

City of Bothell Plan Annex

Introduction

The City of Bothell, incorporated in 1909, is in the north central region of King County and the south central region of Snohomish County and is located on I-405, 12 miles north of Seattle, Washington. The City shares its boundaries with the cities of Kirkland, Woodinville, Kenmore and unincorporated areas of Snohomish counties (see Attachment 1: Bothell Regional Street Map).

Since the first settlers arrived in the late 1800's, Bothell has evolved from a logging camp to an agricultural community to a bedroom suburb to a balanced city with well-established residential areas and thriving retail and employment centers. The historic downtown is home of the Bothell City Hall, Bothell Police Department, Bothell Downtown Fire Station and other City administrative offices.

The City is unique in that it encompasses two counties. Approximately 7.24 square miles are located in King County and 6.42 square miles are located in Snohomish County with a total area consisting of 13.66 square miles. Because Bothell is located in both Snohomish County and King County, it is subject to the planning and policies that have been adopted in both counties. Adopted policies are designed to ensure that city and county comprehensive plans are consistent.

Bothell has a Council-manager government governed by a City Council consisting of seven Council Members, each of whom is elected to a four-year term. Council elections are held every two years, with either three or four positions standing, depending upon the year. All positions are nonpartisan and at-large, elected by the entire city voting population. The Council passes ordinances and resolutions, approves the budget, sets policies and adjudicates issues, and elects from its own membership a Mayor and Deputy Mayor for two-year terms.

Day-to-day affairs in the city are administered by a City Manager appointed by the council.

Bothell is home to Cascadia College and the University of Washington, Bothell. The two institutions share the same campus, which opened in the year 2000. They not only provide for significant employment, but also help train a highly capable workforce for community businesses. Staff and students provide customers for local businesses and services. Partnerships with local businesses and industries provide mutual benefits and strengthen the overall vitality of the community.

City of Bothell Profile

Incorporated: 1909

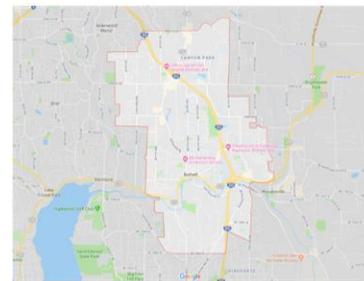
Population: 45,533 (2017)

Location: 47°46'18"N and 122°12'16"W, encompassing both King and Snohomish Counties

Area: 13.66 sq miles

City Manager: Jennifer Phillips

Website: www.bothellwa.gov



Jurisdiction Point of Contact:

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Plan Prepared By:

Name: Jennifer Warmke
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Development Trends

The City of Bothell's population has historically grown at a rate of around 1 percent per year, except when annexations add large numbers of citizens to the City. The overall growth rate is expected to continue.

Bothell has evolved into a major regional employment hub. This growth was initiated by the availability of developable land in the North Creek Valley, but has been sustained by the City's geographically advantageous position within the Puget Sound region and a high quality of life which attracts employers and employees alike. Moreover, sufficient capacity exists within the North Creek and Canyon Park office/light industrial activity centers to accommodate employment growth.

As of 2019, Bothell is experiencing extensive detached single family residential development throughout the city, as well as substantial mixed-use, vertical multi-family growth and institutional redevelopment in and around the downtown core. This development is catalyzed by public roadway and other capital projects.

The Comprehensive Plan provides a vision of Bothell's future development. The vision includes an emphasis on infill development occurring in existing neighborhoods, rather than sprawl and an increase in multi-family housing in the downtown area. While this new development is not located within a distinct hazard zone, the concentration of development has an increased risk to the City when it comes to first response capabilities in the event of a large-scale disaster.

Major business parks are located east of I-405 in the North Creek Valley, with one large business park in the King County portion of the valley and one in the Snohomish County portion.

Employment throughout the city is diverse, although technology-related employment is a particular strength of Bothell. Bothell's ten largest employment groups provide roughly 5 percent of the jobs in the city. Professional and educational services are the principal area of employment in Bothell. This is followed by manufacturing, retail and construction services.

City of Bothell Risk Summary

Hazard Risk and Vulnerability Summary

HAZARD	RISK SUMMARY	VULNERABILITY SUMMARY	IMPACT SUMMARY
Avalanche	Bothell is not at risk for avalanches.		
Earthquake	Earthquakes can be the most destructive hazard Bothell can face if we have a moderate event on the Seattle Fault Zone. An earthquake is a shaking or sometimes violent trembling of the earth which results from sudden shifting of rock beneath the earth's crust. This sudden shifting releases energy in the form of seismic waves or wave-like	Bothell is geographically located in an area known as the Pacific Ring of Fire. A significant number of active fault lines or cracks in that crust have been identified in the central Puget Sound area including Seattle and King County. The nearest major active fault is the South Whidbey Fault, however the city has mapped liquefaction zones as depicted in Attachment 2: Seismic Liquefaction Map. At this time it is not possible to predict the exact date, duration or magnitude of an earthquake.	The most recent earthquake that affected the City was the Nisqually Quake in 2001. The 6.8 magnitude earthquake was centered under Anderson Island in south Puget Sound. While extensive damage due to this earthquake was sustained throughout areas of King County, Bothell experienced only minor damages and did not qualify for any reimbursable expenses.



	movement of the earth's surface.		
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HAZARD	RISK SUMMARY	VULNERABILITY SUMMARY	IMPACT SUMMARY
Flood	6.10 % of the total land area of the city is within Special Flood Hazard Areas; however, of that land area 3.39% is located in Zone X which is an area protected by a levee. The city has good floodplain management regulations and has limited development; however, there are some structures already present in the floodplain.	With no structures in the City shown in the Repetitive Loss Report, structures within floodplains were analyzed. The floodplain boundaries within the City are shown in Attachment 3: Floodplain Map.	The most recent event of flooding in Bothell occurred in 2007. Between December 1 st and 17 th , 2007 the City received heavy rainfall resulting in extensive flooding across the City causing the evacuation of some residences and a business park. This is the one specific NCDC event recorded for flooding for 2007.
Landslide	7.88% of the total land area of the city is located in potential landslide areas per 2002 data. 3.92% of total land is in landslide deposit, scarp, or flank per 2015 DNR data. While not a common problem, landslides in Bothell are typically associated with either unusually heavy seasonal rains or local earthquake activity.	Over the past 10 years, the following neighborhood areas experienced landslides: <ul style="list-style-type: none"> • Valhalla Subdivision • Regents Wood Condominium • 108th/112th Place NE, south of East Riverside Drive • Amber Ridge Subdivision • Norway Hill area • Brentwood Subdivision • Queensborough Subdivision • Boy Scout Property • West Riverside Drive • East Riverside Drive • Woodcrest 	Landslides have been a significant problem in Bothell's southwest area (primarily south of SR 522 and west of I-405) for many years, and several landslides occur every year during the rainy season. Storms have triggered a number of landslides as evidenced in the Attachment 4: Landslide Potential Map. Deposits, according to data compiled in 2002 by the University of Washington, from soils reports produced by engineering firms that conducted explorations in the area. Additionally 2015 Washington State DNR draft data is depicted for Landslide deposits, scarps, and flanks visible and created using lidar.

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HAZARD	RISK SUMMARY	VULNERABILITY SUMMARY	IMPACT SUMMARY
<p>Severe Weather</p>	<p>Severe weather in Bothell can happen at any time of year but usually occurs between October and April. Severe weather can include unseasonable rain, snow, ice, extreme cold, and high winds. High wind events in Bothell are fairly common and are usually experienced as part of a winter weather pattern.</p> <p>Bothell's location within King County's marine climate results in very few extreme cold/ice events. Typically, the area experiences below freezing temperatures for 10-14 consecutive days in January or February.</p>	<p>The National Weather Service can forecast and track severe weather events that may be likely to produce severe high winds, hail, and lightening, but where these related hazards form and how powerful they might be remains unpredictable.</p> <p>Winds in excess of 45 miles per hour can cause road closures, significant damages to public and private property, and injuries to public safety, utility workers and private citizens. The most recent was the December 14-15, 2006 windstorm which caused widespread power outages from downed trees and rendering roads impassable.</p> <p>Snow accumulations in Bothell at elevations below 2,000 feet are uncommon. On average, Bothell will experience one or two snow storms during a winter season with minor accumulations.</p> <p>Additionally, Bothell is located in a convergence zone area which can result in more weather extremes and, at times, higher precipitation.</p>	<p>The most recent event happened in February of 2019 when a series of winter storms producing snow greatly affected the entire Puget Sound region. Impacts resulted in snow covered roads and numerous "snow days" for staff.</p> <p>Prior to that a period of time starting in December 12, 2008 and lasting to January 5, 2009 (refer to Hazard Events Since January 2006 HMP, page 3-4). Extreme cold, snow and then rain resulted in many collapsed structures in the City and an extended period of 24/7 operations for street clearing, debris removal and other operations associated with the severe weather. This event resulted in a preliminary damage assessment of \$361,000 for Bothell and qualified under DR#1825.</p> <p>On December 14-15, 2006 a windstorm causing downed trees and power lines which resulted in major power outages throughout the City for up to one week occurred. This event resulted in a preliminary damage assessment of \$73,808 for Bothell and qualified under DR#1682.</p> <p>On August 30, 1999 Bothell had hail that was 3/4" in diameter that resulted from a severe thunderstorm.</p> <p>In 1995, a windstorm which resulted in downed trees and major power outages for up to</p>



