



**CITY OF EDGEWOOD
ADDENDUM A-4
REGION 5 ALL HAZARD MITIGATION PLAN
2020-2025 EDITION**

Prepared for:

City of Edgewood
2221 Meridian East
Edgewood, WA 98371

In Cooperation with:

Pierce County Department of Emergency Management
2501 S. 35th Street, Suite D
Tacoma, WA 98409

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ADDENDUM A-4

**REGION 5 ALL HAZARD MITIGATION PLAN
2020-2025 EDITION
CITY OF EDGEWOOD**

Table of Contents

SECTION 1 – PROCESS 1-1

SECTION 2 – PROFILE..... 2-1

SECTION 3 – CAPABILITY IDENTIFICATION 3-1

SECTION 4 – RISK ASSESSMENT 4-1

SECTION 5 – MITIGATION STRATEGY 5-1

SECTION 6 – INFRASTRUCTURE 6-1

SECTION 7 – MAINTENANCE 7-1

Appendices

Plan Adoption A

Planning Team B

Plan Revisions C

City of Edgewood and Pierce County Hazus-MH Scenarios D

Documentation Records E

Completed or Deferred Mitigation Strategies F

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Section 1

Plan Process Requirements

Planning Process---Requirement §201.6(b):

An open public involvement process is essential to the development of an effective plan.

Documentation of the Planning Process---Requirement §201.6(b):

In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process **shall** include:

- (1) An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;
- (2) An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and non-profit interests to be involved in the planning process; and
- (3) Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.

Documentation of the Planning Process---Requirement §201.6(c)(1):

[The plan **shall** document] the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.

- Does the plan provide a narrative description of the process followed to prepare the new or updated plan?
- Does the new or updated plan indicate who was involved in the current planning process? (Who led the development at the staff level and were there any external contributors such as contractors? Who participated on the plan committee, provided information, reviewed drafts, etc.?)
- Does the new or updated plan indicate how the public was involved? (Was the public provided an opportunity to comment on the plan during the drafting stage and prior to the plan approval?)
- Does the new or updated plan discuss the opportunity for neighboring communities, agencies, businesses, academia, nonprofits, and other interested parties to be involved in the planning process?
- Does the planning process describe the review and incorporation, if appropriate, of existing plans, studies, reports, and technical information?
- Does the updated plan document how the planning team reviewed and analyzed each section of the plan and whether each section was revised as part of the update process?

SECTION 1

REGION 5 ALL HAZARD MITIGATION PLAN 2020-2025 EDITION CITY OF EDGEWOOD PROCESS SECTION

Table of Contents

PLAN PROCESS REQUIREMENTS	1
TABLE OF CONTENTS	2
CHANGES TO JURISDICTION PLAN IN THIS DOCUMENT	3
CHANGE MATRIX	3
PLAN PROCESS	7
PUBLIC INVOLVEMENT PROCESS.....	7
PLANNING TEAM.....	8
PLANNING TEAM MEETINGS	9
PUBLIC COMMENT	12
ELECTED OFFICIALS MEETINGS.....	12
JOINT PLANNING REQUIREMENT	13
ENDNOTE	14

Changes To Jurisdiction Plan in this Document

This Process Section for the City of Edgewood Hazard Mitigation Plan includes the following changes that are documented as a result of a complete review and update of the existing plan. The purpose of the following change matrix is to advise the reader of these changes updating this plan from the original document approved in November 2008.

The purpose for the changes is three-fold: 1) the Federal Law (Code of Federal Regulations (CFR), Title 44, Part 201.4) pertaining to Mitigation Planning has changed since the original Plan was undertaken; 2) the Local Mitigation Planning Requirements of the Disaster Mitigation Act of 2000 201.6 (d) (3) Plan Review states Plans **must** be reviewed, revised if appropriate, and resubmitted for approval within five years in order to continue to be eligible for HMGP project grant funding. This document when completed and approved will become the City of Edgewood Hazard Mitigation Plan.

Change Matrix

This Matrix of Changes documents the pertinent changes made from the July 2015 City of Edgewood Plan for the Region 5 All Hazard Mitigation Plan; 2020-2025 Update. Most of the changes are a matter of additional detail, more information provided, and in some cases a response to new requirements. This 2020-2025 version represents a complete review and update by City of Edgewood and Pierce County Emergency Management using a detailed process for development and following an established format. During this procedure, all web links have been verified and updated.

Table 1-1 Change Matrix – City of Edgewood Region 5 Hazard Mitigation Plan 2020-2025 Update

Section 1 – Plan Development, Process Section	
Section or Part of Plan	New in 2020 Plan
Section 1 – Process Section	Section 1 – Process Section
	The 2020 Process Section contains goals and objectives for this jurisdiction in the Mitigation Strategy.

Section 2 – Participating Jurisdiction Profiles		
Section or Part of Plan	Previous	2020 Plan
Section 2 – Profile	Information was current as of 2010 Census Data.	The 2020 version of the Profile has been reviewed and updated. The Infrastructure Summary section was updated showing a significant increase in tax parcel values. In addition, the Economic Summary was updated also showing an increase.
	Information was current as of 2010 Census Data.	The 2010 Census Data remained for population data and is the current GIS available information from Pierce County. Once the 2020 Census data becomes available in Pierce County GIS format, population data figures will be updated in the Profile Section 2 and the Risk Assessment Section 4.
		A new Demographic Analysis paragraph was added to the 2020 Mitigation Plan to elaborate on Edgewood’s demographics in more detail and capturing some of the at-risk populations. This also allowed the city to provide an updated overview of it’s growing population beyond the 2010 census which is outdated.
	2015 Edgewood Base Map	The City of Edgewood Base map and Land Use map was updated for 2020.

Section 3 – Capability Identification		
Section or Part of Plan	Previous	2020 Plan
Section 3 – Capability	The Capability Tables shown in the previous plan are in a	The 2020 Capability Section has been improved and

	similar format.	updated to show current information from the City of Edgewood.
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Section 4 – Vulnerability, Risk Analysis	
Section or Part of Plan	2020 Plan
Vulnerability and Hazard Impact Analysis	This section was added to provide a better understanding on how the identified hazards affect the City of Edgewood and its critical infrastructure.
Changes in Development	This required element was added to provide a clearer understanding and location within the plan of the changes in development that have occurred within the City of Edgewood over the past five years.
Disaster Declarations Charts.	The Geological, Meteorological and Technological Charts have been updated to reflect current changes in Pierce County’s Hazard Identification Risk Assessment (HIRA). Major changes include updating the maps, figures and table column to align with the changes in the HIRA. Technological Hazards added “Active Threat” and “Cyber Attack” under the Terrorism category.
Hazard Maps - Overview of Data Source Descriptions	This section was added to provide the reader with a better understanding of the data source that was used to produce the hazard maps.
The previous version of the plan contained hazard maps.	The 2020 Risk Section includes updated maps and contains additional hazard maps such as deep/shallow landslides susceptibility.
The previous version included specific analysis showing vulnerability of population, land and infrastructure according to Census 2010 and 2013/2014 tax parcel data.	The 2020 Risk Section includes completely updated tables showing vulnerability of population, (where different hazard maps were used) land and infrastructure using Census 2010 data and 2019/2020 tax parcel data.

Section 5 – Mitigation Strategy	
Section or Part of Plan	2020 Plan
The previous document used the standard goals as outlined for the entire project.	The 2020 Mitigation Section was drafted using specific goals and objectives written by the jurisdictions to their specific hazards and concerns.
The previous document contained a Mitigation Measure Matrix chart followed by written descriptions of each individual measure.	The new document uses the same format as the original plan with the addition of a ‘Status Update’ table under each mitigation measure. This provides the opportunity to update each mitigation strategy and track the status. New measures have been added to both the Matrix and the individual measure descriptions. Measures completed in the past five years have been moved to a historical appendix in the plan to track projects completed by the jurisdiction.

Section 6 – Infrastructure	
Section or Part of Plan	2020 Plan
The previous plan used a full table with details on each piece of critical infrastructure. In addition, a matrix summary of hazards and dependencies affecting the critical infrastructure was completed.	The 2020 plan uses the same table. The tables have been reviewed and updated by the jurisdiction. This section is only available to the jurisdiction due to the sensitivity of information contained. A disclosure statement acts as a placeholder for Section 6.

Section 7 – Plan Maintenance	
Section or Part of Plan	2020 Plan
The previous Plan Maintenance for the jurisdiction was very similar in format to the newer version for 2020.	The 2020 version of the Plan Maintenance borrows from the format and content of the original; however, the entire document has been reviewed and updated to current information.

Section 8 – Other Changes	
Section or Part of Plan	2020 Plan
The previous document contained four Appendices.	The 2020 Plan contains six Appendices including: place for the final resolution and approval letter from FEMA, list of jurisdiction’s planning team, a chart for any

	changes, 2014 HAZUS analysis, documentation records for Public Outreach events and a historical appendix for completed projects. The Acronym list appears in the Base Plan for the entire project.
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Plan Process

The Region 5 Hazard Mitigation Plan Process Section is a discussion of the planning process used to update the Region 5 Hazard Mitigation Plan (Pierce County is Region 5 for Homeland Security (HLS) in Washington State), including how the process was prepared, who aided in the process, and the public involvement.

The Plan update is developed around all major components identified in 44 CFR 201.6, including:

- **Public Involvement Process;**
- **Jurisdiction Profile;**
- **Capability Identification;**
- **Risk Assessment;**
- **Mitigation Strategy;**
- **Infrastructure Section;** and,
- **Plan Maintenance Procedure.**

Below is a summary of those elements and the processes involved in their development.

Public Involvement Process

Public participation is a key component to strategic planning processes. Citizen participation offers citizens the chance to voice their ideas, interests, and opinions.

“Involving stakeholders who are not part of the core team in all stages of the process will introduce the planning team to different points of view about the needs of the community. It will also provide opportunities to educate the public about hazard mitigation, the planning process, and findings, and could be used to generate support for the mitigation plan.”¹

In order to accomplish this goal and to ensure that the updated Region 5 Hazard Mitigation Plan is comprehensive, the six planning groups in conjunction with Pierce County Emergency Management developed a public participation process of three components:

1. A Planning Team comprised of knowledgeable individual representatives of HLS Region 5 area and its hazards;

2. Hazard Meetings to target the specialized knowledge of individuals working with populations or areas at risk from all hazards; and
3. Public meetings to identify common concerns and ideas regarding hazard mitigation and to discuss specific goals, objectives and measures of the mitigation plan.

This section discusses each of these components in further detail below with public participation outlined in each. Integrating public participation into the development of the Region 5 Hazard Mitigation Plan update has helped to ensure an accurate depiction of the Region's risks, vulnerabilities, and mitigation priorities.

Planning Team

The Planning Team was organized early in 2019. The individual Region 5 Hazard Mitigation Planning Team members understand the portion of Pierce County containing their specific jurisdiction, including how residents, businesses, infrastructure, and the environment may be affected by all hazard events. The members are experienced in past and present mitigation activities and represent those entities through which many of the mitigation measures would be implemented. The Planning Team guided the update of the Plan, assisted in reviewing and updating goals and measures, identified stakeholders, and shared local expertise to create a more comprehensive plan. The Planning Team was comprised of:

Table 1-2 Planning Teams – Discipline Group

NAME	TITLE	JURISDICTION-DEPARTMENT
Woody Edvalson	Emergency Manager	City of Bonney Lake
Alan Predmore	Fire Chief/Emergency Manager	City of Buckley
Jeffrey Wilson	Director of Community Development	City of DuPont
Micah Lundborg	Chief of Police	City of Edgewood
Pete Fisher	Police Chief	City of Fife
Robert Eugley	Patrol Officer	City of Fife
John Cheesman	Chief of Police	City of Fircrest
Kelly Busey	Chief of Police	City of Gig Harbor
Carl Desimas	City Planner	City of Gig Harbor
John Unfred	Assistant Police Chief	City of Lakewood
Tony Hernandez	Police Chief	City of Milton
Mark Bethune	City Manager	City of Orting
Kirstin Hofmann	Emergency Manager	City of Puyallup
Chief Armitage	Police Chief	City of Roy
Officer Armitage	Police Officer	City of Roy
Ryan Windish	Community Development Director	City of Sumner
Ute Scofield	Emergency Manager	City of Tacoma
Jacob Rain	EM Program Coordinator	City of Tacoma
Lisa Petorak	Human Resources Manager	City of University Place
Jack Ecklund	Dir. of Engineering & Capital Projects	City of University Place
Daillene Argo	Clerk-Treasurer	Town of Carbonado

Abby Gribi	Town Administrator	Town of Eatonville
Glen Yates	Eatonville Police Department	Town of Eatonville
Emily Terrell	Consultant	Town of South Prairie
Paul Loveless	Town Administrator	Town of Steilacoom
Alan Predmore	Fire Chief	Town of Wilkeson

Table 1-3 Planning Teams – Regional Group

NAME	TITLE	JURISDICTION-DEPARTMENT
Micah Lundborg	Police Chief	City of Edgewood
Pete Fisher	Police Chief	City of Fife
Robert Eugley	Patrol Officer	City of Fife
John Cheesman	Police Chief	City of Fircrest
Tony Hernandez	Police Chief	City of Milton
Ute Scofield	EM Program Manager	City of Tacoma
Jacob Rain	EM Program Coordinator	City of Tacoma
Jim Wassall	Fire Chief	Pierce County Fire District #13
Jim Jaques	Assistant Fire Chief	East Pierce Fire & Rescue
Kira Thirkield	Fire Chief	Riverside Fire & Rescue #14
Mike Rupert	Director of Safety/Security	Tacoma School District
Jeff Rogers	Environmental Health/Safety	Tacoma School District
Bart Stepp	General Manager	Mt. View-Edgewood Water Co
Jim Oliver	Assistant Quality Improvement Manager	Community Health Care
Eileen Newton	Emergency Manager	Franciscan Health System
Heidi Rock	Emergency Management Program Manager	MultiCare Health System
Alex Truchot	Sr. HSE Manager	Kaiser Permanente
Johanna Hanson	Emergency Management Specialist	Kaiser Permanente
Alisha Peña	Senior Planner	Port of Tacoma – NW Seaport Alliance
Marty Kapsh	Port of Tacoma Patrol Officer	Port of Tacoma
Deirdre Wilson, AICP	Planning Manager	Port of Tacoma

Planning Team Meetings

The Planning Team held 7 Planning Team Meetings either in their Discipline Groups or Regional Planning Groups. Meeting in Regional Planning Groups supported a whole community planning approach which either developed new or stronger relationships amongst jurisdictions. This allowed for an integration of mitigation strategies for regions sharing the commonality in hazards. There was a total of 45 meetings from February 2019 to January 2020 between all Planning Groups. Additional working group drop-in workshops were provided for jurisdictions to continue to work on and update their plans. Two “drop-in” workshops were provided each

month from January through June alternating between morning and afternoons to accommodate work schedules.

The Planning Teams Discipline Groups: City and Town Group, Fire Group, School Group, Special Purpose Group, Utility Group, Medical Group and Unincorporated Pierce County Group. These discipline groups will continue to meet on an annual basis for the relationship building and sharing of mitigation strategies and ideas.

The Planning Team Regional Groups broken down into five geographical areas in Pierce County: West Group (all of Gig Harbor, Key Peninsula, Herron Island, Fox Island and Raft Island), SW Group (Lakewood, Anderson Island, Steilacoom), Central Group (Puyallup, Graham, Eatonville), NE Group (Buckley, Carbonado, Bonney Lake, Wilkeson), North Group (Tacoma, Fife, Edgewood, Sumner). The Regional Groups were developed based on geographic location and the commonality of hazards shared and was new with this update. This provided for better community planning, relationship building, and collaboration of mitigation strategies ultimately leading to community resiliency. These Regional groups will continue to meet on an annual basis and as sub committees are developed to work on specific projects the frequency of meetings will potentially increase.

Table 1-4 Planning Team Meetings

Planning Team Meeting #1 – Cities & Towns: PCEM Puyallup Room – February 21, 2019
Planning Team members Debbie Bailey and Wyatt Godfrey conducted the meeting and the Planning Team discussed the following items: Introduction of Planning Team, Review of the history of the Grant Application, Defining the Planning Requirements, How We Establish the In-Kind Match, Benefits of Developing a Plan, Defining the Planning Process, Establishing the Planning Team Meetings, Elected Official Meetings and Public Comment Meetings, reviewing each jurisdiction’s profile information, and defining next steps.
Planning Team Meeting #2 – North Regional Group: PCEM Puyallup Room – March 25, 2019
Planning Team members Debbie Bailey and Wyatt Godfrey conducted the meeting and the Planning Team discussed the following items: Introduction of Planning Team as this was our first Regional Planning meeting and there were new members present. We reviewed items presented at the previous meeting, Defining the Planning Requirements, Defining the Process, Establishing the Planning Team Meetings, Elected Official Meetings and Public Comment Meetings, and explaining the next steps. This meeting focused on continuing review of the Profile Section, an introduction to begin thinking about mitigation strategies to include a review of what measures from their original plan have already been completed and thinking about new measures they may like to add. In addition, this group discussed the Capability Section and how to recognize capabilities that already exist within the jurisdiction. Everyone was reminded to set up their Elected Official meetings. Everyone was given a copy of their original Section 3 – Capability Section.
There was not a Regional Planning Meeting in April of 2019
Planning Team Meeting #3 – North Regional Group: PCEM Puyallup Room – May 21, 2019

Planning Team members Debbie Bailey and Wyatt Godfrey conducted the meeting with the majority of the regional jurisdictions present. We reviewed the Profile, Capabilities, and Mitigation Strategy Sections, along with introducing the Risk Assessment Section to the group. We also talked about progress made on the In-Kind Match sheets and pre-authorization approval from jurisdictions' governing bodies. Finally, we gathered feedback about our Threat and Hazard Identification Workshop held on May 1-2, and everyone's progress with outreach events for their mitigation plans, especially in relation to fire season starting and the opportunity for communities in this region to incorporate more fire protection and mitigation elements into their planning process.

