Epicenter ID #	NA
Probabilistic Return Period	NA
Longitude of Epicenter	0.00
Latitude of Epicenter	0.00
Earthquake Magnitude	9.00
Depth (km)	0.00
Rupture Length (Km)	0.00
Rupture Orientation (degrees)	0.00
Attenuation Function	



Direct Earthquake Damage

Building Damage

Hazus estimates that about 24,765 buildings will be at least moderately damaged. This is over 8.00 % of the buildings in the region. There are an estimated 968 buildings that will be damaged beyond repair. The definition of the 'damage states' is provided in Volume 1: Chapter 5 of the Hazus technical manual. Table 3 below summarizes the expected damage by general occupancy for the buildings in the region. Table 4 below summarizes the expected damage by general building type.

Damage Categories by General Occupancy Type

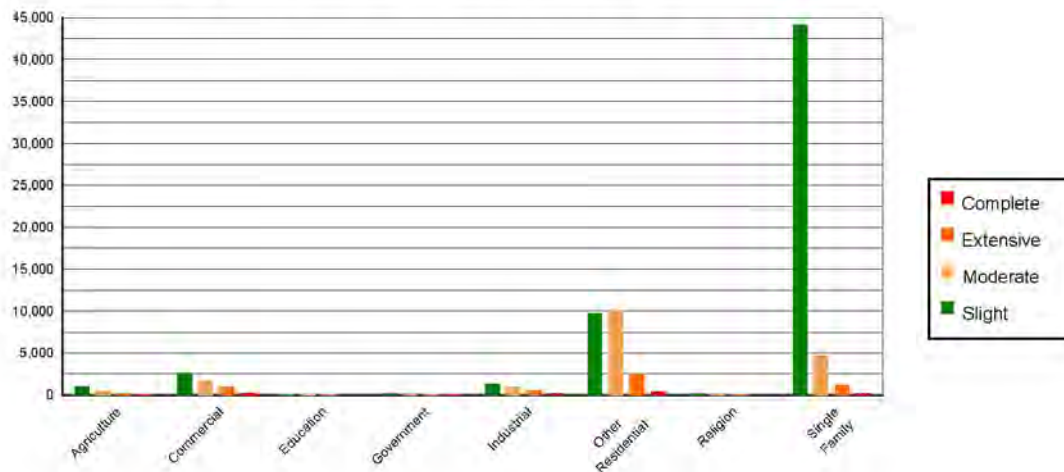


Table 3: Expected Building Damage by Occupancy

	None		Slight		Moderate		Extensive		Complete	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Agriculture	4321.29	1.91	990.60	1.68	458.60	2.52	157.76	2.83	32.75	3.38
Commercial	7509.50	3.31	2819.58	4.44	1755.54	9.63	950.74	17.07	217.64	22.48
Education	357.84	0.16	64.79	0.11	56.27	0.31	43.18	0.78	9.93	1.03
Government	429.55	0.19	135.53	0.23	122.18	0.67	80.13	1.44	19.61	2.02
Industrial	3552.38	1.57	1307.10	2.21	928.28	5.08	526.53	9.45	147.72	15.26
Other Residential	12530.34	5.53	9718.55	16.46	10105.41	55.44	2534.43	45.51	370.27	38.24
Religion	325.97	0.14	128.79	0.22	132.30	0.73	86.84	1.56	19.10	1.97
Single Family	197585.91	87.19	44080.13	74.66	4670.92	25.63	1189.81	21.36	151.23	15.62
Total	226,613		59,045		18,227		5,569		968	



FEMA

Table 4: Expected Building Damage by Building Type (All Design Levels)

	None		Slight		Moderate		Extensive		Complete	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Wood	211707.70	93.42	48098.10	78.07	2579.75	14.15	138.91	2.49	7.31	0.75
Steel	1655.01	0.73	1018.31	1.72	996.68	5.47	643.94	11.56	224.63	23.20
Concrete	1428.87	0.63	658.02	1.11	712.49	3.91	568.21	10.20	119.32	12.32
Precast	1410.73	0.62	630.22	1.07	463.87	2.54	287.97	5.17	73.39	7.58
RM	4477.28	1.98	897.27	1.52	789.65	4.33	359.91	6.46	44.63	4.61
URM	1213.35	0.54	2472.29	4.19	3445.61	18.90	1264.93	22.71	166.16	17.16
MH	4719.83	2.08	7270.85	12.31	9239.45	50.69	2305.57	41.40	332.81	34.37
Total	226,613		59,045		18,227		5,569		968	

*Note:

RM Reinforced Masonry
 URM Unreinforced Masonry
 MH Manufactured Housing



Essential Facility Damage

Before the earthquake, the region had 898 hospital beds available for use. On the day of the earthquake, the model estimates that only 457 hospital beds (51.00%) are available for use by patients already in the hospital and those injured by the earthquake. After one week, 70.00% of the beds will be back in service. By 30 days, 93.00% will be operational.

Table 5: Expected Damage to Essential Facilities

Classification	Total	# Facilities		
		At Least Moderate Damage > 50%	Complete Damage > 50%	With Functionality > 50% on day 1
Hospitals	8	2	0	4
Schools	278	33	0	214
EOCs	5	0	0	5
PoliceStations	24	1	0	19
FireStations	73	5	0	63



FEMA

Transportation Lifeline Damage

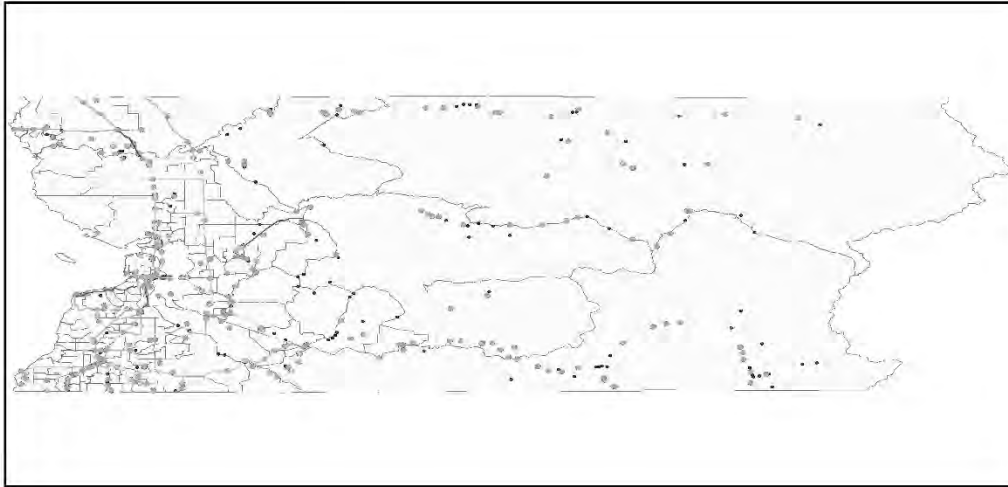




Table 6: Expected Damage to the Transportation Systems

System	Component	Number of Locations				
		Locations/ Segments	With at Least Mod. Damage	With Complete Damage	With Functionality > 50 %	
					After Day 1	After Day 7
Highway	Segments	242	0	0	242	242
	Bridges	497	12	0	485	495
	Tunnels	3	0	0	3	3
Railways	Segments	121	0	0	121	121
	Bridges	85	0	0	85	85
	Tunnels	0	0	0	0	0
	Facilities	2	0	0	2	2
Light Rail	Segments	0	0	0	0	0
	Bridges	0	0	0	0	0
	Tunnels	0	0	0	0	0
	Facilities	0	0	0	0	0
Bus	Facilities	1	0	0	1	1
Ferry	Facilities	4	0	0	4	4
Port	Facilities	48	0	0	48	48
Airport	Facilities	3	0	0	3	3
	Runways	10	0	0	10	10

Table 6 provides damage estimates for the transportation system.

Note: Roadway segments, railroad tracks and light rail tracks are assumed to be damaged by ground failure only. If ground failure maps are not provided, damage estimates to these components will not be computed.

Tables 7-9 provide information on the damage to the utility lifeline systems. Table 7 provides damage to the utility system facilities. Table 8 provides estimates on the number of leaks and breaks by the pipelines of the utility systems. For electric power and potable water, Hazus performs a simplified system performance analysis. Table 9 provides a summary of the system performance information.



FEMA

Table 7 : Expected Utility System Facility Damage

System	Total #	# of Locations			
		With at Least Moderate Damage	With Complete Damage	with Functionality > 50 %	
				After Day 1	After Day 7
Potable Water	4	0	0	4	4
Waste Water	17	0	0	14	17
Natural Gas	1	0	0	1	1
Oil Systems	2	0	0	2	2
Electrical Power	3	0	0	3	3
Communication	4	0	0	4	4

Table 8 : Expected Utility System Pipeline Damage (Site Specific)

System	Total Pipelines Length (miles)	Number of Leaks	Number of Breaks
Potable Water	5,253	0	0
Waste Water	3,152	0	0
Natural Gas	75	0	0
Oil	0	0	0

Table 9: Expected Potable Water and Electric Power System Performance

	Total # of Households	Number of Households without Service				
		At Day 1	At Day 3	At Day 7	At Day 30	At Day 90
Potable Water	306,828	0	0	0	0	0
Electric Power		0	0	0	0	0



Induced Earthquake Damage

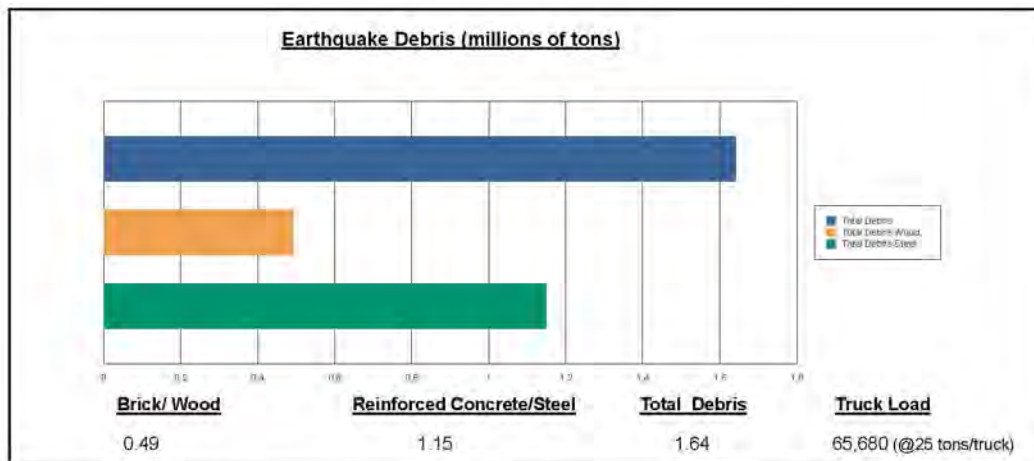
Fire Following Earthquake

Fires often occur after an earthquake. Because of the number of fires and the lack of water to fight the fires, they can often burn out of control. Hazus uses a Monte Carlo simulation model to estimate the number of ignitions and the amount of burnt area. For this scenario, the model estimates that there will be 1 ignitions that will burn about 0.00 sq. mi (0.00 % of the region's total area.) The model also estimates that the fires will displace about 9 people and burn about 0 (millions of dollars) of building value.

Debris Generation

Hazus estimates the amount of debris that will be generated by the earthquake. The model breaks the debris into two general categories: a) Brick/Wood and b) Reinforced Concrete/Steel. This distinction is made because of the different types of material handling equipment required to handle the debris.

The model estimates that a total of 1,642,000 tons of debris will be generated. Of the total amount, Brick/Wood comprises 30.00% of the total, with the remainder being Reinforced Concrete/Steel. If the debris tonnage is converted to an estimated number of truckloads, it will require 65,680 truckloads (@25 tons/truck) to remove the debris generated by the earthquake.

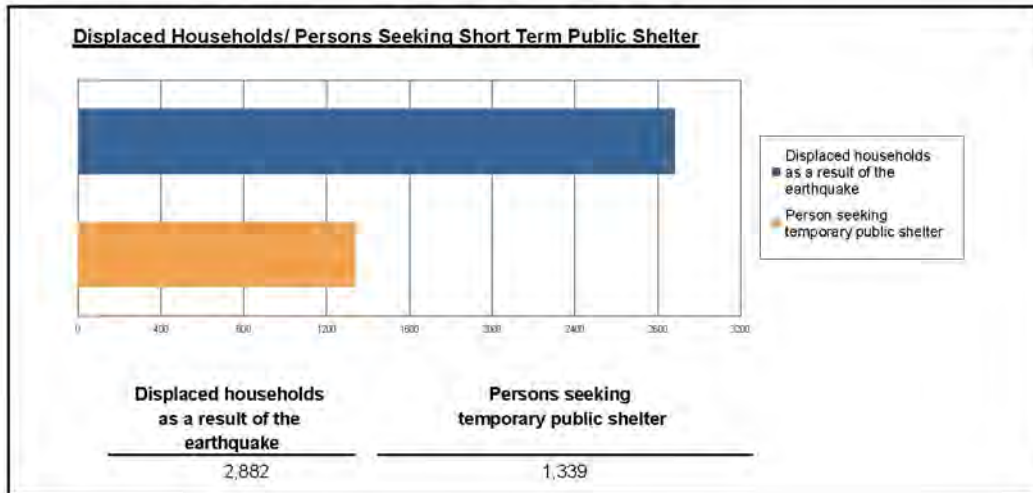




Social Impact

Shelter Requirement

Hazus estimates the number of households that are expected to be displaced from their homes due to the earthquake and the number of displaced people that will require accommodations in temporary public shelters. The model estimates 2,882 households to be displaced due to the earthquake. Of these, 1,339 people (out of a total population of 827,957) will seek temporary shelter in public shelters.



Casualties

Hazus estimates the number of people that will be injured and killed by the earthquake. The casualties are broken down into four (4) severity levels that describe the extent of the injuries. The levels are described as follows:

- Severity Level 1: Injuries will require medical attention but hospitalization is not needed.
- Severity Level 2: Injuries will require hospitalization but are not considered life-threatening.
- Severity Level 3: Injuries will require hospitalization and can become life threatening if not promptly treated.
- Severity Level 4: Victims are killed by the earthquake.

The casualty estimates are provided for three (3) times of day: 2:00 AM, 2:00 PM and 5:00 PM. These times represent the periods of the day that different sectors of the community are at their peak occupancy loads. The 2:00 AM estimate considers that the residential occupancy load is maximum, the 2:00 PM estimate considers that the educational, commercial and industrial sector loads are maximum and 5:00 PM represents peak commute time.

Table 10 provides a summary of the casualties estimated for this earthquake.

HAZUS™**FEMA**

Table 10: Casualty Estimates

		Level 1	Level 2	Level 3	Level 4
2 AM	Commercial	14.66	3.42	0.49	0.97
	Commuting	0.04	0.05	0.08	0.02
	Educational	0.00	0.00	0.00	0.00
	Hotels	0.22	0.04	0.00	0.01
	Industrial	13.50	3.09	0.42	0.82
	Other-Residential	275.28	44.55	3.66	6.94
	Single Family	196.25	27.40	3.09	6.00
	Total	500	79	8	15
2 PM	Commercial	958.83	223.03	32.24	62.99
	Commuting	0.34	0.43	0.75	0.14
	Educational	453.87	105.85	15.47	30.04
	Hotels	0.04	0.01	0.00	0.00
	Industrial	99.08	22.65	3.07	5.96
	Other-Residential	86.64	14.31	1.25	2.29
	Single Family	61.03	9.01	1.06	1.97
	Total	1,660	375	54	103
5 PM	Commercial	657.07	151.95	22.08	42.54
	Commuting	6.83	8.62	15.15	2.90
	Educational	120.87	28.15	4.12	7.95
	Hotels	0.06	0.01	0.00	0.00
	Industrial	61.93	14.15	1.92	3.72
	Other-Residential	102.74	16.70	1.42	2.61
	Single Family	76.57	11.22	1.32	2.45
	Total	1,026	231	46	62

**FEMA**

Economic Loss

The total economic loss estimated for the earthquake is 5,321.49 (millions of dollars), which includes building and lifeline related losses based on the region's available inventory. The following three sections provide more detailed information about these losses.



Building-Related Losses

The building losses are broken into two categories: direct building losses and business interruption losses. The direct building losses are the estimated costs to repair or replace the damage caused to the building and its contents. The business interruption losses are the losses associated with inability to operate a business because of the damage sustained during the earthquake. Business interruption losses also include the temporary living expenses for those people displaced from their homes because of the earthquake.

The total building-related losses were 5,046.88 (millions of dollars); 30 % of the estimated losses were related to the business interruption of the region. By far, the largest loss was sustained by the residential occupancies which made up over 32 % of the total loss. Table 11 below provides a summary of the losses associated with the building damage.

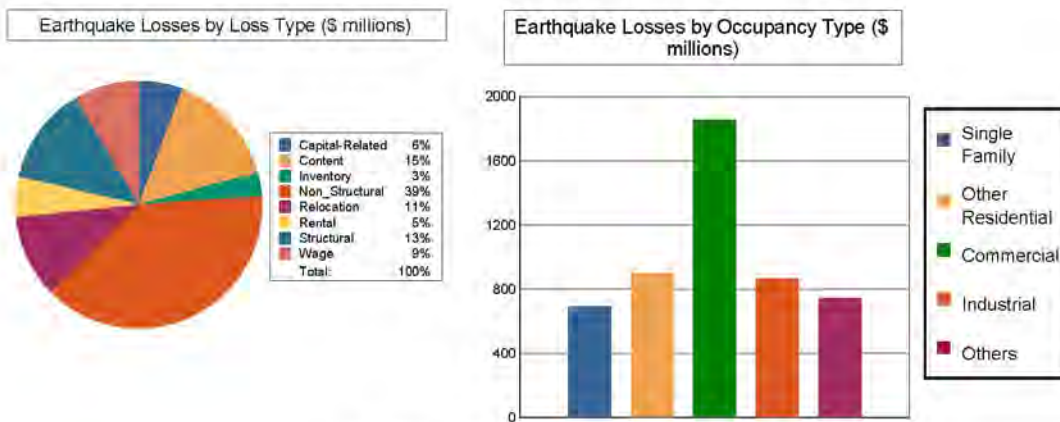


Table 11: Building-Related Economic Loss Estimates
(Millions of dollars)

Category	Area	Single Family	Other Residential	Commercial	Industrial	Others	Total
Income Losses							
	Wage	0.0000	61.2537	285.6769	23.2637	59.9004	430.0947
	Capital-Related	0.0000	26.0680	246.6480	16.2311	8.7342	297.6813
	Rental	16.3975	75.2392	136.6251	13.4606	25.7251	267.4475
	Relocation	51.4067	65.8146	209.3749	59.6826	151.3152	537.5940
	Subtotal	67.8042	228.3755	878.3249	112.6380	245.6749	1532.8175
Capital Stock Losses							
	Structural	91.2977	115.4503	206.9073	131.6573	106.6320	651.9446
	Non_Structural	390.3681	470.7982	471.2221	348.4995	272.9979	1,953.8858
	Content	142.8514	86.1319	210.2798	215.1684	97.0629	751.4944
	Inventory	0.0000	0.0000	84.6217	53.2656	18.8532	156.7405
	Subtotal	624.5172	672.3804	973.0309	748.5908	495.5460	3514.0653
	Total	692.32	900.76	1851.36	861.23	741.22	5046.88



Transportation and Utility Lifeline Losses

For the transportation and utility lifeline systems, Hazus computes the direct repair cost for each component only. There are no losses computed by Hazus for business interruption due to lifeline outages. Tables 12 & 13 provide a detailed breakdown in the expected lifeline losses.