			one week resulted in the City receiving reimbursement through FEMA’s Public Assistance Program for expenses incurred.
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HAZARD	RISK SUMMARY	VULNERABILITY SUMMARY	IMPACT SUMMARY
Tsunami	Bothell is not at risk for tsunamis.		
Volcano	Bothell is not at a direct risk for volcano activity. The largest impact would be ash-fall.		
Wildfire	<p>A fire needs three elements in the right combination to ignite and grow – a heat source, fuel, and oxygen. How a fire behaves primarily depends on the characteristics of available fuel, weather conditions, and terrain. Weather plays a role in the forms of wind, low precipitation, and lightening. Terrain is an additional factor, as the topography of a region or local area influences the amount and moisture of available fuel. Other elements like barriers and land elevation also need to be taken into account as highways and lakes can affect spread of fire, as can an uphill/downhill orientation, as fire spreads more easily as it moves uphill. In addition to natural conditions for fire viability, humans also play a role. For these reasons, fire hazards are a very real risk for Bothell residents and businesses and must be vigilantly prepared for</p>	<p>Wildfires are rare occurrences in Bothell. The National Climatic Data Center does not have any records of wildfires that have occurred in Bothell. Typically any wildfires are contained rapidly and remain small, so that each has a minimal impact.</p> <p>The Bothell Fire Department trains up to 15 of our members in Wildland firefighting. All wildland firefighters are certified red card. In addition we have 3 members certified as engine bosses along with a certified strike team leader and another in training. The Bothell Fire Department also has a fully functioning Type 6 wildland engine company that is operational throughout the wildland season.</p> <p>With the increasing urbanization, the threat of wildland/urban interface fire grows, due to a rise in the building of homes and the prevalence of more comprehensive transportation systems. Many City residents live outside of the City center while commuting or telecommuting to work. As a result, wildfires can encroach onto residential properties and structure fires can invade wooded areas.</p>	<p>The NCDC does not list any wildfires or forest fires for Bothell, however the City’s Fire Department has identified areas within the City that could cause potential problems. These areas are shown in Attachment 5: Urban Wildfire Map.</p> <p>A major fire in downtown did break out at the Mercantile Building on July 22, 2016, and damaged and closed more than 20 businesses. The fire dealt a blow to the redevelopment program and required state aid for rebuilding</p>



	and mitigated against in efforts to keep our region and surrounding counties and communities safer.		
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HAZARD	RISK SUMMARY	VULNERABILITY SUMMARY	IMPACT SUMMARY
Civil Disturbance	Civil disorders have become a part of the urban environment in Washington State. Civil disorder typically begins as nonviolent gatherings. Injuries are usually restricted to police and individuals observed to be breaking the law.	<p>The economic impact to urban areas during civil unrest and following such events can be profound. Direct impacts include looting and smashed windows as well as endangering shop owners and customers. Indirect economic impacts result from the loss of business when potential customers do not approach businesses for extended periods of time. Customer impressions and habits can change from the experience of a single threatening event.</p> <p>For large scale crowd control incidents, Bothell Police Department participates as part of the Allied Law Enforcement Response Team (ALERT). This is a regional team that includes officers from Bothell, Everett, Edmonds, Lynnwood, Mukilteo, and Mountlake Terrace. Our participation on this team is memorialized in policy BPD 418.</p> <p>Also, as part of the policy that covers our patrol efforts, our response to “Crowds, Events, and Gatherings” is governed by policy BPD 408.10</p>	Bothell has no history of civil disorder events occurring.
Cyber Incident	Like other governments and businesses across the nation, Bothell relies heavily on computers and networks to conduct its normal business and is therefore susceptible to cyber-attack.	Cyber-attacks against computer systems could potentially shut down radio, telephone, and computer networks used to control and manage City or regional services, resulting in loss of those services or the inability to properly dispatch public	Bothell has not had any reports or incidents of cyber-terrorism. However, the City has implemented mitigation efforts against the threat of cyber-terrorism are being addressed in several ways, one of which is incorporating plans that outline



		safety and other personnel to the incidents.	response procedures and creating redundant data sites.
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HAZARD	RISK SUMMARY	VULNERABILITY SUMMARY	IMPACT SUMMARY
Dam Failure	Bothell is not at direct risk of dam failures as we do not have dams and are not in an inundation area. However, Seattle Public Utilities (SPU) Tolt Dam and reservoir is the primary source of drinking water supply for the city's water system.	There are no direct dam failure impacts to property within the city. Loss of water supply associated with the Tolt Dam failure located approximately 25 miles east of Bothell would result in severe water supply and fire response impacts.	Bothell has no history of direct, or indirect impacts from dam failure events.
Hazardous Materials Incident	A majority of the fixed planning facilities in Bothell are located in the commercial and industrial areas of the City. Based on the location of the fixed facilities, that area of the City has a higher probability of a chemical release.	<p>The industrial and geographic characteristics of our City continue to place Bothell at risk for probably hazardous materials releases. Many factors determine the impact of a potential incident including quick and solid decision-making by emergency officials, location and type of release, evacuation and shelter-in-place needs, public health concerns, and relevant economic considerations. Additionally, while most incidents are generally brief, the resulting recovery and cleanup may take time to exact.</p> <p>Bothell Fire utilizes the Eastside Hazmat team which is comprised of hazmat team members from Bothell, Woodinville, Kirkland, Bellevue, Eastside Fire and Redmond. The Bellevue Fire Department maintains Hazmat One which will be dispatched in the event of a Hazmat incident. We are also working on additional Haz/Tech units which may be located in</p>	There has been one significant spill in Bothell which occurred at the AT&T building on August 1, 2008. Cleanup at this site has been on-going since that time and is not complete.



		Woodinville and Eastside Fire. In addition, Bothell Fire trains with and maintains a large multi person/patient decontamination unit located in a mobile trailer at our Queensborough station #44.	
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HAZARD	RISK SUMMARY	VULNERABILITY SUMMARY	IMPACT SUMMARY
Public Health Emergency	Public health consequences may be direct or indirect and can affect both a local population’s health and its health infrastructure. The direct consequences of a public health disaster are counted in the number of injuries and fatalities occurring as a result of the incident.	All disasters have public health consequences. Natural disasters will affect local populations by causing physical injury, property loss and economic hardship. We also are vulnerable to pandemics and outbreaks of other novel communicable diseases, as well as to the chronic diseases that increasingly affect the health of the population. Although the public health consequences of each of these hazards may be significant, they can be moderated through proactive planning, practice and evaluation.	Bothell has not had any recorded public health emergencies.
Terrorism	Terrorist targets tend to be located in urban areas. Seats of government, stadiums and public meeting places are high-value targets that produce substantial news coverage.	The U.S. population has largely been spared the impacts of international terrorism until recently. However, Washington State and King County locations have witnessed examples of terrorist activity over the last decade.	Bothell has no history of terrorism events occurring.