There was not a Regional Planning Meeting in June of 2019

Planning Team Meeting #4 – North Regional Group: PCEM Puyallup Room – July 16, 2019

Planning Team members Debbie Bailey and Wyatt Godfrey reviewed the Profile, Capabilities, Risk Assessment, and Mitigation Strategy Sections to see how everyone was coming along with their update process. A reminder was provided for those who had not turned in their in-kind match sheet, as well as for those who had not completed the governing body pre-approval requirement yet. Debbie offered to create jurisdictional maps for public outreach events to bring residents in to talk about hazards that can affect them and how the mitigation plan plays a role in community resilience. Lastly, Todd Kilpatrick, the former Mitigation Grant Program Manager with Washington State Emergency Management Division who now works at Pierce County Emergency Management, spoke to the group about the Hazard Mitigation Grant Program (HMGP), the Pre-Disaster Mitigation Grant (PDM), potential projects that are eligible for those grants, and the upcoming Mitigation Grant Workshop that'll be held on August 12th and 19th.

There was not a Regional Planning Meeting in August of 2019

Planning Team Meeting #5 – North Regional Group: PCEM Puyallup Room – September 24, 2019

Planning Team members Debbie Bailey and Wyatt Godfrey reviewed the Profile, Capabilities, Risk Assessment, and Mitigation Strategy Sections to check on the jurisdictions' progress. More specifically, Debbie explained the process of developing new mitigation strategies to add to their plans. This discussion covered how to select a new mitigation strategy, the required components for their strategy development, and the format required to input the strategy into the plan. Feedback was gathered about the August Mitigation Grant Workshop – unanimous positive feedback with a few recommendations to improve for next time. A reminder for the In-Kind Match Sheet and pre-authorization documentation was provided. Finally, the meeting was closed out with a discussion on the progress of meeting the public outreach requirements and ideas for those who had not completed that component yet.

Planning Team Meeting #6 – North Regional Group: PCEM Puyallup Room – October 22, 2019

Planning Team members Debbie Bailey and Wyatt Godfrey held the meeting with less participation than preferred but included a call-in option for those who couldn't attend in person. The usual review of previous sections occurred, with the introduction of the Infrastructure and Plan Maintenance Sections. Participants were taught how to fill out the potentially overwhelming tables in the Infrastructure Section and told to review the Plan Maintenance Section for any inaccurate statements or language. Like the previous meeting, a reminder for the In-Kind Match Sheet, pre-authorization documentation, and public outreach documentation was provided.

Planning Team Meeting #7 – North Regional Group: PCEM Nisqually Room – November 21, 2019

The final planning meeting was conducted by Debbie Bailey and Wyatt Godfrey. All sections of the plan were discussed and reviewed to ensure participants' questions were answered. A detailed discussion of the Mitigation Strategy Section occurred, specifically looking at the integration of new strategies into the plan and how to reorder them by priority. Like the previous meeting, a reminder for the In-Kind Match Sheet, pre-authorization documentation, and public outreach documentation was provided. Participants were informed that in the new year, Pierce County DEM would be hosting two "workshops" a month where jurisdictions can walk in and get help with their plan on an individual basis, instead of only in the previously used group format. The goal is to refine the work that participants have done thus far and craft it into a well-rounded, comprehensive, and usable Hazard Mitigation Plan.

Public Comment

Date	Location	Time
1/15/2019	Edgewood City Hall – 2224 104 th Ave E, Edgewood, WA	7:00pm
10/16/2019 – 11/22/2019	Online survey to community members	N/A

Elected Officials Meetings

On January 15, 2019, Debbie Bailey presented in front of the Edgewood City Council with the assistance of Police Chief Micah Lundborg. She first explained the overarching project of updating local jurisdictions' mitigation plans and then went into detail about the purpose, components, and processes involved in this update. Debbie provided reading material to the Council – in particular, a list of all jurisdictions participating in this update, as well as a short brochure explaining the mitigation plan and how it benefits the whole community. Once she was finished presenting, the Council had the opportunity to ask questions and provide comments. Many Councilmembers provided positive feedback regarding Edgewood's involvement in this planning process, while others asked questions about the project timeline, grant funding opportunities, and the applicability of specific mitigation projects for their jurisdiction. After the commentary period ended, the Council unanimously voted to approve the City of Edgewood's participation in the update of their Hazard Mitigation Plan.

Joint Planning Requirement

The City of Edgewood has the following identified plan which must collaborate with the mitigation plan; these plans are identified in the table below and must be updated within the predetermined timeline.

Plan	Next Update
Comprehensive Plan	June 2020

Endnote

¹State and Local Mitigation Planning How-to Guide, Getting Started: building support for mitigation planning, FEMA 386-1, September 2002, p. 3-1.

SECTION 2

**REGION 5 ALL HAZARD MITIGATION PLAN
2020-2025 EDITION
CITY OF EDGEWOOD
PROFILE SECTION**

Table of Contents

TABLE OF CONTENTS..... 1
VISION STATEMENT 2
VISION STATEMENT 2
SERVICES SUMMARY..... 2
GEO-POLITICAL SUMMARY 3
POPULATION SUMMARY 5
 DEMOGRAPHICS.....5
 SPECIAL POPULATIONS5
 DEMOGRAPHIC ANALYSIS5
INFRASTRUCTURE SUMMARY 6
 GENERAL6
 JURISDICTION INFRASTRUCTURE6
ECONOMIC SUMMARY 8
RESOURCE DIRECTORY 9
 REGIONAL9
 NATIONAL9
ENDNOTES..... 10

Vision Statement

A unique, safe, and prosperous community of neighbors.

Services Summary

The City of Edgewood was incorporated in the year 1996.

The jurisdiction provides the following services through their own capabilities:

Table 2-1 City Services¹

CITY SERVICES			
Service	Yes	Service	Yes
Mayor	Yes	Municipal Airport	No
City Attorney	Yes	Municipal Court	No
City Clerk	Yes	Public Works/Improvements	No
City Treasurer	Yes	Comprehensive Planning	Yes
Sheriff or Police	Yes	Parking Meter Revenue	No
Parks Board	Yes	Construction and Operation of Boat Harbors, Marinas, Docks, etc.	No
City Council	Yes	Issue Bonds and Levies of General Tax	Yes
License and Tax Fees	Yes	Fire Department/EMS	No
Non-Polluting Power Generation	No	Parking, Off-street Facilities	No
Hydroelectric Resources	No	Sanitary Landfill/Refuse Service	No
Radio Communications	No	Sidewalks	Yes
Streets	Yes	Storm Drains	Yes
Wastewater Treatment	No	Streets/Alleys	Yes
Water Utility	No	Parks and Parkways	Yes
Public Transportation Systems	No	Water Pollution Abatement	No
Residential Care Facilities	No	Local Improvement Districts	Yes
Child Care Facilities	No		

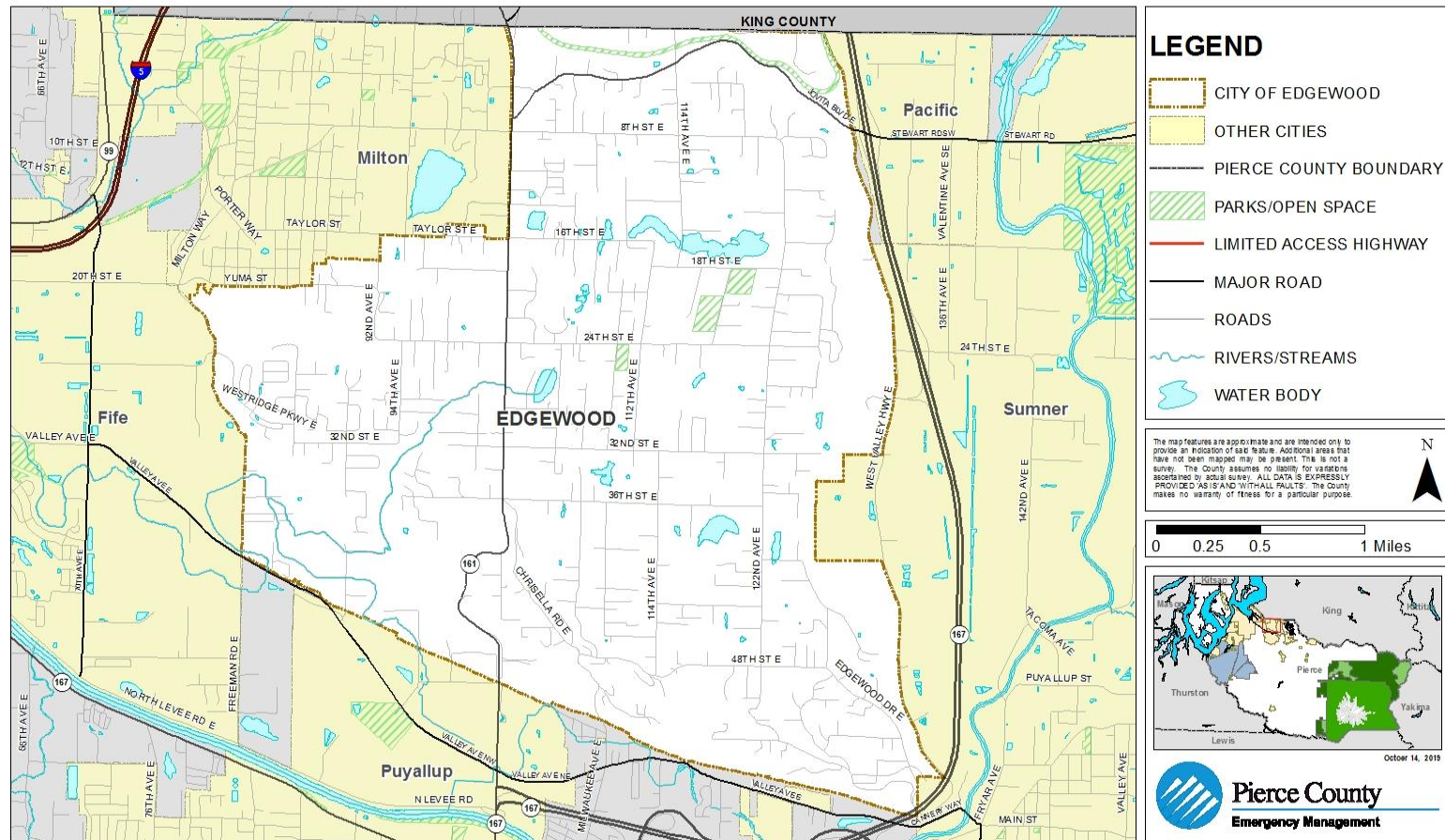
Geo-Political Summary

Table 2-2 Geo-Political Summary²

Jurisdiction	Area (sq mi)	Elevation Range (ft)	Major Water Features	Regional Partners	
				Shared Borders	Land Use Authorities
City of Edgewood	8.36	40-480	<ul style="list-style-type: none"> • Puyallup Watershed • 4-Hylebos Basin • 15-Lower White River Basin 	<ul style="list-style-type: none"> • Fife • Milton • Pacific • Sumner • Puyallup • Unincorporated Pierce County • Unincorporated King County • Puyallup Tribe 	<ul style="list-style-type: none"> • Edgewood • Fife • Milton • Pacific • Sumner • Puyallup • Unincorporated Pierce County • Unincorporated King County • Puyallup Tribe

Map 2- 1 City of Edgewood - Basemap

CITY OF EDGEWOOD - BASEMAP



Population Summary

Demographics

Table 2-1 Population^{3,4,5,6}

Jurisdiction	Population	Population Density (people/sq mi)	Population Served	Projected Year 2022 Population Change (%)	Projected Population Density	Projected 2022 Population Served
City of Edgewood	9,391	1,123	9,391	45.88%	1,639	13,700
Region 5	795,147	440	795,147	-13.41%	381	688,495

Special Populations

Table 2-2 Special Populations⁷

Jurisdiction	Population	Population 65 Plus	% of Total	Population Under 20	% of Total
City of Edgewood	9,391	1,314	14%	2,285	24%
Region 5	795,147	87,770	11%	220,351	28%

Demographic Analysis

In comparison to the last update, the overall population in the City of Edgewood has increased significantly to a rough estimate of 10,990 for 2018 and it is continuing to rise. Development of single-family residences and multi-family homes are rapidly increasing as well. Edgewood has also seen a slight increase in the population of its vulnerable residents too. Currently recorded in the city are three adult family homes and one memory care facility that hold a combined 77 beds. Additionally, the city limits of Edgewood are covered by two zip codes (98371 and 98372) which share coverage with the City of Puyallup. There are a combined 316 Electricity-Dependent Beneficiaries within those two zip codes.

Edgewood Country Retreat Inc	9823 29 th SCE, EW 98371 (253) 864-3022	6 beds
Edgewood Manor AFH	11115 Karshner Rd E, EW 98371 (253) 904-8006	5 beds
The Ashley House	11306 8 th St E, EW 98371 (253) 533-9050	6 beds
The Cottages at Edgewood Senior Living (Memory Care)	2510 Meridian Av E EW 98371 (253) 881-1435	60 beds

Infrastructure Summary

General

Table 2-5 Parcel Summary⁸

Jurisdiction	# Parcels	Land Value	Average Land Value	Improved Value	Average Improved Value
City of Edgewood	4,805	\$852,052,600	\$177,326	\$1,206,803,600	\$251,156
Region 5	328,831	\$55,032,560,799	\$167,358	\$82,7665100,038	\$251,699

Jurisdiction	Total Assessed Value	Average Assessed Value
City of Edgewood	\$2,058,856,200	\$428,482
Region 5	\$137,799,070,837	\$419,057

Table 2-6 Housing Summary⁹

Jurisdiction	# Houses	Housing Density	Avg Year Built	Avg Year Built (%)
City of Edgewood	4,576	547	<ul style="list-style-type: none"> • <1939: 433 • 1940 – 1979: 2,230 • 1980 – 2004: 1,182 • 2005>139 	<ul style="list-style-type: none"> • <1939: 10.9% • 1940 – 1979: 55.9% • 1980 – 2004: 29.6% • 2005>: 3.5%
Region 5	353,089	195	<ul style="list-style-type: none"> • <1939: 34,368 • 1940 – 1979: 126,363 • 1980 – 2004: 139,894 • 2005> 22,830 	<ul style="list-style-type: none"> • <1939: 10.6% • 1940 – 1979: 39% • 1980 – 2004: 43.2% • 2005> 7.1%

Jurisdiction Infrastructure

The following table shows the overview of infrastructure owned by the City of Edgewood. The infrastructure is categorized according to the infrastructure sectors as designated by the Department of Homeland Security. This chart is intended as a summary only.

For further details on Department of Homeland Security infrastructure sectors, please see the Process Section 1.

Table 2-7 Owned Infrastructure¹⁰

Total Infrastructure	Emerg. Services	Tele-comm	Transportation	Water	Energy	Government	Commercial	Total Value (\$)
12	0	0	0	0	0	12	0	\$28,260,416

Map 2- 2 City of Edgewood – Official Land Use Map



City of Edgewood Future Land Use Map Effective March 20, 2018

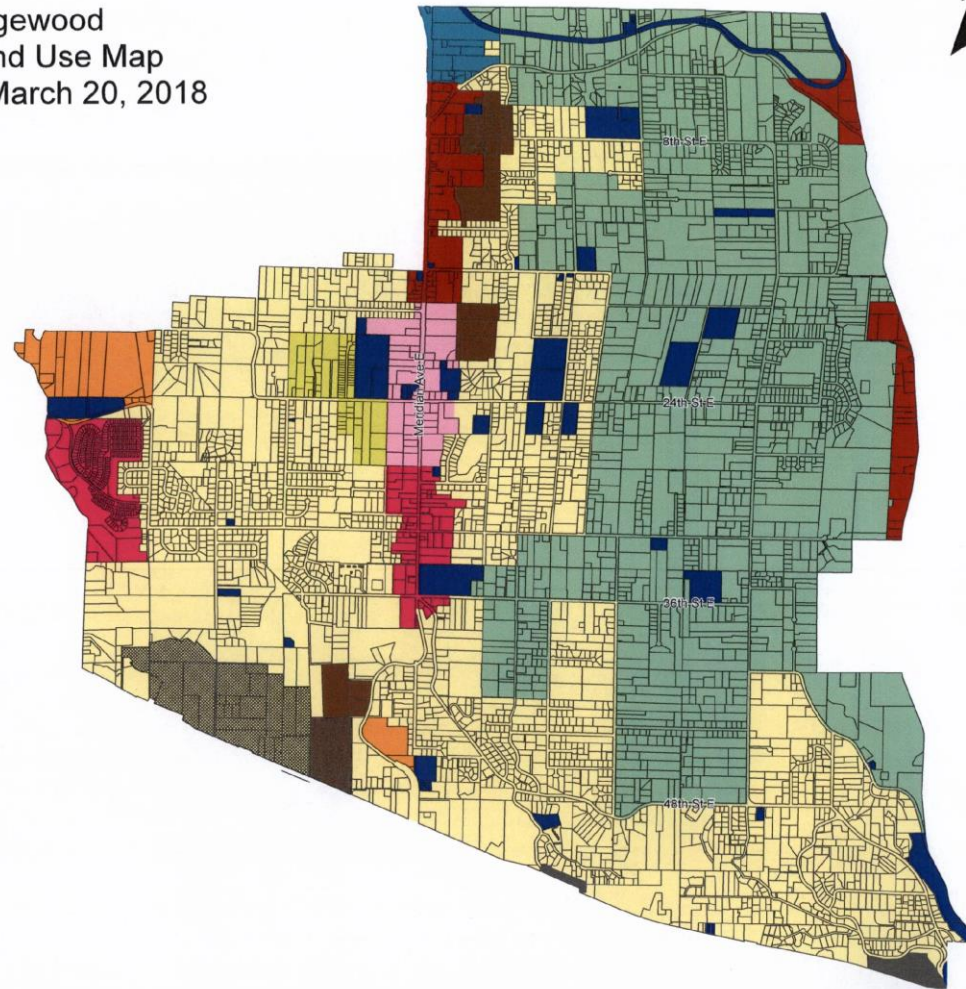
Amended by Ordinance 18-0517

DISCLAIMER: The City of Edgewood makes no claims concerning the accuracy of this map nor assumes any liability from the use of the information herein.