Table 12: Transportation System Economic Losses
(Millions of dollars)

System	Component	Inventory Value	Economic Loss	Loss Ratio (%)
Highway	Segments	3497.1296	0.0000	0.00
	Bridges	2593.4517	44.9196	1.73
	Tunnels	11.5615	0.0382	0.33
	Subtotal	6102.1428	44.9578	
Railways	Segments	3260.4795	0.0000	0.00
	Bridges	425.4250	2.4087	0.57
	Tunnels	0.0000	0.0000	0.00
	Facilities	5.3260	0.6719	12.62
	Subtotal	3691.2305	3.0806	
Light Rail	Segments	0.0000	0.0000	0.00
	Bridges	0.0000	0.0000	0.00
	Tunnels	0.0000	0.0000	0.00
	Facilities	0.0000	0.0000	0.00
	Subtotal	0.0000	0.0000	
Bus	Facilities	2.0759	0.2793	13.45
	Subtotal	2.0759	0.2793	
Ferry	Facilities	5.3240	0.6097	11.45
	Subtotal	5.3240	0.6097	
Port	Facilities	160.9415	18.8177	11.69
	Subtotal	160.9415	18.8177	
Airport	Facilities	28.7917	2.9505	10.25
	Runways	49.5905	0.0000	0.00
	Subtotal	78.3822	2.9505	
	Total	10,040.10	70.70	



Table 13: Utility System Economic Losses
(Millions of dollars)

System	Component	Inventory Value	Economic Loss	Loss Ratio (%)
Potable Water	Pipelines	0.0000	0.0000	0.00
	Facilities	146.5200	7.6022	5.19
	Distribution Lines	169.0892	0.0002	0.00
	Subtotal	315.6092	7.6024	
Waste Water	Pipelines	0.0000	0.0000	0.00
	Facilities	2571.2687	126.7431	4.93
	Distribution Lines	101.4535	0.0001	0.00
	Subtotal	2672.7222	126.7432	
Natural Gas	Pipelines	426.0423	0.0000	0.00
	Facilities	69.8360	4.0159	5.75
	Distribution Lines	67.6357	0.0000	0.00
	Subtotal	563.5140	4.0159	
Oil Systems	Pipelines	0.0000	0.0000	0.00
	Facilities	0.2200	0.0136	6.18
	Subtotal	0.2200	0.0136	
Electrical Power	Facilities	1035.7656	65.4881	6.32
	Subtotal	1035.7656	65.4881	
Communication	Facilities	0.4400	0.0512	11.64
	Subtotal	0.4400	0.0512	
Total		4,588.27	203.91	



FEMA

Appendix A: County Listing for the Region

Snohomish, WA

**Appendix B: Regional Population and Building Value Data**

State	County Name	Population	Building Value (millions of dollars)		
			Residential	Non-Residential	Total
Washington	Snohomish	827,957	65,515	34,396	99,912
Total Region		827,957	65,515	34,396	99,912

Figure E.3: Southern Whidbey Island Fault Hazus Summary Report



FEMA

RiskMAP
Increasing Resilience Together

Hazus: Earthquake Global Risk Report

Region Name: EQ_scenarios

Earthquake Scenario: M7.4-Southern Whidbey Island fault-south

Print Date: January 28, 2025

Disclaimer:

Totals only reflect data for those census tracts/blocks included in the user's study region.

The estimates of social and economic impacts contained in this report were produced using Hazus loss estimation methodology software which is based on current scientific and engineering knowledge. There are uncertainties inherent in any loss estimation technique. Therefore, there may be significant differences between the modeled results contained in this report and the actual social and economic losses following a specific earthquake. These results can be improved by using enhanced inventory, geotechnical, and observed ground motion data.



FEMA

Table of Contents

Section	Page #
General Description of the Region	3
Building and Lifeline Inventory	4
Building Inventory	
Critical Facility Inventory	
Transportation and Utility Lifeline Inventory	
Earthquake Scenario Parameters	7
Direct Earthquake Damage	8
Buildings Damage	
Essential Facilities Damage	
Transportation and Utility Lifeline Damage	
Induced Earthquake Damage	14
Fire Following Earthquake	
Debris Generation	
Social Impact	15
Shelter Requirements	
Casualties	
Economic Loss	17
Building Related Losses	
Transportation and Utility Lifeline Losses	
 Appendix A: County Listing for the Region	
Appendix B: Regional Population and Building Value Data	



General Description of the Region

Hazus-MH is a regional earthquake loss estimation model that was developed by the Federal Emergency Management Agency (FEMA) and the National Institute of Building Sciences. The primary purpose of Hazus is to provide a methodology and software application to develop multi-hazard losses at a regional scale. These loss estimates would be used primarily by local, state and regional officials to plan and stimulate efforts to reduce risks from multi-hazards and to prepare for emergency response and recovery.

The earthquake loss estimates provided in this report was based on a region that includes 1 county(ies) from the following state(s):

Washington

Note:

Appendix A contains a complete listing of the counties contained in the region.

The geographical size of the region is 2,105.91 square miles and contains 173 census tracts. There are over 306 thousand households in the region which has a total population of 827,957 people. The distribution of population by Total Region and County is provided in Appendix B.

There are an estimated 310 thousand buildings in the region with a total building replacement value (excluding contents) of 99,912 (millions of dollars). Approximately 91.00 % of the buildings (and 66.00% of the building value) are associated with residential housing.

The replacement value of the transportation and utility lifeline systems is estimated to be 10,040 and 4,588 (millions of dollars), respectively.



Building and Lifeline Inventory

Building Inventory

Hazus estimates that there are 310 thousand buildings in the region which have an aggregate total replacement value of 99,912 (millions of dollars). Appendix B provides a general distribution of the building value by Total Region and County.

In terms of building construction types found in the region, wood frame construction makes up 84% of the building inventory. The remaining percentage is distributed between the other general building types.

Critical Facility Inventory

Hazus breaks critical facilities into two (2) groups: essential facilities and high potential loss facilities (HPL). Essential facilities include hospitals, medical clinics, schools, fire stations, police stations and emergency operations facilities. High potential loss facilities include dams, levees, military installations, nuclear power plants and hazardous material sites.

For essential facilities, there are 8 hospitals in the region with a total bed capacity of 898 beds. There are 278 schools, 73 fire stations, 24 police stations and 5 emergency operation facilities. With respect to high potential loss facilities (HPL), there are no dams identified within the inventory. The inventory also includes no hazardous material sites, no military installations and no nuclear power plants.

Transportation and Utility Lifeline Inventory

Within Hazus, the lifeline inventory is divided between transportation and utility lifeline systems. There are seven (7) transportation systems that include highways, railways, light rail, bus, ports, ferry and airports. There are six (6) utility systems that include potable water, wastewater, natural gas, crude & refined oil, electric power and communications. The lifeline inventory data are provided in Tables 1 and 2.

The total value of the lifeline inventory is over 14,628.00 (millions of dollars). This inventory includes over 350.45 miles of highways, 497 bridges, 8,480.47 miles of pipes.

HAZUS™**FEMA**

Table 1: Transportation System Lifeline Inventory

System	Component	# Locations/ # Segments	Replacement value (millions of dollars)
Highway	Bridges	497	2593.4517
	Segments	242	3497.1296
	Tunnels	3	11.5615
	Subtotal		6102.1428
Railways	Bridges	85	425.4250
	Facilities	2	5.3260
	Segments	121	3260.4795
	Tunnels	0	0.0000
	Subtotal		3691.2305
Light Rail	Bridges	0	0.0000
	Facilities	0	0.0000
	Segments	0	0.0000
	Tunnels	0	0.0000
	Subtotal		0.0000
Bus	Facilities	1	2.0759
	Subtotal		2.0759
Ferry	Facilities	4	5.3240
	Subtotal		5.3240
Port	Facilities	48	160.9415
	Subtotal		160.9415
Airport	Facilities	3	28.7917
	Runways	10	49.5905
	Subtotal		78.3822
Total			10,040.10



FEMA

Table 2: Utility System Lifeline Inventory

System	Component	# Locations / Segments	Replacement value (millions of dollars)
Potable Water	Distribution Lines	NA	169.0892
	Facilities	4	146.5200
	Pipelines	0	0.0000
	Subtotal		315.6092
Waste Water	Distribution Lines	NA	101.4535
	Facilities	17	2571.2667
	Pipelines	0	0.0000
	Subtotal		2672.7222
Natural Gas	Distribution Lines	NA	67.6357
	Facilities	1	69.8360
	Pipelines	8	426.0423
	Subtotal		563.5140
Oil Systems	Facilities	2	0.2200
	Pipelines	0	0.0000
	Subtotal		0.2200
Electrical Power	Facilities	3	1035.7656
	Subtotal		1035.7656
Communication	Facilities	4	0.4400
	Subtotal		0.4400
		Total	4,588.30



Earthquake Scenario

Hazus uses the following set of information to define the earthquake parameters used for the earthquake loss estimate provided in this report.



Scenario Name	M7.4-Southern Whidbey Island fault-south
Type of Earthquake	
Fault Name	NA
Historical Epicenter ID #	NA
Probabilistic Return Period	NA
Longitude of Epicenter	0.00
Latitude of Epicenter	0.00
Earthquake Magnitude	7.42
Depth (km)	0.00
Rupture Length (Km)	0.00
Rupture Orientation (degrees)	0.00
Attenuation Function	



Direct Earthquake Damage

Building Damage

Hazus estimates that about 87,397 buildings will be at least moderately damaged. This is over 28.00 % of the buildings in the region. There are an estimated 7,172 buildings that will be damaged beyond repair. The definition of the 'damage states' is provided in Volume 1: Chapter 5 of the Hazus technical manual. Table 3 below summarizes the expected damage by general occupancy for the buildings in the region. Table 4 below summarizes the expected damage by general building type.

Damage Categories by General Occupancy Type

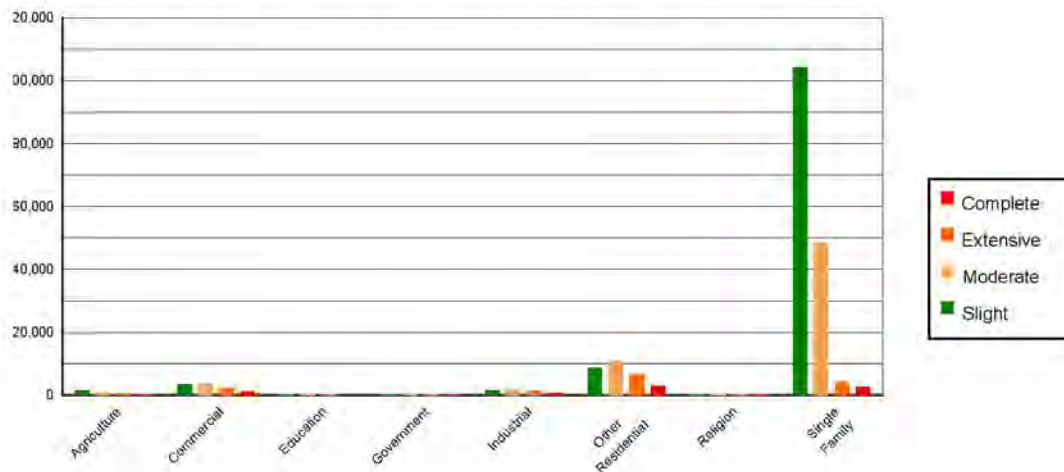


Table 3: Expected Building Damage by Occupancy

	None		Slight		Moderate		Extensive		Complete	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Agriculture	3381.03	3.25	1471.01	1.23	680.44	1.01	343.75	2.31	124.78	1.74
Commercial	2871.14	2.77	3369.45	2.82	3544.38	5.42	2251.46	15.15	1016.57	14.17
Education	164.65	0.16	125.44	0.10	127.25	0.19	78.94	0.53	35.71	0.50
Government	233.36	0.23	142.74	0.12	174.11	0.27	153.44	1.03	83.35	1.16
Industrial	1456.35	1.41	1515.26	1.27	1723.28	2.64	1213.49	8.16	551.62	7.69
Other Residential	6807.93	6.58	8610.02	7.20	10507.57	16.08	6464.21	43.49	2869.27	40.00
Religion	138.22	0.13	155.79	0.13	187.05	0.29	137.88	0.93	74.06	1.03
Single Family	88465.89	85.48	104137.47	87.12	48437.93	74.11	4219.38	28.39	2417.32	33.70
Total	103,499		119,527		65,362		14,863		7,173	



FEMA

Table 4: Expected Building Damage by Building Type (All Design Levels)

	None		Slight		Moderate		Extensive		Complete	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Wood	94651.08	91.46	111699.85	93.45	51508.18	78.80	2487.81	18.80	204.84	2.86
Steel	763.97	0.74	613.05	0.51	1282.49	1.96	1235.02	8.31	644.03	8.98
Concrete	587.61	0.57	559.16	0.47	1012.81	1.55	912.17	8.14	415.16	5.79
Precast	450.18	0.43	407.10	0.34	848.08	1.30	821.80	5.53	339.03	4.73
RM	2367.12	2.29	1017.74	0.85	1573.39	2.41	1188.40	8.00	422.08	5.88
URM	377.69	0.36	681.98	0.57	2041.11	3.12	2859.35	19.24	2602.21	36.28
MH	4300.92	4.16	4548.29	3.81	7095.96	10.88	5378.01	38.18	2545.33	35.49
Total	103,499		119,527		65,362		14,863		7,173	

*Note:

RM Reinforced Masonry
 URM Unreinforced Masonry
 MH Manufactured Housing



Essential Facility Damage

Before the earthquake, the region had 898 hospital beds available for use. On the day of the earthquake, the model estimates that only 239 hospital beds (27.00%) are available for use by patients already in the hospital and those injured by the earthquake. After one week, 42.00% of the beds will be back in service. By 30 days, 64.00% will be operational.

Table 5: Expected Damage to Essential Facilities

Classification	Total	# Facilities		
		At Least Moderate Damage > 50%	Complete Damage > 50%	With Functionality > 50% on day 1
Hospitals	8	4	0	2
Schools	278	166	0	84
EOCs	5	5	0	0
PoliceStations	24	12	0	8
FireStations	73	36	0	33



Transportation Lifeline Damage

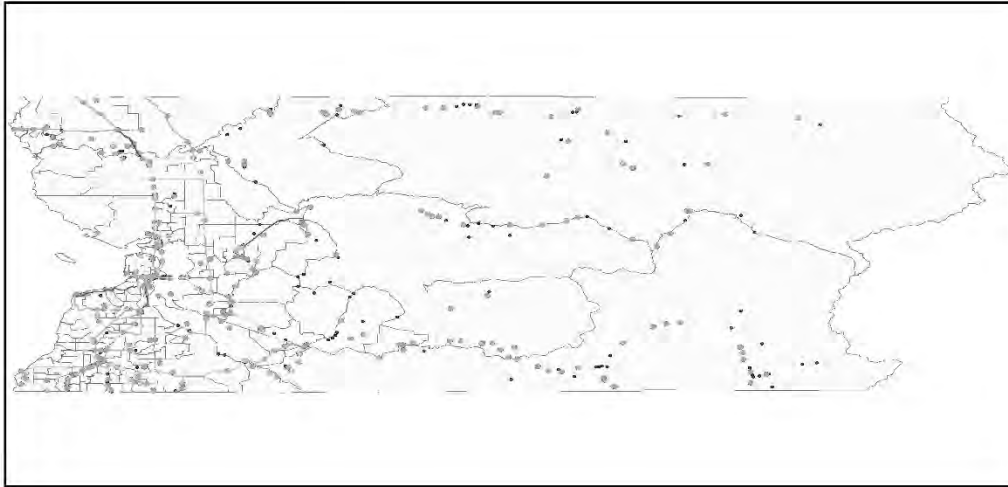




Table 6: Expected Damage to the Transportation Systems

System	Component	Number of Locations				
		Locations/ Segments	With at Least Mod. Damage	With Complete Damage	With Functionality > 50 %	
					After Day 1	After Day 7
Highway	Segments	242	0	0	242	242
	Bridges	497	43	5	458	473
	Tunnels	3	0	0	3	3
Railways	Segments	121	0	0	121	121
	Bridges	85	0	0	85	85
	Tunnels	0	0	0	0	0
	Facilities	2	0	0	2	2
Light Rail	Segments	0	0	0	0	0
	Bridges	0	0	0	0	0
	Tunnels	0	0	0	0	0
	Facilities	0	0	0	0	0
Bus	Facilities	1	0	0	1	1
Ferry	Facilities	4	2	0	3	4
Port	Facilities	48	1	0	47	48
Airport	Facilities	3	1	0	2	3
	Runways	10	0	0	10	10

Table 6 provides damage estimates for the transportation system.

Note: Roadway segments, railroad tracks and light rail tracks are assumed to be damaged by ground failure only. If ground failure maps are not provided, damage estimates to these components will not be computed.

Tables 7-9 provide information on the damage to the utility lifeline systems. Table 7 provides damage to the utility system facilities. Table 8 provides estimates on the number of leaks and breaks by the pipelines of the utility systems. For electric power and potable water, Hazus performs a simplified system performance analysis. Table 9 provides a summary of the system performance information.



FEMA

Table 7 : Expected Utility System Facility Damage

System	# of Locations				
	Total #	With at Least Moderate Damage	With Complete Damage	with Functionality > 50 %	
				After Day 1	After Day 7
Potable Water	4	3	0	1	4
Waste Water	17	9	0	4	16
Natural Gas	1	1	0	0	1
Oil Systems	2	0	0	1	2
Electrical Power	3	1	0	3	3
Communication	4	3	0	2	4

Table 8 : Expected Utility System Pipeline Damage (Site Specific)

System	Total Pipelines Length (miles)	Number of Leaks	Number of Breaks
Potable Water	5,253	0	0
Waste Water	3,152	0	0
Natural Gas	75	0	0
Oil	0	0	0

Table 9: Expected Potable Water and Electric Power System Performance

	Total # of Households	Number of Households without Service				
		At Day 1	At Day 3	At Day 7	At Day 30	At Day 90
Potable Water	306,828	0	0	0	0	0
Electric Power		184,766	139,400	74,606	12,685	222



Induced Earthquake Damage

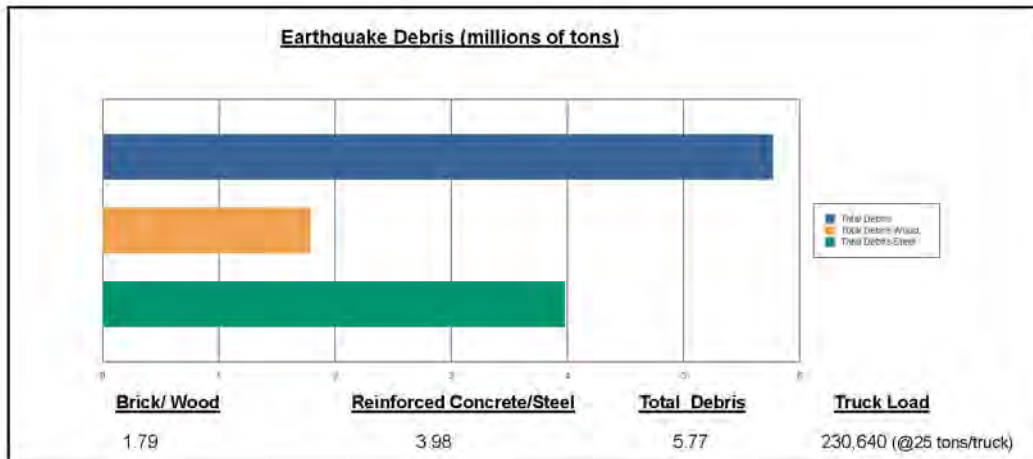
Fire Following Earthquake

Fires often occur after an earthquake. Because of the number of fires and the lack of water to fight the fires, they can often burn out of control. Hazus uses a Monte Carlo simulation model to estimate the number of ignitions and the amount of burnt area. For this scenario, the model estimates that there will be 4 ignitions that will burn about 0.01 sq. mi (0.00 % of the region's total area.) The model also estimates that the fires will displace about 89 people and burn about 8 (millions of dollars) of building value.