Assets at Risk

ASSET	VALUE (\$)	RISK SUMMARY	VULNERABILITY SUMMARY	IMPACT SUMMARY
Park at Bothell Landing Amphitheater	N/A	Floodplain Area	The amphitheater has flooded numerous times, however there has been no damage associated with the flooding.	While the amphitheater has flooded numerous times since it was built, it was planned for in the design and construction to withstand that.
North Creek Sportsfields 1, 2, 3, and 4	Turf replacement \$1million at each field; restroom	Zone X Floodplain Liquefaction Area	Fields 1, 2 and 4 are synthetic turf fields. Damage to the synthetic turf fields and the dirt infield of North	This area is primarily open space, however fields 2 and 4 have restroom/ maintenance storage facilities on site. The fields generate approximately



	facilities ~\$400k; lighting ~\$700k; lost revenue		Creek Field 3 has the potential to be significant and costly in the event of levy failure.	\$250,000 in revenue per year and cost about one million dollars to replace per field. The impact to the Department and City could be significant.
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ASSET	VALUE (\$)	RISK SUMMARY	VULNERABILITY SUMMARY	IMPACT SUMMARY
Park at Bothell Landing	~\$4.5million	Liquefaction Area Urban Wildfire Area	This area is at a low risk for hazards due to liquefaction or urban wildfire.	This 5.87 acre park has buildings of historical significance to Bothell. A couple of the buildings are on the National Historical Registry. (Hannan House/ Historical Museum, Berkstrom Cabin, Bothell's 1 st Schoolhouse, and the Lytle House). The property also has restrooms, parking, trails, kayak rentals with water access, picnic tables and playground areas throughout the park. The park is one of Bothell's most heavily used parks given its location next to the regional King County trail system and being downtown in Bothell. The impact to the City would be medium.
East Norway Hill	N/A	Urban Wildfire Area	This area is at a low risk for urban wildfire.	The 25 acre park has a large open play field with a picnic table and bench. The rest of the park is mostly wooded trails and wetlands. The impact is low.
Blyth Park	~ \$250k	Urban Wildfire Area	This area is at a low risk for urban wildfire.	This 40.8 acre park has rentable large and small shelters, picnic areas with tables, horseshoe pit, volleyball, playground, an 18-hole disc golf course, parking, restrooms, trails and trail connections to W Riverside Trail, Sammamish River Trail and Bothell's newest open space formerly known as the Wayne Golf Course. The revenue streams from the rentable shelters if they were rendered unusable would have a medium impact on the Department.

Haynes Open Space	N/A	Urban Wildfire Area	This area is at a low risk for urban wildfire.	This 4.7 acre area is primarily open space and the impact is low.
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ASSET	VALUE (\$)	RISK SUMMARY	VULNERABILITY SUMMARY	IMPACT SUMMARY
Centennial Park	\$3 million	Urban Wildfire Area	This area is at a low risk for urban wildfire.	This 54 acre park is primarily made up of passive use open space and trails. The park also has one of Bothell's first school houses which is available for rent. The park contains a small play area, walkable trails, a picnic shelter, restrooms and parking. The impact is relatively low.
North Creek Forest	N/A	Urban Wildfire Area	This area is at a low risk for urban wildfire.	This 64 acre park is primarily made up of open space and trails. The impact is low.
Former Wayne Golf Course	N/A	Urban Wildfire Area	This area is at a low risk for urban wildfire.	The open space contains 85 acres of passive use open space and 4 acres of active space. The City is currently performing a Feasibility study on the 4 acres of active space to determine what kind of economic engine could be placed there to help offset the costs of restoring and maintaining the newly acquired open space. The impact is low.
Valhalla Sewer Lift Station	\$1.1 million	Landslide Area	This area is at a low risk for landslide.	Backed up sewers which could be a potential health hazard and river contamination.
East Riverside Drive Sewer Lift Station #43	\$1.19 million	Landslide Area	This area is at moderate risk for landslide.	Backed up sewers which could be a potential health hazard and river contamination.

Plan Update Process

Since 2005, the City of Bothell has been part of an annex to the King County Regional Hazard Mitigation Plan.

The Emergency Preparedness Manager, Jennifer Warmke, led the most recent revision of the City of Bothell's Annex to the King County Regional Hazard Mitigation Plan and will maintain the document in cooperation with the King County Office of Emergency Management.

The City utilized the King County HIVA Hazard Analysis which identifies all the likely natural and technological hazards that might or have occurred within the county. The city reviewed all hazards and addressed those that affect the city in the Hazard Risk and Vulnerability Summary.

This annex evaluates the risks that all natural hazards pose to the residents and property of the City of Bothell by presenting a profile and analysis of hazardous events, an assessment of vulnerable community assets, potential hazard mitigation strategies, and methods for building community support and ensuring adoption.

This was done by incorporating existing plans and ordinances and working closely with King and Snohomish counties, local jurisdictions, businesses, residents and City departments, along with a wide variety of regional agencies to ensure that proper information was obtained and that every potential aspect to risks and mitigation was addressed.

A planning team, composed of planning participants and technical advisors (see Jurisdiction Planning Team) provided technical review and input for the annex development and also served as the recommending body to the Bothell City Council.

Additionally, there were a number of opportunities for the City to become involved in the regional planning process. The City of Bothell was represented at the all planning meetings that were conducted by the King County Office of Emergency Management on December 13th, 2018, March 4th, 2019, June 3rd, 2019, July 25th, 2019 and August 22nd, 2019.

The residents of Bothell were also able to provide comments on participating in this process. Information was provided on the City’s website and during two public/community outreach events on August 13th, 2019 and September 5th, 2019.

Opportunities for public comment were provided during the drafting stage and prior to approval. All meetings were posted and open to the public. A copy of the draft was made available on the City of Bothell’s Emergency Preparedness page at www.bothellwa.gov/preparedness and by request to the Emergency Preparedness Manager. Specific comments and questions about the annex were directed to the City of Bothell’s Emergency Preparedness Manager.

Jurisdiction Planning Team

NAME	TITLE	ORGANIZATION	CONTRIBUTION
Jennifer Warmke	Emergency Manager	City of Bothell	Composer
Jaclynn Brandenburg	Deputy Public Works Director	City of Bothell	Contributor
Dan Peddy	Public Works Ops Mgr	City of Bothell	Contributor
Boyd Benson	Utilities and Development Division Manager	City of Bothell	Contributor
Jeff Sperry	Fleet and Facilities Mgr	City of Bothell	Reviewer
Steve Morikawa	Capital Division Mgr	City of Bothell	Contributor
Nik Stroup	Parks Director	City of Bothell	Contributor
Dave Swasey	Building Official	City of Bothell	Contributor
Michael Kattermann	Community Development Director	City of Bothell	Reviewer
Jeff Smith	Development Services Manager	City of Bothell	Reviewer
Daryn Brown	GIS Supervisor	City of Bothell	Contributor
Doug McDonald	Deputy Chief Fire Ops	City of Bothell	Contributor

Butch Noble	Deputy Chief Community Risk Reduction	City of Bothell	Contributor
Lisa Rossiter	IS Systems Supervisor	City of Bothell	Contributor
Laura Moon	Finance Admin Support Manager	City of Bothell	Contributor
Kellye Mazzoli	Assistant City Manager	City of Bothell	Reviewer
Mike Johnson	Police Captain	City of Bothell	Reviewer

Plan Update Timeline

PLANNING ACTIVITY	DATE	SUMMARY	ATTENDEES
Initial Planning Meeting	June 4, 2019	Review of process, annex and mitigation strategy discussion, timeline.	Jennifer W., Jaclynn B., Dan P., Boyd B., Nik S., Dave S., Daryn B., Butch N., Doug M. Lisa R., Mike J., Laura M., Michael K., Steve M.
GIS Map Discussion	June 18, 2019	Discuss of GIS and mapping needs for plan.	Jennifer W., Daryn B.
Review of Annex (pages 1-12)	July 16, 2019	Thorough review of pages 1-12 of annex, including maps; outline of future timelines.	Jennifer W., Jaclynn B., Nik S., Dan P., Dave S., Doug M., Butch N., Laura M., Boyd B., Daryn B.
Development of Mitigation Strategies	July 16, 2019	General review of previous strategies and brainstorm/research of new strategies.	Jennifer W., Jaclynn B., Nik S., Dan P., Dave S., Doug M., Butch N., Laura M., Boyd B., Daryn B.
Review of Public Works Mitigation Strategies	July 31, 2019	Reviewed mitigation strategies with public works (including transportation, capital facilities, water and wastewater, utilities and development services)	Jaclynn B., Dan P., Steve M., Boyd B., Jennifer W.
Finalization of GIS Maps and Identification of Assets	August 8 th , 2019	Finalized mapping components and reviewed city assets in hazard areas.	Daryn B., Jennifer W.
Review of Mitigation Strategies and Final Annex Review	August 14 th , 2019	Review and prioritization of mitigation strategies and final annex review.	Nik S., Daryn B., Mike K., Jaclynn B., Dan P., Steve M., Jennifer W.