Legend

- Single Family Low
- Single Family Moderate
- Single Family High
- Commercial
- Mixed Residential Low
- Mixed Residential Moderate
- Mixed Use Residential
- Town Center
- Business Park
- Industrial
- Public
- Economic Study Overlay
- Parcel Boundaries

0 0.25 0.5 1 Miles



Economic Summary

Table 2-8 Fiscal Summary¹¹

Jurisdiction	Operating Costs (per month)	Operating Budgeted Revenues ¹²	Operating Budgeted Expenditures ¹³	Fund Balance as % of Operating Cost	Avg Fund Balance (5 yrs)
City of Edgewood	\$588,475	\$7,061,700	\$7,126,943	50%	\$3,082,122

Table 2-10 Unemployment Rate¹⁵

Jurisdiction	Unemployment Rate
Region 5 (Pierce County)	4.8%
WA State	4.3%

Resource Directory

Regional

- **City of Edgewood**
<http://cityofedgewood.org/>
- **Pierce County Government**
<https://www.co.pierce.wa.us/>
- **Pierce County DEM**
<https://www.co.pierce.wa.us/104/Emergency-Management>
- **Pierce County Planning and Public Works (PPW)**
<https://www.co.pierce.wa.us/4999/Planning-Public-Works>
- **Municipal Research & Services Center of Washington (MRSC)**
<http://www.mrsc.org/>

National

- **US Census**
<http://www.census.gov/>

Endnotes

¹ Information from a survey compiled by the City.

² Information from Pierce County GIS application, CountyView Pro (2019).

³ “Population” from Census 2010, Office of Financial Management. It should be noted that current (as of December 2019) population of City of Edgewood is reported by the Office of Financial Management as 9,391.

⁴ “Projected Population Change (%)” from Pierce County Buildable Lands Report, Dec. 2019.

⁵ “Projected Population Density” is based on an assumption of the jurisdiction maintaining the same geographic area and boundaries. It does not consider changes in annexation, district mergers, etc.

⁶ “Projected 2022 Population” from Pierce County Buildable Lands Report, Dec. 2019.

⁷ Information from Pierce County GIS application, CountyView Pro, based on 2010 Census Block data.

⁸ Information from Pierce County GIS application, CountyView Pro, based on August 2019 tax parcel data.

⁹ Information from Census 2010, Office of Financial Management.

¹⁰ Information obtained from Jurisdiction from the Homeland Security Sector Infrastructure.

¹¹ Information obtained from the Budget of the Jurisdiction.

¹² Non-Capital

¹³ Non-Capital

¹⁵ Information from Washington State Employment Security Department, December 2019 Monthly Employment Report.

Section 3

Capability Identification Requirements

Planning Process---Requirement §201.6(b):

An open public involvement process is essential to the development of an effective plan.

Documentation of the Planning Process---Requirements §201.6(b):

In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process **shall** include:

(3) Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.

- Does the planning process describe the review and incorporation, if appropriate, of existing plans, studies, reports, and technical information?

Assessing Vulnerability: Analyzing Development Trends---Requirement §201.6(c)(2) (ii)(C):

[The plan **should** describe vulnerability in terms of] providing a general description of land uses and development trends within the community so that mitigation options can be considered in future land use decisions.]

- Does the plan describe land uses and development trends?

Identification and Analysis of Mitigation Actions: National Flood Insurance Program (NFIP) Compliance--Requirement §201.6(c)(3)(ii):

[The mitigation strategy] must also address the jurisdiction's participation in the National Flood Insurance Program (NFIP), and continued compliance with NFIP requirements, as appropriate.

- Does the new or updated plan describe the jurisdiction(s) participation in the NFIP?

SECTION 3

REGION 5 ALL HAZARD MITIGATION PLAN 2020-2025 EDITION CITY OF EDGEWOOD CAPABILITY IDENTIFICATION SECTION

Table of Contents

CAPABILITY IDENTIFICATION REQUIREMENTS.....	1
TABLE OF CONTENTS	2
LEGAL AND REGULATORY.....	3
ADMINISTRATIVE CAPABILITY	4
TECHNICAL CAPABILITY	6
FISCAL CAPABILITY.....	7
SPECIFIC CAPABILITIES	8

Legal and Regulatory

Table 3-1 Legal and Regulatory

Regulatory Tools (Ordinances and Codes)	Yes or No
<u>Jurisdiction Capabilities</u>	
Building Construction/Design Construction Codes	Yes
Flood Damage Prevention Ordinance	Yes
Growth Management Ordinance	Yes
Critical Area Ordinance	Yes
Hazard Setback Requirements	Yes
Hillside and Steep Slope Ordinance	Yes
Land Use and Regulatory Codes	Yes
Mechanical Codes	Yes
Plan Review Requirements	Yes
Plumbing Codes	Yes
Real Estate Disclosure Requirements	Yes
Storm Water Management	Yes
Subdivision Ordinance or Regulations	Yes
Tax and License Codes	Yes
Wildfire Ordinance	Yes
Zoning Ordinance	Yes

Administrative Capability

Table 3-2 Administrative Capability

Administrative Tools (Agency, Departments or Programs)	Yes or No
<u>Jurisdiction Capabilities</u>	
Architectural Review Board/Historic Review	No
Board of Adjustments/Hearing Examiner	Yes
Building Official	Yes
Chamber of Commerce	Yes
City/Town Website	Yes
Commercial Fire Safety/Code Inspection Program	No
Community CPR/First Aid Program	No
Community Emergency Response Teams	No
Downtown Revitalization Committee	No
Economic Development Board	Yes
Emergency Manager	Yes
Engineers	Yes
Families First Coalition	No
Fire and Injury Prevention Program	No
Fire Chief	Yes
Fire Safety & Disaster Classes in Schools	No
Flood Plan Manager	No
Government TV Access	No
Grant Writers	No
Home Safety Council	No
Information included in Utility Bills	No
Lahar Warning System	No
Planners	Yes
Planning Commission	Yes
Police Chief	Yes
Police Department	Yes
Public Utility	No
Public Works Department	Yes
Safe Streets Program	Yes
Safety Fairs	Yes
Stream Team	No
Surveyors	No
City/Town Council	Yes
City/Town Meetings	Yes
City/Town Planning Commission	Yes

Table 3-3 Administrative Capability (Cont'd)

Administrative Tools (Agency, Departments or Programs)	Yes or No
<u>Regional Capabilities</u>	
Local Business Districts	No
Local Department of Emergency Management	No
Local Fire Agencies plus Mutual Aid with others	Yes
Local Hospitals	No
Local Law Enforcement Agencies and Mutual Aid with others	Yes
Local Neighborhood Associations	Yes
Local Neighborhood Emergency Teams (NET)	Yes
Local Newspapers	Yes
Local Parks Commission/Board	Yes
Local Power Companies	No
Local Parent Teacher's Association	Yes
Neighboring Counties	Yes
Pierce County ALERT	Yes
Pierce County Department of Emergency Management	Yes
Pierce County Fire Chiefs Association	No
Pierce County Neighborhood Emergency Teams (PCNET)	Yes
Pierce County Police Chiefs Association	Yes
Pierce County Safe Kids Coalition	No
Pierce County Sheriffs Department	Yes
Puget Sound Clean Air Agency	Yes
Puget Sound Energy	Yes
Puget Sound Regional Council	Yes
Puget Sound Water Quality Management Plan	Yes
Service Organizations	No
Tacoma/Pierce County Health Department	Yes
Tribes	Yes

Technical Capability

Table 3-4 Technical Capability

Technical Tools (Plans and Other)	Yes or No
Jurisdiction Capabilities	
After Action Reports of Any Incident	Yes
Capital Improvement Plan	Yes
Comprehensive Emergency Management Plan	Yes
Comprehensive Plan	Yes
Continuity of Governmental Services and Operations Plan (COOP and COG)	Yes
Critical Facilities Plan	No
Drainage Master Plan	No
Economic Development Plan	No
Emergency Evacuation Plan	No
Emergency Response Plan	Yes
Generator Placement Plan	No
Habitat Plan	Yes
Hazardous Materials Response Plan	No
Lahar Evacuation Plan	Yes
Pandemic Flu Plan	Yes
Post-Disaster Recovery Plan	No
Sewer/Wastewater Comprehensive Plan	Yes
Storm Comprehensive Plan	No
Water Comprehensive Plan	No
Regional Capabilities	
Local and Regional Emergency Exercises – All Types	Yes

Fiscal Capability

Table 3-5 Fiscal Capability

Fiscal Tools (Taxes, Bonds, Fees, and Funds)	Yes or No
<u>Jurisdiction Capabilities</u>	
TAXES:	
Authority to Levy Taxes	Yes
BONDS:	
Authority to Issue Bonds	Yes
FEES:	
Fees for Water, Sewer, Gas or Electric Service	Yes
Impact Fees for Homebuyers/Developers for New Developments/Homes	Yes
Local Improvement District (LID)	Yes
FUNDS:	
Capital Improvement Project Funds	Yes
Enterprise Funds	No
General Government Fund (Departments)	No
Internal Service Funds	No
Special Revenue Funds	No
Withhold Spending in Hazard-Prone Areas	Yes
<u>Regional Capabilities</u>	
Pierce County Land Conservancy	No
Cascade Land Conservancy	No

Specific Capabilities

Table 3-6 Specific Capabilities

Jurisdiction Specific Capabilities	
<u>Legal & Regulatory</u>	
<u>Administrative & Technical</u>	
Edgemont Parent Teacher's Association	
Edgewood Parks Board	
Emergency Management Tabletop Exercises	
Edgewood Newsletter	
<u>Fiscal</u>	

Section 4

Risk Assessment Requirements

Identifying Hazards--- Requirement §201.6(c)(2)(i):

[The risk assessment **shall** include a] description of the type ... of all natural hazards that can affect the jurisdiction.

- Does the new or updated plan include a **description** of the types of **all natural hazards** that affect the jurisdiction?

Profiling Hazards---Requirement §201.6(c)(2)(i):

[The risk assessment **shall** include a] description of the ... location and extent of all natural hazards that can affect the jurisdiction. The plan **shall** include information on previous occurrences of hazard events and on the probability of future hazard events.

- Does the risk assessment identify (i.e., geographic area affected) of each hazard being addressed in the new or updated plan?
- Does the risk assessment identify the extent (i.e., magnitude or severity) of each hazard addressed in the new or updated plan?
- Does the plan provide information on previous occurrences of each hazard addressed in the new or updated plan?
- Does the plan include the probability of future events (i.e., chance of occurrence) for each hazard addressed in the new or updated plan?

Assessing Vulnerability: Overview---Requirement §201.6(c)(2) (ii):

[The risk assessment **shall** include a] description of the jurisdiction's vulnerability to the hazards described in paragraph (c)(2)(i) of this section. This description **shall** include an overall summary of each hazard and its impact on the community.

- Does the new or updated plan include an overall summary description of the jurisdiction's vulnerability to each hazard?
- Does the new or updated plan address the impacts of each hazard on the jurisdiction?

Assessing Vulnerability: Addressing Repetitive Loss Properties---Requirement §201.6(c)(2) (ii):

[The risk assessment] **must** also address the National Flood Insurance Program (NFIP) insured structures that have been repetitively damaged by floods.

- Does the new or updated plan describe vulnerability in terms of the types and numbers of repetitive loss properties located in the identified hazard areas?

Assessing Vulnerability: Identifying Structures---Requirement §201.6(c)(2) (ii)(A):

The plan **should** describe vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard areas...

- Does the new or updated plan describe vulnerability in terms of the types and numbers of existing buildings, infrastructure, and critical facilities located in the identified hazard areas?
- Does the new or updated plan describe vulnerability in terms of the types and numbers of future buildings, infrastructure, and critical facilities located in the identified hazard areas?

Assessing Vulnerability: Estimating Potential Losses---Requirement §201.6(c)(2) (ii)(B):

[The plan **should** describe vulnerability in terms of an] estimate of the potential dollar losses to vulnerable structures identified in paragraph (c)(2)(ii)(A) of this section and a description of the methodology used to prepare the estimate...

- Does the new or updated plan estimate potential dollar losses for vulnerable structures?
- Does the new or updated plan describe the methodology used to prepare the estimate?

Assessing Vulnerability: Analyzing Development Trends---Requirement §201.6(c)(2) (ii)(c):

[The plan **should** describe vulnerability in terms of] providing a general description of land uses and development trends within the community so that mitigation options can be considered in future land use decisions.

- Does the new or updated plan describe land uses and development trends?

SECTION 4

**REGION 5 ALL HAZARD MITIGATION PLAN
2020-2025 EDITION
CITY OF EDGEWOOD
RISK ASSESSMENT SECTION**

Table of Contents

RISK ASSESSMENT REQUIREMENTS 1

TABLE OF CONTENTS 3

VULNERABILITY AND HAZARD IMPACT ANALYSIS 5

 IDENTIFIED HAZARDS AFFECTING THE CITY OF EDGEWOOD5

 METEOROLOGICAL6

 TECHNOLOGICAL7

CHANGES IN DEVELOPMENT 7

**CITY OF EDGEWOOD HAZARD MAPS AND OVERVIEW OF DATA SOURCE
DESCRIPTIONS 14**

 REGULATED FLOODPLAIN14

 LANDSLIDE SUSCEPTIBILITY - DEEP15

 LANDSLIDE SUSCEPTIBILITY - SHALLOW16

 LIQUEFACTION POTENTIAL16

 VOLCANIC – LAHAR18

 HAZARDOUS MATERIAL18

 TRANSPORTATION ACCIDENTS / INCIDENTS.....19

 DROUGHT, SEVERE WEATHER, CIVIL DISTURBANCE, ENERGY EMERGENCY, EPIDEMIC, AND TERRORISM.....19

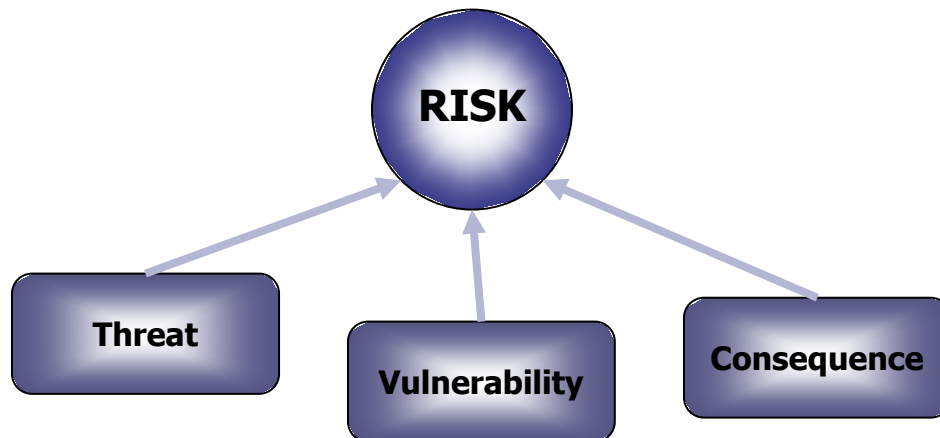
 VULNERABILITY ANALYSIS DATA19

VULNERABILITY ANALYSIS 31

ENDNOTES 39

Section Overview

The Risk Assessment portrays the threats of natural hazards, the vulnerabilities of a jurisdiction to the hazards, and the consequences of hazards impacting communities. Each hazard is addressed as a threat and is identified and profiled in the Hazard Identification. The vulnerabilities to and consequences of a given hazard are addressed in the Vulnerability Analysis. Vulnerability is analyzed in terms of exposure of both population and infrastructure to each hazard. Consequences are identified as anticipated, predicted, or documented impacts caused by a given hazard when considering the vulnerability analysis and the characteristics of the hazard as outlined in its identification.



The WA Region 5 **Hazard Identification** was used for this plan. Each jurisdiction's Vulnerability and Consequence Analysis are based on the Region 5 Hazard Identification. The Region 5 Hazard Identification can be found in the Base Plan. Each hazard is identified in subsections. The subsections are grouped by hazard-type (i.e., geological, meteorological, and technological hazards) and then alphabetically within each type. A summary table of the WA Region 5 Hazard Identification is included in this section as Table 4-1a, Table 4-1b, and Table 4-1c.

The **Vulnerability Analysis** is displayed in these six tables:

- Table 4-2 General Exposure
- Table 4-3 Population Exposure
- Table 4-4 General Infrastructure Exposure
- Table 4-5a Consequence Analysis Chart – Geological
- Table 4-5b Consequence Analysis Chart – Meteorological
- Table 4-5c Consequence Analysis Chart – Technological

Each jurisdiction has its own Vulnerability Analysis, and it is included in this section.

The **Consequence Identification** is organized by Threat. Each threat page summarizes the hazard, graphically illustrates exposures from the Vulnerability Analysis, and lists corresponding Consequences. Each jurisdiction has its own Consequence Identification and it is included in this section: avalanche, earthquake, landslide, tsunami, volcanic, drought, flood, severe weather, wildland/urban interface fire, abandoned mines, civil disturbance, dam failure, energy

emergency, epidemic, hazardous materials, pipeline, terrorism / active threat, and transportation accident.

Specific information and analysis of the City of Edgewood's owned (public) infrastructure is addressed in the Infrastructure Section of its Plan.

Vulnerability and Hazard Impact Analysis

Identified Hazards Affecting the City of Edgewood

Through the Mitigation, Hazard Identification Risk Assessment (HIRA) and Comprehensive Emergency Management Plan (CEMP) planning processes, the City of Edgewood has identified seven major hazards that significantly affect the region. These hazards were chosen based on multiple criteria including high frequency and potential impact. The most common hazards are earthquake, flood, winter/severe storms, volcano eruption/lahar, hazardous materials, and terrorism / active threat / attack tactics¹. They have been identified in all three plans and the likelihood of (re)occurrence and potential damage to life and property is illustrated. Additionally, certain man-made hazards such as fire, hazmat, and terrorism have been accounted for in the mitigation strategies and can be found in Section 5 of this plan.

The City of Edgewood sits atop a small plateau at an altitude of approximately three hundred fifty feet. A great portion of the population and its buildings are situated above sea level with many residential areas constructed atop steep hills in order to maximize the views provided by the elevated location. Overlooking the valleys below, the eastern and southern edges of the city face Mt. Rainier. The western side of the city, also elevated, looks towards the Puyallup River Delta and the Port of Tacoma on Commencement Bay. In other words, the geography of Edgewood indicates the obvious vulnerabilities facing the city.

Geological:

- Earthquake
- Landslide
- Volcanic

Meteorological:

- Flood
- Severe Weather

Technological:

- Hazardous Materials
- Terrorism / Active Threat / Attack Tactics

Geological

Earthquake

The two main geological threats to the city are, Earthquakes and Landslides. Historical records indicate earthquakes occur in the area approximately every 40 years or less with “intraplate” quakes occurring about every 23 years. In 2001, three quakes were recorded with magnitudes between 4.3 and 6.8.