Debris Generation

Hazus estimates the amount of debris that will be generated by the earthquake. The model breaks the debris into two general categories: a) Brick/Wood and b) Reinforced Concrete/Steel. This distinction is made because of the different types of material handling equipment required to handle the debris.

The model estimates that a total of 5,768,000 tons of debris will be generated. Of the total amount, Brick/Wood comprises 31.00% of the total, with the remainder being Reinforced Concrete/Steel. If the debris tonnage is converted to an estimated number of truckloads, it will require 230,640 truckloads (@25 tons/truck) to remove the debris generated by the earthquake.

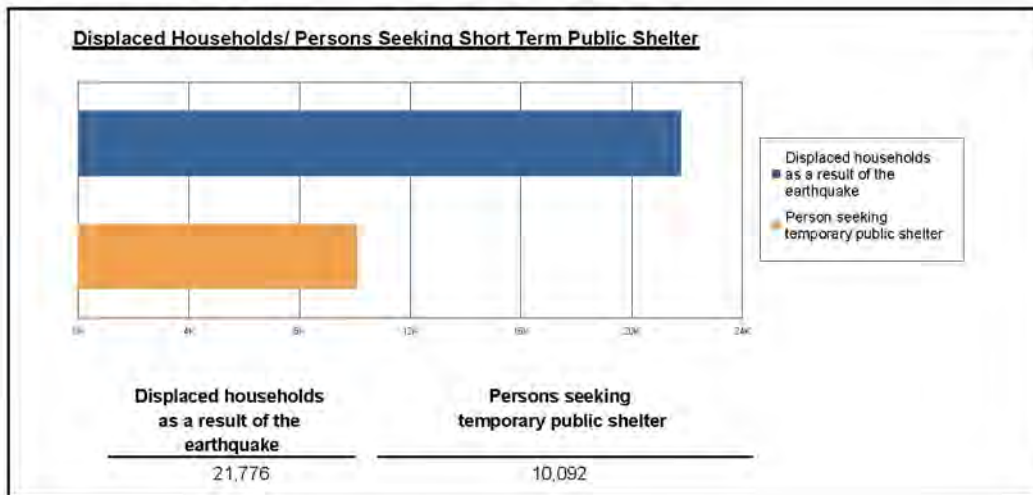




Social Impact

Shelter Requirement

Hazus estimates the number of households that are expected to be displaced from their homes due to the earthquake and the number of displaced people that will require accommodations in temporary public shelters. The model estimates 21,776 households to be displaced due to the earthquake. Of these, 10,092 people (out of a total population of 827,957) will seek temporary shelter in public shelters.



Casualties

Hazus estimates the number of people that will be injured and killed by the earthquake. The casualties are broken down into four (4) severity levels that describe the extent of the injuries. The levels are described as follows:

- Severity Level 1: Injuries will require medical attention but hospitalization is not needed.
- Severity Level 2: Injuries will require hospitalization but are not considered life-threatening.
- Severity Level 3: Injuries will require hospitalization and can become life threatening if not promptly treated.
- Severity Level 4: Victims are killed by the earthquake.

The casualty estimates are provided for three (3) times of day: 2:00 AM, 2:00 PM and 5:00 PM. These times represent the periods of the day that different sectors of the community are at their peak occupancy loads. The 2:00 AM estimate considers that the residential occupancy load is maximum, the 2:00 PM estimate considers that the educational, commercial and industrial sector loads are maximum and 5:00 PM represents peak commute time.

Table 10 provides a summary of the casualties estimated for this earthquake.



FEMA

Table 10: Casualty Estimates

		Level 1	Level 2	Level 3	Level 4
2 AM	Commercial	56.25	15.82	2.53	4.99
	Commuting	0.27	0.45	0.66	0.13
	Educational	0.00	0.00	0.00	0.00
	Hotels	0.87	0.21	0.03	0.06
	Industrial	62.46	17.48	2.75	5.41
	Other-Residential	1323.69	294.94	32.56	62.44
	Single Family	1391.72	314.45	43.22	85.28
	Total	2,835	643	82	158
2 PM	Commercial	3588.05	1003.08	160.08	313.92
	Commuting	2.46	4.02	5.90	1.19
	Educational	1565.96	417.84	65.34	126.93
	Hotels	0.17	0.04	0.01	0.01
	Industrial	459.48	128.19	20.21	39.44
	Other-Residential	411.75	92.31	10.69	19.58
	Single Family	436.74	103.48	14.97	28.23
	Total	6,465	1,749	277	529
5 PM	Commercial	2421.08	672.83	107.64	208.05
	Commuting	50.49	82.48	120.90	24.34
	Educational	417.58	111.26	17.42	33.66
	Hotels	0.26	0.06	0.01	0.02
	Industrial	287.17	80.12	12.63	24.65
	Other-Residential	507.32	113.58	13.09	23.96
	Single Family	550.61	129.31	18.59	35.07
	Total	4,235	1,190	290	350



FEMA

Economic Loss

The total economic loss estimated for the earthquake is 21,672.90 (millions of dollars), which includes building and lifeline related losses based on the region's available inventory. The following three sections provide more detailed information about these losses.



Building-Related Losses

The building losses are broken into two categories: direct building losses and business interruption losses. The direct building losses are the estimated costs to repair or replace the damage caused to the building and its contents. The business interruption losses are the losses associated with inability to operate a business because of the damage sustained during the earthquake. Business interruption losses also include the temporary living expenses for those people displaced from their homes because of the earthquake.

The total building-related losses were 20,666.62 (millions of dollars); 23 % of the estimated losses were related to the business interruption of the region. By far, the largest loss was sustained by the residential occupancies which made up over 42 % of the total loss. Table 11 below provides a summary of the losses associated with the building damage.

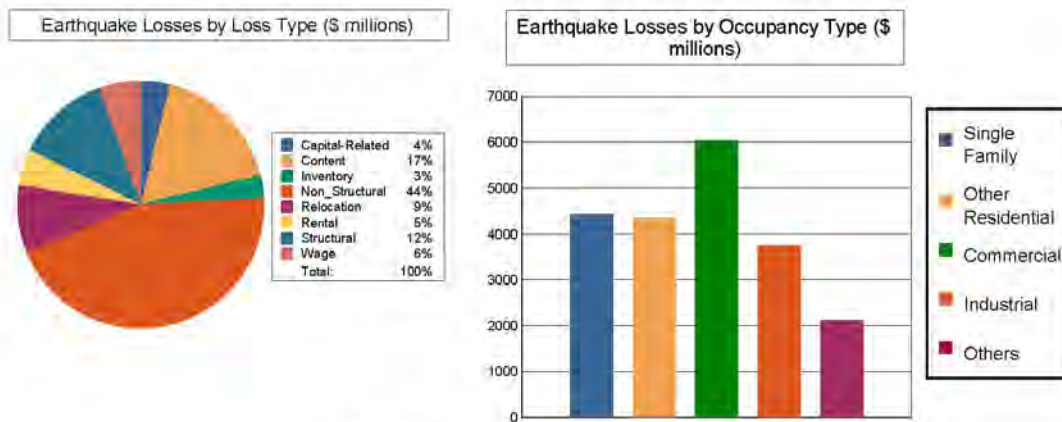


Table 11: Building-Related Economic Loss Estimates
(Millions of dollars)

Category	Area	Single Family	Other Residential	Commercial	Industrial	Others	Total
Income Losses							
	Wage	0.0000	220.5140	739.6875	86.0008	125.6717	1,171.8740
	Capital-Related	0.0000	93.8180	655.1622	61.1710	18.3587	828.5099
	Rental	130.9857	368.2508	380.9979	43.6309	60.3776	984.2429
	Relocation	484.3801	263.3133	580.7588	170.7464	335.6929	1,834.8915
	Subtotal	615.3658	945.8961	2356.6064	361.5491	540.1009	4819.5183
Capital Stock Losses							
	Structural	538.1388	493.9965	679.7191	512.4733	269.8632	2,494.1909
	Non_Structural	2448.1779	2454.3893	1807.0403	1590.4187	888.3953	9,188.4215
	Content	828.0314	450.8715	857.2901	1035.4840	359.0499	3,530.7269
	Inventory	0.0000	0.0000	335.6240	245.3711	52.7720	633.7671
	Subtotal	3814.3481	3399.2573	3679.6735	3383.7471	1570.0804	15847.1064
	Total	4429.71	4345.15	6036.28	3745.30	2110.18	20666.62



FEMA

Transportation and Utility Lifeline Losses

For the transportation and utility lifeline systems, Hazus computes the direct repair cost for each component only. There are no losses computed by Hazus for business interruption due to lifeline outages. Tables 12 & 13 provide a detailed breakdown in the expected lifeline losses.

Table 12: Transportation System Economic Losses
(Millions of dollars)

System	Component	Inventory Value	Economic Loss	Loss Ratio (%)
Highway	Segments	3497.1296	0.0000	0.00
	Bridges	2593.4517	182.6881	7.04
	Tunnels	11.5615	1.2093	10.46
	Subtotal	6102.1428	183.8974	
Railways	Segments	3260.4795	0.0000	0.00
	Bridges	425.4250	23.5556	5.54
	Tunnels	0.0000	0.0000	0.00
	Facilities	5.3260	1.6634	31.23
	Subtotal	3691.2305	25.2190	
Light Rail	Segments	0.0000	0.0000	0.00
	Bridges	0.0000	0.0000	0.00
	Tunnels	0.0000	0.0000	0.00
	Facilities	0.0000	0.0000	0.00
	Subtotal	0.0000	0.0000	
Bus	Facilities	2.0759	0.6271	30.21
	Subtotal	2.0759	0.6271	
Ferry	Facilities	5.3240	1.9795	37.18
	Subtotal	5.3240	1.9795	
Port	Facilities	160.9415	45.7091	28.40
	Subtotal	160.9415	45.7091	
Airport	Facilities	28.7917	7.5287	26.15
	Runways	49.5905	0.0000	0.00
	Subtotal	78.3822	7.5287	
	Total	10,040.10	264.96	



FEMA

Table 13: Utility System Economic Losses
(Millions of dollars)

System	Component	Inventory Value	Economic Loss	Loss Ratio (%)
Potable Water	Pipelines	0.0000	0.0000	0.00
	Facilities	146.5200	34.3196	23.42
	Distribution Lines	169.0892	0.0005	0.00
	Subtotal	315.6092	34.3201	
Waste Water	Pipelines	0.0000	0.0000	0.00
	Facilities	2571.2687	493.5739	19.20
	Distribution Lines	101.4535	0.0002	0.00
	Subtotal	2672.7222	493.5741	
Natural Gas	Pipelines	426.0423	0.0000	0.00
	Facilities	69.8360	23.9213	34.25
	Distribution Lines	67.6357	0.0001	0.00
	Subtotal	563.5140	23.9214	
Oil Systems	Pipelines	0.0000	0.0000	0.00
	Facilities	0.2200	0.0166	7.55
	Subtotal	0.2200	0.0166	
Electrical Power	Facilities	1035.7656	189.2733	18.27
	Subtotal	1035.7656	189.2733	
Communication	Facilities	0.4400	0.2000	45.45
	Subtotal	0.4400	0.2000	
Total		4,588.27	741.31	



FEMA

Appendix A: County Listing for the Region

Snohomish, WA



FEMA

Appendix B: Regional Population and Building Value Data

State	County Name	Population	Building Value (millions of dollars)		
			Residential	Non-Residential	Total
Washington	Snohomish	827,957	65,515	34,396	99,912
Total Region		827,957	65,515	34,396	99,912

Figure E.4: 100-Year Flood Hazus Summary Report



Hazus: Flood Global Risk Report

Region Name:	FL_SnoCo
Flood Scenario:	SnoCo FL 100-yr scenario
Print Date:	Monday, January 6, 2025

Disclaimer:

Totals only reflect data for those census tracts/blocks included in the user's study region.

The estimates of social and economic impacts contained in this report were produced using Hazus loss estimation methodology software which is based on current scientific and engineering knowledge. There are uncertainties inherent in any loss estimation technique. Therefore, there may be significant differences between the modeled results contained in this report and the actual social and economic losses following a specific Flood. These results can be improved by using enhanced inventory data and flood hazard information.



FEMA

RiskMAP
Increasing Resilience Together



Table of Contents

Section	Page #
General Description of the Region	3
Building Inventory	
General Building Stock	4
Essential Facility Inventory	5
Flood Scenario Parameters	6
Building Damage	
General Building Stock	7
Essential Facilities Damage	9
Induced Flood Damage	10
Debris Generation	
Social Impact	10
Shelter Requirements	
Economic Loss	12
Building-Related Losses	
Appendix A: County Listing for the Region	15
Appendix B: Regional Population and Building Value Data	16



FEMA

Flood Global Risk Report

RiskMAP
Increasing Resilience Together

Page 2 of 16



General Description of the Region

Hazus is a regional multi-hazard loss estimation model that was developed by the Federal Emergency Management Agency (FEMA) and the National Institute of Building Sciences (NIBS). The primary purpose of Hazus is to provide a methodology and software application to develop multi-hazard losses at a regional scale. These loss estimates would be used primarily by local, state and regional officials to plan and stimulate efforts to reduce risks from multi-hazards and to prepare for emergency response and recovery.

The flood loss estimates provided in this report were based on a region that included 1 county(ies) from the following state(s):

- Washington

Note:

Appendix A contains a complete listing of the counties contained in the region.

The geographical size of the region is approximately 160 square miles and contains 8,082 census blocks. The region contains over 307 thousand households and has a total population of 827,611 people. The distribution of population by State and County for the study region is provided in Appendix B.

There are an estimated 300,115 buildings in the region with a total building replacement value (excluding contents) of 81,542 million dollars. Approximately 93.39% of the buildings (and 74.37% of the building value) are associated with residential housing.



FEMA

Flood Global Risk Report

RiskMAP
Increasing Resilience Together

Page 3 of 16



Building Inventory

General Building Stock

Hazus estimates that there are 300,115 buildings in the region which have an aggregate total replacement value of 81,542 million dollars. Table 1 and Table 2 present the relative distribution of the value with respect to the general occupancies by Study Region and Scenario respectively. Appendix B provides a general distribution of the building value by State and County.

Table 1
Building Exposure by Occupancy Type for the Study Region

Occupancy	Exposure (\$1000)	Percent of Total
Residential	60,640,532	74.4%
Commercial	11,943,656	14.6%
Industrial	4,107,442	5.0%
Agricultural	680,344	0.8%
Religion	824,286	1.0%
Government	1,222,567	1.5%
Education	2,122,927	2.6%
Total	81,541,754	100%

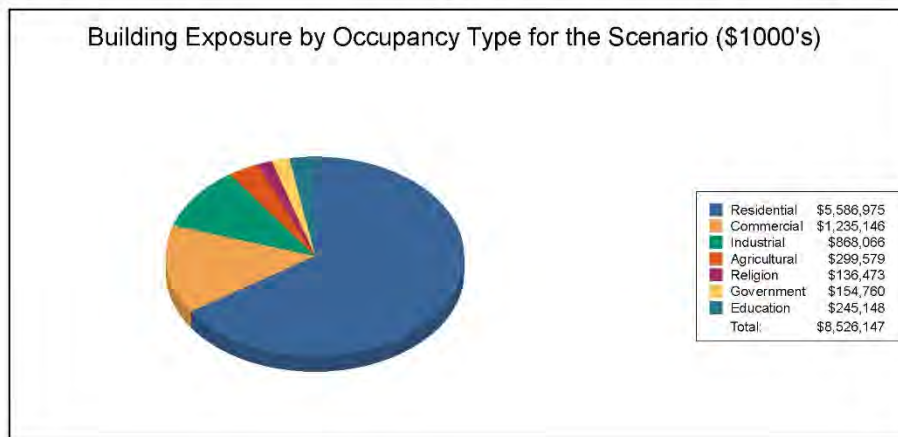
Building Exposure by Occupancy Type for the Study Region
(\$1000's)





Table 2
Building Exposure by Occupancy Type for the Scenario

Occupancy	Exposure (\$1000)	Percent of Total
Residential	5,586,975	65.5%
Commercial	1,235,146	14.5%
Industrial	868,066	10.2%
Agricultural	299,579	3.5%
Religion	136,473	1.6%
Government	154,760	1.8%
Education	245,148	2.9%
Total	8,526,147	100%



Essential Facility Inventory

For essential facilities, there are 8 hospitals in the region with a total bed capacity of 898 beds. There are 278 schools, 73 fire stations, 24 police stations and 5 emergency operation centers.





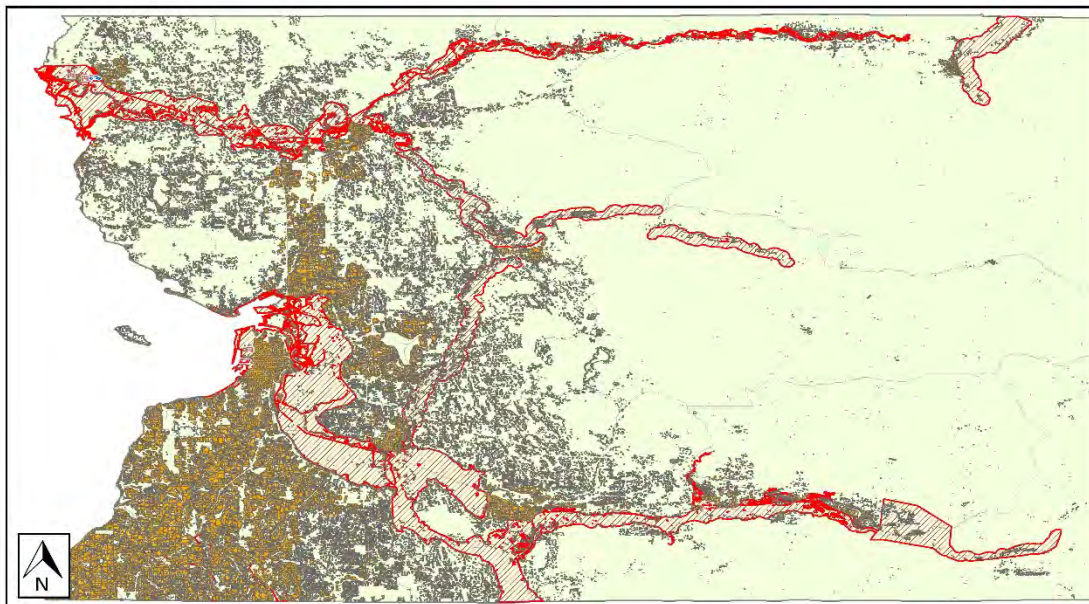
Flood Scenario Parameters

Hazus used the following set of information to define the flood parameters for the flood loss estimate provided in this report.

Study Region Name:	FL_SnoCo
Scenario Name:	SnoCo FL 100-yr scenario
Return Period Analyzed:	100
Analysis Options Analyzed:	No What-Ifs

Study Region Overview Map

Illustrating scenario flood extent, as well as exposed essential facilities and total exposure



Flood Global Risk Report



Page 6 of 16



Building Damage

General Building Stock Damage

Hazus estimates that about 1,381 buildings will be at least moderately damaged. This is over 54% of the total number of buildings in the scenario. There are an estimated 313 buildings that will be completely destroyed. The definition of the 'damage states' is provided in the Hazus Flood Technical Manual. Table 3 below summarizes the expected damage by general occupancy for the buildings in the region. Table 4 summarizes the expected damage by general building type.