Public Outreach

Public Outreach Events

EVENT	DATE	SUMMARY	ATTENDEES
Preparedness and Mitigation Outreach Event	August 13 th , 2019	The City teamed with the UW-B Nursing Program to provide a preparedness and mitigation outreach event. The event was shared widely on a variety of social media	EM Staff, UW students, city staff, Shag residents, and other members of the public



		channels, included a write-up by UW-Bothell, and attracted more than 50 city staff, UW-Bothell students, and members of the public. The event included demonstrations, hands-on activities, games and refreshments.	
EVENT	DATE	SUMMARY	ATTENDEES
Preparedness and Mitigation Outreach Event	September 5 th , 2019	Combined with Premera to provide a preparedness and mitigation outreach event. Information was shared via social media and the event included educational sessions and handouts.	Members of the public, Premera employees and families, city staff, EM and Fire Staff

Jurisdiction 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 at the county level and documented in the base plan.

Bothell's future mitigation efforts were established based on plans and studies (listed below) as well as information provided by the City's own subject matter experts. Each of the initiatives in this plan was identified as necessary to meet the goals and objectives of the City as they relate to level of service, preservation, health and safety, and design standards. Each department that submitted projects for the various plans within the City reviewed the benefit of the proposed project, cost of project and the complexity of project before the projects were included in the Transportation, Waste Water, Fresh Water, and Comprehensive City Plans.

Within the City's Annex, all of the projects were prioritized based on the information provided by each department and documentation from contractors, engineers and researchers and the degree to which the projects collaborate with the City's strategies and goals as well as the regional strategies and goals established by King County Office of Emergency Management. In addition, each project was determined to align with the City of Bothell's future strategic and financial goals.

Plan Monitoring, Implementation, and Future Updates

King County leads the mitigation plan monitoring and update process and schedules the annual plan check-ins and bi-annual mitigation strategy updates. Updates on mitigation projects are solicited by the county for inclusion in the countywide annual report. As part of participating in the 2020 update to the Regional Hazard Mitigation Plan, every jurisdiction agrees to convene their internal planning team at least annually to review their progress on hazard mitigation strategies and to update the plan based on new data or recent disasters.

As part of leading a countywide planning effort, King County Emergency Management will send to planning partners any federal notices of funding opportunity for the Hazard Mitigation Assistance Grant Program. Proposals from partners will be assessed according 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 April 2025. All jurisdictions will submit letters of intent by 2023, at least two years prior to plan expiration. The county will lead the next regional planning effort, beginning at least 18 months before the expiration of the 2020 plan.

Plan Integration

Plan Goals

1. Access to Affordable, Healthy Food
2. Access to Health and Human Services
3. Access to Parks and Natural Resources
4. Access to Safe and Efficient Transportation
5. Affordable, Safe, Quality Housing
6. Community and Public Safety
7. Early Childhood Development
8. Economic Development
9. Equitable Law and Justice System
10. Equity in Government Practices
11. Family Wage Jobs and Job Training
12. Healthy Built and Natural Environments
13. Quality Education
14. Strong, Vibrant Neighborhoods

When plans and planning processes are more integrated, it is possible to achieve greater impact through clearer definition, smarter investment, partnerships, and innovation. Successful integration requires coordination between planning efforts and, especially, cross-participation in planning processes. The goals of plan integration are to:

- Ensure consistency with jurisdiction priorities across all planning processes
- Leverage opportunities to further multi-benefit initiatives that are supported by multiple planning processes
- Achieve common measures of success for outcomes

The hazard mitigation plan can benefit from integration with planning processes that:

- Prioritize and invest in infrastructure
- Regulate development
- Set strategic direction for programs

To other planning processes, the hazard mitigation plan brings risk and vulnerability information to help prioritize projects and set development standards or regulations. The mitigation plan also comes with potential funding for investments in cost-effective risk-reduction projects. On the other hand, the mitigation plan depends on other plans and processes to implement many strategies. Since the mitigation plan is not itself a regulatory or budgetary document, strategies identified in the mitigation plan are often best implemented through those processes or programs.

There are many plans and planning processes within King County that impact hazard risk. These include strategic plans, long-range plans, resource plans, and capital plans.

PLAN TITLE	DESCRIPTION	LEAD	INTEGRATION STRATEGY
Capital Facilities Plan	Capital facilities plans identify and prioritize large scale projects.	Public Works Department	<ul style="list-style-type: none"> • Integrate mitigation strategies from capital plans • Encourage the use of hazard information to prioritize capital improvements • Support city departments with funding gaps in accessing Hazard Mitigation Assistance to complete or expand projects that are identified as important but are unfunded or partially funded
Comprehensive Plan	This plan is the long-range guiding policy document for all land use and development regulations in the City of Bothell.	Executive Department	<ul style="list-style-type: none"> • Encourage updates to the critical areas ordinance • Provide feedback and comments on the plan
Comprehensive Emergency Management Plan	The CEMP is for use by local government department directors,	Executive Department	<ul style="list-style-type: none"> • The Hazard Mitigation Plan provides the risk profiles that support the



	managers and staff in mitigating, preparing for, responding to, and recovering from disasters.		development of the CEMP <ul style="list-style-type: none"> The Hazard Mitigation Plan is also a component (the mitigation component) of the CEMP
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Continued Public Participation

King County and its partner cities already maintains 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 King 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.

The outreach and mitigation teams will also continue to work with media and other agency partners to publicize mitigation success stories and help explain how vulnerabilities are being fixed. When possible, public tours of mitigation projects will be organized to allow community members to see successful mitigation in action.

Hazard Mitigation Authorities, Responsibilities, and Capabilities

Plans

PLAN TITLE	RESPONSIBLE AGENCY	POINT OF CONTACT	RELATIONSHIP TO HAZARD MITIGATION PLAN
Comprehensive Plan	Community Development	Michael Kattermann	Helped build mitigation strategies
Comprehensive Emergency Management Plan	Emergency Management	Jennifer Warmke	Referenced in Annex and Mitigation Strategies
Capital Facilities Plan	Finance	Gretchen Zundel	Helped build mitigation strategies
Transportation Improvement Program	Public Works	Steven Morikawa	Helped build mitigation strategies
Biennial Budget	Finance	Laura Moon	City funding
Wastewater System Comprehensive Plan	Public Works	Boyd Benson	Helped build mitigation strategies
Water System Comprehensive Plan	Public Works	Boyd Benson/Dan Peddy	Helped build mitigation strategies
Stormwater Comprehensive Plan	Public Works	Boyd Benson	Helped build mitigation strategies
Continuity of Operations/Government Plan	Emergency Management	Jennifer Warmke	Referenced in Mitigation Strategies
Parks, Recreation and Open Space Plan	Parks	Nik Stroup	Currently under update

The City of Bothell’s Annex to the Regional Hazard Mitigation Plan was created utilizing project information outlined in multiple strategic, comprehensive and financial plans developed by the City. These plans include:

Programs, Policies, and Processes

PROGRAM/POLICY	RESPONSIBLE AGENCY	POINT OF CONTACT	RELATIONSHIP TO HAZARD MITIGATION PLAN
Bothell Municipal Code	City Council	Jennifer Phillips	City Regulations
Building Codes	Building Division	David Swasey	Building Regulations
Fire Codes	Fire	Butch Noble	Fire Regulations
Bothell Design and Construction Standards	Public Works	Boyd Benson	Design and construction standards and specifications
Comprehensive Emergency Management Plan	Emergency Management	Jennifer Warmke	All Aspects
Critical Areas Ordinance	Planning Division	Jeff Smith	Planning Regulations
Zoning	Planning Division	Jeff Smith	Zoning Regulations
State Environmental Policy Act	Community Development	Jeff Smith	Environmental Regulations
Procurement Policy	Finance	Chris Bothwell	Contracts, Professional Services, Goods
2021-2022 Budget	Finance	Chris Bothwell	Contracts, Professional Services, Goods
Bothell Police Department	Police	Mike Johnson	Civil Disturbance and Terrorism
CJIS (Criminal Justice Information Systems) Security Requirement	Information Services	Lisa Rossiter	Cybersecurity
PCI (Payment Card Industry) Security Requirements	Information Services	Lisa Rossiter	Cybersecurity
Washington Cities Insurance Authority (WCIA) cybersecurity requirements	Information Services	Lisa Rossiter	Cybersecurity
City of Bothell Information Security Administrative Order 2.4.1	Information Services	Lisa Rossiter	Cybersecurity

Entities Responsible for Hazard Mitigation

AGENCY/ORGANIZATION	POINT OF CONTACT	RESPONSIBILITY(S)
Emergency Preparedness	Jennifer Warmke	Composer
Community Development	Dave Swasey	Contributor
Public Works	Jaclynn Brandenburg	Contributor
Parks	Nik Stroup	Contributor
Fire	Doug McDonald	Contributor