Landslide

As previously mentioned, the eastern, southern, and western sides of the city are atop steep hills with a small percentage of the population living at the base of the hillsides. Landslides have been recorded throughout areas of the city temporarily blocking traffic and transportation on 25th Street, Jovita Blvd, Chrisella Road, and Meridian. In 1997, a landslide on Caldwell Road ultimately led to a permanent closure of the road removing one route into and out of the city. Fortunately, there have been no reported injuries caused by any of the slides but there has been some minor property damage. Of great concern is the potential for a large landslide similar to Landslide SR 530 slide in 2014.

Volcanic

Finally, due to the fact the City of Edgewood is part of designated evacuation routes from the valley floor, Edgewood will be impacted should there be a volcanic eruption, a lahar, or tsunami. People fleeing from potential pyroclastic flows or incoming ocean waters, will race up the hills of Edgewood. Dealing with a mass influx of citizens who may have just lost all their belongings will take a toll on the city and its residents as well.

Meteorological

Flood

Globally speaking, it seems the climates throughout the world are changing. Extended periods of drought, torrential flooding, earlier, later, longer and stronger storm seasons, heavy snowfalls or no snow at all, seem to be concerns shared across the nation and the world. The City of Edgewood is no different and is subject to this climate change too. Meteorological Hazards are an ever-present threat to Edgewood. However, the most common reoccurring threat we tend to see relates to storms and flooding. Roughly 35% of the city is tributary to closed depressions throughout our borders. Water pools without anywhere for it to go. There are no streams, creeks, or drainage systems to remove the water from these areas. As a result, rains create flooded areas and heavy or excessive precipitation quickly increase the amount of flooding to the surrounding properties. Valley flooding, from swollen creeks and rivers can also impact a small percentage of properties on the lower, southwestern edge of the city too.

Severe Weather

Severe storms, whether they are just wind, rain, snow, and/or ice impact the city with downed trees, toppled power systems, debris slides, and closed roads. Traffic and transportation through the city can be impacted heavily as a result. With limited ingress and egress routes to and from the city, getting help into or out of the city can be a challenge.

Technological

Hazardous Materials

The US Department of Transportation (DOT) collects data on hazardous materials incidents occurring in the US during transportation.

No significant incidents have occurred within the City of Edgewood although it is within the main thoroughfares of the larger urban areas of Pierce and King Counties, thus dangerous materials are frequently passing through the city. There is a railroad that touches the city's southern line with three points that intersect with major transportation routes: SR 161, SR 167, and Valley Ave E.

Fixed locations are the most frequent for accidents, but the transportation accidents are often riskier because they happen in uncontained spaces. They can be in close proximity to people and responders who usually have less information about the materials involved.

Areas up to one-half mile downwind from an accident site are considered vulnerable, according to US DOT. An incident could affect thousands of people in Edgewood.

Other hazards, such as earthquakes and landslides could produce hazardous material incidents.

Terrorism and Active Threat / Attack Tactics

Attacks can be perpetrated by many different actors with different motivations, such as terrorists, violent extremists, the mentally ill, and targeted violent offenders. All use violent attack tactics to harm people and/or property. Attack tactics can include active shooter, bombings, arson, murder, kidnapping, and vehicle ramming.

Incidents of terrorism and active threats have increased in the United States. In 2019 Edgewood experienced an active shooter threat at the junior high school and in addition a resident of Edgewood was charged with threatening to shoot up a school in Anacortes, WA.

Edgewood's greatest threat probably comes from a school shooting type incident. Our police department trains regularly for this type of incident.

Changes in Development

The City of Edgewood incorporated in 1996 and has slowly grown through the years. However, since the completion of the sewer system through the Meridian corridor, around the 2010 census, the city has grown nearly 21%. Approximately 17% of that growth has occurred in just the last three years. While there has been a small increase in the number of commercial properties and

businesses in the city, the greatest growth has been in the development of residential and multi-family properties. In the past five years, five multi-family housing development projects with approximately 788 housing units have been added to the city. There have also been 18 approved residential land division projects which have created 464 new buildable lots. Currently, there are still 27 division projects in process which means the city may soon have an additional 425 buildable lots. The residential population is growing rapidly in the city and the potential for more growth appears inevitable.

The City of Edgewood adopted FEMA's most current flood maps in the first quarter of 2017. Along with the adoption of the maps, the City updated Title 14 of the Edgewood Municipal Code which established more control over the development on the valley floor. The City continues to work with landowners to establish Base Flood Elevation (BFE) for the closed depressional areas with the adoption of the Critical Areas Ordinance in 2018.

As development continues and more people are moving into the City of Edgewood, the risk of identified hazards impacting the population continues to increase as well. The City of Edgewood continues to monitor its infrastructure, incorporates elements of the mitigation plan into existing plans and ordinances and is evaluating and re-evaluating mitigation strategies as time and resources allow.

Table 4-1a WA Region 5 Hazard Identification: Summary – Geological

HAZARD		DECLARATION # DATE/PLACE	PROBABILITY/ RECURRENCE	MAPS, FIGURES AND TABLES
<u>Geological</u>	<u>AVALANCHE</u>	Not Applicable	Yearly in the mountainous areas of the County including Mt. Rainier National Park and the Cascades.	Slab Avalanche Areas Vulnerable to Avalanche Pierce County Avalanches of Record
	<u>EARTHQUAKE</u>	N/A--7/22/2001 Nisqually Delta N/A--6/10/2001 Satsop DR-1361-WA--2/2001 Nisqually N/A--7/2/1999 Satsop DR-196-WA--4/29/1965 Maury Island, South Puget Sound N/A--4/13/1949 South Puget Sound N/A--2/14/1946 Maury Island	40 years or less occurrence Historical record—about every 23 years for intraplate earthquakes.	Types of Earthquakes Major Faults in the Puget Sound Basin Seattle and Tacoma Fault Segments Pierce County Seismic Hazard Major Pacific Northwest Earthquakes Notable Earthquakes Felt in Pierce County Salmon Beach, Tacoma Washington following Feb 2001 Earthquake Liquefaction Niigata Japan-1964 Lateral Spreading – March 2001
	<u>LANDSLIDE</u>	DR-1671-WA--2006 DR-1361-WA--2001 DR-1159-WA--12/96-2/1997 DR-852-WA--1/1990 DR-545-WA--12/1977 State proclamations: 17-08 –05/18/2017 SR 410	Slides with minor impact (damage to five or less developed properties or \$1,000,000 or less damage) 10 years or less. Slides with significant impact (damage to six or more developed properties or \$1,000,000 or greater damage) 100 years or less.	Northeast Tacoma Landslide January 2007 Pierce County Landslide Deposits, Scarps and Flanks, and Susceptibility Landslide Facts for Pierce County – Shallow Landslide Susceptibility Pierce County Deep Landslide Hazard Area Pierce County Shallow Landslide Hazard Area Pierce County Slope Stability Areas Pierce County Comparison of Landslide Susceptible Areas Notable Landslides in Pierce County Ski Park Road – Landslide January 2003 SR-165 Bridge Along Carbon River – Landslide February 1996 Aldercrest Drive – Landslide
	<u>TSUNAMI</u>	N/A--A.D. 900 Seattle Fault EQ Sourced Tsunami N/A--1894 Puyallup River Delta N/A--1949 Tacoma Narrows	Due to the limited historic record, until further research can provide a better estimate a recurrence rate of plus or minus 100-200 years will be used.	Hawaii 1957 – Residents Explore Ocean Floor Before Tsunami Hawaii 1949 – Wave Overtakes a Seawall Tsunamis in Washington State Tsunami Inundation and Current Based on Earthquake Scenario Notable Tsunamis in Pierce County Salmon Beach, Pierce County 1949 – Tsunamigenic Subaerial Landslide Salmon Beach, Pierce County 1949 – Tsunamigenic Subaerial Landslide Damage in Tacoma from 1894 Tsunami
	<u>VOLCANIC</u>	DR-623-WA--5/1980	The recurrence rate for either a major lahar (Case I or Case II) or a major tephra eruption is 500 to 1000 years. The recurrence rate for either a major lahar (Case I or Case II) or a major tephra eruption is 500 to 1000 years.	Volcano Hazards Tephra Types and Sizes Lahars, Lava Flows and Pyroclastic Hazards of Mt. Rainier Estimated Lahar Travel Times for Lahars 10 ⁷ to 10 ⁸ Cubic Meters in Volume Pierce County Eruptive Events and Lahars

Table 4-1b WA Region 5 Hazard Identification: Summary – Meteorological

HAZARD		DECLARATION # DATE/PLACE	PROBABILITY/ RECURRENCE	MAPS, FIGURES AND TABLES
<u>Meteorological</u>	<u>CLIMATE CHANGE</u>	Not Applicable	Not Applicable	IPCC Models on Global Temperature Change: 1900 to 2100 Recent and Projected Temperatures for the Pacific Northwest Puget Sound Projected Warming Puget Sound Projected Precipitation Change Projected Decline in Snowpack Projected Sea Level Risk – Tacoma Sea Level Rise Inundation Area in 2100 Tacoma Tideflats Climate Impacts and Natural Hazards Comparison of the South Cascade Glacier: 1928 to 2003 Lower Nisqually Glacier Retreat: 1912 to 2001
	<u>DROUGHT</u>	Many dry seasons but no declarations State proclamations: 18-05--7/31/2018	50 years or less occurrence	Sequence of Drought Impacts Palmer Drought Severity Index Pierce County Watersheds %Area of Basin in Drought Conditions Since 1895 %Time in Severe to Extreme Drought: 1895-2004 %Time in Severe to Extreme Drought: 1985-1995 Notable Droughts Affecting Pierce County Columbia River Basin USDA Climate Zones – Washington State
	<u>FLOOD</u>	DR-WA 1817--01/2009 DR-1734-WA--12/2007 DR-1671-WA--11/2006 DR-1499-WA--10/2003 DR-1159-WA--12/96-2/97 DR-1100-WA--1-2/1996 DR-1079-WA--11-12/1995 DR-896-WA--12/1990 DR-883-WA--11/1990 DR-852-WA--1/1990 DR-784-WA--11/1986 DR-545-WA--12/1977 DR-492-WA--12/1975 DR-328-WA--2/1972 DR-185-WA--12/1964	5 years or less occurrence Best available science--the frequency of the repetitive loss claims indicates there is approximately a 33 percent chance of flooding occurring each year.	Lower Puyallup River Historical Flooding in Lower Puyallup River Levees and Revetments in the Lower Puyallup River Summary of Damages to Lower Puyallup River Facilities Middle Puyallup River Historical Flooding in Middle Puyallup River Levees and Revetments in the Middle Puyallup River Summary of Damages to Lower Middle River Facilities Upper Puyallup River Historical Flooding in Upper Puyallup River Levees and Revetments in the Upper Puyallup River Summary of Damages to Upper Puyallup River Facilities Lower White River Historical Flooding in Lower White River Levees and Revetments in the Lower White River Summary of Damages to Lower White River Facilities Upper White River Historical Flooding in Upper White River Levees and Revetments in the Upper White River Summary of Damages to Upper White River Facilities Greenwater River Historical Flooding in Greenwater River Carbon River Historical Flooding in Carbon River South Prairie Creek Historical Flooding in South Prairie Creek Middle Nisqually River Historical Flooding in Middle Nisqually River Upper Nisqually River Historical Flooding in Upper Nisqually River

<u>Meteorological</u>				Levees and Revetments in the Upper Nisqually River Summary of Damages to Upper Nisqually River Facilities Mashel River Historical Flooding in Mashel River Nov 2006 Flooding River Park Estates – Along Puyallup River
	<u>SEVERE WEATHER</u>	DR-4056-WA – 01/2012 DR-1825- WA – 12/2008 – 01/2009 DR-1682-WA--12/2006 DR-1159-WA--12/96-2/1997 DR-1152-WA--11/19/1996 DR-981-WA--1/1993 Inauguration Day Storm DR-137-WA--10/1962 Columbus Day Storm State proclamations: 19-06--02/15/2019 (Dec. 2018 Winter Storm) 19-05--02/14/2019 Winter Storm Maya 17-08--5/18/2017 Severe rain 17-03--3/14/2017 17-02--1/19/2017 Winter Storm 15-18--12/24/2015 Windstorms and Flooding	The recurrence rate for all types of severe storms is 5 years or less.	Fujita Tornado Damage Scale Windstorm Tracks Pierce County Severe Weather Wind Hazard – South Wind Event Pierce County Severe Weather Wind Hazard – Enumclaw East Wind Event Notable Severe Weather in Pierce County Snowstorm January 2004 Downtown Tacoma Satellite Image – Hanukkah Eve Windstorm Before/After Tornado Damage Greensburg KS May 2007 County Road December 2006 Windstorm Tacoma Narrows Bridge – November 1940 Windstorm
	<u>WUI FIRE</u>	EM-3372-WA Aug-Sept. 2015 State proclamations: 17-12--9/2/2017 Norse Peak Fire 15-11--6/26/2015	Based on information from WA DNR the probability of recurrence for WUI fire hazard to Pierce County is 5 years or less.	Washington State Fire Hazard Map Pierce County Forest Canopy Industrial Fire Precaution Level Shutdown Zones Carbon Copy Fire August 2006 Washington State DNR Wildland Fire Statistics: 1973-2007 DNR Wildland Response South Puget Sound Region: 2002-2007 Pierce County DNR Fires

Table 4-2c WA Region 5 Hazard Identification Summary – Technological

HAZARD		DECLARATION # DATE/PLACE	PROBABILITY/ RECURRENCE	MAPS, FIGURES AND TABLES
<i>Technological</i>	<u>ABANDONED MINES</u>	Not Applicable	Based on information from WA DNR. The Pierce County Sheriff's Department reports that they have had very few incidents of citizens entering the abandoned mines in east Pierce Co. Isolated issues of minor subsidence have occurred, typically following flood events i.e. 2009/2010.	Pierce County – Mine Hazard Areas Map Based on WA DNR Information Schasse, Koler, Eberle, and Christie, <u>The Washington State Coal Mine Map Collection: A Catalog, Index, and User's Guide</u> , Open File Report 94-7, June 1984 Pierce County 2014 HIRA
	<u>CIVIL DISTURBANCE</u>	Not Applicable	In the past 150 + years there have been eleven major incidents giving a recurrence rate of every seven years.	Pierce County Civil Disturbance High Probability Locations Map Pierce County Civil Disturbance High Probability Locations Zoomed In Map
	<u>DAM FAILURE</u>	Not Applicable	No occurrences in Pierce County 50+ years recurrence for WA State	Reasons for Dam Failures Nationally PC Dams that Pose a High or Significant Risk to the Public Pierce County High and Significant Risk Dams Dam Failures in WA State Mud Mt. Dam Intake
	<u>ENERGY EMERGENCY</u>	Not Applicable	Power outages are the most frequent energy incident, via natural hazards (storms, ice) Recurrence rate – every five years (storms) Recurrence rate – 50+ years (major)	Tacoma Power Outage 1929, USS Lexington provides power
	<u>EPIDEMIC / PANDEMIC</u>	EM-3507-WA 03/12/2020	Epidemic: <ul style="list-style-type: none"> 1976-2014 Ebola outbreaks Flu occurs annually Pandemics: <ul style="list-style-type: none"> 2009-2010 "Swine Flu" recurrence rate – 20 years 	Individuals hoping to avoid contacting disease
	<u>HAZARDOUS MATERIALS</u>	Not Applicable	<ul style="list-style-type: none"> Dalco Passage oil spill of October 13, 2004 Chlorine Spill Port of Tacoma February 12, 2007 Large incidents five-year recurrence Small incidents one-week recurrence	List of constituents or ingredients found in Bakken crude oil Environmental Protection Agency's Identified Top Five Facilities Exxon Valdez Oil Spill, 1989 Pierce County Spill data from May 2018 to May 2019 Dalco Passage oil spill (October 13, 2004)
	<u>PIPELINE FAILURE</u>	Not Applicable	<ul style="list-style-type: none"> Northwest Pipeline Corporation natural gas incident May 1st, 2003, in Sumner 10 years recurrence	Cities and Towns with interstate pipelines within, or within 1 mile of city limits Olympic Pipeline Rupture 06/10/99 Pierce County Pipelines Whatcom Falls Park, 2003
	<u>TERRORISM ACTIVE THREAT CYBER ATTACK</u>	Not Applicable	Minor incident – recurrence 1-year Major Incident – recurrence 10 years	250 Active Shooter Incidents in the U.S. from 2000-2017: Incidents per year 250 Active Shooter Incidents in the U.S. from 2000-2017: Casualty Breakdown per year 250 Active Shooter Incidents in the U.S. from 2000-2017: Location Categories Occurrences in the Puget Sound

	<u>TRANSPORTATION</u> <u>ACCIDENT</u>	Not Applicable State proclamations: 17-13--12/18/2017 Amtrak derailment 15-05--4/16/2015 SR 410 Bridge 15-04--3/11/15 Damage to I-5 Overpass	Minor incidents – recurrence daily Major incidents - recurrence 10 years	Airports in Pierce County Ferry Services in Pierce County Transportation Accidents/Catastrophic Failures in Pierce County
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City of Edgewood Hazard Maps and Overview of Data Source Descriptions

Regulated Floodplain²

Summary:

The flood hazard map delineates the flood hazard risk of the City of Edgewood. This map uses the new FEMA Flood Insurance Study (FIS) and Digital Flood Insurance Rate Map (DFIRM) for Pierce County, Washington and Incorporated Areas effective on March 7, 2017. These mapping products replace the FIS & FIRM issued to Unincorporated Pierce County in 1987 and the other incorporated communities between 1980 and 1985. The new DFIRM is a seamless countywide product adopted by every community participating in the National Flood Insurance Program (NFIP).

The intended purposes of this data are to support the National Flood Insurance Program so that flood insurance policies can be written for any qualifying structure in the community. In areas identified as Special Flood Hazard Areas (SFHA), a structure with a federally backed loan is required to purchase flood insurance. SFHA are designated as Zones beginning with the letter A or V (e.g. AE, AH and VE). Areas of moderate risk or areas suspected to be at risk of flooding but where no detailed flood study has been completed are shown as Zone X (Shaded). It is also to inform development in or near flood hazard areas so that new construction and redevelopment meets the purposes of the flood hazards areas described in Pierce County Code Title 18E.70.