Total Economic Loss (1 dot = \$300K) Overview Map

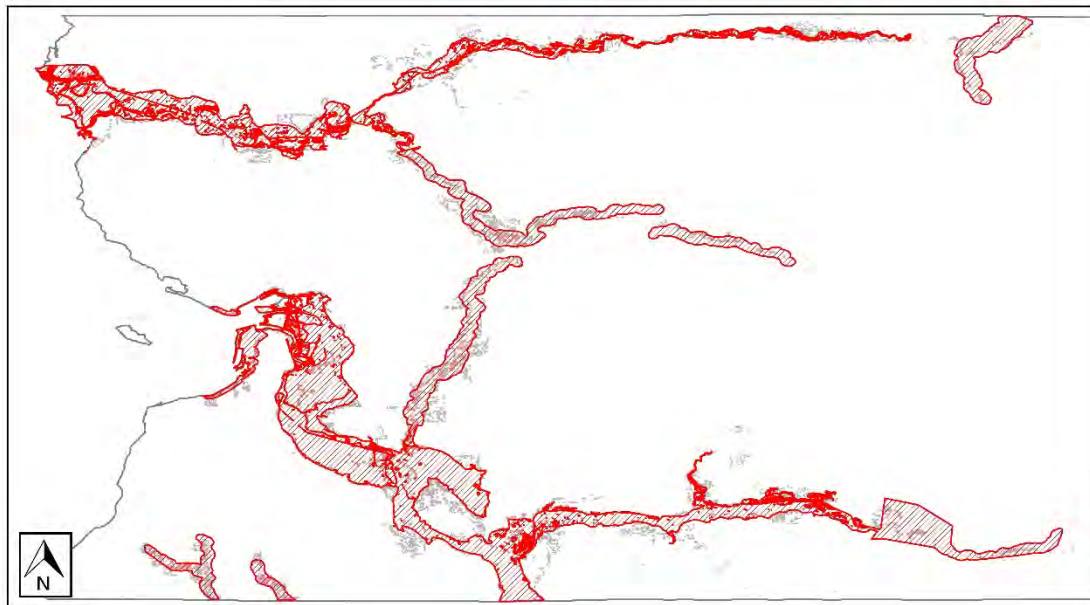
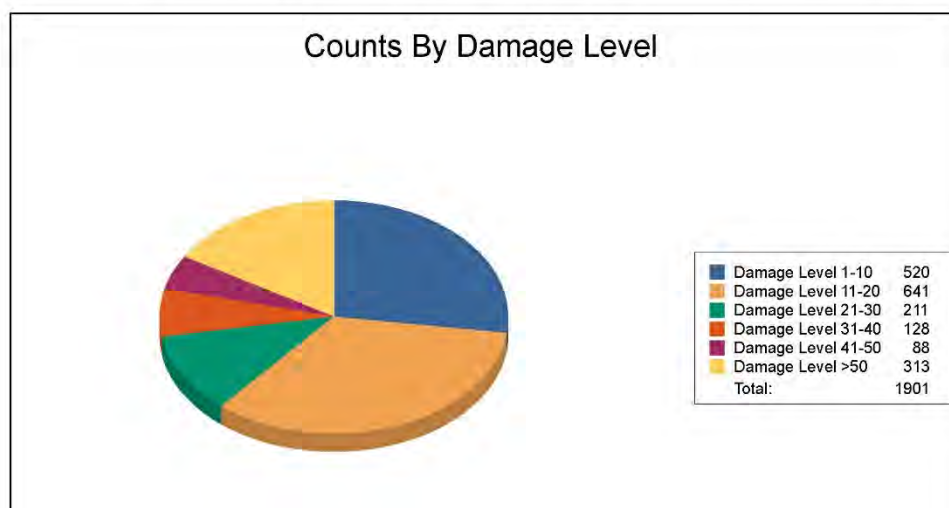




Table 3: Expected Building Damage by Occupancy

Occupancy	1-10		11-20		21-30		31-40		41-50		>50	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Agriculture	197	39	192	38	49	10	15	3	21	4	27	5
Commercial	25	53	21	45	1	2	0	0	0	0	0	0
Education	0	0	0	0	0	0	0	0	0	0	0	0
Government	8	30	19	70	0	0	0	0	0	0	0	0
Industrial	14	30	21	45	3	6	0	0	0	0	9	19
Religion	0	0	0	0	0	0	0	0	0	0	0	0
Residential	276	22	388	30	158	12	113	9	67	5	277	22
Total	520		641		211		128		88		313	



FEMA

Flood Global Risk Report

RiskMAP
 Increasing Resilience Together

Page 8 of 16



Table 4: Expected Building Damage by Building Type

Building Type	1-10		11-20		21-30		31-40		41-50		>50	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Concrete	0	0	0	0	0	0	0	0	0	0	1	100
ManufHousing	10	10	7	7	6	6	0	0	6	6	69	70
Masonry	0	0	0	0	0	0	0	0	0	0	0	0
Steel	12	50	7	29	0	0	0	0	0	0	5	21
Wood	495	28	626	35	205	12	128	7	82	5	239	13



FEMA

Flood Global Risk Report

RiskMAP
 Increasing Resilience Together

Page 9 of 16



Essential Facility Damage

Before the flood analyzed in this scenario, the region had 898 hospital beds available for use. On the day of the scenario flood event, the model estimates that 898 hospital beds are available in the region.

Table 5: Expected Damage to Essential Facilities

Classification	Total	# Facilities		
		At Least Moderate	At Least Substantial	Loss of Use
Emergency Operation Centers	5	0	0	0
Fire Stations	73	3	1	1
Hospitals	8	0	0	0
Police Stations	24	1	0	1
Schools	278	3	1	3

If this report displays all zeros or is blank, two possibilities can explain this.

- (1) None of your facilities were flooded. This can be checked by mapping the inventory data on the depth grid.
- (2) The analysis was not run. This can be tested by checking the run box on the Analysis Menu and seeing if a message box asks you to replace the existing results.

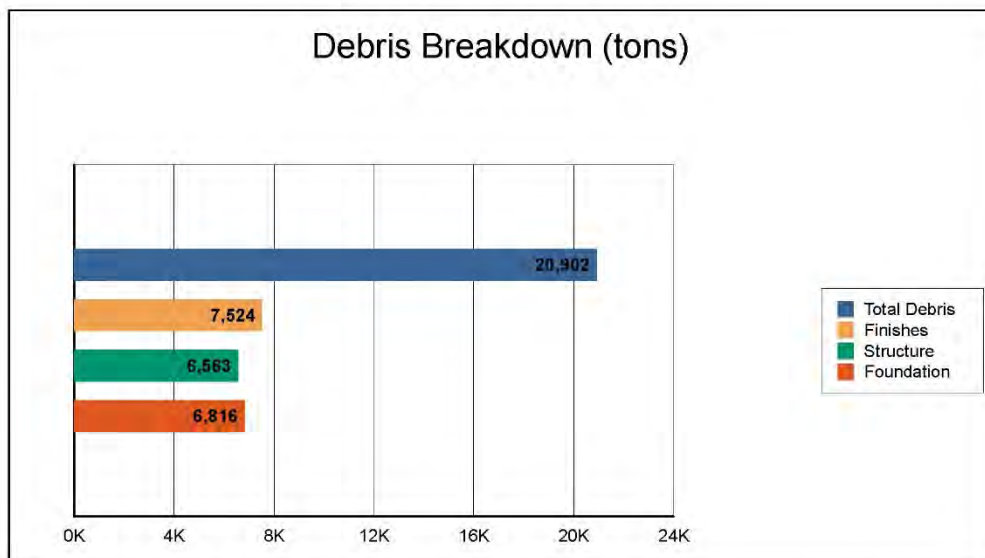




Induced Flood Damage

Debris Generation

Hazus estimates the amount of debris that will be generated by the flood. The model breaks debris into three general categories: 1) Finishes (dry wall, insulation, etc.), 2) Structural (wood, brick, etc.) and 3) Foundations (concrete slab, concrete block, rebar, etc.). This distinction is made because of the different types of material handling equipment required to handle the debris.



The model estimates that a total of 20,902 tons of debris will be generated. Of the total amount, Finishes comprises 36% of the total, Structure comprises 31% of the total, and Foundation comprises 33%. If the debris tonnage is converted into an estimated number of truckloads, it will require 837 truckloads (@25 tons/truck) to remove the debris generated by the flood.

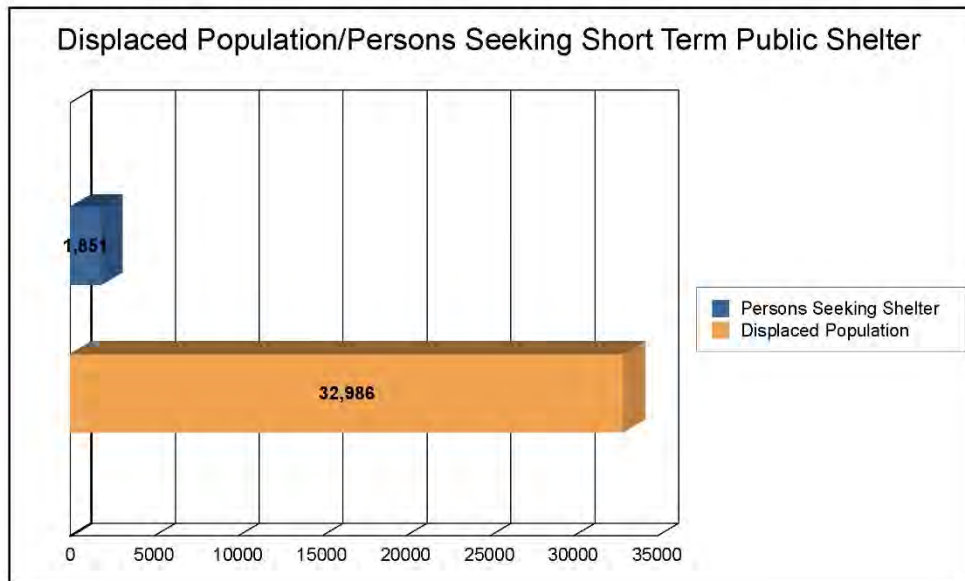




Social Impact

Shelter Requirements

Hazus estimates the number of households that are expected to be displaced from their homes due to the flood and the associated potential evacuation. Hazus also estimates those displaced people that will require accommodations in temporary public shelters. The model estimates 10,995 households (or 32,986 of people) will be displaced due to the flood. Displacement includes households evacuated from within or very near to the inundated area. Of these, 1,851 people (out of a total population of 827,611) will seek temporary shelter in public shelters.





Economic Loss

The total economic loss estimated for the flood is 1,165.51 million dollars, which represents 13.67 % of the total replacement value of the scenario buildings.

Building-Related Losses

The building losses are broken into two categories: direct building losses and business interruption losses. The direct building losses are the estimated costs to repair or replace the damage caused to the building and its contents. The business interruption losses are the losses associated with inability to operate a business because of the damage sustained during the flood. Business interruption losses also include the temporary living expenses for those people displaced from their homes because of the flood.

The total building-related losses were 452.40 million dollars. 61% of the estimated losses were related to the business interruption of the region. The residential occupancies made up 19.49% of the total loss. Table 6 below provides a summary of the losses associated with the building damage.



FEMA

Flood Global Risk Report

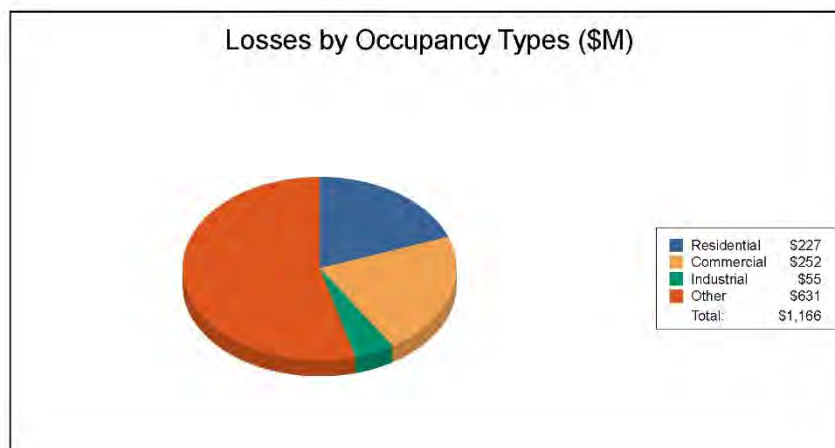
RiskMAP
Increasing Resilience Together

Page 13 of 16



Table 6: Building-Related Economic Loss Estimates
(Millions of dollars)

Category	Area	Residential	Commercial	Industrial	Others	Total
Building Loss						
	Building	95.35	8.82	9.90	20.89	134.96
	Content	45.99	21.21	21.49	36.88	125.56
	Inventory	0.00	10.06	14.81	167.01	191.88
	Subtotal	141.34	40.08	46.20	224.78	452.40
Business Interruption						
	Income	5.05	97.08	2.34	56.63	161.10
	Relocation	50.98	21.76	2.54	31.08	106.36
	Rental Income	17.88	16.19	0.67	4.58	39.32
	Wage	11.88	77.09	2.95	314.41	406.33
	Subtotal	85.80	212.12	8.50	406.70	713.11
ALL	Total	227.14	252.20	54.69	631.48	1,165.51



FEMA

Flood Global Risk Report

RiskMAP
Increasing Resilience Together

Page 14 of 16



Appendix A: County Listing for the Region

- Washington
- Snohomish



FEMA

Flood Global Risk Report



Page 15 of 16



Appendix B: Regional Population and Building Value Data

	Population	Building Value (thousands of dollars)		
		Residential	Non-Residential	Total
Washington				
Snohomish	827,611	60,640,532	20,901,222	81,541,754
Total	827,611	60,640,532	20,901,222	81,541,754
Total Study Region	827,611	60,640,532	20,901,222	81,541,754



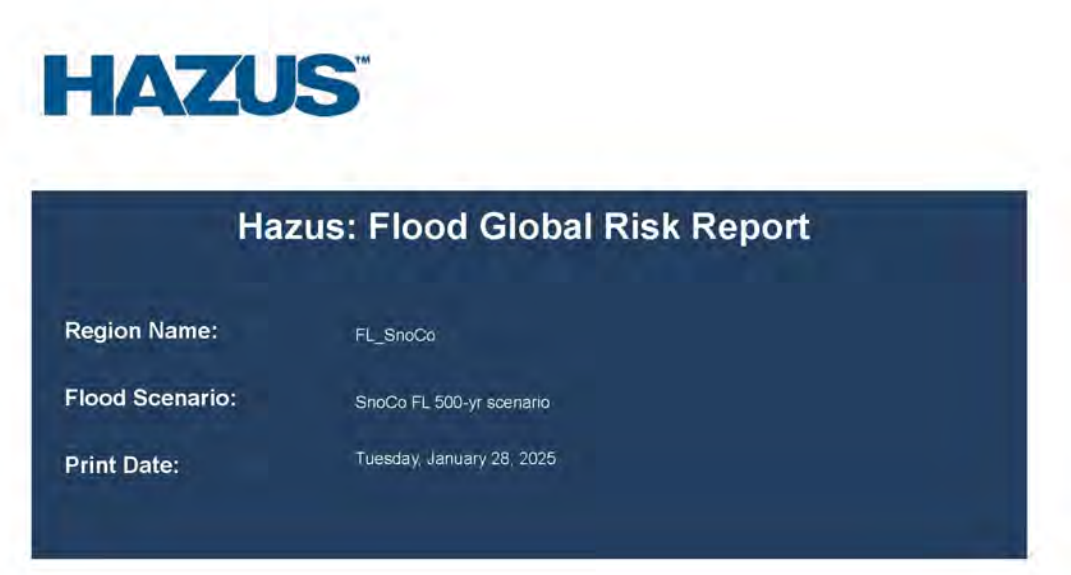
FEMA

Flood Global Risk Report

RiskMAP
Increasing Resilience Together

Page 16 of 16

Figure E.5: 500-Year Flood Hazus Summary Report

**Disclaimer:**

Totals only reflect data for those census tracts/blocks included in the user's study region.

The estimates of social and economic impacts contained in this report were produced using Hazus loss estimation methodology software which is based on current scientific and engineering knowledge. There are uncertainties inherent in any loss estimation technique. Therefore, there may be significant differences between the modeled results contained in this report and the actual social and economic losses following a specific Flood. These results can be improved by using enhanced inventory data and flood hazard information.

**FEMA**

RiskMAP
Increasing Resilience Together



Table of Contents

Section	Page #
General Description of the Region	3
Building Inventory	
General Building Stock	4
Essential Facility Inventory	5
Flood Scenario Parameters	6
Building Damage	
General Building Stock	7
Essential Facilities Damage	9
Induced Flood Damage	10
Debris Generation	
Social Impact	10
Shelter Requirements	
Economic Loss	12
Building-Related Losses	
Appendix A: County Listing for the Region	15
Appendix B: Regional Population and Building Value Data	16





General Description of the Region

Hazus is a regional multi-hazard loss estimation model that was developed by the Federal Emergency Management Agency (FEMA) and the National Institute of Building Sciences (NIBS). The primary purpose of Hazus is to provide a methodology and software application to develop multi-hazard losses at a regional scale. These loss estimates would be used primarily by local, state and regional officials to plan and stimulate efforts to reduce risks from multi-hazards and to prepare for emergency response and recovery.

The flood loss estimates provided in this report were based on a region that included 1 county(ies) from the following state(s):

- Washington

Note:

Appendix A contains a complete listing of the counties contained in the region.

The geographical size of the region is approximately 160 square miles and contains 8,082 census blocks. The region contains over 307 thousand households and has a total population of 827,611 people. The distribution of population by State and County for the study region is provided in Appendix B.

There are an estimated 300,115 buildings in the region with a total building replacement value (excluding contents) of 81,542 million dollars. Approximately 93.39% of the buildings (and 74.37% of the building value) are associated with residential housing.





Building Inventory

General Building Stock

Hazus estimates that there are 300,115 buildings in the region which have an aggregate total replacement value of 81,542 million dollars. Table 1 and Table 2 present the relative distribution of the value with respect to the general occupancies by Study Region and Scenario respectively. Appendix B provides a general distribution of the building value by State and County.