Police	Mike Johnson	Reviewer
Executive	Kellye Mazzoli	Reviewer
Information Services	Lisa Rossiter	Contributor
GIS	Daryn Brown	Contributor
Finance	Laura Moon	Contributor

National Flood Insurance Program

National Flood Insurance Program Compliance

What department is responsible for floodplain management in your community?	Public Works
Who is your community's floodplain administrator? (title/position)	Public Works Director
What is the date of adoption of your flood damage prevention ordinance?	Ordinance 1946; July 2005
When was the most recent Community Assistance Visit or Community Assistance Contact?	October 4, 2012
Does your community have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are?	No
Do your flood hazard maps adequately address the flood risk within your community? If so, please state why.	Yes
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?	No
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?	No
How many Severe Repetitive Loss (SRL) and Repetitive Loss (RL) properties are located in your jurisdiction?	SRL: 0 RL: 0
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?	No

Hazard Mitigation Strategies

Bothell's future mitigation efforts were established based on plans and studies (listed in Programs, Policies and Processes) as well as information provided by the City's own subject matter experts. Each of the initiatives in this plan was identified as necessary to meet the goals and objectives of the City as they relate to level of service, preservation, health and safety, and design standards. Each department that submitted projects for the various plans

within the City reviewed the benefit of the proposed project, cost of project and the complexity of project before the projects were included in the Transportation, Waste Water, Fresh Water, and Comprehensive City Plans.

All of the projects were prioritized based on the information provided by each department and documentation from contractors, engineers and researchers and the degree to which the projects collaborate with the City’s strategies and goals as well as the regional strategies and goals established by King County Office of Emergency Management. In addition, each project was determined to align with the City of Bothell’s future strategic and financial goals.

2015 Hazard Mitigation Strategy Status

STRATEGY	DESCRIPTION	PRIORITY	STATUS
Improvements to Morningside Reservoir and Booster Station.	Provide seismic valves, security barriers and improve notification and response.	N/A	Completed
Rehabilitate City Bridges	Provide for seismic and safety improvements, as well as the preservation and maintenance of the existing integrity.	N/A	Completed
Backup power at Maywood water pump station	Installation of backup power supply.	Included in 2019 strategies	Now included in 2019 Hazard Mitigation Strategies
Realign SR 522	Create a new streamlined “T” intersection with left turn lanes, sidewalks, traffic signals, utilities, lighting and landscaping	N/A	Completed
Disaster Preparedness education	Provide education to general public and businesses within the community.	Included in 2019 strategies	Now included in 2019 Hazard Mitigation Strategies
Emergency Funding	Provide funding for immediate action to address landslides, erosion, deterioration, vandalism, and spot hazardous locations.	N/A	Removing
Capacity and Safety Improvements	Provide capacity and safety improvements and include roadway widening to a five lane roadway with intermittent median landscaping, bicycle lanes, curb, gutter and sidewalk.	Included in 2019 strategies	Now included in 2019 Hazard Mitigation Strategies

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STRATEGY	DESCRIPTION	PRIORITY	STATUS
SR 524 Intersection Improvements	Widen the roadway in the southbound direction from 2 to 3 lanes from SR 524 to about 500’ north of 220 th St SE.	N/A	Removed

SR 527 and 39th Ave SE Safety and Access Improvements	Access improvements will be limited to roadway widening to provide for left turn packets and improve sight distances.	N/A	Removed
Multiway Boulevard Improvements	Provide four travel lanes, left turn land, two sided landscape medians and two side lanes with parking and wide sidewalks.	N/A	Completed
Well-Field Redevelopment	Pen Park Reservoir Tank was replaced with new 1MG reservoir tank. Upgrade of well-fields determined to be cost prohibitive, but city will maintain water rights.	Included in 2019 strategies	Now included in 2019 Hazard Mitigation Strategies
Sammamish River Bridge replacement	Seismic retrofit of bridge.	N/A	Construction in 2019
Widen newly annexed SR 522 segment	Provide for continuous business access and transit lane in both directions, sidewalk on the north side of highway and other related street improvements.	N/A	Construction in 2019
Horse Creek Pipeline upgrade	Provide for a hybrid open channel/pipe system upgrade.	N/A	Completed
Consolidation of Critical Facilities		N/A	Remove
Maintain compliance with National Flood Insurance Program	Meet the minimum requirements of the NFIP by: enforcing the adopted flood damage prevention ordinance; participating in the floodplain identification and mapping updates; and providing public assistance and information on floodplain requirement and impacts.	N/A	Remove as this is ongoing an in currently plans.
Repetitive Loss Mitigation	Where appropriate, support retrofitting, purchase, or relocation of structures located in hazard-prone areas.	N/A	Specific projects addressed in 2019 Hazard Mitigation Strategies.

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STRATEGY	DESCRIPTION	PRIORITY	STATUS
Plan Integration	Integrate the hazard mitigation plan into other plans, ordinances, or programs to dictate land uses within the jurisdiction.	N/A	Plans are already integrated with this annex.

Support County-Wide Initiatives	Continue to support county-wide initiatives identified in this plan.	N/A	Initiatives integrated into this annex.
Plan Maintenance Support	Actively participate in the plan maintenance strategies as identified in this plan.	N/A	Remove, this is already part of the plan.
Standby Power at City Hall	Provide for standby power generator sufficient to operate City Hall in the event of a loss of electrical power.	Included in 2019 strategies	Now included in 2019 Hazard Mitigation Strategies
Maintain Emergency Response Supplies	Maintain personnel supplies, consumables, and equipment to support 150 responders for seven days of emergency response activities.	N/A	Remove, this has been addressed in budgets.
Generator Power at Bothell Operations Center	Provide for standby power generator sufficient to operate the Bothell Operations Center in the event of a loss of electrical power.	Included in 2019 strategies	Now included in 2019 Hazard Mitigation Strategies
Ensure Operational Readiness of the ECC	Continue to ensure the operational readiness of the ECC to include technology updates.	N/A	Remove, this has been addressed in budget.
Establish a backup ECC	Establish a backup ECC at the Bothell Operations Center.	Included in 2019 strategies	Now included in 2019 Hazard Mitigation Strategies
Replacement of Aging Fire Stations	Replacement of three aging fire stations with new facilities that meet modern requirements.	N/A	Remove. A bond has been passed to fund this project.
Eliminate flood hazard in northbound right lane of 120th Ave NE	Project will separate right-of-way flows from Parr Creek and elevate the roadway along with stabilization measure to prevent future roadway flooding and settlement.	Included in 2019 strategies	Now included in 2019 Hazard Mitigation Strategies
Eliminate flood hazard along 35th Ave SE between 228th and 240th	Project will increase pipe sizes as necessary for capacity along 35 th Ave and 24 th Ave and will restore Cole/Woods Creek to its natural channel to prevent splitting flows down 35 th Ave SE.	Included in 2019 strategies	Now included in 2019 Hazard Mitigation Strategies

2020 Hazard Mitigation Strategies

STRATEGY	LEAD AGENCY/POC	TIMELINE	PRIORITY
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Backup Power for Critical City Facilities	Public Works/Fleet & Facilities Mgr & Water/Sewer Manager	Two project currently have applications under HMGP.	High
Ensure Community Resilience	Emergency Preparedness	Currently looking to hire part-time position for CERT and Ham.	High
Enhanced Cyber Security	Information Services/IS Systems Supervisor	Seeking funding options.	High
Seismically Resilient Water System	Public Works/Utilities & Development Services Mgr	Looking to put into next budget biennium.	Moderate
Reduce Roadway Hazards	Public Works/Capital Division Mgr	Many projects listed in our Capital Facilities Plan. 10 year goal for completion.	Moderate
Road Improvements to Reduce Emergency Response Times	Public Works/Capital Division Mgr	Some projects listed in Capital Facilities Plan. Seeking additional funding sources.	Low