Description:

The DFIRM is a composite of several flood studies, some dating back to the 1970s and as recent as 2016 that represent the best available date at the production deadline. The exception to this is the "secluded areas" that are near significant levees that effect the floodplain do not meet the federal standard (44 Code of Federal Regulations 65.10) to show an area protected by the levee. The secluded areas, in the lower Puyallup River and the Carbon River and Puyallup River near the City of Orting, continue to show the understanding of risk prior to the establishment of 44CFR65.10 as shown on the first FIRM. There are more recent hydraulic studies that show a better understanding of flood risk and Unincorporated Pierce County regulates to this better data which has been added to the Regulated Floodplain 2017 feature class. In areas where the regulated flood hazard varies from the DFIRM there are attributions indicating a different "insurance zone" or "insurance BFE".

The Digital Flood Insurance Rate Map (DFIRM) Database depicts flood risk information and supporting data used to develop the risk data. The primary risk classifications used are the 1-percent-annual-chance flood event, the 0.2-percent-annual- chance flood event, and areas of minimal flood risk. The DFIRM Database is derived from Flood Insurance Studies (FISs), previously published Flood Insurance Rate Maps (FIRMs), and flood hazard analyses performed in support of the FISs and FIRMs, and new mapping data, where available. The FISs and FIRMs are published by the Federal Emergency Management Agency (FEMA).

The FIRM is the basis for floodplain management, mitigation, and insurance activities for the National Flood Insurance Program (NFIP). Insurance applications include enforcement of the

mandatory purchase requirement of the Flood Disaster Protection Act, which "... requires the purchase of flood insurance by property owners who are being assisted by Federal programs or by Federally supervised, regulated or insured agencies or institutions in the acquisition or improvement of land facilities located or to be located in identified areas having special flood hazards, " Section 2 (b) (4) of the Flood Disaster Protection Act of 1973. In addition to the identification of Special Flood Hazard Areas (SFHAs), the risk zones shown on the FIRMs are the basis for the establishment of premium rates for flood coverage offered through the NFIP. The DFIRM Database presents the flood risk information depicted on the FIRM in a digital format suitable for use in electronic mapping applications. The DFIRM database is a subset of the Digital FIS database that serves to archive the information collected during the FIS.

Updates:

The October 2019 update to the Regulated Floodplain 2017 shows the changed flood hazard areas modified by FEMA in two Letter of Map Revisions (LOMR).

Some coastal areas of Puget Sound were modified by LOMR 19-10-0588P that became effective 4/22/2019.

A new flood study of Deer Creek within the City of Puyallup modified the flood hazard areas with LOMR 18-10-0841P that became effective 4/4/2019.

Landslide Susceptibility - Deep³

Summary:

These data sets were produced to provide attribute and spatial information on deep-seated landslide susceptibility in Pierce County, by the Washington State Department of Natural Resources, Washington Division of Geology and Earth Resources (DGER). The goal of this data is to estimate the extent of deep-seated landslide susceptible areas. This data is only an estimate of deep-seated landslide susceptible areas and can occur outside of the bounds of these polygons. This data is nonregulatory and is intended for informational purposes. It may not be suitable for legal, engineering, forestry, or surveying purposes; but it is intended to assist planners, homeowners, regulators, and others by identifying areas to seek further geologic investigation before developing, or areas to avoid. Users of this information should consider their intended application, and review or consult the accompanying documentation, to determine the usability of the data for themselves.

Description:

This is a polygon feature class intended to estimate areas susceptible to deep-seated landslides. To create this susceptibility dataset a landslide inventory was first created by using the methods described in the report accompanying these data. The constructed landslide inventory was then used, along with other necessary datasets, to create this deep-seated landslide susceptibility dataset by following protocol from Special Paper 48 (Burns and Mickelson, 2016). This feature class is part of a larger landslide susceptibility dataset for Pierce County, Washington.

Use Limitations:

The Washington Division of Geology and Earth Resources (DGER) shall not be held liable for improper or incorrect use of the data described and/or contained herein. This product is provided

'as is' without warranty of any kind, either expressed or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular use. The Washington State Department of Natural Resources and the authors of this product will not be liable to the user of this product for any activity involving the product with respect to the following: (a) lost profits, lost savings, or any other consequential damages; (b) the fitness of the product for a particular purpose; or (c) use of the product or results obtained from use of the product. Although these data have been processed successfully on computers of DGER, no warranty, expressed or implied, is made by DGER regarding the use of these data on any other system, nor does the fact of distribution constitute or imply any such warranty.

Landslide Susceptibility - Shallow⁴

Summary:

These data sets were produced to provide attribute and spatial information on shallow landslide susceptibility in Pierce County, by the Washington State Department of Natural Resources, Washington Division of Geology and Earth Resources (DGER). The goal of this data is to estimate the extent of shallow landslide susceptible areas. This data is only an estimate of shallow landslide susceptible areas and can occur outside of the bounds of these polygons. This data is non-regulatory and is intended for informational purposes. It may not be suitable for legal, engineering, forestry, or surveying purposes; but it is intended to assist planners, homeowners, regulators, and others by identifying areas to seek further geologic investigation before developing, or areas to avoid. Users of this information should consider their intended application, and review or consult the accompanying documentation, to determine the usability of the data for themselves.

Description:

This is a polygon feature class intended to estimate areas susceptible to shallow landslides. To create this susceptibility dataset, the data listed in Special Paper 45 (Burns and others, 2012) as necessary data was obtained, and the Factor of Safety (FOS) portion of that protocol was followed. This feature class is part of a larger landslide susceptibility dataset for Pierce County, Washington.

Use Limitations:

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Liquefaction Potential⁵

Summary:

This is a subset of the original data clipped to Pierce County. The liquefaction susceptibility map details the risk potential throughout the City of Edgewood in a color gradient map.

The Washington State Department of Natural Resources, Division of Geology and Earth Resources received grant funding through the Hazard Mitigation Grant Program (HMGP) following the Nisqually earthquake of February 2001 (FEMA-1361-DRWA). This grant required the Division of Geology and Earth Resources to develop statewide liquefaction susceptibility and NEHRP (National Earthquake Hazards Reduction Program) site class maps.

Regional and local earthquake hazard maps such as these support hazard mitigation, emergency planning and response, planning of local zoning ordinances, and building code enforcement. The primary reason for producing this series of earthquake hazard maps is to support revisions to the State Hazard Mitigation Plan required in the implementation of final rules 44CFR201.4 and 44CFR201.6. These Federal code regulations require both state and local agencies to describe the location and extent of earthquake hazards that affect their jurisdictions. Additionally, these maps will serve a great variety of end-users that are crucial partners in earthquake hazard mitigation.

Description:

These data contain polygons that provide information regarding the relative liquefaction potential for Pierce County, Washington. This feature class is part of a geodatabase that contains statewide ground response data for Washington State. Liquefaction is a natural phenomenon in which saturated, sandy soils lose their strength and behave as liquid. Liquefaction is caused by severe ground shaking during earthquake events. Polygons are classified as having 'very low' to 'high' relative liquefaction susceptibility. Areas underlain by bedrock or peat are mapped separately as these earth materials are not liquefiable, although peat deposits may be subject to permanent ground deformation caused by earthquake shaking and require site-specific analysis under the International Building Code. Water and ice are also separately designated.

Use Limitations:

The Washington Division of Geology and Earth Resources (DGER) shall not be held liable for improper or incorrect use of the data described and/or contained herein. This product is provided 'as is' without warranty of any kind, either expressed or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular use. The Washington State Department of Natural Resources and the authors of this product will not be liable to the user of this product for any activity involving the product with respect to the following: (a) lost profits, lost savings, or any other consequential damages; (b) the fitness of the product for a particular purpose; or (c) use of the product or results obtained from use of the product. Although these data have been processed successfully on computers of DGER, no warranty, expressed or implied, is made by DGER regarding the use of these data on any other system, nor does the fact of distribution constitute or imply any such warranty. Appropriate use of these map data is the responsibility of each user. - Users must acknowledge the originators when using the data set as a source. - Data should not be used beyond the limits of the source scale. - The data set is not a survey document and should not be utilized as such. This map is meant only as a general guide to delineate areas prone to liquefaction. It is not a substitute for site-specific investigation to assess the potential for liquefaction for any development project. Because the data used in the

liquefaction susceptibility assessment have been subdivided based on regional geologic mapping, this map cannot be used to determine the presence or absence of liquefiable soils beneath any specific locality. This determination requires a site-specific geotechnical investigation performed by a qualified practitioner.

Volcanic – Lahar⁸

Summary

This volcanic hazard zone is intended for use by public and private agencies to view, overlay with other Geographic Information System (GIS) datasets, and make maps of volcanic hazards from potential future eruptions of Mount Rainier, Washington. It is critical to understand the nature of the boundaries of the volcanic hazard zones. Although arcs serve as boundaries of hazard zones, the degree of hazard does not change abruptly at these boundaries. Rather, a volcanic hazard decreases gradually with increased distance from the volcano and above the valley floor. These volcanic hazards also span a range of size and recurrence. The hazard zones delineated in this data set portray volcanic events believed most likely from future activity at Mount Rainier, Washington. Areas outside the hazard zones, especially those having low relief, should not be regarded as hazard-free. Too many uncertainties exist in source, size, and mobility of future events to locate boundaries of zero-hazard zones with confidence.

Description

This is a combined dataset of a Case I, Case II and Case III lahar scenario into one dataset and does not include a pyroclastic dataset. Please contact Washington Division of Geology and Earth Resources to obtain these datasets or more information. For the planning purposes and identification of lahar risk within jurisdictions, the Case I scenario dataset is used to identify the worst-case scenario potentially possible, although again, areas outside the hazard zones, especially those having low relief, should not be regarded as hazard-free.

This dataset contains inundation zones for Case I lahars which are defined as areas that could be affected by cohesive lahars that originate as enormous avalanches of weak, chemically altered rock from the volcano. Case I lahars can occur with or without eruptive activity. The average time interval between Case I lahars on Mount Rainier is about 500 to 1000 years.

Hazardous Material

The Hazardous Material map has outlined the main arterial routes, railroad lines, airports, marine ferry routes and Tier II sites for which the GIS spatial analysis was taken where there is the potential risk for hazardous materials to be located at any given time. A 2,500-foot buffer was placed around these identified areas, in accordance with the Emergency Response Guidebook (ERG) for potential contaminated zones. This zone does not go into detail of identifying 3 control zones during a hazmat incident. It is intended for general planning purposes only. If an actual incident were to occur instructions would be given by the Incident Commander on site and buffer zones would be determined by the type of hazardous material released. To reduce clutter and overlapping of data the 2,500-buffer zone was not included on the map, but data was analyzed from within those perimeters.

2017 Tier II Sites

The Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 was created to help communities plan for chemical emergencies. It also requires industry to report on the storage, use and releases of hazardous substances to federal, state, and local governments. EPCRA requires state and local governments, and Indian tribes to use this information to prepare for and protect their communities from potential risks. In 2017 Pierce County Emergency Management secured a project to identify reported 2017 Tier II Sites within Pierce County. These sites were mapped based on their geographical location of identified hazardous substances reported. There were only a couple of reported Tier II sites identified within the City of Edgewood.

Transportation Accidents / Incidents

The Transportation Accident map, like the Hazardous Material Map has also outlined the main arterial routes, railroad lines, airports, marine ferry routes for which the GIS spatial analysis was taken where there is the potential risk for transportation accidents/incidents to occur at any given time. A 2,500-foot buffer was placed around these identified areas also for potential hazard risks related to the accident/incident. It is intended for general planning purposes only. If an actual accident/incident were to occur instructions would be given by the Incident Commander on site and traffic control zones, barriers or alternate routes would be determined by the type of accident/incident. To reduce clutter and overlapping of data the 2,500-buffer zone was not included on the map, but data was analyzed from within those perimeters.

Drought, Severe Weather, Civil Disturbance, Energy Emergency, Epidemic, and Terrorism

Due to the nature of these potential natural and human-caused hazards occurring anywhere within Pierce County or within a local jurisdiction, their total boundary figures are used when calculating the risk factors. These numbers will match their Base number's and will show the percent risk at 100% on the Vulnerability Analysis Tables for General Exposure, Population Exposure and General Infrastructure Exposure.

Hazard maps are not created for each of these hazards and for reference the Base map is in Profile Section 2 of this Mitigation Plan.

Vulnerability Analysis Data

A vulnerability analysis was conducted on each hazard map to determine the General Exposure, Population Exposure, and general Infrastructure Exposure risk.

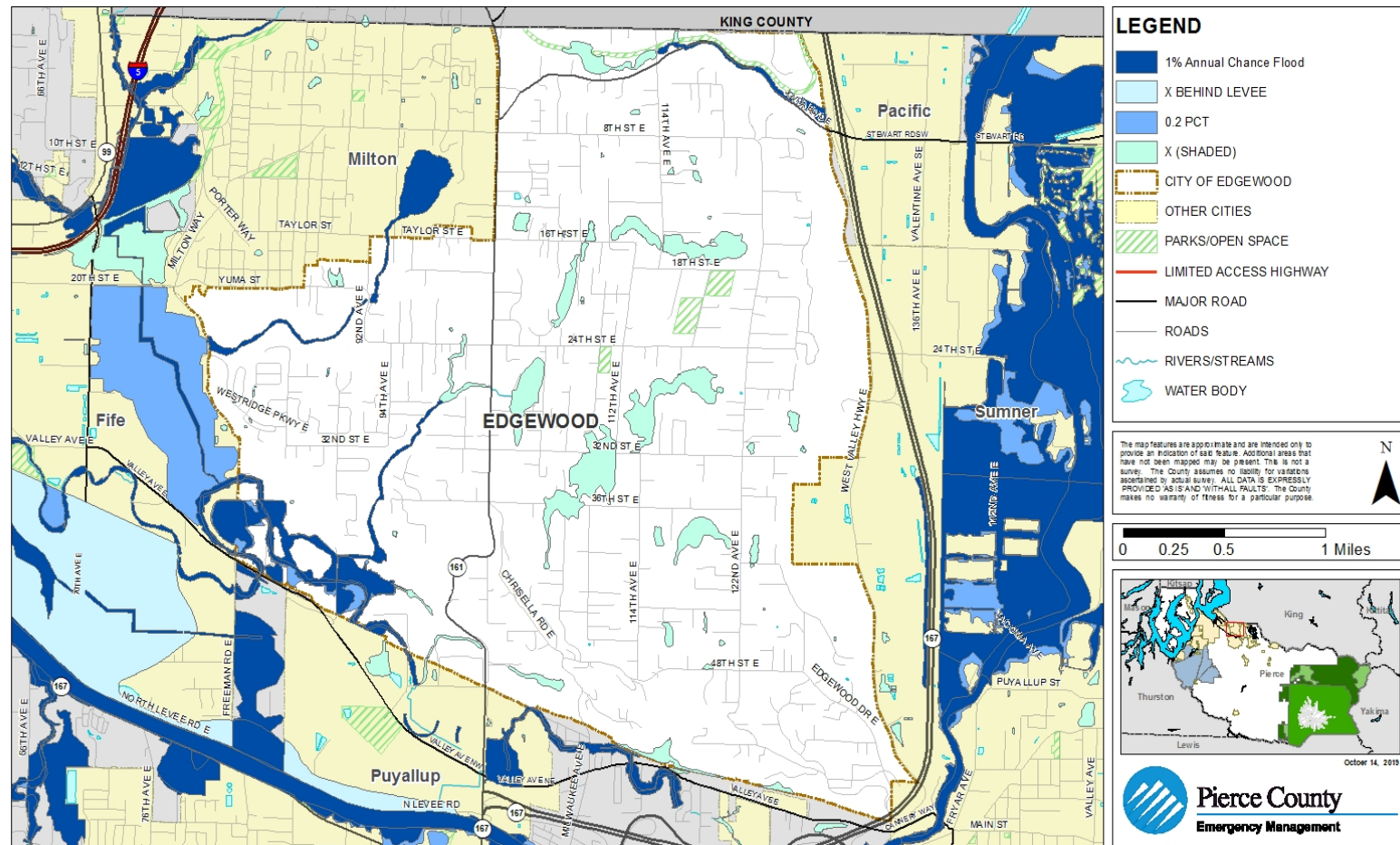
The Pierce County parcel geodatabase is derived from the Pierce County Assessor-Treasurer's Office and they edit and maintain their "parcel" geodatabases daily. The GIS polygon data includes condominium parcel information but does not include mobile home data. A "Total Base" value is determined for each jurisdiction based on their boundaries and then an analysis is performed to determine the risk percent of each hazard within those boundaries. The tax parcel geodatabase provides information for the square miles, parcels, land value, improved value and total assessed values for the analysis and is identified in Tables 4-3 and 4-4.

The original 2010 census data was downloaded by Pierce County GIS via the US Census Bureau server ftp and was available on October 14, 2011. All population base and hazard exposure data are derived from this dataset in determining the population exposure. At the current time with the mitigation plan updates this is the best available data that is county wide. As hazards do not have jurisdictional boundaries, a dataset is required that is county wide for analysis purposes. It is acknowledged that this population data is 10 years old and outdated and will be replaced within the plan once the 2020 census data becomes available sometime in 2021. Profile Section 2 provides a heading “Demographic Analysis” for jurisdictions to identify their current populations as best described by them.

The population density figures from Table 4-3 Vulnerability Analysis, Population Exposure calculate the total population density within each hazard area to identify the vulnerable population at risk. The population density is not calculated from the entire jurisdictional boundary.