Table 1
Building Exposure by Occupancy Type for the Study Region

Occupancy	Exposure (\$1000)	Percent of Total
Residential	60,640,532	74.4%
Commercial	11,943,656	14.6%
Industrial	4,107,442	5.0%
Agricultural	680,344	0.8%
Religion	824,286	1.0%
Government	1,222,567	1.5%
Education	2,122,927	2.6%
Total	81,541,754	100%

Building Exposure by Occupancy Type for the Study Region
(\$1000's)

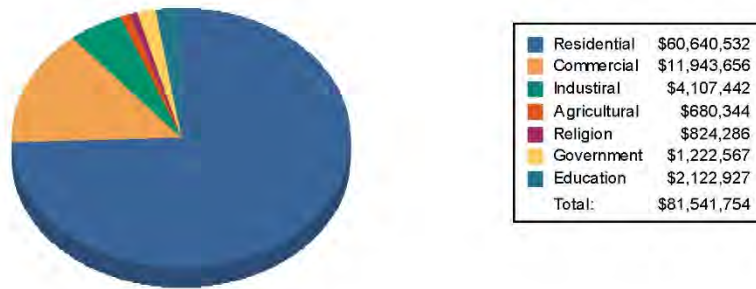
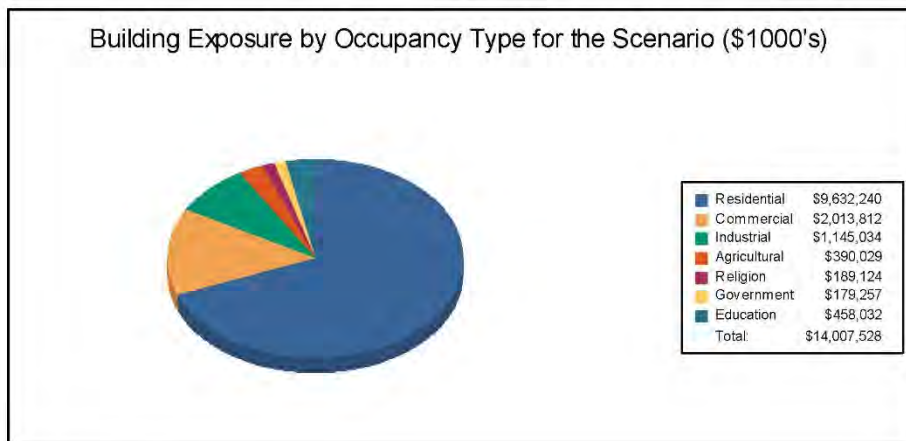




Table 2
Building Exposure by Occupancy Type for the Scenario

Occupancy	Exposure (\$1000)	Percent of Total
Residential	9,632,240	68.8%
Commercial	2,013,812	14.4%
Industrial	1,145,034	8.2%
Agricultural	390,029	2.8%
Religion	189,124	1.4%
Government	179,257	1.3%
Education	458,032	3.3%
Total	14,007,528	100%



Essential Facility Inventory

For essential facilities, there are 8 hospitals in the region with a total bed capacity of 898 beds. There are 278 schools, 73 fire stations, 24 police stations and 5 emergency operation centers.





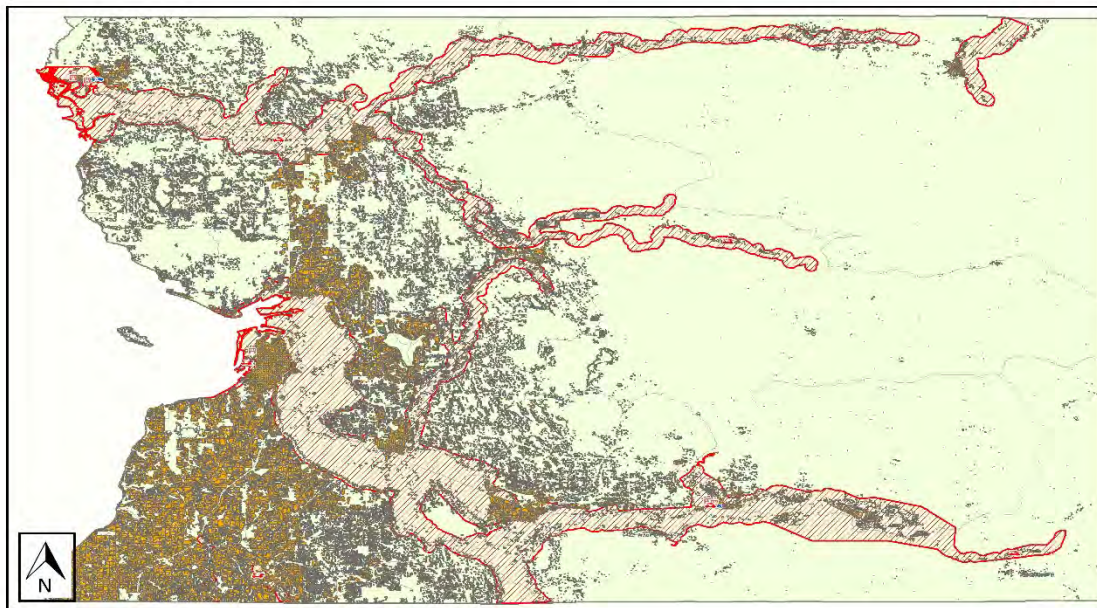
Flood Scenario Parameters

Hazus used the following set of information to define the flood parameters for the flood loss estimate provided in this report.

Study Region Name:	FL_SnoCo
Scenario Name:	SnoCo FL 500-yr scenario
Return Period Analyzed:	500
Analysis Options Analyzed:	No What-Ifs

Study Region Overview Map

Illustrating scenario flood extent, as well as exposed essential facilities and total exposure





Building Damage

General Building Stock Damage

Hazus estimates that about 2,769 buildings will be at least moderately damaged. This is over 53% of the total number of buildings in the scenario. There are an estimated 781 buildings that will be completely destroyed. The definition of the 'damage states' is provided in the Hazus Flood Technical Manual. Table 3 below summarizes the expected damage by general occupancy for the buildings in the region. Table 4 summarizes the expected damage by general building type.

Total Economic Loss (1 dot = \$300K) Overview Map

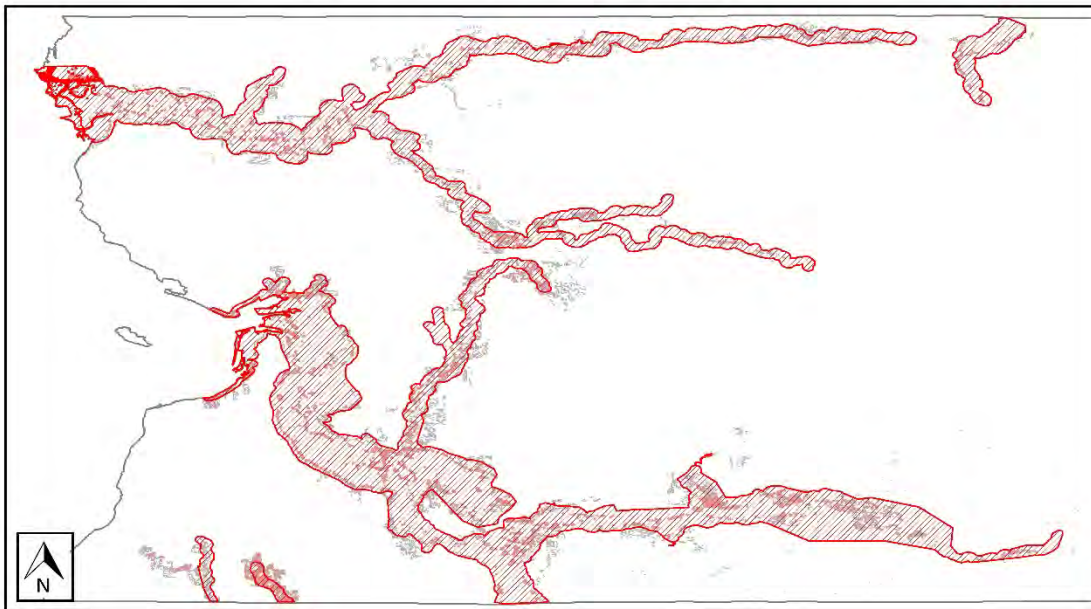
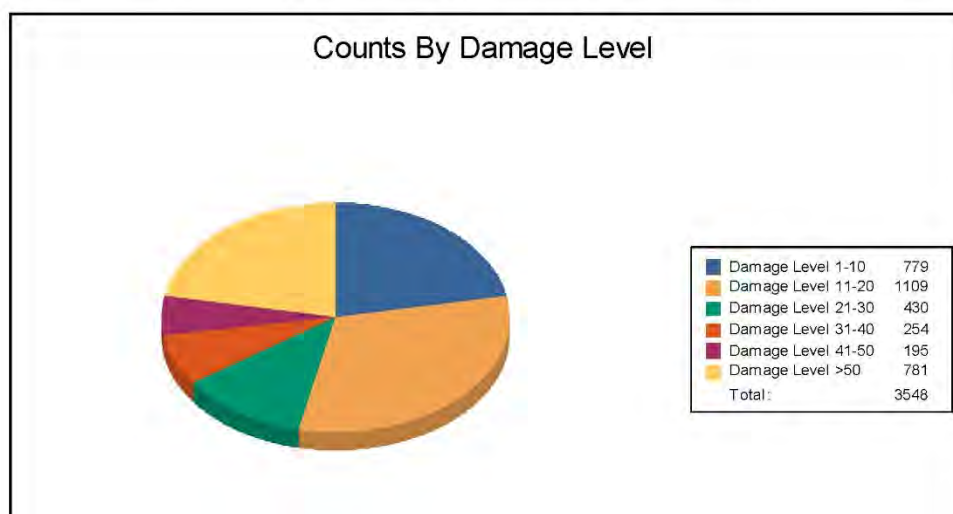




Table 3: Expected Building Damage by Occupancy

Occupancy	1-10		11-20		21-30		31-40		41-50		>50	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Agriculture	235	31	313	41	107	14	29	4	26	3	49	6
Commercial	49	44	54	48	2	2	1	1	1	1	5	4
Education	0	0	0	0	0	0	0	0	0	0	0	0
Government	8	24	20	61	5	15	0	0	0	0	0	0
Industrial	23	22	38	36	21	20	3	3	12	11	9	8
Religion	2	100	0	0	0	0	0	0	0	0	0	0
Residential	462	18	684	27	295	12	221	9	156	6	718	28
Total	779		1,109		430		254		195		781	



FEMA

Flood Global Risk Report

RiskMAP
 Increasing Resilience Together

Page 8 of 16



Table 4: Expected Building Damage by Building Type

Building Type	1-10		11-20		21-30		31-40		41-50		>50	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Concrete	0	0	0	0	0	0	0	0	3	50	3	50
ManufHousing	15	8	16	8	13	7	0	0	8	4	145	74
Masonry	0	0	0	0	0	0	0	0	0	0	0	0
Steel	31	37	29	35	4	5	1	1	10	12	9	11
Wood	728	22	1,059	33	410	13	253	8	174	5	627	19



FEMA

Flood Global Risk Report

RiskMAP
 Increasing Resilience Together

Page 9 of 16



Essential Facility Damage

Before the flood analyzed in this scenario, the region had 898 hospital beds available for use. On the day of the scenario flood event, the model estimates that 898 hospital beds are available in the region.

Table 5: Expected Damage to Essential Facilities

Classification	Total	# Facilities		
		At Least Moderate	At Least Substantial	Loss of Use
Emergency Operation Centers	5	0	0	0
Fire Stations	73	5	1	3
Hospitals	8	0	0	0
Police Stations	24	2	0	2
Schools	278	7	1	7

If this report displays all zeros or is blank, two possibilities can explain this.

- (1) None of your facilities were flooded. This can be checked by mapping the inventory data on the depth grid.
- (2) The analysis was not run. This can be tested by checking the run box on the Analysis Menu and seeing if a message box asks you to replace the existing results.

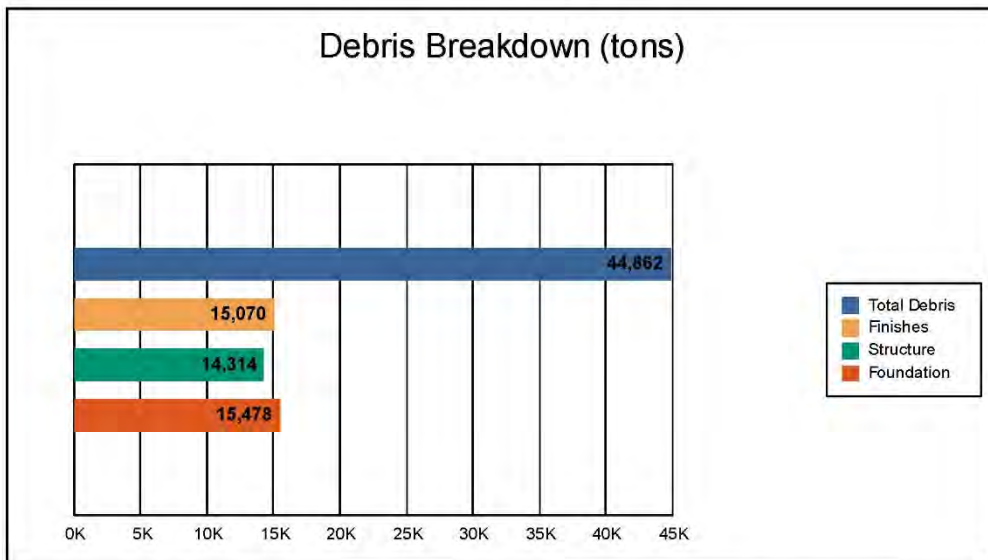




Induced Flood Damage

Debris Generation

Hazus estimates the amount of debris that will be generated by the flood. The model breaks debris into three general categories: 1) Finishes (dry wall, insulation, etc.), 2) Structural (wood, brick, etc.) and 3) Foundations (concrete slab, concrete block, rebar, etc.). This distinction is made because of the different types of material handling equipment required to handle the debris.



The model estimates that a total of 44,862 tons of debris will be generated. Of the total amount, Finishes comprises 34% of the total, Structure comprises 32% of the total, and Foundation comprises 35%. If the debris tonnage is converted into an estimated number of truckloads, it will require 1795 truckloads (@25 tons/truck) to remove the debris generated by the flood.

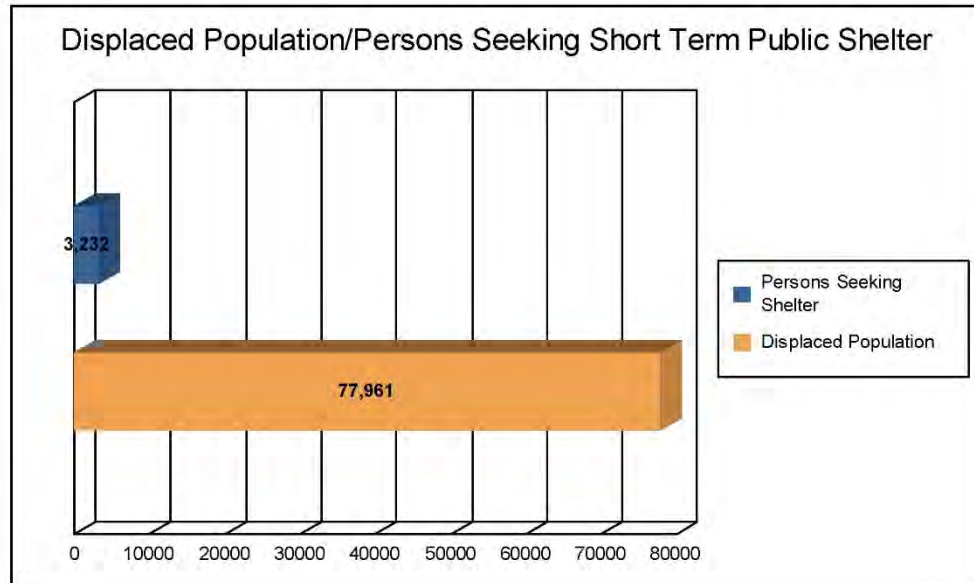




Social Impact

Shelter Requirements

Hazus estimates the number of households that are expected to be displaced from their homes due to the flood and the associated potential evacuation. Hazus also estimates those displaced people that will require accommodations in temporary public shelters. The model estimates 25,987 households (or 77,961 of people) will be displaced due to the flood. Displacement includes households evacuated from within or very near to the inundated area. Of these, 3,232 people (out of a total population of 827,611) will seek temporary shelter in public shelters.





Economic Loss

The total economic loss estimated for the flood is 3,321.23 million dollars, which represents 23.71 % of the total replacement value of the scenario buildings.

Building-Related Losses

The building losses are broken into two categories: direct building losses and business interruption losses. The direct building losses are the estimated costs to repair or replace the damage caused to the building and its contents. The business interruption losses are the losses associated with inability to operate a business because of the damage sustained during the flood. Business interruption losses also include the temporary living expenses for those people displaced from their homes because of the flood.

The total building-related losses were 1,772.80 million dollars. 47% of the estimated losses were related to the business interruption of the region. The residential occupancies made up 16.10% of the total loss. Table 6 below provides a summary of the losses associated with the building damage.



FEMA

Flood Global Risk Report

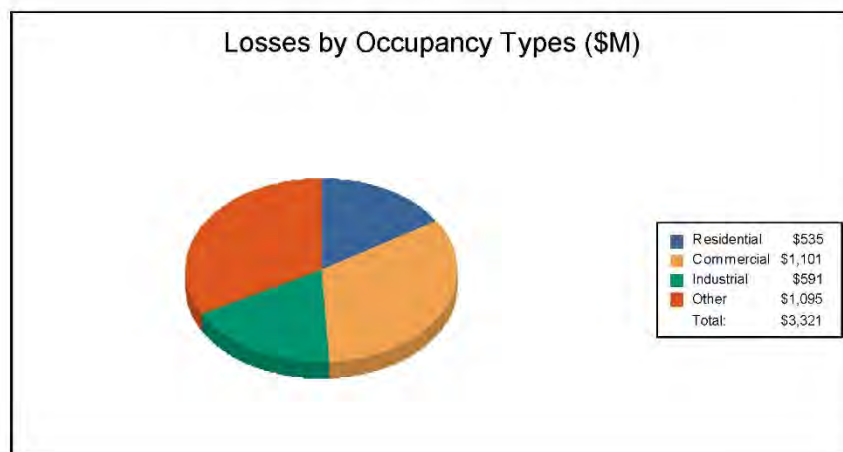
RiskMAP
Increasing Resilience Together

Page 13 of 16



Table 6: Building-Related Economic Loss Estimates
(Millions of dollars)

Category	Area	Residential	Commercial	Industrial	Others	Total
Building Loss						
	Building	241.28	170.68	114.19	57.24	583.39
	Content	120.85	243.47	331.58	110.38	806.28
	Inventory	0.00	38.73	73.06	271.35	383.14
	Subtotal	362.13	452.87	518.84	438.97	1,772.80
Business Interruption						
	Income	10.04	305.53	21.23	97.97	434.77
	Relocation	95.91	80.21	15.24	53.23	244.59
	Rental Income	42.96	59.80	7.86	6.74	117.36
	Wage	23.63	202.22	27.93	497.92	751.70
	Subtotal	172.54	647.76	72.26	655.87	1,548.42
ALL	Total	534.67	1,100.63	591.10	1,094.83	3,321.23



FEMA

Flood Global Risk Report

RiskMAP
Increasing Resilience Together

Page 14 of 16



Appendix A: County Listing for the Region

Washington
- Snohomish



FEMA

Flood Global Risk Report

RiskMAP
Increasing Resilience Together

Page 15 of 16



Appendix B: Regional Population and Building Value Data

	Population	Building Value (thousands of dollars)		
		Residential	Non-Residential	Total
Washington				
Snohomish	827,611	60,640,532	20,901,222	81,541,754
Total	827,611	60,640,532	20,901,222	81,541,754
Total Study Region	827,611	60,640,532	20,901,222	81,541,754



Table E.2: FEMA Disaster Declarations

Type	Date of Declaration	Event	Casualties	Disaster Number
Flood	December 29, 1964	Heavy Rains, Flooding	–	185
Earthquake	April 29, 1965	6.5 to 6.7 Magnitude	6 deaths	196
Flood	December 1, 1975	Severe Storms, Flooding	–	492
Flood	December 10, 1977	Severe Storms, Mudslides, Flooding	–	545
Flood	December 31, 1979	Storms, High Tides, Mudslides, Flooding	–	612
Volcanic Eruption	May 21, 1980	Mount St. Helens Eruption	57 deaths	623
Flood	December 15, 1986	Severe Storms, Flooding	–	784
Flood	November 26, 1990	Severe Storms, Flooding	–	883
Flood	March 8, 1991	Severe Storms, High Tides	–	896
Severe Storm	March 4, 1993	Severe Storms & High Wind	–	981
Severe Storm	January 3, 1996	Severe Storms, High Wind, Flooding	–	1079
Flood	February 9, 1996	High Winds, Severe Storms, Flooding	–	1100
Severe Storm	January 17, 1997	Severe Winter Storm, Landslides, Mudslides, Flooding	–	1159
Flood	April 2, 1997	Heavy Rains, Snow Melt, Flooding, Landslides, Mudslides	–	1172
Earthquake	February 28, 2001	6.8 Magnitude	400 injuries	1361
Severe Storm	November 7, 2003	Severe Storms, Flooding	–	1499
Severe Storm	May 17, 2006	Severe Storms, Landslides, Mudslides	–	1671
Severe Storm	December 12, 2006	Severe Storms, Flooding, Tidal Surge, Landslides, Mudslides	–	1641
Severe Storm	February 14, 2007	Severe Storms, Landslides, Mudslides, Flooding	–	1734
Severe Storm	December 8, 2007	Severe Winter Storm, Landslides, Mudslides	–	1682

Type	Date of Declaration	Event	Casualties	Disaster Number
Flood	January 7, 2009	Severe Winter Storm, Landslides, Mudslides, Flooding	–	1817
Severe Storm	March 2, 2009	Severe Winter Storm, Snow	–	1825
Severe Storm	March 5, 2012	Severe Winter Storm, Flooding, Landslides, Mudslides	–	4056
Landslide/Mudslide	March 24, 2014	Flooding, Mudslides	43 deaths/12 injuries	3370
Landslide/Mudslide	April 2, 2014	Flooding, Mudslides	–	4168
Severe Storm	October 15, 2015	Severe Windstorm	–	4242
Severe Storm	January 15, 2016	Severe Storms, Winds, Flooding, Landslides, Mudslides	–	4249
Severe Storm	March 4, 2019	Severe Winter Storms, Winds, Flooding, Landslides, Mudslides, Tornado	–	4418
Biological	March 22, 2020	Covid-19 Pandemic		4481
Severe Storm	April 23, 2020	Severe Storms, Flooding, Landslides, and Mudslides	–	4539
Severe Storm	April 8, 2021	Severe Winter Storm, Straight-line Winds, Flooding, Landslides, and Mudslides	–	4593
Severe Storm	January 12, 2023	Severe Winter Storm, Straight-line Winds, Flooding, Landslides, and Mudslides	–	4682
Severe Storm	April 7, 2026	Severe Storm, Straight-line Winds, Flooding, Landslides and Mudslides	1 death	4906

Table E.3: Severe Weather Events Resulting in Deaths/Injuries or Property Damage²¹

Date	Type	Death	Injuries	Property Damage
11/24/1970	Tornado	0	0	25.00K
10/26/1971	Tornado	0	0	25.00K

²¹ Source: NOAA Storm Event Database.