Hazard Mitigation Strategy

<h3>Hazard Mitigation Strategy 1 –Backup Power for Critical City Facilities</h3>			
Lead POC Public Works Fleet & Facilities Manager; Water/Sewer Manager	Partner Points of Contact	Hazards Mitigated / Goals Addressed <ul style="list-style-type: none"> • All Hazards • Goals: <ul style="list-style-type: none"> ○ Health/Human Services ○ Community/Public Safety ○ Economic Development ○ Government Practices 	Funding Sources / Estimated Costs \$ 4,000,000 <ul style="list-style-type: none"> • General Fund • Utility Funds • Grants
Strategy Vision/Objective A community that can continue government continuity and operations in the event of an electrical power interruption.			
Mitigation Strategy Ensure back up power for critical city facilities.			
2-Year Objectives <ul style="list-style-type: none"> • Identify the needs of each facility and order necessary electrical studies to ensure for proper sizing of equipment and associated needs. • Explore funding options to include grants. 	5-Year Objectives <ul style="list-style-type: none"> • Continue to explore alternate ways to power critical facilities in the event of an electrical power loss. 	Long-Term Objectives <ul style="list-style-type: none"> • City facilities have backup power supplies. 	
Implementation Plan/Actions <ul style="list-style-type: none"> • Provide for generator power to sufficiently operate the Bothell Operations Center and backup Emergency Coordination Center. • Provide for generator power to be able to continue critical government functions at City Hall. • Maywood Pump Station backup power to ensure continuity of water flow for fire flow. • Holly Hills Pump Station backup power to ensure water fire flow. • UPS for primary transportation signalized intersections to ensure traffic flow and emergency vehicles and egress. 			
Performance Measures <ul style="list-style-type: none"> • Bothell Operations Center will have a backup power supply and will be able to function as a backup Emergency Coordination Center and Departmental Operations Center. • City Hall will have backup power needed to continue critical continuity of government operations. • Uninterrupted fire flow. • Reduce traffic congestion to allow emergency response and egress. 			



Hazard Mitigation Strategy 2 – Ensure Community Resiliency			
Lead POC Emergency Manager	Partner Points of Contact	Hazards Mitigated / Goals Addressed <ul style="list-style-type: none"> • All Hazards • Goals: <ul style="list-style-type: none"> ○ Health/Human Services ○ Community/Public Safety ○ Economic Development ○ Government Practices ○ Quality Education ○ Strong, Vibrant Neighborhoods 	Funding Sources / Estimated Costs \$ 5,000 <ul style="list-style-type: none"> • General Fund • Grants • Citizen Corps
Strategy Vision/Objective A community that understands and prepares for the various hazards associated with living in the Pacific Northwest and Bothell, as well as the limitations of government response capabilities and how individuals can support and help one another.			
Mitigation Strategy Provide emergency management training and preparation assistance to the Bothell community both directly and through local private and public partnerships.			
2-Year Objectives <ul style="list-style-type: none"> • CERT train 20 community members • Engage with 30 businesses 	5-Year Objectives <ul style="list-style-type: none"> • Conduct two joint Ham CERT exercises. 		Long-Term Objectives <ul style="list-style-type: none"> • A prepared, resilient community.
Implementation Plan/Actions <ul style="list-style-type: none"> • Continue to conduct at least one Community Emergency Response Team (CERT) trainings each year. • Create a Citizen Corps program to retain CERT trained volunteers. • Develop a sustainable Ham radio program. • Train 10 of Ham radio operators to include 2 city staff members. • Meet with neighborhood groups to promote emergency preparedness. 			
Performance Measures <ul style="list-style-type: none"> • Annually increase the number of individuals trained in emergency management preparedness and response. 			



Hazard Mitigation Strategy 3 – Enhanced Cyber Security			
Lead POC IS Systems Supervisor	Partner Points of Contact	Hazards Mitigated / Goals Addressed <ul style="list-style-type: none"> • Cybersecurity • Terrorism • Goals: <ul style="list-style-type: none"> ○ Health/Human Services ○ Community/Public Safety ○ Economic Development ○ Government Practices 	Funding Sources / Estimated Costs \$ 40,000 <ul style="list-style-type: none"> • General Fund • Grants
Strategy Vision/Objective Improve protection of the City’s network and infrastructure against virus or brute force attacks through improved security technologies.			
Mitigation Strategy Implement monitoring and filtering program comprised of robust application, network and access monitoring systems and provide Information Services staff with sufficient training to fully utilize the technologies.			
2-Year Objectives <ul style="list-style-type: none"> • Supplemental email filtering systems in place with staff fully trained and resources assigned 	5-Year Objectives <ul style="list-style-type: none"> • Network and access monitoring systems in place with staff fully trained and resources assigned 	Long-Term Objectives <ul style="list-style-type: none"> • Protection of the City’s network and infrastructure against cyber incidents. 	
Implementation Plan/Actions <ul style="list-style-type: none"> • Work with vendors and resellers to identify systems best suited to Bothell’s size and resources. • Work with vendors to ensure appropriate and in depth training resources are available for staff. • Work with vendors to ensure sufficient ongoing support and maintenance contracts. • Demos • Purchase and contract process • Testing and implementation of email filtering system • Testing and implementation of network and access monitoring systems 			
Performance Measures <ul style="list-style-type: none"> • Solution will be the protection of the City’s network and infrastructure against cyber incidents. 			



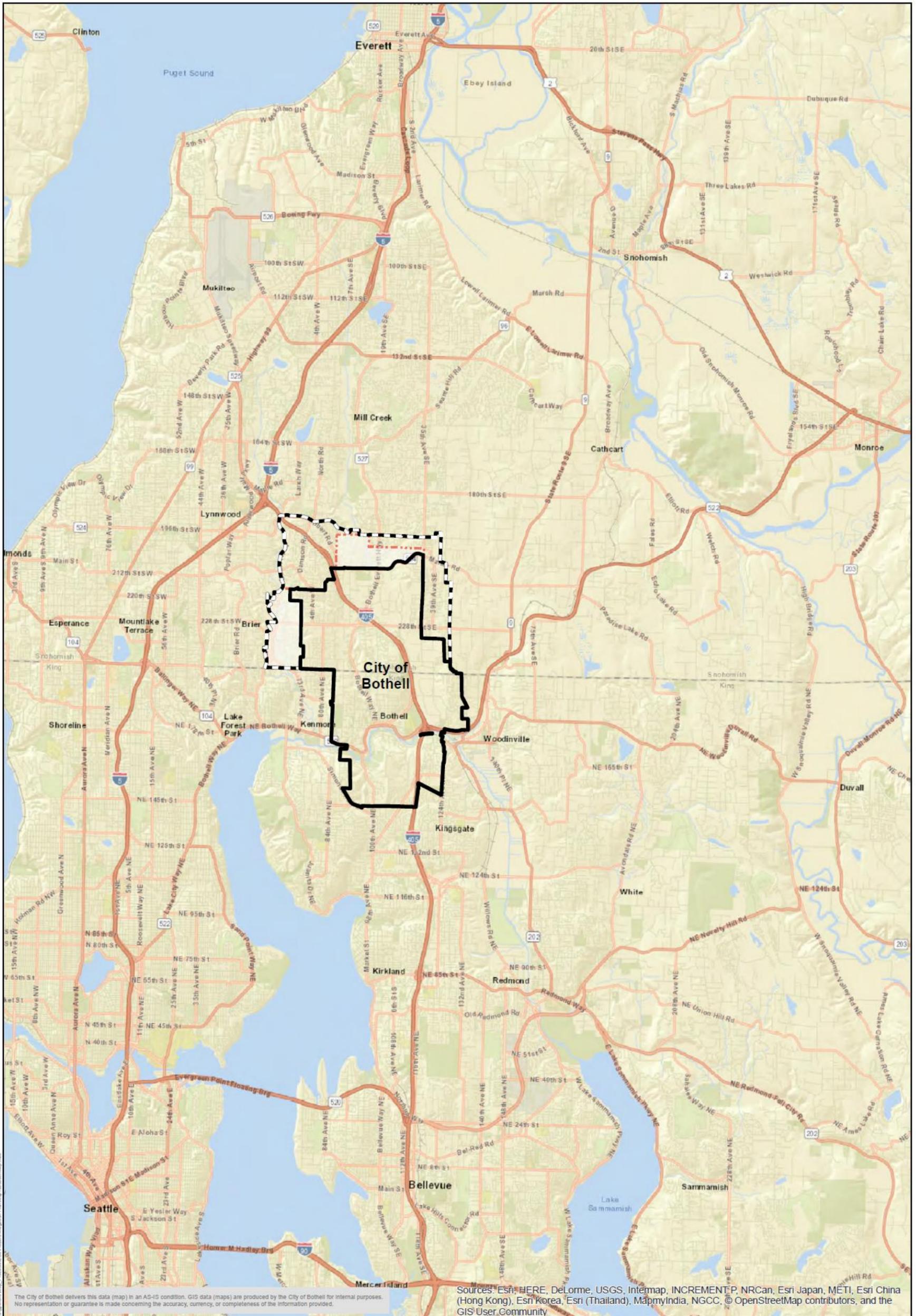
Hazard Mitigation Strategy 4 – Seismically Resilient Water System			
Lead POC Utilities and Development Services Manager	Partner Points of Contact <ul style="list-style-type: none"> Alderwood Water and Wastewater District 	Hazards Mitigated / Goals Addressed <ul style="list-style-type: none"> Earthquake Goals: <ul style="list-style-type: none"> Health/Human Services Community/Public Safety 	Funding Sources / Estimated Costs <p>\$ 200,000</p> <ul style="list-style-type: none"> Utility Fund Grants
Strategy Vision/Objective The water supply system owned by the city is seismically resilient.			
Mitigation Strategy Ensure that the City maintains a potable water supply and adequate fire flow in the event of an earthquake.			
2-Year Objectives <ul style="list-style-type: none"> Begin conversations with Alderwood Water and Wastewater District. Explore options for a pump for city wells. Explore alternative funding options. 	5-Year Objectives <ul style="list-style-type: none"> Enter into agreements/contracts to fix problem. Begin construction to make improvements. 	Long-Term Objectives <ul style="list-style-type: none"> Water supply is more resilient throughout the city. 	
Implementation Plan/Actions <ul style="list-style-type: none"> Ensure Penn Park Wells (#1 and #2) have water pumps for firefighting and non-potable needs. Intertie with Alderwood Water and Wastewater District to provide emergency and improved fire flow. Install seismic valves on Maywood and Bloomberg reservoir tanks. Construct additional water main looping at Norway Hill. 			
Performance Measures <ul style="list-style-type: none"> Water supply is more resilient throughout the city. 			