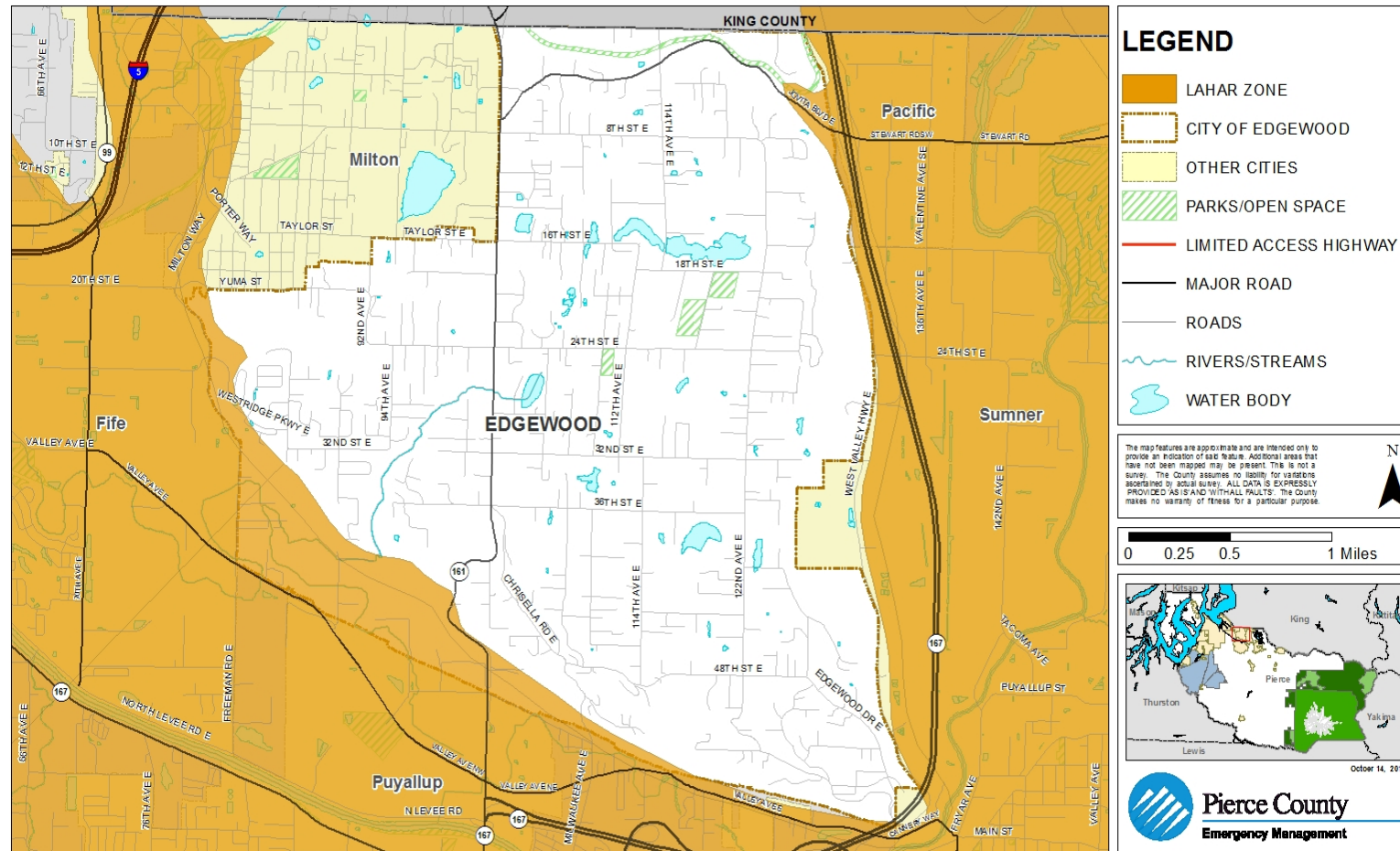
Map 4-1 City of Edgewood – Flood Hazard Map

CITY OF EDGEWOOD - FLOOD HAZARD AREA

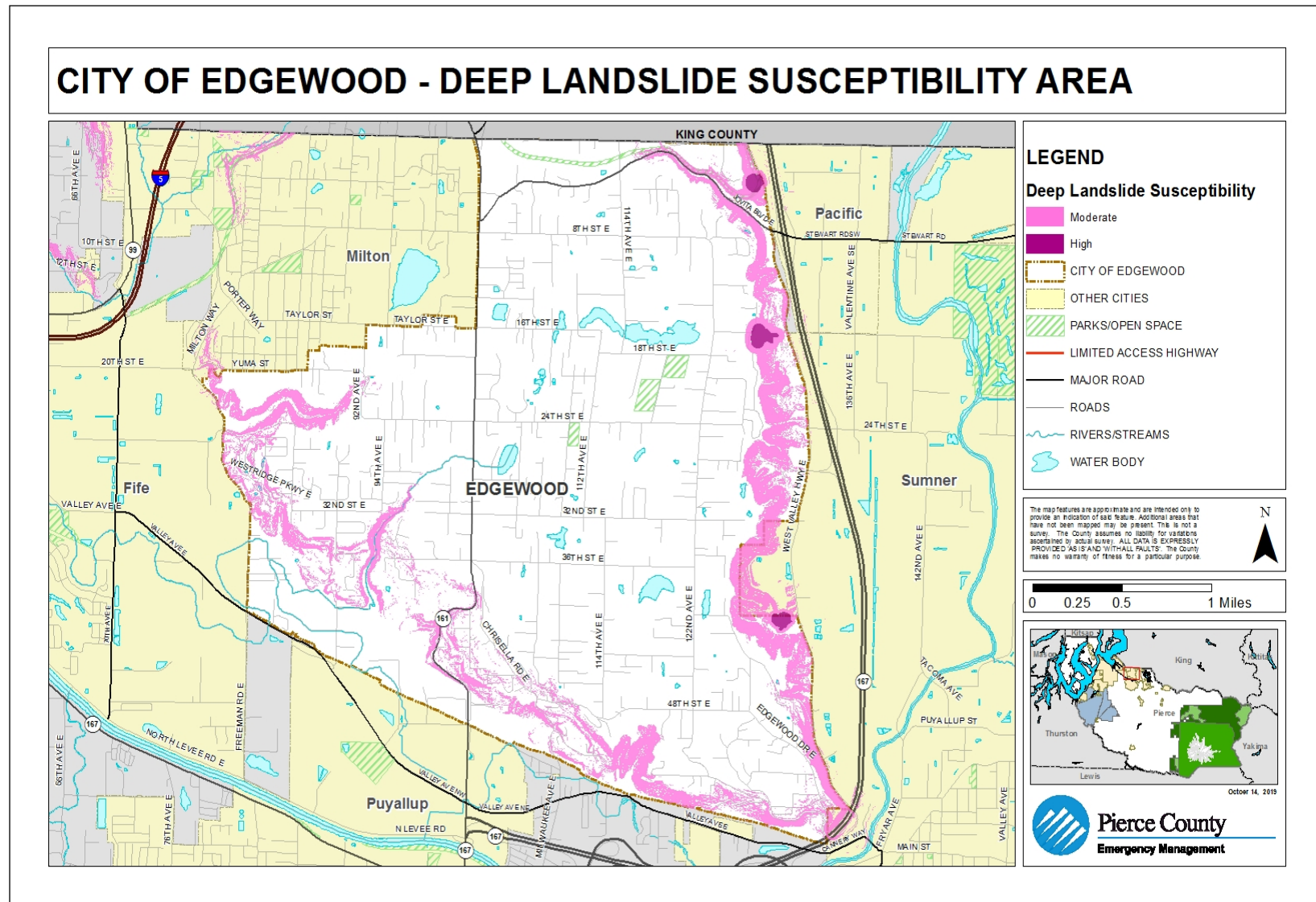


Map 4-2 City of Edgewood – Lahar Hazard Map

CITY OF EDGEWOOD - LAHAR HAZARD AREA

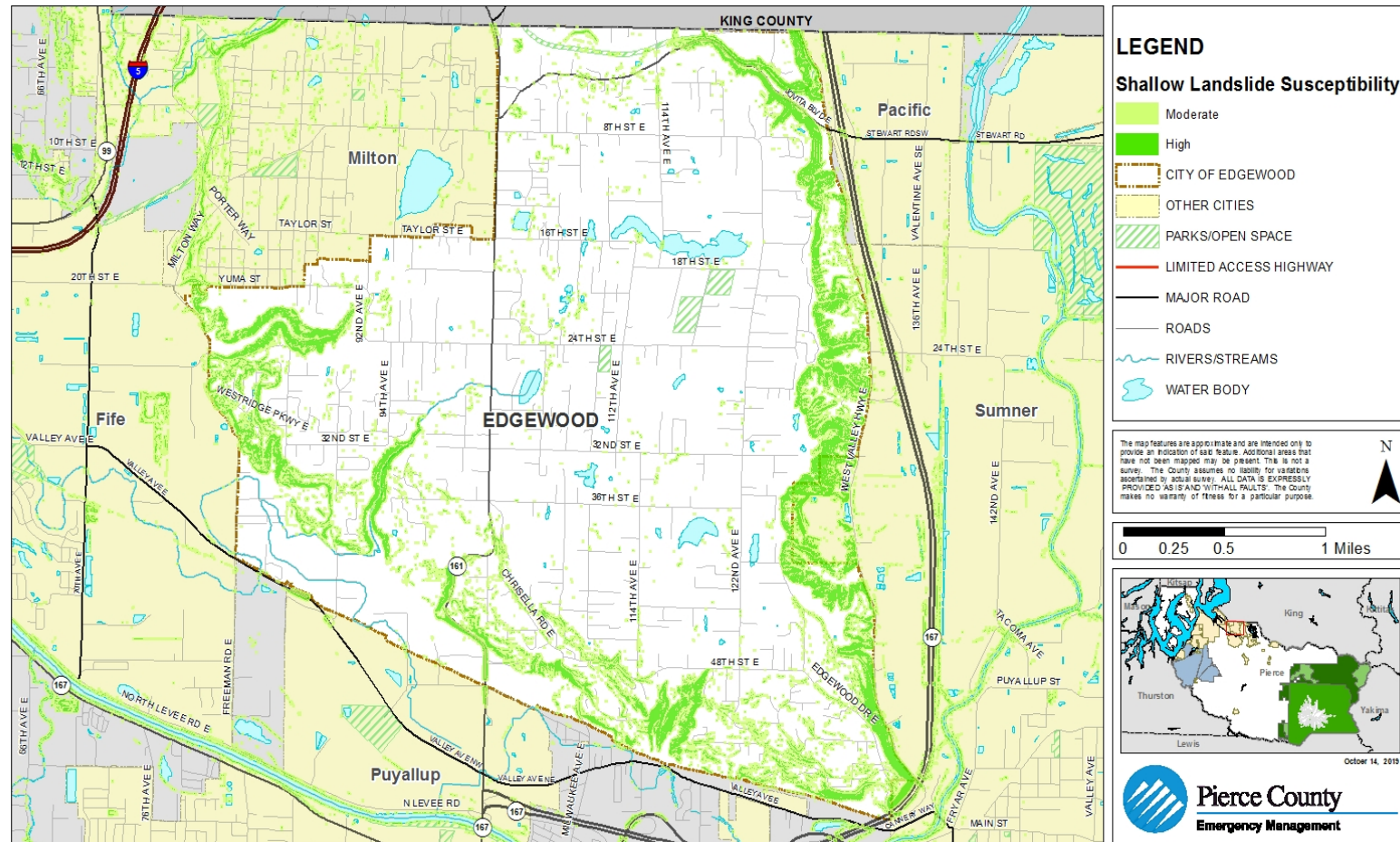


Map 4-3 City of Edgewood – Deep Landslide Hazard Map



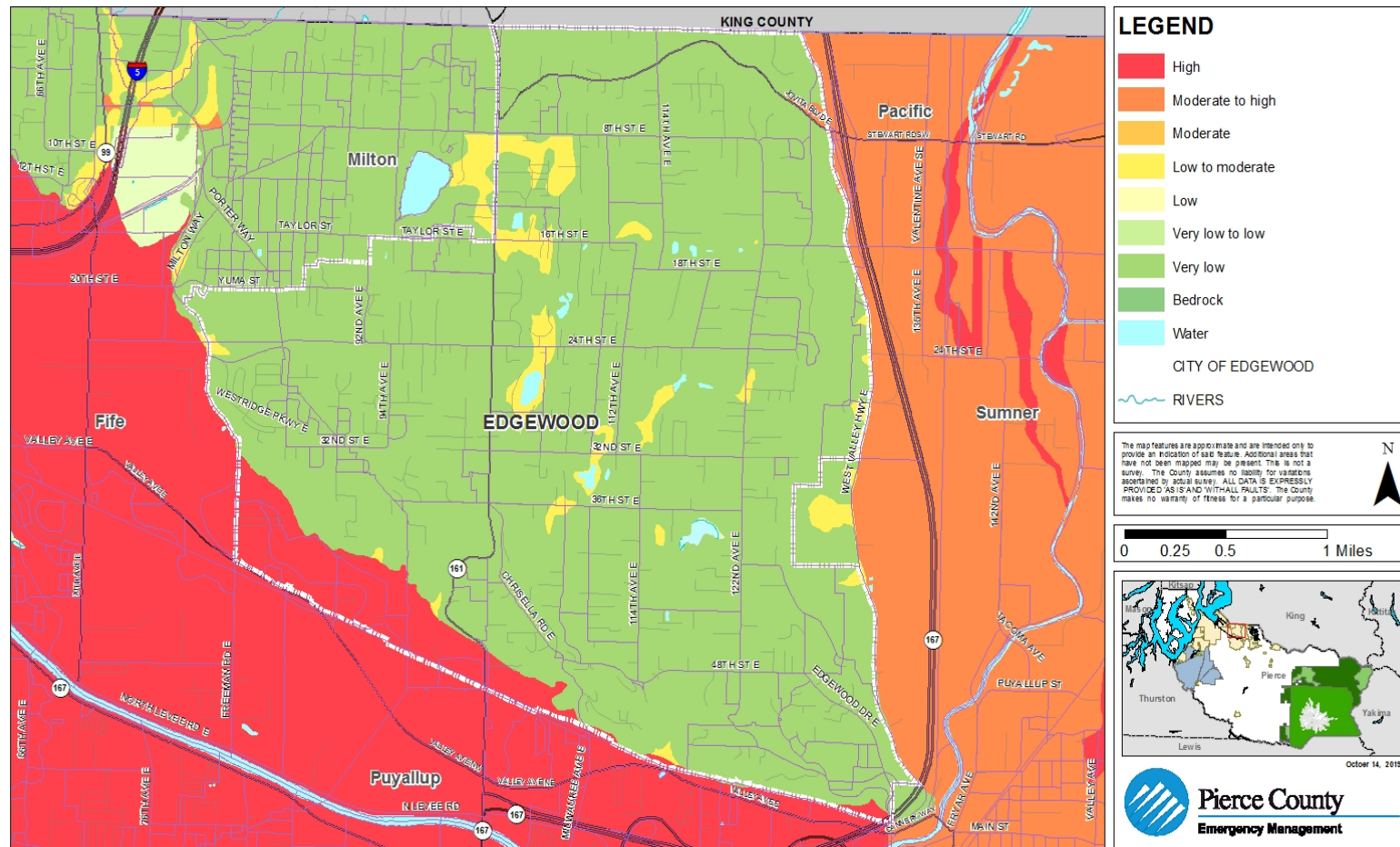
Map 4-4 City of Edgewood – Shallow Landslide Hazard Map

CITY OF EDGEWOOD - SHALLOW LANDSLIDE SUSCEPTIBILITY AREA



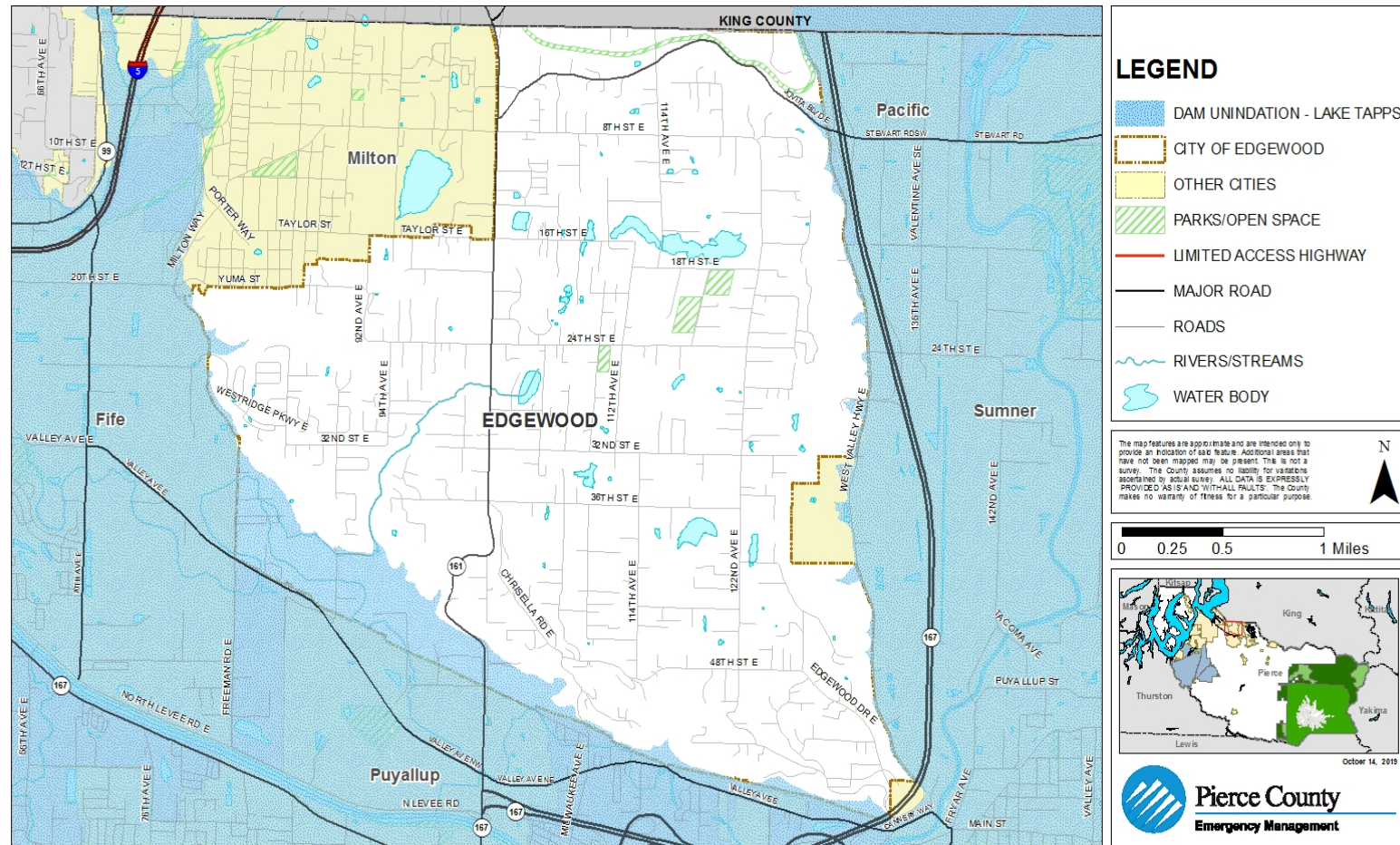
Map 4-5 City of Edgewood – Liquefaction Hazard Map