Date	Type	Death	Injuries	Property Damage
9/15/1996	Lightning	1	0	0.00K
4/10/1997	Lightning	0	0	35.00K
5/31/1997	Flood	0	0	5.00K
8/6/2004	Heavy Rain	0	0	20.00K
9/1/2004	Lightning	0	0	5.00K
5/18/2005	Tornado	0	0	6.00K
9/9/2005	Lightning	0	0	2.00K
10/1/2005	Lightning	0	0	2.00K
3/8/2006	Strong Wind	0	0	50.00K
11/4/2006	Flood	0	0	3.300M
11/26/2006	Heavy Snow	0	0	2.000M
12/14/2006	High Wind	0	0	5.400M
1/5/2007	Strong Wind	0	0	500.00K
2/28/2007	Heavy Snow	0	0	5.00K
3/11/2007	Strong Wind	0	0	2.00K
10/18/2007	High Wind	0	0	750.00K
12/3/2007	Heavy Rain	0	0	10.000M
11/4/2008	Lightning	0	0	25.00K
11/12/2008	Flood	0	0	100.00K
12/17/2008	Heavy Snow	0	0	500.00K
12/20/2008	Heavy Snow	0	0	200.00K
12/21/2008	Heavy Snow	0	0	3.000M
1/7/2009	Flood	0	0	6.500M
3/15/2009	Strong Wind	0	0	10.00K
3/20/2009	Strong Wind	1	1	20.00K
10/23/2009	Strong Wind	0	0	15.00K
1/18/2010	High Wind	0	0	18.00K
3/16/2010	Strong Wind	0	0	40.00K
4/2/2010	High Wind	0	0	15.00K
5/3/2010	Strong Wind	0	0	5.00K
12/12/2010	Flood	0	0	1.100M
12/14/2010	Thunderstorm Wind	0	0	30.00K
1/16/2011	Flood	0	0	50.00K
3/13/2011	Debris Flow	0	0	100.00K
9/25/2011	Strong Wind	0	0	20.00K
11/22/2011	Strong Wind	0	0	50.00K
2/22/2012	Debris Flow	0	0	200.00K
6/23/2012	Thunderstorm Wind	0	0	5.00K
11/19/2012	Debris Flow	0	0	2.00K
12/16/2012	Debris Flow	0	0	50.00K
12/17/2012	Coastal Flood	0	0	200.00K
1/9/2014	Debris Flow	0	0	2.00K
1/11/2014	Strong Wind	0	0	100.00K
3/22/2014	Debris Flow	43	12	60.000M

Date	Type	Death	Injuries	Property Damage
10/25/2014	Strong Wind	1	0	250.00K
10/25/2014	High Wind	0	0	500.00K
11/6/2014	Strong Wind	0	1	100.00K
11/11/2014	High Wind	0	0	4.000M
11/29/2014	Strong Wind	0	0	80.00K
12/11/2014	Strong Wind	0	0	500.00K
8/29/2015	High Wind	0	0	1.500M
9/20/2015	Strong Wind	1	0	0.00K
10/10/2015	Strong Wind	0	0	50.00K
11/17/2015	Strong Wind	1	0	1.500M
11/17/2015	Flood	0	0	250.00K
11/17/2015	High Wind	0	0	3.500M
12/9/2015	Strong Wind	0	0	50.00K
1/1/2016	Avalanche	1	0	0.00K
3/1/2016	Strong Wind	0	0	200.00K
3/10/2016	High Wind	0	0	1.000M
3/13/2016	High Wind	0	0	200.00K
1/8/2017	High Wind	0	0	351.00K
2/1/2017	High Wind	0	0	500.00K
9/4/2017	Wildfire	0	0	4.500M
10/18/2017	High Wind	0	0	50.00K
11/13/2017	High Wind	0	0	1.500M
11/13/2017	High Wind	1	1	2.000M
11/13/2020	Strong Wind	0	0	500.00K
11/17/2020	Strong Wind	0	0	1.000M
1/12/2021	Flood	0	0	329.00K
10/24/2021	High Wind	2	0	0.00K
11/12/2021	Flood	0	0	2.420M
1/9/2023	Strong Wind	1	0	0.00K
11/19/2024	High Wind	1	0	0.00K

Appendix F: Annual Report & CRS Compliance Template

Figure F.1: 2024 Annual Progress Report

Community <u>SNOHOMISH COUNTY *</u>	State <u>WA</u>	CID <u>535534</u>
-------------------------------------	-----------------	-------------------

COMMUNITY RATING SYSTEM ANNUAL RECERTIFICATION

CRS Activity 510
Annual Progress Report on Implementation of Credited Plan

Which Plan is this for (use separate templates for each credited Plan):

☒ **Floodplain Management Plan (Hazard Mitigation Plan)**

☐ **Repetitive Loss Area Analysis**

☐ **Floodplain Species Plan**

☐ **Substantial Damage Plan**

Name of Community: Snohomish County, WA

Date this Annual Progress Report was prepared: October 28, 2024

Name of Plan: Snohomish County Hazard Mitigation Plan – September 2020 Update

Date of Adoption of Plan: January 13, 2021

5 Year CRS Expiration Date: October 1, 2028

How can a copy of the credited Plan be obtained: Please visit the Department of Emergency Management (DEM) office (720 80th Street SW, Building A, Everett, WA 98203) to view a hard copy. A navigable electronic version is available on our website at:
<https://snohomishcountywa.gov/HMP>

Describe how this annual progress report (not the credited Plan) was prepared and how it was submitted to the governing body, released to the media, and made available to the public:
 This report was prepared by DEM staff and participating planning partners. The report is being submitted to the County Council for review. This progress report will be made available for review by the media and the public. A locally published notice stating progress report availability and the location of the full plan will be released this year.

Provide a description of the implementation of each recommendation or action item in the action plan or area analysis report, including a statement on how the project was implemented or not implemented during the previous year:
 Progress percentages, as applicable, are included under each action item.

Discuss why any objectives were not reached or why implementation is behind schedule:
 Objectives for the plan are in-progress and were prioritized based on current projects, funding, and objectives.

What are the recommendations for new projects or revised recommendations?
 Ensure action items and lead agencies are correctly aligned after County department restructuring. New action items will be identified through the 2025 HMP update process.

Community Certifications	CC-213-S	Edition: 2017
--------------------------	----------	---------------

HAZARD MITIGATION ACTION PLAN MATRIX	
Project/Mitigation Measure Number: SnoCo-1 Adapt, retrofit, and/or develop redundancy in, critical infrastructure and systems located in high-hazard areas or that support response, recovery, or continuity of operations plans.	
Actions: Reduce risk to critical facilities in higher risk areas where relocation is not practicable and where life safety can be assured. 1. Support appropriate retrofitting using best available science to assure life safety and the functionality of critical facilities post disaster. 2. Implement structural and non-structural mitigation measures to reduce risk to vulnerable Snohomish County buildings and critical facilities. Reduce risk to utility networks. 1. Protect wastewater facility from ground water infiltration. 2. Establish micro grids and bury above ground systems as elements are upgraded or replaced.	
Hazards Addressed: All	
Goal(s): 1, 2, 3	
Objective(s): 1.2, 1.5, 2.2, 2.3, 3.3	
Lead Agency: Snohomish County Facilities Management (FM), Snohomish County Public Works (PW)	
Secondary Agency(s): Snohomish County Department of Emergency Management (DEM), Snohomish County Planning and Development Services (PDS), Snohomish County Department of Conservation and Natural Resources (DCNR)	
How does this project contribute to overall risk reduction? Cities have ongoing action items to seismically protect water infrastructure systems and water sources in the event of an earthquake. One city has completed road infrastructure projects to maintain emergency routes after a seismic event.	
How were risk reduction actions prioritized through a benefit cost analysis? Snohomish County departments implement a Continuous Improvement process that includes prioritizing projects by impact, cost and risk analysis. All budget funded projects go through Council and Executive approval.	
Funding has been secured for some projects but is grant eligible for existing grant program. Possible implementation tools include -- Revenue sources: FEMA Hazard Mitigation Grants, General Fund, Airport Funds, Roads Fund, CIP Special Assessment Districts, and Assessment Fees, Federal Highway Administration (FHWA).	
Timeline: Ongoing	
2024 Update: Snohomish County Public Works Environmental Services completed a design for slide repair to N High Rock Rd, totaling \$32k. Additionally, Snohomish County Public Works Road Maintenance completed \$2.3 million of washout/slide repair work, \$53k in sinkhole repairs, and \$835k in subgrade/embankment repairs. Designs were completed this year for two bridge replacement projects that will start construction next year, totaling \$7.3 million and funded by FHWA. Dive inspections were also completed for two bridges to monitor for scour.	

Project/Mitigation Measure Number: SnoCo-2 Enhance and improve capital improvement programs, taxing, zoning, and development approaches to promote mitigation and reduce exposure/vulnerability to hazards.	
Actions: 1. Promote development in low-risk areas. a. Conduct a pre-disaster gap analysis for urban and transit centers to identify the required provisions that need to be in place before a disaster for the growth centers to function to their full supportive capability. b. Require deferral permit fees for risk reducing development. c. Offer expedited permitting and prioritization for development within a growth center. 2. Make greatest use of the post disaster environment to advance the comprehensive plan and increase community safety. a. Consider more stringent building standards commensurate with higher risks where practicable. b. Evaluate the permitting process for opportunities to incentivize improved building practices.	
Hazards Addressed: Earthquake, Hazardous Materials, Weather Events, Flooding, Dam Failure, Wildfire, Mass Earth Movement, Volcano, Tsunami	
Goal(s): 1, 2, 3, 4	
Objective(s): 1.1, 2.2, 3.1, 4.1, 4.3, 4.4	
Lead Agency: PDS, PW	
Secondary Agency(s): Snohomish County Tomorrow (SCT), DCNR, FEMA	
How does this project contribute to overall risk reduction? As a result of the Oso slide, the County updated its Landslide Hazard regulations in Snohomish County Code 30.62B.340. Regulations concerning geologically hazardous areas are contained in Chapter 30.62B GEOLOGICALLY HAZARDOUS AREAS.	
How were risk reduction actions prioritized through a benefit cost analysis? Snohomish County departments implement a Continuous Improvement process that includes prioritizing projects by impact, cost and risk analysis. All budget funded projects go through Council and Executive approval.	
<u>Funding has not been secured.</u>	
Timeline: Ongoing	
2024 Update: Snohomish County Planning and Development Services developed the 2024 Comprehensive Plan to include policies in several elements including Natural Environment, Capital Facilities and Utilities, Land Use and Climate Change and Resiliency that address natural hazards, approaches, funding, coordination, and incentives. Several programs from the County and other planning partners also address mitigating hazards.	

Project/Mitigation Measure Number: SnoCo-3 Create and enhance coordinated public information programs that increase hazard awareness and that support actionable preparedness and mitigation measures and are inclusive of individuals with limited English proficiency and those with access and functional needs.	
Actions: 1. Encourage emergency preparedness kits (3 to 10 days survival) and promote emergency preparedness programs (CERT, SNAP, etc.).	

2.	Inform and deliver accessible education to the public for local hazards, hazard mitigation and preparedness via a County-operated website.
3.	Map and maintain public sector critical transportation routes.
4.	Maintain and improve hazard monitoring, emergency communications, and early warning systems.
Hazards Addressed: All	
Goal(s): 1, 2, 3, 4	
Objective(s): 1.5, 2.1, 2.3, 3.2, 4.4	
Lead Agency: DEM	
Secondary Agency(s): PW, Snohomish County Human Services Department (HSD), Snohomish County Office of Social Justice (OSJ), WA Emergency Management Division (WA EMD)	
How does this project contribute to overall risk reduction? The County and cities were able to provide in person and online outreach to assist the public with all-hazards education along with planned social media campaigns while also supporting countywide Citizen Corp efforts and offering free in person preparedness training.	
How were risk reduction actions prioritized through a benefit cost analysis? Snohomish County departments implement a Continuous Improvement process that includes prioritizing projects by impact, cost and risk analysis. All budget funded projects go through Council and Executive approval.	
Funding has not been secured but is grant eligible for existing grant program.	
Timeline: Ongoing	
2024 Update: Snohomish County Human Services supported this measure for all case management clients through distributing educational material on emergency preparedness while conducting home visits, identifying through a screening process all clients that would need assistance in the event of an emergency or weather-related event. The Behavioral Health and Veteran Services Division promoted 988 Suicide and Crisis Lifeline which is being marketed in multiple languages through the county, state and nation. Snohomish County Department of Emergency Management did stand-up information booths at National Night Out events in multiple jurisdictions and the Evergreen State Fair and continues to lead a countywide CERT leadership group to support CERT coordination countywide.	

Project/Mitigation Measure Number: SnoCo-4 Promote individual community's ability to respond and recover from an event through the developing of social capital and strengthening of community networks.

Actions:

1. Provide incentives, such as neighborhood grants, for high-risk neighborhoods to develop plans.
2. Promote a "Map-Your-Neighborhood" program.
3. Connect neighborhoods by increasing walkability and increased connectivity of walkable and bikeable networks.

Hazards Addressed: All

Goal(s): 2, 3

Objective(s): 2.3, 3.1, 3.2, 3.3

Lead Agency: DEM

Secondary Agency(s): All
How does this project contribute to overall risk reduction? As part of its 2024 Comprehensive Plan Update the County is increasing multi-modal infrastructure, in particular in the Southwest UGA.
How were risk reduction actions prioritized through a benefit cost analysis? Snohomish County departments implement a Continuous Improvement process that includes prioritizing projects by impact, cost and risk analysis. All budget funded projects go through Council and Executive approval.
Funding has not been secured but is grant eligible for existing grant programs including ARPA and HUD.
Timeline: Ongoing
2024 Update: Snohomish County Human Services Department (HSD) promoted Early Head Start which provides an emergency preparedness training to enrolled families. Emergency backup plans are discussed with all clients in their direct service programs for Case Management and Long-Term Care and Aging to ensure persons served have a plan in place in case of an emergency. Energy and Assistance addresses extreme weather conditions by providing a limited number of air conditioners for hot weather and furnace repairs for cold weather conditions. Information is provided in multiple languages and interpretation is available. Additionally, in person outreach was conducted for different populations and geographic areas. HSD executed an interlocal agreement with the City of Everett to develop a new central shelter that will include extra bed capacity for cold weather sheltering. Additionally, HSD invested \$1.5 million dollars in over 20 community-based centers to upgrade/improve HVAC systems which can serve as cooling facilities, warming locations, and cleaner-air facilities during inclement weather and poor air quality events.

Project/Mitigation Measure Number: SnoCo-5 Enhance and improve support for risk reduction programs and capabilities including supporting efforts through programs, processes, regulations, and funding.
Actions: 1. Develop Departmental continuity of operations plans and neighborhood-based continuity plans (small businesses and neighborhoods). 2. Coordinate with Planning processes and programs in PDS, PW and DCNR to support grant applications for funding department specific projects and to brief on DEM led projects. 3. Attend SCT Meetings to provide subject matter expertise to capital and comprehensive planning processes and provide briefings on DEM led projects.
Hazards Addressed: All
Goal(s): 1, 2, 3, 4
Objective(s): 1.4, 1.5, 2.1, 2.3, 3.3, 4.1
Lead Agency: DEM
Secondary Agency(s): All
How does this project contribute to overall risk reduction? Developing and maintaining a County-wide Continuity of Operations Plan provides guidance for leadership and essential personnel on where to report and how to respond after a hazard event, including roles and responsibilities, tasks and redundancy of communication. Interdepartmental Climate and Resiliency Committee (ICRC) to coordinate on among other things, grant opportunities that would result in increased resiliency.
How were risk reduction actions prioritized through a benefit cost analysis? Snohomish County departments implement a Continuous Improvement process that includes prioritizing projects by impact, cost and risk analysis. All budget funded projects go through Council and Executive approval.

Funding has not been secured but may be HMP grant eligible.
Timeline: Ongoing
2024 Update: Snohomish County Human Services Department supported this measure through including in all provider and service contracts that emergency procedures must be in place for clients that are served in the community.