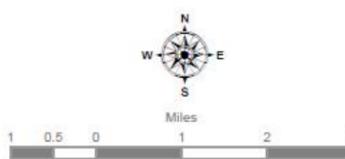
Hazard Mitigation Strategy 5 – Reduce Roadway Hazards			
Lead POC Capital Division Manager	Partner Points of Contact <ul style="list-style-type: none"> Local/State/Federal funding agencies Local/State/Federal permitting agencies 	Hazards Mitigated / Goals Addressed <ul style="list-style-type: none"> Flood Goals: <ul style="list-style-type: none"> Safe/Efficient Transportation Community/Public Safety Economic Development 	Funding Sources / Estimated Costs \$ 12,200,000 <ul style="list-style-type: none"> General Fund Capital Funds Stormwater Funds Grants
Strategy Vision/Objective Reduce or eliminate roadway hazards due to flooding and/or landslide in Bothell.			
Mitigation Strategy Floodwater/drainage areas in the city is a chronic issue during the wet winter months on several roadways resulting in lane closures in heavily trafficked areas. During heavy rain and flooding events road may become inaccessible due to water inundation. Erosion and land movement associated with rains and slopes also impact priority roadways. The lack of accessibility impacts traffic control and the safety and quality of life of the people that live, work or need access to these areas.			
2-Year Objectives <ul style="list-style-type: none"> Identify all affected roadways. Complete pre-designs. Include in the CFP. 	5-Year Objectives <ul style="list-style-type: none"> Begin construction to reduce hazards. Seek funding for additional projects. 	Long-Term Objectives <ul style="list-style-type: none"> Eliminate the risk of road closures due to heavy rainfall, flooding, and landslide in Bothell. 	
Implementation Plan/Actions <ul style="list-style-type: none"> Eliminate flood hazard in northbound right lane of 120th Avenue NE Eliminate flood hazard along 35th Avenue SE between 228th and 240th Eliminate flood hazard along 240th St SE between Fitzgerald Road and 35th Ave SE Eliminate landslide hazard along Bothell Everett Highway between 242nd St SE and 240th St SE 			
Performance Measures <ul style="list-style-type: none"> Successfully identify options to reduce hazards from chronic flooding and landslide issues on select roadways that are resilient to climate change and will prevent road closures. 			

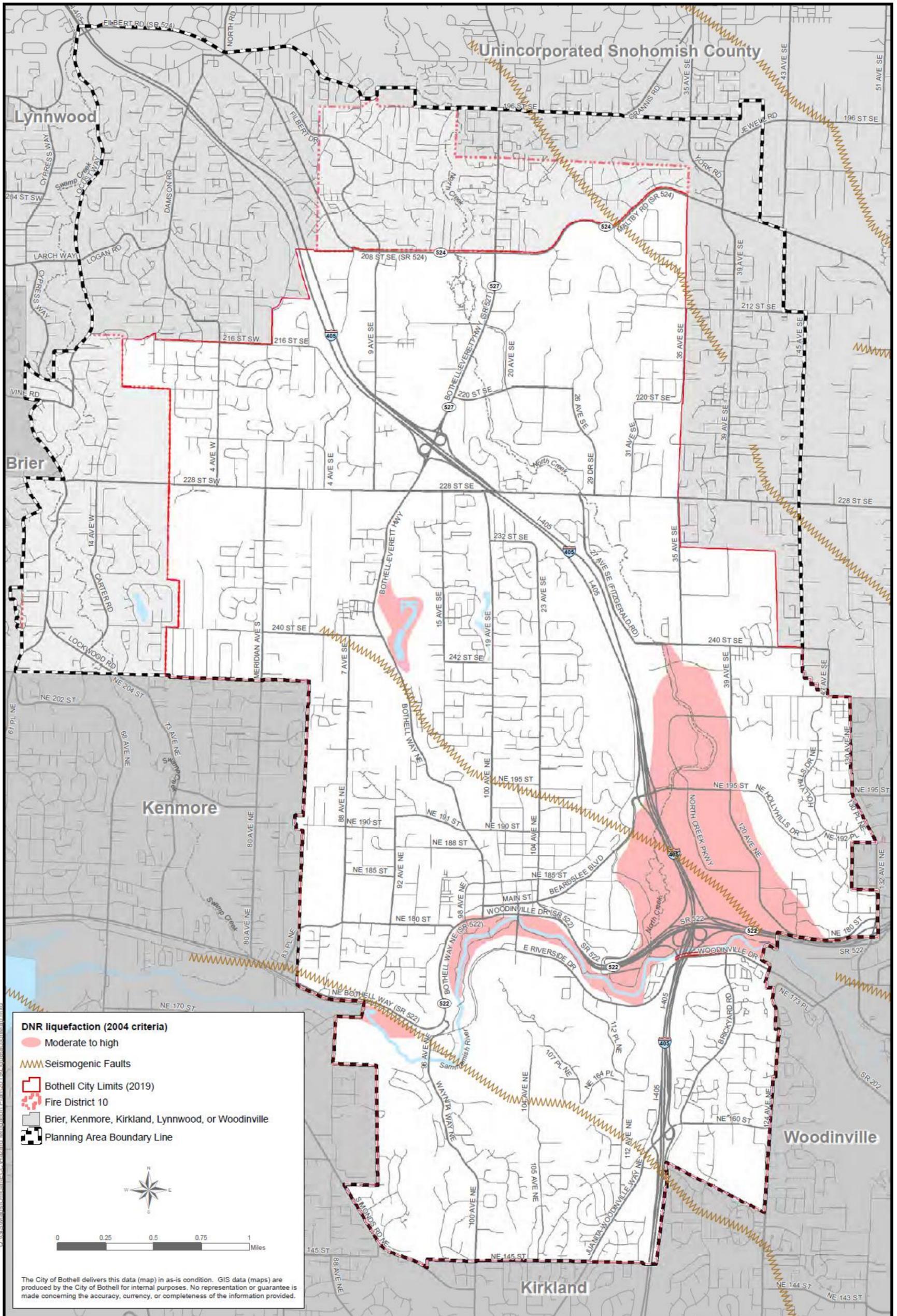


Hazard Mitigation Strategy 6 – Road Improvements to Reduce Emergency Response Times			
Lead POC Capital Division Manager	Partner Points of Contact <ul style="list-style-type: none"> Local/State/Federal funding agencies Local/State/Federal permitting agencies 	Hazards Mitigated / Goals Addressed <ul style="list-style-type: none"> All Hazards Goals: <ul style="list-style-type: none"> Community/Public Safety Safe/Efficient Transportation Economic Development 	Funding Sources / Estimated Costs <p>\$ 64,900,000</p> <ul style="list-style-type: none"> General Fund Capital Funds Grants
Strategy Vision/Objective Reduce emergency vehicle response times on major life/safety priority transportation corridors.			
Mitigation Strategy Complete roadway improvement to alleviate congestion thereby allowing for reduced emergency response times.			
2-Year Objectives <ul style="list-style-type: none"> Begin design Explore funding options. 	5-Year Objectives <ul style="list-style-type: none"> Complete design process. 		Long-Term Objectives <ul style="list-style-type: none"> Construct all improvements and reduce emergency response times.
Implementation Plan/Actions <ul style="list-style-type: none"> Widen Beardslee Boulevard from UW-Bothell Campus to I-405. Construct a roundabout at the intersection of Meridian Ave S and 240th St SE Widen Bothell Way NE/Bothell Everett Highway from Reder Way to 240th St SE 			
Performance Measures <ul style="list-style-type: none"> Solution enhances public safety transportation lifelines. 			