CITY OF EDGEWOOD - LIQUEFACTION SUSCEPTIBILITY



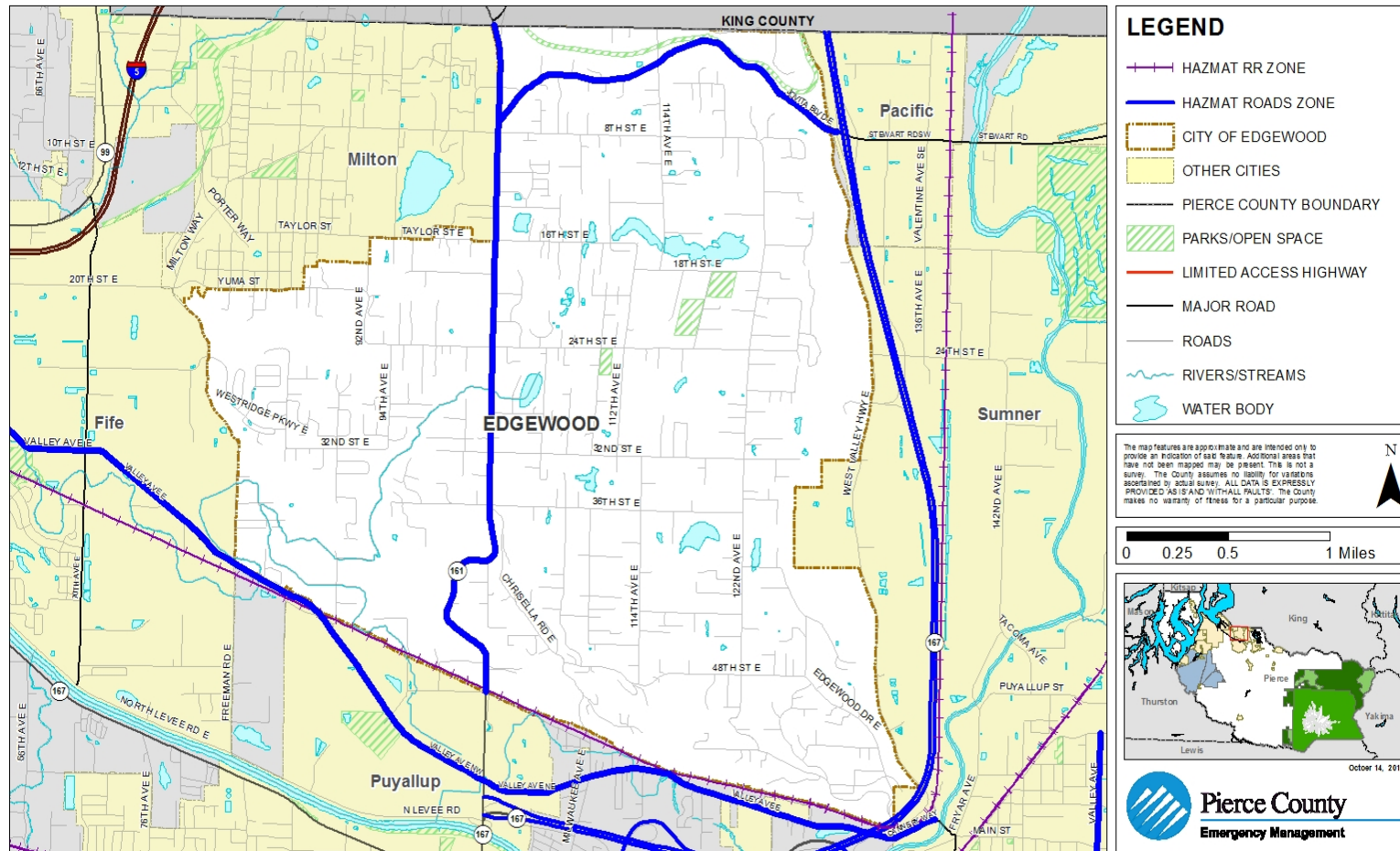
Map 4-6 City of Edgewood – Dam Failure Hazard Map

CITY OF EDGEWOOD - DAM FAILURE-LAKE TAPPS HAZARD AREA



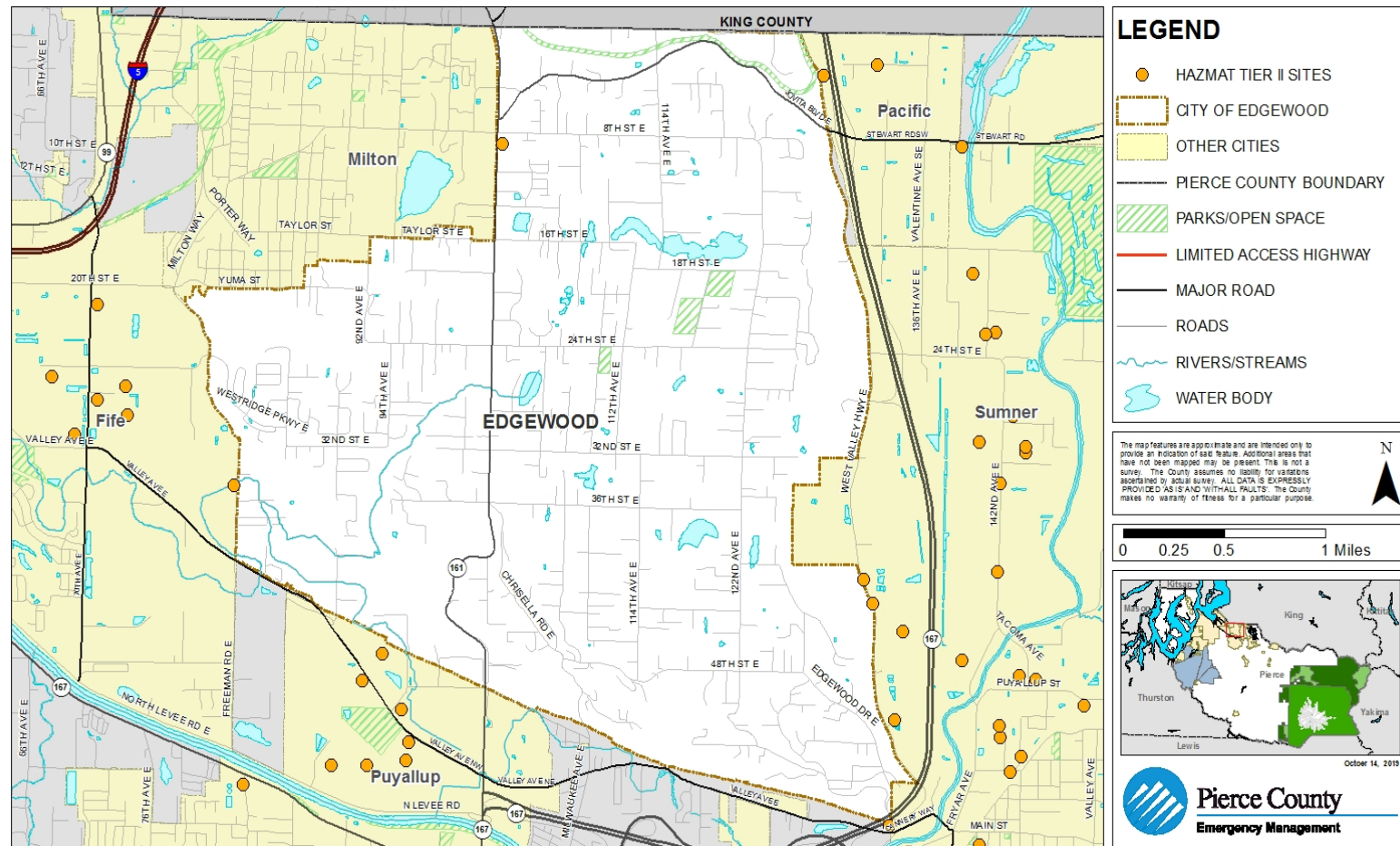
Map 4-7 City of Edgewood – Hazardous Material Hazard Area Map

CITY OF EDGEWOOD - HAZARDOUS MATERIAL HAZARD AREA



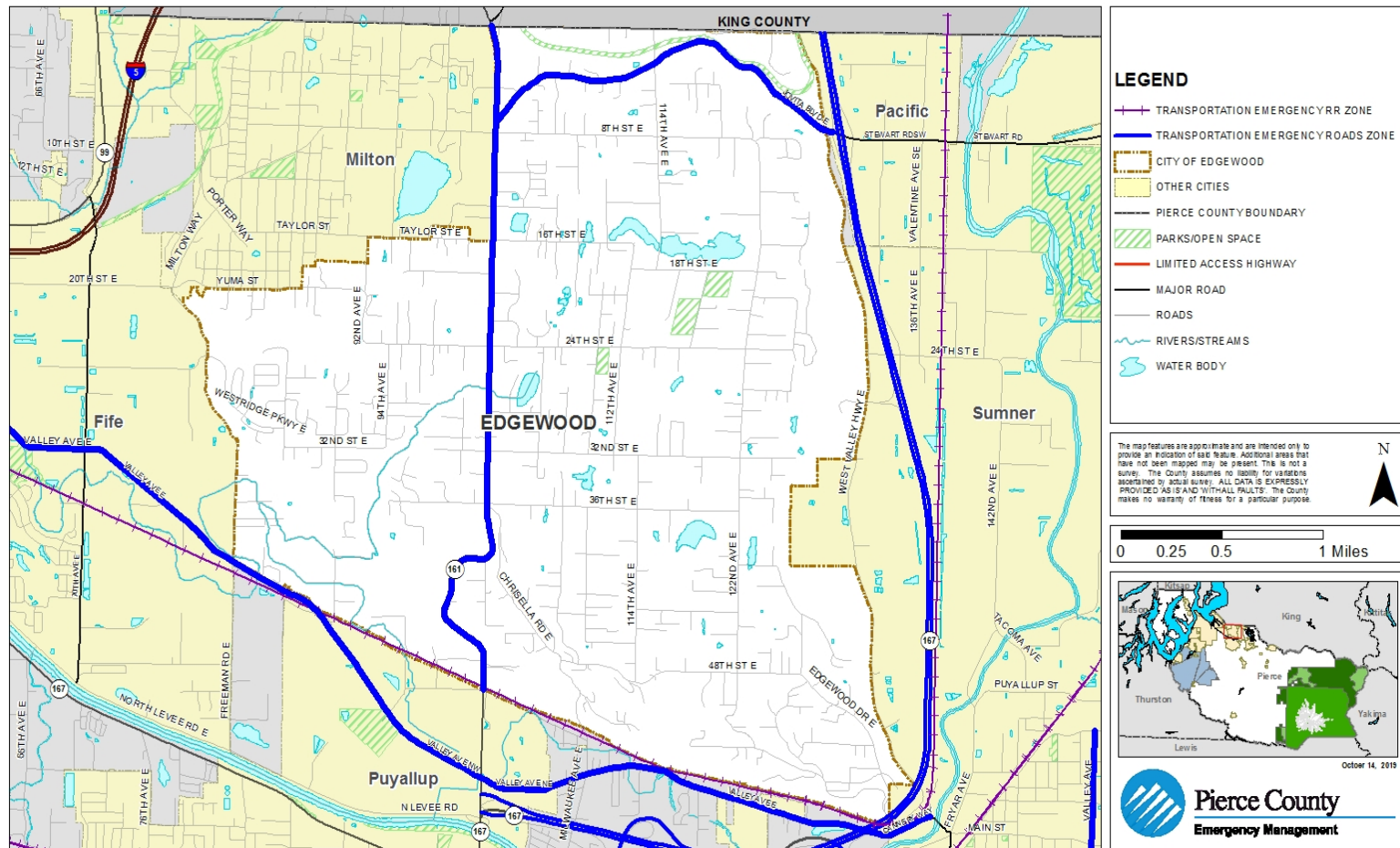
Map 4-8 City of Edgewood – Hazardous Material Tier II Sites (2017) Hazard Area Map

CITY OF EDGEWOOD - HAZARDOUS MATERIAL TIER II SITES (2017)

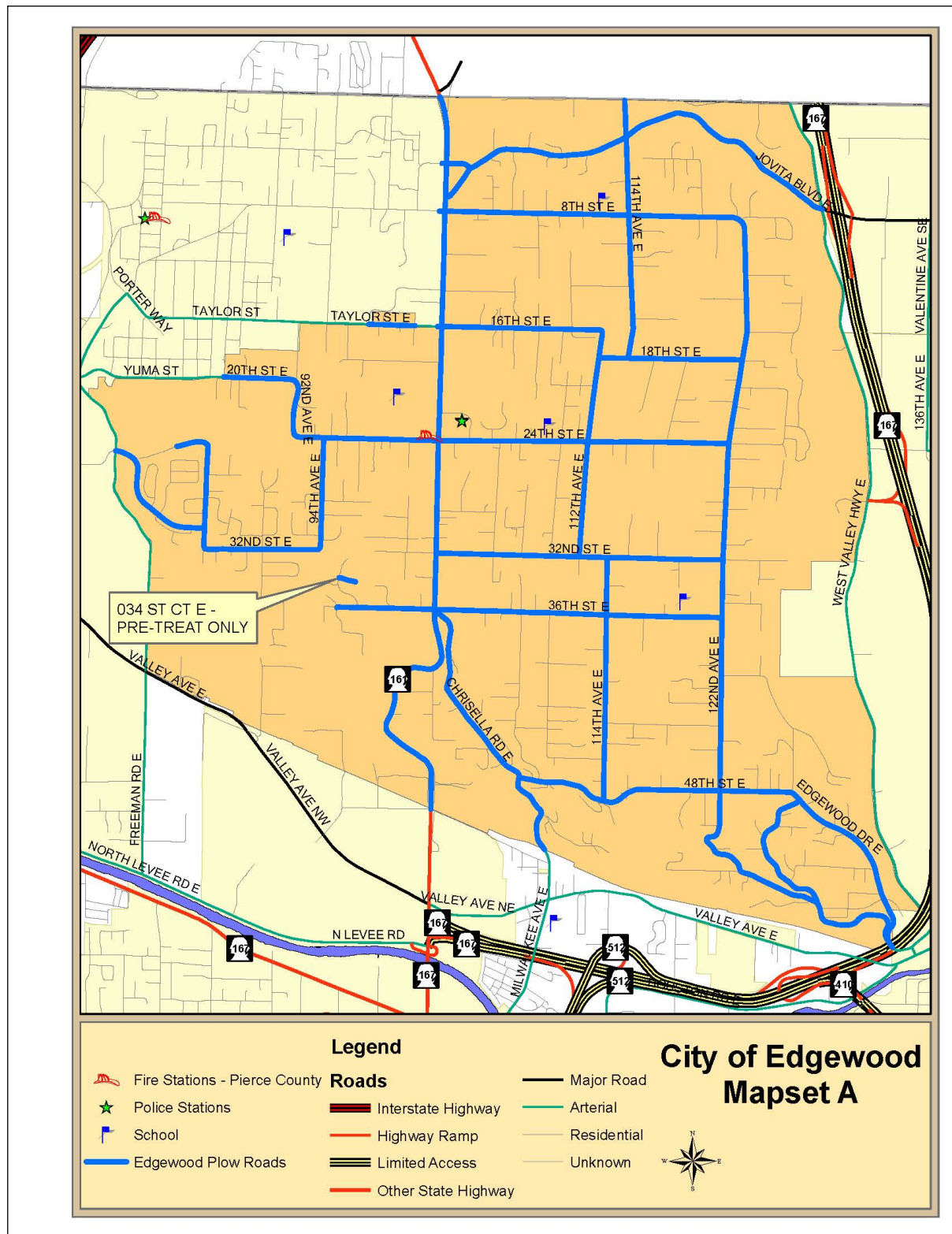


Map 4-9 City of Edgewood – Transportation Emergency Hazard Area Map

CITY OF EDGEWOOD - TRANSPORTATION EMERGENCY HAZARD AREA



Map 4-10 City of Edgewood – Severe Weather – Snow Routes Map



Vulnerability Analysis

Table 4-2 Vulnerability Analysis: General Exposure¹⁰

THREAT ¹¹		AREA (SQ MI)		PARCELS	
		Total	% Base	Total	% Base
BASE		7.65	100%	4,805	100%
Geological	Avalanche ¹²	NA	NA	NA	NA
	Liquefaction Susceptibility ¹³	.72	9.2%	429	10.1%
	Landslide-Deep	.81	10.5%	289	6%
	Landslide-Shallow	1.35	17.6%	771	16%
	Tsunami	NA	NA	NA	NA
	Volcanic ¹⁴	1.07	13.7%	250	5.2%
Meteorological	Drought ¹⁵	7.65	100%	4,805	100%
	Flood	2	26.14%	432	9%
	Severe Weather	7.65	100%	4,805	100%
	WUI Fire ¹⁶	NA	NA	NA	NA
Technological	Abandoned Mines ¹⁷	NA	NA	NA	NA
	Civil Disturbance ¹⁸	7.65	100%	4,805	100%
	Dam Failure ¹⁹	1.23	16.07%	213	4.43%
	Energy Emergency ²⁰	7.65	100%	4,805	100%
	Epidemic ²¹	7.65	100%	4,805	100%
	Hazardous Material ²²	5.10	66%	2,915	60.7%
	Pipeline Hazard ²³	NA	NA	NA	NA
	Terrorism ²⁴ / Active Threat	7.65	100%	4,805	100%
	Transportation Accidents ²⁵	6.99	90%	3,641	85.4%