Project/Mitigation Measure Number: SnoCo-6 Integrate HMP with other planning and regulatory documents and mechanisms through a coordinated County-wide approach while considering regional partners.
Actions: - Integrate the HMP with the following plans and mechanisms: - Comprehensive Plan - Capital Improvements Plan - Critical Areas Ordinances - Shoreline Master Plan - Other applicable mechanisms - Continue support, maintenance, improvement, and implementation of HMP. - Update hazard, risk, and vulnerability information incorporating best available science and enhanced technology. - Provide intergovernmental coordination and partnership opportunities.
Hazards Addressed: All
Goal(s): 1, 2, 3, 4
Objective(s): 1.1, 1.5, 2.2, 3.1, 3.3, 4.1, 4.2, 4.3, 4.4
Lead Agency: DEM, PDS
Secondary Agency(s): None
How does this project contribute to overall risk reduction? Providing an All Hazards briefing for the Capital Improvement Program provides Leadership and Decision Makers with additional information when planning and siting future facilities and infrastructure, as well as helps identify existing ones that may require maintenance or improvements to withstand the risks of different hazards. Updating the GIS database with recent seismic modeling results provides a better perspective of potential damage to the local Critical Transportation System and impacts to Mass Care services and the Supply Chain.
How were risk reduction actions prioritized through a benefit cost analysis? Snohomish County departments implement a Continuous Improvement process that includes prioritizing projects by impact, cost and risk analysis. All budget funded projects go through Council and Executive approval.
Funding secured, available, is an ongoing project or meets existing grant eligibility requirements.
Possible implementation tools: General Fund Expenditures (Growth Management Act, Critical Areas Ordinance, Coastal Zone Management Area Plans, Capital Improvement Program, NFIP Community Rating System 510 Plans, Special Area and Functional Plans).
Timeline: Ongoing
2024 Update: Snohomish County Planning and Development Services worked to integrate the HMP with other planning regulatory documents which increased coordination and outcomes between the County, Tribes, planning

partners, special purpose districts, and community members. This integration includes using climate change projection in long-term planning documents and in capital projects planning.

Project/Mitigation Measure Number: SnoCo-7 Develop and implement a County-wide risk reduction program that supports comprehensive, all-hazards strategies.

Actions:

1. Activate and utilize the Disaster Resilience Committee to perform stakeholder and public outreach, examine damage assessments from past Snohomish County hazard events, and provide strategies based on best available science to develop a County-wide plan for risk reduction.
2. Work with Regional Partners to coordinate regional mass care and transportation efforts and agreements.

Hazards Addressed: All

Goal(s): 1, 2, 3, 4

Objective(s): 1.1, 1.2, 1.3, 1.4, 2.2, 3.3, 4.1, 4.3, 4.4, 4.5

Lead Agency: DEM

Secondary Agency(s): All

How does this project contribute to overall risk reduction? No feedback received.

How were risk reduction actions prioritized through a benefit cost analysis? Snohomish County departments implement a Continuous Improvement process that includes prioritizing projects by impact, cost and risk analysis. All budget funded projects go through Council and Executive approval.

Funding has not been secured but is grant eligible for existing grant program.

Timeline: Ongoing

2024 Update:

Multiple county departments including Human Services and Emergency Management work with regional partners King County, RARET (Regional Alliance for Resilient and Equitable Transportation), and Snotrac to improve transportation services for the most marginalized and underserved communities.

Project/Mitigation Measure Number: SnoCo-8 Provide incentives for eligible non-profits and private entities, including homeowners, to adapt to risks through structural and nonstructural mitigation measures.

Actions:

1. Provide retrofitting information and technical expertise to organizations.
2. Develop special retrofitting loan packages with banks and home-based government loan and or grant programs for communities with higher risks.
3. Work with neighborhood organizations to inform homeowners of retrofit options, through special purpose events such as block parties.

Hazards Addressed: Earthquake, Hazardous Materials, Weather Events, Flooding, Dam Failure, Wildfire, Mass Earth Movement, Volcano, Tsunami

Goal(s): 2, 3

Objective(s): 2.1, 2.2, 2.3, 3.1, 3.3

2024 Progress Report
Snohomish County Hazard Mitigation Plan - 2020 Update

7

Lead Agency: PDS, PW, DEM
Secondary Agency(s): Snohomish County Executive's Office, HSD, Snohomish County Health Department (SCHD)
How does this project contribute to overall risk reduction? Continuing to provide incentives and assistance with home elevation projects to residents reduces structure damage and human casualties.
How were risk reduction actions prioritized through a benefit cost analysis? Snohomish County departments implement a Continuous Improvement process that includes prioritizing projects by impact, cost and risk analysis. All budget funded projects go through Council and Executive approval.
<u>Funding has not been secured</u> but is grant eligible for existing grant program.
Timeline: Ongoing
2024 Update: Snohomish County Planning and Development Services continues to work with the County's C-PACER Program, TDR, PDR, Conservation Futures programs to support this mitigation measure. Snohomish County Surface Water Management has worked to finish two ongoing FEMA grants, one for home elevation and one for buyout.

Project/Mitigation Measure Number: SnoCo-9 Develop and implement metrics that identify the most at-risk communities, especially those at risk of isolation or "islanding", to ensure that critical services and facilities are resilient.
Actions: - Utilize the AFN need factors established in the Regional RCPGP 2019 CPOD project to prioritize food and water distribution post disaster and to assess sheltering needs. - Give a higher priority within capital improvement budgets, grant programs or other funding sources to: - Relocate or retrofit vulnerable emergency operation centers, medical facilities, and other critical facilities serving communities at risk of isolation during an event. - Provide alternative access to critical facilities. - Establish and maintain backup or redundant power sources. - Strengthen community networks. - Expand disaster sheltering services, public outreach to vulnerable communities, and coordination of local and regional critical services.
Hazards Addressed: Earthquake, Epidemic, Hazardous Materials, Weather Events, Flooding, Dam Failure, Wildfire, Mass Earth Movement, Volcano, Tsunami
Goal(s): 2, 3
Objective(s): 2.3, 3.1, 3.3
Lead Agency: DEM, HSD, SCHD, Executive's Office
Secondary Agency(s): PW, PDS
How does this project contribute to overall risk reduction? Tools were developed to inform a Climate Change and Resiliency Element and a Subarea Plan Element for planning efforts.
How were risk reduction actions prioritized through a benefit cost analysis? Snohomish County departments implement a Continuous Improvement process that includes prioritizing projects by impact, cost and risk analysis. All budget funded projects go through Council and Executive approval.
<u>Funding has not been secured</u> but is grant eligible for existing grant program.

2024 Progress Report

Snohomish County Hazard Mitigation Plan - 2020 Update

8

Timeline: Ongoing
2024 Update: Snohomish County Executive's Office developed and implemented metrics that identify the most at-risk communities, especially those at-risk of isolation or "islanding" to ensure that critical services and facilities are resilient. Snohomish County Human Services Developmental Disabilities and Early Learning Division programs prioritize and provide services to the most at-risk communities (low-income, families with low-incomes, individuals with multiple and complex challenges to economic stability and well-being including children/youth/adults with developmental disabilities. Services support connections to community services and networks of support. Most other HSD programs are required to identify and work with the most vulnerable populations and grant funds typically require assessing individuals for level of need and prioritizing funds for the most vulnerable.
Project/Mitigation Measure Number: SnoCo-10 Promote earthquake risk reduction and resilience methods including specific planning for identified geographic islands through the improved data collection, education and outreach, and planning for seismic activity. Actions: 1. Perform a GIS analysis with current State and Federal layers to assess the islanding effect of worst-case scenarios on the transportation system and identify population islands that may be created based on infrastructure damage and repair times. 2. Work with regional partners and cities to establish viable CPOD sites and produce a CONOPs plan for prioritization, operation and logistics for resupply and distribution 3. Work with regional partners and cities to establish viable sheltering sites based on the 2019 RCPGP CPOD population island results
Hazards Addressed: Earthquake, Hazardous Materials, Dam Failures, Mass Earth Movement, Tsunami
Goal(s): 1, 2, 3, 4
Objective(s): 1.5, 2.1, 2.3, 3.1, 3.2, 3.3, 4.3, 4.4
Lead Agency: DEM, PW
Secondary Agency(s): FM, PDS, DCNR
How does this project contribute to overall risk reduction? No feedback received.
How were risk reduction actions prioritized through a benefit cost analysis? Snohomish County departments implement a Continuous Improvement process that includes prioritizing projects by impact, cost and risk analysis. All budget funded projects go through Council and Executive approval.
Funding has not been secured but is grant eligible for existing grant program
Timeline: Ongoing
2024 Update: Snohomish County Department of Emergency Management completed work on the 2019 Regional Catastrophic Preparedness Grant which was used to identify population islands and develop a CPOD tool to identify potential sites for a catastrophic earthquake scenario. Additionally, DEM participated in FEMA's preparedness grant case study, which explore how FEMA non-disaster preparedness grant funds are used by communities to increase capabilities to prevent, protect against, mitigate, respond to, and recover from disasters and emergencies and fit into FEMA's broader work to understand the role of grant-funded investments in improving grant recipient outcomes.

Project/Mitigation Measure Number: SnoCo-11 Promote wildfire mitigation and risk reduction methods in areas identified in medium and high-risk areas.
Actions: 1. Using a five-step process, encourage communities to develop an action plan that guides their residential risk reduction activities, while engaging and encouraging their neighbors to become active participants in maintaining a safer place to live (www.firewise.org).
Hazards Addressed: Wildfire
Goal(s): 1, 2, 4
Objective(s): 1.5, 2.1, 2.2, 2.3, 4.1
Lead Agency: DEM
Secondary Agency(s): PDS, DCNR, WA Department of Natural Resources (WA DNR), United States Forest Service (USFS)
How does this project contribute to overall risk reduction? Working with the State and regional partners in implementation of the WUI Code will help set regional standards for building and land use codes within the WUI, making it easier for property owners and developers to understand and comply.
How were risk reduction actions prioritized through a benefit cost analysis? Snohomish County departments implement a Continuous Improvement process that includes prioritizing projects by impact, cost and risk analysis. All budget funded projects go through Council and Executive approval.
<u>Funding has not been secured</u> but is grant eligible for existing grant program.
Timeline: Ongoing
2024 Update: Snohomish County Department of Emergency Management has convened stakeholders countywide in the development of a Community Wildfire Protection Plan which engaged the community through survey to determine gaps in public education regarding wildfire risk reduction activities. The department also promoted services provided by partners at the Snohomish Conservation District which includes home visits to assess individual fire readiness.

Project/Mitigation Measure Number: SnoCo-12 Consider flood control structure maintenance and restoration.
Actions: 1. Consider the benefits and life cycle costs of removing flood-prevention structures and instituting an adaptive strategy for vulnerable land uses. 2. Continue compliance with the Shoreline Master Plan and Growth Management Act Programs. 3. Implement salmon recovery plans and Sustainable Lands Strategy (SLS). 4. Implement storm water management to prevent land use caused increases in flood levels and restore flood plain function. 5. Reestablish and maintain healthy riparian areas and consider setbacks and the use of bioengineering techniques where it is not feasible to decommission existing flood control structures. 6. Prohibit new dikes, levees, floodgates, pump stations, culverts, dams, water diversions, and other alterations in the floodplain unless it has been demonstrated that no feasible alternative exists.
Hazards Addressed: Flooding

Goal(s): 1, 2, 3, 4
Objective(s): 1.1, 1.2, 1.3, 1.5, 2.1, 2.2, 3.2, 3.3, 4.1, 4.3 4.4
Lead Agency: DCNR - SWM
Secondary Agency(s): PDS, Executive's Office
How does this project contribute to overall risk reduction? The Washington State GMA requires review of a participating jurisdiction's Critical Area Codes and Development Regulations during a Comprehensive Plan update. Consideration of other Environmental planning factors during the development of the Comp plan and CAO updates ensures that programs like the SLS and other mitigation strategies can be implemented when considering the growth target rate of the region within the next 30 years.
How were risk reduction actions prioritized through a benefit cost analysis? Snohomish County departments implement a Continuous Improvement process that includes prioritizing projects by impact, cost and risk analysis. All budget funded projects go through Council and Executive approval.
Funding has been secured through WA State Department of Ecology, Washington State Recreation and Conservation Office, and sponsors including Adopt a Stream. Other projects do not have funding secured but are grant eligible for existing grant program.
Timeline: Ongoing
2024 Update: Snohomish County Public Works Environmental Services completed multiple flooding mitigation projects including the Mann Rd and Ben Howard Rd Improvements project totaling \$3.5 million. Snohomish County Surface Water Management's Floodplain Services group conducted an inventory of county owned structures and liabilities and will be assessing private and relic structures. Relationships have been re-established with Diking, Drainage, and Flood Control districts to better evaluate and plan on a waterbody or watershed scale. Snohomish County Surface Water Management created an Integrated Floodplain Coordinator job position to better cooperate with relevant outside stakeholders and agencies regarding agricultural interests, flooding, and environmental work. Inspections were carried out at the Cascade District court, in Arlington, WA, to determine what future work may be needed to ensure longevity of county infrastructure. Riverine involvement was ruled out.

Project/Mitigation Measure Number: SnoCo-13 Plan and prepare for climate impacts using best available science.
Actions: 1. Consider best available climate science modeling in comprehensive planning efforts 2. Conduct study in collaboration with local jurisdictions to identify critical infrastructure that may be impacted due to climate change. 3. Upgrade/relocate county buildings and infrastructure to protect and prepare for sea level rise, flooding, and storm events from climate change. 4. Continue implementation of Sustainable Operations Action Plan (SOAP). 5. Establish a collaborative workgroup of County Departments, municipal governments in the county, and organizations that provide public services to focus on implementation of strategies to reduce greenhouse gas emissions and adapt to changing climate.
Hazards Addressed: All
Goal(s): 2, 3, 4
Objective(s): 2.2, 3.1, 3.2, 3.3, 4.1

2024 Progress Report

11

Snohomish County Hazard Mitigation Plan - 2020 Update

Lead Agency: PDS, PW, Executive's Office
Secondary Agency(s): All
How does this project contribute to overall risk reduction? Consideration of the Hazard Mitigation Plan during the Capital Improvement Plan process ensures that infrastructure and facility improvements are developed to minimize damage from hazards, and that future population planning is a factor in land use and capital facility decisions.
How were risk reduction actions prioritized through a benefit cost analysis? Snohomish County departments implement a Continuous Improvement process that includes prioritizing projects by impact, cost and risk analysis. All budget funded projects go through Council and Executive approval.
<u>Funding has been secured</u> through Floodplains by Design and additional projects do not have funding secured but are grant eligible for existing grant programs.
Timeline: Ongoing
2024 Update: Snohomish County Executive's Office utilized best available science in their efforts to plan and prepare for climate impacts within Snohomish County. Snohomish County Planning and Development Services also used best available climate science in their comprehensive planning efforts and participated in the coordination efforts between departments. The Interdepartmental Climate Change and Resiliency Committee (ICRC) is used to coordinate and further projects, programs, and funding opportunities between county departments. The County's internal SOAP is being maintained through OES. Snohomish County DEM utilized best available science to develop and update the Wildland Urban Interface map and performed an updated assessment of wildfire risk throughout the county.

Project/Mitigation Measure Number: SnoCo-14 Identify and implement a comprehensive dam and levee mitigation and response program with a lens on climate change, the most vulnerable communities, and highest risk structures.
Actions: 1. Identify high-risk dams and levees. 2. Map the failure inundation areas for high-risk dams and levees. 3. Create dam and levee failure action plans. 4. Upgrade dam failure warning system in compliance with CRS requirements. 5. Establish levee failure warning system.
Hazards Addressed: Dam Failure
Goal(s): 1, 2, 3
Objective(s): 1.1, 1.5, 2.2, 3.1, 3.2, 3.3
Lead Agency: PW, PDS, DEM
Secondary Agency(s): HSD, Executive's Office
How does this project contribute to overall risk reduction? No feedback received.
How were risk reduction actions prioritized through a benefit cost analysis? Snohomish County departments implement a Continuous Improvement process that includes prioritizing projects by impact, cost and risk analysis. All budget funded projects go through Council and Executive approval.
<u>Funding has not been secured</u> but is grant eligible for existing grant program.
Timeline: Ongoing

2024 Update: Snohomish County DEM has designed a Flood Control Structure Analysis to identify and assess 10-12 flood control structures in need of improvement throughout the county and develop a scope of work and benefit cost analysis for 5 of the structures analyzed. DEM applied and was approved for a FY 23 Flood Management Assistance grant to fund the study.

Project/Mitigation Measure Number: SnoCo-15 Update and improve County flood hazard risk assessment data and methodology and identify innovative methods to reduce the impacts of flooding to the community while preserving and restoring ecosystem functions and services.

Actions:

1. Adopt improved DFIRMs.
2. Work with the City of Bothell and the National Weather Service (NWS) Seattle Weather Field Office (WFO) to develop a flood stage for the North Creek stream gage at 228th Street SE. Include development of flood phase's 1, 2, 3, 4 with corresponding property damages and loss of use with each flood stage identified.
3. Work with the UW Atmospheric Sciences department and Seattle Public Utilities to expand the "rain watch" products north of the City of Seattle.
4. Upgrade/improve flood hazard warning based on CRS requirements.

Hazards Addressed: Flooding, Mass Earth Movement, Weather Events

Goal(s): 1, 2, 3, 4

Objective(s): 1.1, 1.2, 1.3, 1.5, 2.1, 2.2, 2.3, 3.1, 3.2, 4.2, 4.3, 4.4, 4.5

Lead Agency: PW, PDS

Secondary Agency(s): DEM, DCNR, Executive's Office

How does this project contribute to overall risk reduction? No feedback received.

How were risk reduction actions prioritized through a benefit cost analysis? Snohomish County departments implement a Continuous Improvement process that includes prioritizing projects by impact, cost and risk analysis. All budget funded projects go through Council and Executive approval.

Funding has not been secured but is grant eligible for existing grant program.

Timeline: Ongoing

2024 Update:

Snohomish County Planning and Development Services worked to update and improve County flood hazard risk assessment data and methodology and identify innovative methods to reduce the impacts of flooding to the community while preserving and restoring ecosystem functions and services including the adoption of improved Digital Flood Insurance Rate Maps (DFIRMs) and maintaining the Flood Hazard Regulations and Density Fringe.

Project/Mitigation Measure Number: SnoCo-16 Support the development of a regional, comprehensive, and equitable acquisition, development, and redevelopment strategy for areas that experience substantial, severe or repetitive loss, are in high-hazard areas.

Actions:

1. Relocate or retrofit and continue the acquisition of "repetitive flood-loss" properties and those at risk to channel migration.
2. Expand county TDR/PDR program to include all high flood risk areas as sending areas.

Use the best available science to:
3. Incorporate best available science as required by the Growth Management Act to prioritize hazard areas.
Expand use of the transfer and purchase of development rights programs to include prioritized hazard areas.
Hazards Addressed: Flooding, Weather Events, Dam Failure, Wildfire, Mass Earth Movement, Volcano, Tsunami
Goal(s): 1, 3, 4
Objective(s): 1.2, 3.1, 3.3, 4.2, 4.3, 4.4, 4.5
Lead Agency: PW, PDS, DEM
Secondary Agency(s): Executive's Office, FEMA
How does this project contribute to overall risk reduction? Acquiring homes in the flood hazard area allows jurisdictions to incentivize safe relocation of residents susceptible to the hazards and losses from flood events. Designating the acquisition properties to Open Space prohibits significant development that may be subject to loss in the future, and allows natural flood functions to occur, reducing downstream impacts.
How were risk reduction actions prioritized through a benefit cost analysis? Snohomish County departments implement a Continuous Improvement process that includes prioritizing projects by impact, cost and risk analysis. All budget funded projects go through Council and Executive approval.
<u>Funding has been secured</u> through Floodplains by Design and HMA grant programs.
Timeline: Ongoing
2024 Update: Snohomish County Planning and Development Services is preparing for the update of the Shoreline Management Program which will include the best available science for Climate Change projections, Sea level rise, storm surge, and king tides. The County also participates in a regional Transfer of Development Rights program.