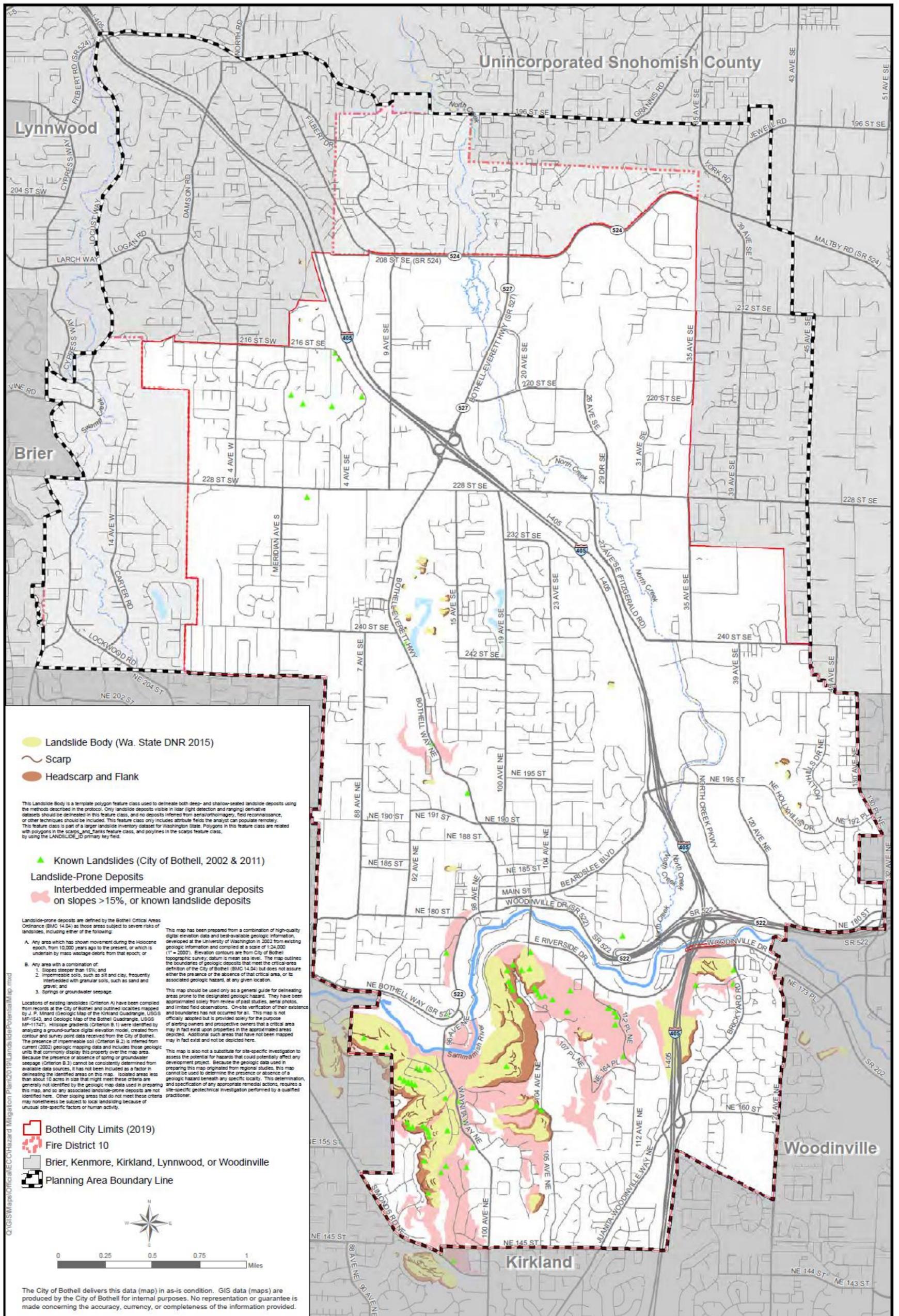
Hazard Mitigation Plan
Bothell Regional Street Map





Hazard Mitigation Plan
Seismic Liquefaction

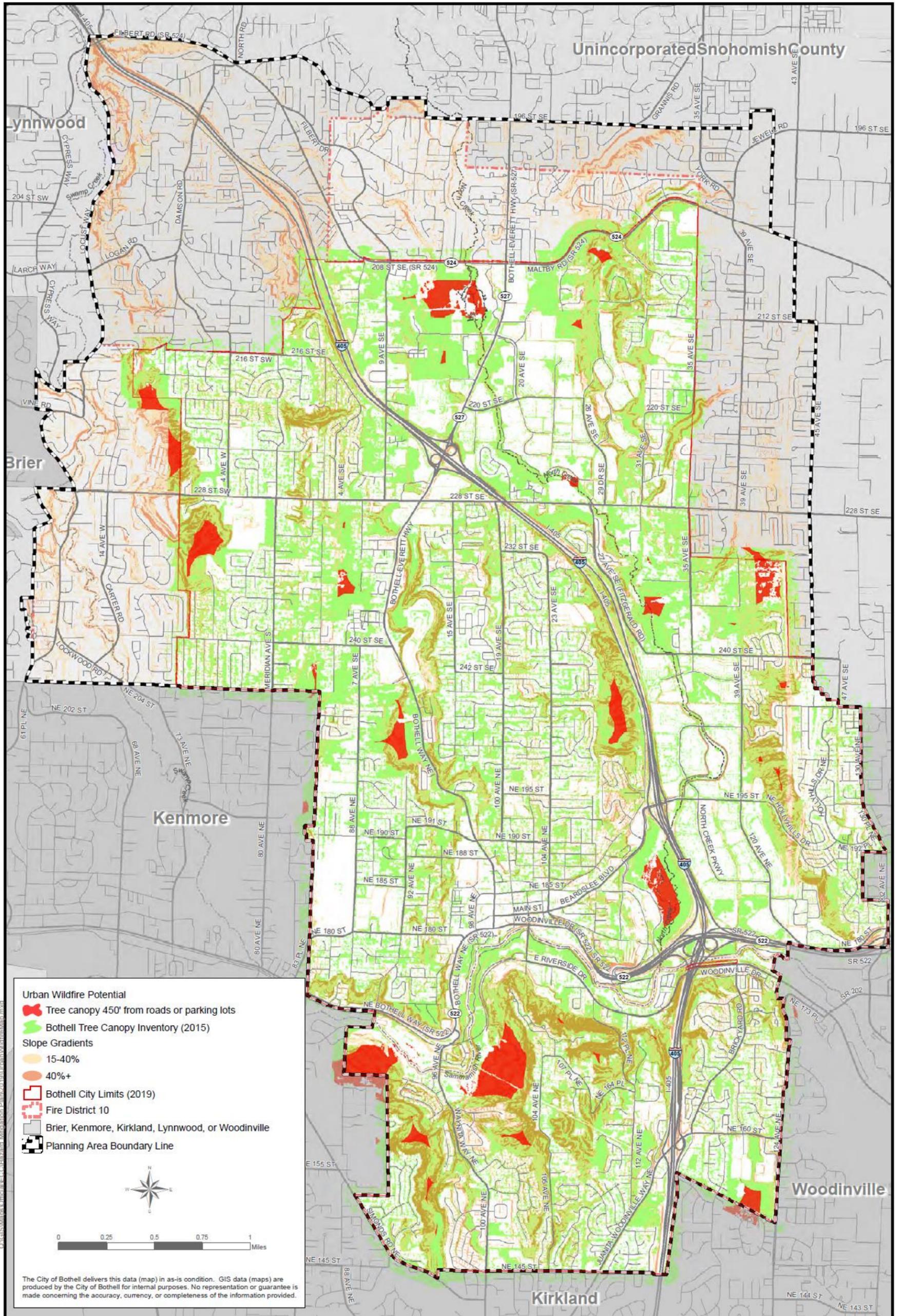




Hazard Mitigation Plan
Landslide Potential



Attachment 5: Urban Wildfire Map



Hazard Mitigation Plan
Urban Wildfire