Project/Mitigation Measure Number: SnoCo-17 Support improved data collection, education and outreach, and planning for tsunami activity.
Actions:
1. Obtain tsunami numerical modeling data from NOAA/DNR to approximate wave height maximums along the Snohomish County coastline and map the results to better understand potential tsunami risk.
2. Coastal land uses may be vulnerable to increased landslides as tsunami wave energy destabilizes slopes. Identify high risk coastlines utilizing DOE Shoreline Sediment Driftcell data, DNR Surficial Geology and Tsunami Inundation data, and USGS soils data.
Hazards Addressed: Tsunami
Goal(s): 2, 3, 4
Objective(s): 2.3, 3.2, 4.3, 4.4
Lead Agency: DCNR
Secondary Agency(s): DEM, WA DNR

How does this project contribute to overall risk reduction? No feedback received.
How were risk reduction actions prioritized through a benefit cost analysis? Snohomish County departments implement a Continuous Improvement process that includes prioritizing projects by impact, cost and risk analysis. All budget funded projects go through Council and Executive approval.
Funding has/has not been secured but is grant eligible for existing grant program.
Timeline: Ongoing
2024 Update: The Snohomish County Department of Emergency Management supported this measure by participating in a statewide exercise for a tsunami scenario. DEM Staff also attends the quarterly Innercoast Tsunami Working Group meeting hosted by Washington State Emergency Management Division.

Project/Mitigation Measure Number: SnoCo-18 Revise existing plans to address updated assessments of risks identified in refined methodology, mapping, and analysis.
Actions: 1. Utilize Best Available Science and Best Available Data when updating the Comprehensive Emergency Management Plan, the Hazard Mitigation Plan, and other Standard Operating Procedures. 2. Participate in Regional and Statewide Preparedness meetings. 3. Update GIS databases when new data products are released to maintain a current data library of base layers and hazard data.
Hazards Addressed: All
Goal(s): 2, 3, 4
Objective(s): 2.3, 3.2, 4.3, 4.4
Lead Agency: DEM
Secondary Agency(s): All
How does this project contribute to overall risk reduction? Incorporating the latest State and Federal agency GIS data into our local database and modeling ensures that we are identifying vulnerable communities, infrastructure and facilities, and helping historically underserved communities that will benefit from the Justice40 Initiative prepare by utilizing public outreach and pre-screening efforts for response efforts and outreach sites.
How were risk reduction actions prioritized through a benefit cost analysis? Snohomish County departments implement a Continuous Improvement process that includes prioritizing projects by impact, cost and risk analysis. All budget funded projects go through Council and Executive approval.
Funding has not been secured but is grant eligible for existing grant program.
Timeline: Ongoing
2024 Update: The Department of Emergency Management has supported this measure through introducing a refined methodology in update of the CEMP ESF annexes which will also be use for updates completed with ILA partners in the county. Additionally, the GIS team continued to maintain and update the data library used for base layers and hazard data. Surface Water Management conducting new HAZUS modeling in support of the upcoming Hazard Mitigation Plan update.

Project/Mitigation Measure Number: SnoCo-19 Support local, tribal, state, and federal mitigation efforts, when feasible, and ensure alignment with County mitigation efforts to support a comprehensive and regional mitigation strategy.
Actions: 1. Expand the StormReady program in Snohomish County to include more sites around the county. 2. Coordinate with US Geological survey staff to identify actions the County can take to accelerate new monitoring station installation to improve early warning of eruption and lahar flow. 3. Coordinate Priority Transportation Routes and Alternate Routes with WA EMD and FEMA. 4. Continue to support the multi-jurisdiction ILA and regional planning, training and exercise efforts between Snohomish County and local and regional partners.
Hazards Addressed: All
Goal(s): 1, 2, 3, 4
Objective(s): 1.4, 1.5, 2.2, 2.3, 3.1, 3.2, 3.3, 4.1, 4.3, 4.4, 4.5
Lead Agency: DEM
Secondary Agency(s): All
How does this project contribute to overall risk reduction? Collaboration with local and regional jurisdictions and agencies prior to an event, and finding opportunities to exercise and test these capabilities, better prepares the County and Cities to respond to an event, including having cross-jurisdictional communications and outreach plans in place, identifying needs for ILAs and Site Agreements before a response is needed, and preparing partners for interoperability by identifying roles and responsibilities, providing operational plans, and support for incident response, situational awareness and public outreach.
How were risk reduction actions prioritized through a benefit cost analysis? Snohomish County departments implement a Continuous Improvement process that includes prioritizing projects by impact, cost and risk analysis. All budget funded projects go through Council and Executive approval.
<u>Funding has not been secured</u> but is grant eligible for existing grant program.
Timeline: Ongoing
2024 Update: Snohomish County Department of Emergency Management contributed to regional planning efforts through standing committees including the Emergency Management Advisory Committee and the Local Emergency Planning Committee, participated in, hosted, and/or facilitated exercises at the local and state level, and successfully renewed the ILA agreement with local municipal partners.

Figure F.2: Community Rating System Compliance Template

Community	SNOHOMISH COUNTY *	State	WA	CID	535534
-----------	--------------------	-------	----	-----	--------

COMMUNITY RATING SYSTEM ANNUAL RECERTIFICATION

CRS Activity 510

Annual Progress Report on Implementation of Credited Plan

Which Plan is this for (use separate templates for each credited Plan):

☐ Floodplain Management Plan (Hazard Mitigation Plan)
☐ Repetitive Loss Area Analysis
☐ Floodplain Species Plan
☐ Substantial Damage Plan

Name of Community:

Date this Annual Progress Report was prepared (not the date of adoption of the credited Plan):

Name of Plan:

Date of Adoption of Plan:

5 Year CRS Expiration Date:

1. How can a copy of the credited Plan be obtained:
2. Describe how **this annual progress report** (not the credited Plan) was prepared and how it was submitted to the governing body, released to the media, and made available to the public:
3. Provide a description of the implementation of each recommendation or action item in the action plan or area analysis report, including a statement on how the project was implemented or not implemented during the previous year:
4. Discuss why any objectives were not reached or why implementation is behind schedule:
5. What are the recommendations for new projects or revised recommendations?

Community Certifications	CC-213-5	Edition: 2017
--------------------------	----------	---------------

Appendix G: Planning Mechanism Integration

Introduction

Staff throughout multiple County departments worked to find a process to better integrate the Comprehensive Plan, the Capital Improvement Program (CIP) and the Hazard Mitigation Plan to comply with current FEMA and State requirements (RCW 36.70A.070). The following process was developed and agreed upon by the aforementioned departments to document hazard identification and risk reduction during project development. This proposed process will be reviewed and subject to revision during the next CIP update cycle.

Current CIP/HMP Process

Snohomish County Code (SCC) 4.26.024 requires the Executive to prepare a Capital Improvement Program (CIP) that covers the next six fiscal years of capital projects and programs pursuant to the County charter and the Growth Management Act (GMA) of Washington (RCW 36.70A). The CIP is a GMA -required component of the County's Capital Facilities Element of the comprehensive plan.

The County's fiscal budget is linked to the CIP and both are updated on a biennial basis. The next scheduled update will be for the 2027-2032 planning horizon. The plan is developed by the County's Finance Budget Division in partnership with Planning and Development Services (PDS) Long Range Planning Division.

Table G.1: Capital Improvement Program County Department Roles

Department	CIP Role
Airport	Airport Infrastructure and Facilities
Conservation and Natural Resources - Parks	Parklands and Facilities
Conservation and Natural Resources – Surface Water Management	Drainage facilities and maintenance
Emergency Management	Hazard Mitigation
Facilities	General Government Facilities and Fleet Services
Finance	Debt Services and Reserves, Budget
Planning and Development Services	Integration into the Comprehensive Plan process
Public Works – Solid Waste	Solid Waste Facilities
Public Works – Transportation	Transportation Improvement Plan

Under the current CIP process County department staff responsible for project planning review their department's previously published maps, narratives, and projects and update

them with current budget information and projects. Projects are prioritized internally, usually by a Level of Service standard that the department must meet. The departments then submit their current requests for the capital budget. The Finance Division updates the project database and refines the budget requests with departments. The Executive then recommends a final version to the County Council for approval during the budget process.

Capital funding generally emanates from operating revenues, grants, local improvement districts, latecomer fees and mitigation fees. The County’s six-year capital financing plan utilizes Real Estate Excise Taxes (REET), voter approved issues, General Fund, special revenue funds, enterprise funds, internal service funds, and other RCW allowed sources²².

Projects in the CIP are placed into three categories:

1. General Governmental – Tax and user fee supported
2. Transportation – Projects implemented from the adopted Transportation Improvement Plan
3. Proprietary – fees generated from the sale of goods and services for operations

Integration with the HMP/Additional Context:

The last section in the 2025-2030 CIP “*CIP Linkage to Hazard Mitigation Planning*” currently addresses the HMP and natural hazard planning. The section highlights the important role capital facilities and infrastructure serve in disaster response. It also addresses integrating resilience into capital facilities planning and implementing risk reduction projects into existing capital facilities and infrastructure, but does not require that projects are screened for natural hazards, nor does it provide a natural hazard risk assessment of the projects listed in the CIP.

The Growth Management Act (GMA) was recently updated to add a new climate change and resiliency planning goal (RCW 36.70A.020 (14)) and require a climate change and resiliency element as a mandatory element in local comprehensive plans. Snohomish County adopted their Climate Change and Resiliency Element as part of the 2024 Comprehensive Plan update. The climate change and resiliency element has two subelements: a greenhouse gas emissions reduction subelement and a resiliency subelement.

Per RCW 36.70A.020 (14), “The resiliency subelement must equitably enhance resiliency to, and avoid or substantially reduce the adverse impacts of, climate change in human

²² Snohomish County 2025-2030 Capital Improvement Plan, p. 8;
<https://snohomishcountywa.gov/DocumentCenter/View/129363>

communities and ecological systems through goals, policies, and programs consistent with the best available science and scientifically credible climate projections and impact scenarios that moderate or avoid harm, enhance the resiliency of natural and human systems, and enhance beneficial opportunities. The resiliency subelement must prioritize actions that benefit overburdened communities that will disproportionately suffer from compounding environmental impacts and will be most impacted by natural hazards due to climate change. Specific goals, policies, and programs of the resiliency subelement must include, but are not limited to, those designed to:

- (A) Identify, protect, and enhance natural areas to foster resiliency to climate impacts, as well as areas of vital habitat for safe passage and species migration;
- (B) Identify, protect, and enhance community resiliency to climate change impacts, including social, economic, and built environment factors, that support adaptation to climate impacts consistent with environmental justice; and
- (C) Address natural hazards created or aggravated by climate change, including sea level rise, landslides, flooding, drought, heat, smoke, wildfire, and other effects of changes to temperature and precipitation patterns.”

The state allows for a natural hazard mitigation plan or similar plan to substitute for the requirements of the resiliency subelement; however, that substitute plan must be guided by RCW 36.70A.020(14), which prioritizes actions that benefit overburdened communities, and that complies with the applicable requirements of the GMA.

The 2019 Snohomish County Shoreline Management Program (SMP) outlines the relationship between the GMA and the Shoreline Management Act (SMA). RCW 90.58.340 requires that policies for lands adjacent to the shorelines be consistent with the SMA. In order for shoreline designation provisions, local comprehensive plan land use designations, and development regulations to be internally consistent, all three of the conditions below should be met:

- (A) The comprehensive plan provisions and shoreline environment designation provisions should not preclude one another;
- (B) Land use policies and regulations should protect preferred shoreline uses from being impacted by incompatible uses; and
- (C) Infrastructure and services provided in the comprehensive plan should be sufficient to support allowed shoreline uses. Shoreline uses should not be allowed where the comprehensive plan does not provide sufficient roads, utilities, and other services to support them.”

The SMP also specifies policy that new development or uses should be discouraged if they would require structural flood hazard reduction measures within the channel migration zone or floodway.²³

Ensuring new facilities are resilient, including building to earthquake standards, locating facilities in low-risk areas, and equipping them with resilient infrastructure including communications, power, and water, is an integral part of building the resiliency of Snohomish County’s utilities, public facilities, infrastructure, and maintaining public services. The Capital Facilities and Utility Element in the Snohomish County Comprehensive Plan emphasizes the relationship between long-term planning for capital facilities and utilities and the integration and implementation of the Snohomish County Hazard Mitigation Plan.²⁴ The element prescribes that the County shall build its resiliency by integrating natural and human-caused hazards into the planning of its capital facilities and services. FEMA updated the Local Mitigation Planning Guide Handbook in 2023 and again in 2025. The update requires that Hazard Mitigation Plans better implement land use and capital planning efforts. Element D3 of the Local Mitigation Guide policy states: “Does the plan describe a process by which each community will integrate the requirements of the mitigation plan into other planning mechanisms, such as comprehensive or capital improvement plans, when appropriate?”

According to the current Local Mitigation Planning Guide Handbook, future development must be assessed and considered in the jurisdiction’s long-term risk reduction vision and strategies. This includes providing a general description of land uses, identified growth areas, development trends and demographic changes. The handbook recommends hazard planning under the direction of a jurisdiction’s comprehensive or master plans and to reference future land use plans and build-out scenarios. FEMA identifies the following three steps in the handbook to address future land use and development:

- Identify any areas planned and zoned for future development or annexation.
- Look in local land use, development or comprehensive plans to identify what kinds of development are planned for growth areas. For example, there could be a planned industrial park or a planned residential development. If they don’t have that information, estimate or describe the planned development.
- Review plans for new facilities, infrastructure and other capital improvements like stormwater management infrastructure. Use these to support existing and future development.

²³ Snohomish County Shoreline Management Program. 2019.

<https://www.snohomishcountywa.gov/DocumentCenter/View/68998/SMP-Policy-Amend-FINAL-20191009>

²⁴ Snohomish County Comprehensive Plan Capital Facilities and Utilities Element. 2024. [Capital facilities and Utilities element \(cuE\)](#).

In addition to future land use and development, the handbook requires that jurisdictions consider building codes, ordinances, policies, laws, plans and programs that guide growth and development in hazard mitigation planning. Local ordinances include zoning, subdivision, floodplain management, wildfire or steep slope regulations, and the processes involved with building and development in those areas including site plan review. FEMA suggests that hazard mitigation planners consider the following questions when identifying and describing planning and regulatory capabilities:

- What is the legal framework for land use planning in the state and participating communities? (A useful resource for this is the 2022 Survey of State Planning Laws)
- What kinds of plans does each participant have? Which do they use most often?
- Are there any laws or ordinances that mitigate hazards?
- How do participants regulate growth and development?
- How do participants protect community lifelines and other critical facilities, including dams and levees?
- How do planning and development decisions and processes account for and/or increase hazard risk?

DEM participated in the County's Comprehensive Plan Update, led by PDS, which provides policies, goals and objectives for future land use and development within the county. The Snohomish County Comprehensive Plan update addresses zoning and subdivision in the Land Use and Housing elements, floodplain management and geohazards in the Natural Environment elements, and wildfire risks in the Climate Change element. PDS staff have participated in the Hazard Mitigation Plan update process, providing insight on development regulations and site plan review.

Another recommendation in the handbook to encourage and assist in successful mitigation funding is to describe the jurisdictions capital projects process, how projects are prioritized among competing priorities and how mitigation fits into the capital improvement plan. Finally, jurisdictions are recommended to consider whether comprehensive plans and development regulations impact public safety, and to add a hazard screening to the capital improvement and development process. Snohomish County DEM and PDS developed the following recommended changes to the County's CIP process for leadership to consider in the next CIP update.

Proposed Changes to the CIP/HMP Processes

The County's Department of Emergency Management (DEM) is proposing to add a step to the CIP process where departments responsible for capital planning screen the location of

County projects relative to the risk of natural hazards. Natural Hazard GIS layers will be identified by DEM to be added to department project maps for the screening process. Department staff performing the project screening will identify the hazards the capital project may be vulnerable to. If risks are identified, an additional set of screening questions helps determine whether the project was planned with adequate mitigation measures, or if additional mitigation measures may be needed in the future, identifying them for future HMP action items.

Staff responsible for the department's CIP update will then determine the risks to the project or improvement and consider including mitigation actions to improve the resilience of the facility to natural hazards and climate change. These improvements will not be required to be added to the project budgets, but should be a consideration during the budget development. These mitigation items will be reviewed to determine if they should be captured in the Hazard Mitigation Plan Update and/or Annual Report.

Process for Natural Hazard Assessment

1. Departmental project managers or staff delegated to update the CIP will screen proposed projects against the following GIS layers (click each bullet for link to County and State definitions and resources):

- Flood Hazard Areas
- Landslide Hazard Areas
- Liquefaction
- Wildfire

DEM has identified the authoritative data sources for these layers and basic instructions for the screening. In most cases, DEM is resourcing the same data layers considered in the 2024 Comprehensive Plan update and the Natural Hazard Viewer to ensure staff are screening with single points of truth. However, the data sources will be linked to the data owner to ensure the most updated version is being used. For example, Washington State Department of Natural Resources (DNR) provides geological hazard layers that may not be up to date in the County's GIS system. The hub site will link staff directly to the DNR page for staff to download the GIS layer. This guarantees that best available and most current data is consistently used for the screening.

2. To determine the risk and mitigation actions that can be taken, project managers will answer the following questions:
 - A. Has the project been screened for natural hazards?
 - a. List the Natural Hazards the project is vulnerable to.

- B. Does the project design or update include measures to mitigate for the natural hazard(s)?
- Yes – briefly identify the mitigation measures and include the funding source if using mitigation funds.
 - No – why not?
 - What steps could be taken for mitigation?
 - Estimated cost of additional improvement and timeline?
 - Do you want these additional improvements included as action items in the next Hazard Mitigation Plan update?
- C. Excluding agricultural, open space, habitat restoration, or recreational uses, will the planned improvement encourage development in areas that may be unsafe by increasing access to hazardous areas?
- Yes – are the infrastructure and services provided in the comprehensive plan sufficient to support future uses in the planned improvement areas that experience substantial, severe or repetitive loss, or are high-hazard areas?
3. Project managers or staff delegated to update the CIP will consult the Climate Change future conditions provided by PDS to determine the following Climate Change risks to the project:
- Extreme Heat (i.e. vulnerability of materials, increased heat island effects, vulnerability to Public Safety Power Shut-offs, etc.)
 - Extreme Precipitation
 - Sea Level Rise
 - Coastal Erosion
4. To determine the risk and mitigation actions that can be taken, project managers will answer the following questions:
- Has the project been screened for climate change risks? (use the Countywide Climate Vulnerability Tool hosted by PDS or Public Works Climate Decision Tool)
 - What impacts of Climate Change is the project potentially vulnerable to? (i.e. sea level rise, extreme heat, wildfire, etc.)
 - Does the project design or improvement include measures to mitigate for the Climate Change impact(s)?
 - Yes – briefly identify the mitigation measures and include the funding source if using mitigation funds.
 - No – answer the following:
 - What steps could be taken for mitigation?
 - Estimated costs of additional improvements and timeline?

- iii. Do you want these additional improvements included as action items in the next Hazard Mitigation Plan update?

The results of these questions and the additional natural hazard project vicinity maps will be shared with DEM to be summarized with trend analyses in the “*CIP Linkage to Hazard Mitigation Planning*” section of the CIP. The goal of this process is to align land use and capital planning with hazard mitigation planning, and screening capital improvement projects is a key step to achieve this. Additionally, these capital facilities may serve a critical function in an emergency response, and it is important to consider the exposure of the project to natural hazards and climate change for this reason.

Mitigation actions identified for the projects that cannot be included in the current design and budget will be considered for inclusion in the Hazard Mitigation Plan mitigation strategies if the department determines they would like to pursue potential hazard mitigation, infrastructure or community resilience grants to fund the mitigation actions. Actions identified to mitigate Climate Change impacts may be included in the Communitywide Climate Resilience Plan if it is a better fit for potential funding sources.

Appendix H: Community Wildfire Protection Plan

The full text of the 2024 Snohomish County Community Wildfire Protection Plan can be found at:

<https://www.snohomishcountywa.gov/4113/Community-Wildfire-Protection-Plan>²⁵

²⁵ Link is subject to change with Snohomish County website update.