Table 4-3 Vulnerability Analysis: Population Exposure

THREAT ²		POPULATION			SPECIAL POPULATIONS (OF TOTAL EXPOSED POPULATION)			
		Total	% Base	Density (pop/sq mi)	65+ yrs		20- yrs	
					#	%	#	%
BASE		9,391	100%	1,228	1,314	14%	2,285	24%
Geological	Avalanche	NA	NA	NA	NA	NA	NA	NA
	Liquefaction Susceptibility	1,633	17.4%	2,281.62	178	1.8%	437	4.6%
	Landslide-Deep	610	6.5%	752.89	75	.79%	146	1.5%
	Landslide-Shallow	1,094	11.6%	809.77	166	1.76%	262	2.78%
	Tsunami	NA	NA	NA	NA	NA	NA	NA
	Volcanic	1,416	15.1%	1,318	300	3.19%	526	5.6%
Meteorological	Drought	9,391	100%	1,228	1,314	14%	2,285	24%
	Flood	6,844	73%	3,416	894	9.51%	1,697	18.07%
	Severe Weather	9,391	100%	1,228	1,314	14%	2,285	24%
	WUI Fire	NA	NA	NA	NA	NA	NA	NA
Technological	Abandoned Mines	NA	NA	NA	NA	NA	NA	NA
	Civil Disturbance	9,391	100%	1,228	1,314	14%	2,285	24%
	Dam Failure	389	4.1%	668.87	67	5.1%	76	3.3%
	Energy Emergency	9,391	100%	1,228	1,314	14%	2,285	24%
	Epidemic	9,391	100%	1,228	1,314	14%	2,285	24%
	Hazardous Material	7,337	78.1%	1,439	1,037	11.04%	1,755	18.68%
	Pipeline Hazard	NA	NA	NA	NA	NA	NA	NA
	Terrorism / Active Threat	9,391	100%	1,228	1,314	14%	2,285	24%
	Transportation Accidents	7,337	78.1%	1,538	1,037	11.04%	1,755	18.68%

Table 4-4 Vulnerability Analysis: General Infrastructure Exposure

THREAT ²		LAND VALUE			IMPROVED VALUE			TOTAL ASSESSED VALUE		
		Total (\$)	% Base	Avg. Value (\$)	Total (\$)	% Base	Avg. Value (\$)	Total (\$)	% Base	Avg. Value (\$)
BASE		\$852,052,600	100%	\$177,326	\$1,206,803,600	100%	\$251,156	\$2,058,856,200	100%	\$428,482
Geological	Avalanche	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Liquefaction Susceptibility	\$30,155,600	6.9%	\$119,665	\$25,490,600	4.6%	\$101,153	\$55,646,200	5.6%	\$129,711
	Landslide-Deep	\$43,978,100	5.2%	\$152,173	\$57,606,600	4.8%	\$199,331	\$101,584,700	4.9%	\$351,504
	Landslide-Shallow	\$118,846,200	13.9%	\$154,146	\$171,892,700	14.2%	\$104,425	\$290,738,900	14.1%	\$377,093
	Tsunami	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Volcanic	\$46,750,100	5.5%	\$187,000	\$47,298,500	3.9%	\$189,194	\$94,048,600	4.6%	\$376,194
Meteorological	Drought	\$852,052,600	100%	\$177,326	\$1,206,803,600	100%	\$251,156	\$2,058,856,200	100%	\$428,482
	Flood	\$94,425,400	11.1%	\$218,577	\$95,783,700	7.9%	\$221,722	\$190,209,100	9%	\$440,299
	Severe Weather	\$852,052,600	100%	\$177,326	\$1,206,803,600	100%	\$251,156	\$2,058,856,200	100%	\$428,482
	WUI Fire	NA	NA	NA	NA	NA	NA	NA	NA	NA
Technological	Abandoned Mines	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Civil Disturbance	\$852,052,600	100%	\$177,326	\$1,206,803,600	100%	\$251,156	\$2,058,856,200	100%	\$428,482
	Dam Failure	\$41,785,400	4.9%	\$196,176	\$24,617,200	2.04%	\$115,574	\$28,007,600	3.23%	\$311,749
	Energy Emergency	\$852,052,600	100%	\$177,326	\$1,206,803,600	100%	\$251,156	\$2,058,856,200	100%	\$428,482

	Epidemic	\$852,052,600	100%	\$177,326	\$1,206,803,600	100%	\$251,156	\$2,058,856,200	100%	\$428,482
	Hazardous Material	\$572,679,800	67.2%	\$196,460	\$807,802,000	66.9%	\$277,119	\$1,380,481,800	67.1%	\$473,578.66
	Pipeline Hazard	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Terrorism / Active Threat	\$852,052,600	100%	\$177,326	\$1,206,803,600	100%	\$251,156	\$2,058,856,200	100%	\$428,482
	Transportation Accidents	\$572,679,800	67.2%	\$196,460	\$807,802,000	66.9%	\$277,119	\$1,380,481,800	67.1%	\$473,578.66

Table 4-5a Consequence Analysis Chart – Geological^{26,27}

THREAT ²		CONSEQUENCE	YES OR NO
<i>Geological</i>	Avalanche	Impact to the Public	No
		Impact to the Responders	No
		Impact to COG and/or COOP in the Jurisdiction	No
		Impact to Property, Facilities and Infrastructure	No
		Impact to the Environment	No
		Impact to the Jurisdiction Economic Condition	No
		Impact to Reputation or Confidence in Jurisdiction	No
	Liquefaction Susceptibility	Impact to the Public	Yes
		Impact to the Responders	Yes
		Impact to COG and/or COOP in the Jurisdiction	Yes
		Impact to Property, Facilities and Infrastructure	Yes
		Impact to the Environment	Yes
		Impact to the Jurisdiction Economic Condition	Yes
		Impact to Reputation or Confidence in Jurisdiction	Yes
	Landslide	Impact to the Public	Yes
		Impact to the Responders	Yes
		Impact to COG and/or COOP in the Jurisdiction	No
		Impact to Property, Facilities and Infrastructure	Yes
		Impact to the Environment	Yes
		Impact to the Jurisdiction Economic Condition	Yes
		Impact to Reputation or Confidence in Jurisdiction	Yes
	Tsunami	Impact to the Public	No
		Impact to the Responders	No
		Impact to COG and/or COOP in the Jurisdiction	No
		Impact to Property, Facilities and Infrastructure	No
		Impact to the Environment	No
		Impact to the Jurisdiction Economic Condition	No
		Impact to Reputation or Confidence in Jurisdiction	No
	Volcanic²⁸	Impact to the Public	Yes
		Impact to the Responders	Yes
		Impact to COG and/or COOP in the Jurisdiction	No
		Impact to Property, Facilities and Infrastructure	Yes
		Impact to the Environment	Yes
		Impact to the Jurisdiction Economic Condition	No
		Impact to Reputation or Confidence in Jurisdiction	No

Table 4-5b Consequence Analysis Chart – Meteorological

THREAT		CONSEQUENCE	YES OR NO
<i>Meteorological</i>	Drought	Impact to the Public	Yes
		Impact to the Responders	Yes
		Impact to COG and/or COOP in the Jurisdiction	No
		Impact to Property, Facilities and Infrastructure	No
		Impact to the Environment	Yes
		Impact to the Jurisdiction Economic Condition	No
		Impact to Reputation or Confidence in Jurisdiction	No
	Flood	Impact to the Public	Yes
		Impact to the Responders	Yes
		Impact to COG and/or COOP in the Jurisdiction	No
		Impact to Property, Facilities and Infrastructure	Yes
		Impact to the Environment	Yes
		Impact to the Jurisdiction Economic Condition	Yes
		Impact to Reputation or Confidence in Jurisdiction	No
	Severe Weather	Impact to the Public	Yes
		Impact to the Responders	Yes
		Impact to COG and/or COOP in the Jurisdiction	Yes
		Impact to Property, Facilities and Infrastructure	Yes
		Impact to the Environment	Yes
		Impact to the Jurisdiction Economic Condition	Yes
		Impact to Reputation or Confidence in Jurisdiction	Yes
	WUI Fire	Impact to the Public	No
		Impact to the Responders	No
		Impact to COG and/or COOP in the Jurisdiction	No
		Impact to Property, Facilities and Infrastructure	No
		Impact to the Environment	No
		Impact to the Jurisdiction Economic Condition	No
		Impact to Reputation or Confidence in Jurisdiction	No

Table 4-5c Consequence Analysis Chart – Technological²⁹

THREAT		CONSEQUENCE	YES OR NO
<i>Technological</i>	Abandoned Mines	Impact to the Public	No
		Impact to the Responders	No
		Impact to COG and/or COOP in the Jurisdiction	No
		Impact to Property, Facilities and Infrastructure	No
		Impact to the Environment	No
		Impact to the Jurisdiction Economic Condition	No
		Impact to Reputation or Confidence in Jurisdiction	No
	Civil Disturbance	Impact to the Public	Yes
		Impact to the Responders	Yes
		Impact to COG and/or COOP in the Jurisdiction	No
		Impact to Property, Facilities and Infrastructure	No
		Impact to the Environment	No
		Impact to the Jurisdiction Economic Condition	No
		Impact to Reputation or Confidence in Jurisdiction	No
	Dam Failure	Impact to the Public	No
		Impact to the Responders	No
		Impact to COG and/or COOP in the Jurisdiction	No
		Impact to Property, Facilities and Infrastructure	No
		Impact to the Environment	No
		Impact to the Jurisdiction Economic Condition	No
		Impact to Reputation or Confidence in Jurisdiction	No
	Energy Emergency	Impact to the Public	Yes
		Impact to the Responders	Yes
		Impact to COG and/or COOP in the Jurisdiction	No
		Impact to Property, Facilities and Infrastructure	No
		Impact to the Environment	No
		Impact to the Jurisdiction Economic Condition	No
		Impact to Reputation or Confidence in Jurisdiction	No
	Epidemic	Impact to the Public	Yes
		Impact to the Responders	Yes
		Impact to COG and/or COOP in the Jurisdiction	Yes
		Impact to Property, Facilities and Infrastructure	No
		Impact to the Environment	No
		Impact to the Jurisdiction Economic Condition	Yes
		Impact to Reputation or Confidence in Jurisdiction	No
	Hazardous Materials	Impact to the Public	Yes
		Impact to the Responders	Yes
		Impact to COG and/or COOP in the Jurisdiction	Yes
		Impact to Property, Facilities and Infrastructure	Yes
		Impact to the Environment	Yes
		Impact to the Jurisdiction Economic Condition	Yes
		Impact to Reputation or Confidence in Jurisdiction	Yes
	Pipeline Hazards	Impact to the Public	Yes
		Impact to the Responders	Yes
		Impact to COG and/or COOP in the Jurisdiction	Yes
		Impact to Property, Facilities and Infrastructure	Yes
		Impact to the Environment	Yes
		Impact to the Jurisdiction Economic Condition	Yes
		Impact to Reputation or Confidence in Jurisdiction	Yes
	Terrorism / Active Threat	Impact to the Public	Yes
		Impact to the Responders	Yes
		Impact to COG and/or COOP in the Jurisdiction	Yes
		Impact to Property, Facilities and Infrastructure	Yes
		Impact to the Environment	Yes

		Impact to the Jurisdiction Economic Condition	Yes
		Impact to Reputation or Confidence in Jurisdiction	Yes
	Transportation Accident	Impact to the Public	Yes
		Impact to the Responders	Yes
		Impact to COG and/or COOP in the Jurisdiction	Yes
		Impact to Property, Facilities and Infrastructure	Yes
		Impact to the Environment	Yes
		Impact to the Jurisdiction Economic Condition	Yes
		Impact to Reputation or Confidence in Jurisdiction	Yes

Endnotes

¹ The Terrorism and Active Threat / Attack Tactics chapters have many similarities and can even be connected in an incident. For this edition of the mitigation plan terrorism and active threat / attack tactics are discussed as one. For the remainder of this risk assessment Terrorism and Attack Tactics are discussed as one due to the many comparisons. Although Cyber Attack is another new chapter in this update, there was not enough time to assess the jurisdictions individually and will be expanded upon in the next update.

² Data source information for the Regulated Floodplain 2017 GIS Feature Class hazard layer is from the Metadata. For additional information contact Dennis Dixon with Pierce County, Planning and Public Works, Surface Water Management Division.

³ Data source information for the Deep Landslide Susceptibility GIS Feature Class hazard layer is from the Metadata. For additional information contact the Washington Geological Survey.

⁴ Data source information for the Shallow Landslide Susceptibility GIS Feature Class hazard layer is from the Metadata. For additional information contact the Washington Geological Survey.

⁵ Liquefaction susceptibility is assigned based on criteria described in: Palmer, Stephen P.; Magsino, Sammantha L.; Bilderback, Eric L.; Poelstra, James L.; Folger, Derek S.; Niggemann, Rebecca A., 2007, Liquefaction susceptibility and site class maps of Washington State, by county: Washington Division of Geology and Earth Resources Open File Report 2004-20, 78 plates, with 45 p. text.

[http://www.dnr.wa.gov/ResearchScience/Topics/GeologyPublicationsLibrary/Pages/pub_ofr04-20.aspx]

Data source information for the Liquefaction Susceptibility GIS Feature Class hazard layer is from the Metadata. For additional information contact the Washington Geological Survey, Washington Division of Geology and Earth Resources. Last updates to this data set on 2017-01-03.

⁸ Lahar parcel and lahar study area were added by The Washington Division of Geology and Earth Resources. Lahar_case_1, Lahar_case_2, lahar_case_3, postlahar, and pyroclastic originated from USGS Open-File Report 2007-2005: Schilling, S. P.; Doelger, S.; Hoblitt, R. P.; Walder, J. S.; Driedger, C. L.; Scott, K. M.; Pringle, P. T.; Vallance, J. W., 2008, Digital data for volcano hazards from Mount Rainier, Washington; Revised 1998: U.S. Geological Survey Open-File Report 2007-1220, ArcInfo coverages and shapefiles.

[<http://pubs.usgs.gov/of/2007/1220/data.html>]. This digital data accompanies Volcano Hazards from Mount Rainier, Washington; Revised 1998 (U.S. Geological Survey Open-File Report 98-428): Hoblitt, R. P.; Walder, J. S.; Driedger, C. L.; Scott, K. M.; Pringle, P. T.; Vallance, J. W., 1998, Volcano Hazards from Mount Rainier, Washington; Revised 1998: U.S. Geological Survey Open-File Report 98-428

[<http://vulcan.wr.usgs.gov/Volcanoes/Rainier/Hazards/OFR98-428/OFR98-428.pdf>]

¹⁰ Info obtained from Pierce County GIS application, CountyView Pro (10/2019).

¹¹ Currently the expanding body of empirical data on climate change supports its basic premise that the long-term average temperature of the earth's atmosphere has been increasing for decades (1850 to 2019). This trend is continuing and will create dramatic changes in the local environment of Pierce County. Today, questions revolve around the overall increase in local temperature and its long-term effects. Climate change today refers to variations in either regional or global environments over time. Time can refer to periods ranging in length from a few decades to other periods covering millions of years. Several circumstances can cause climate change. Included herein are such diverse factors as solar cycles, volcanic eruptions, changing ocean current patterns, or even something as unusual as a methane release from the ocean floor. Over the past 150 years good temperature records have allowed comparisons to be made of global temperatures from year-to-year. This has shown an overall increase of approximately 0.7° C during this period. An increasing body of scientific evidence implies that the primary impetus driving climate change today is an increase in atmospheric green house gases.

¹² Jurisdiction is not vulnerable to this hazard; therefore, it is marked NA or not-applicable.

¹³ It should be noted here that although all residents, all property and all infrastructure of the City of Edgewood are vulnerable to earthquake shaking, not all are subject to the affects of liquefaction and liquefiable soils which is what is represented here.

¹⁴ The threat of volcanic ashfall affects the entire Region 5 however some jurisdictions are specifically threatened by lahar flows directly from Mt. Rainier; an active volcano.

¹⁵ The entire jurisdiction is vulnerable to Drought. There are three things that must be understood about the affect of Drought on the jurisdiction: 1) Drought is a Region wide event. When it does affect Pierce County, it will affect

every jurisdiction, 2) Drought will gradually develop over time. It is a gradually escalating emergency that may take from months to years to affect the jurisdiction. Initially lack of water may not even be noticed by the citizens.

However, as the Drought continues, its effects will be noticed by a continually expanding portion of the community until it is felt by all, and 3) jurisdictions will be affected differently at different times as a drought develops. This will vary depending on the needs of each local jurisdiction. Some examples are jurisdictions that have industry that requires a continuous supply of a large quantity of water; others have agriculture that requires water but may only require it at certain times of the year; and, some jurisdictions have a backup source of water while others do not.

¹⁶ According to the most recent information from the Department of Natural Resources, the City of Edgewood while undergoing development does not have large areas of forested land that could develop into a wildland/urban interface fire. Further study is needed to determine the extent of the area that could be affected.

¹⁷ The definition of Abandoned Mines comes from the 2020 Pierce County HIRA: Abandoned mines are any excavation under the surface of the earth, formerly used to extract metallic ores, coal, or other minerals, and that are no longer in production.

¹⁸ The definition of Civil Disturbance comes from the 2020 Pierce County HIRA: Civil Disturbance (unrest) is the result of groups or individuals within the population feeling, rightly or wrongly, that their needs or rights are not being met, either by the society at large, a segment thereof, or the current overriding political system. When this results in community disruption of a nature where intervention is required to maintain public safety it has become a civil disturbance. Additionally, the Region 5 Strategic Plan includes Operational Objectives 3 & 4: Intelligence Gathering, Indicators, Warnings, etc; and Intelligence and Information Sharing.

¹⁹ The definition of Dam Failure comes from the 2020 Pierce County HIRA: A dam is any “barrier built across a watercourse for impounding water.”¹⁹ Dam failures are catastrophic events “characterized by the sudden, rapid, and uncontrolled release of impounded water.” The vulnerability analysis was based on the potential dam failure from Mud Mountain Dam and Lake Tapps using Pierce County’s GIS data which originated from each of the dams emergency plans inundation maps.

²⁰ The definition of an Energy Emergency comes from the 2020 Pierce County HIRA: Energy emergency refers to an out-of-the-ordinary disruption, or shortage, of an energy resource for a lengthy period. Additionally, the Region 5 Strategic Plan addresses Energy Emergencies in its Operational Objective 32, Restoration of Lifelines which addresses the restoration of critical services such as oil, gas, natural gas, electric, etc.

²¹ The definition of epidemic comes from the Centers for Disease Control: A Pandemic is an epidemic occurring over a very wide area and usually affecting a large proportion of the population. Pandemics occur when a wholly new subtype of influenza A virus emerges. A “novel” virus can develop when a virulent flu strain that normally infects birds or animals infects a human who has influenza; the two viruses can exchange genetic material, creating a new, virulent flu virus that can be spread easily from person-to-person. Unlike the flu we see yearly, no one would be immune to this new flu virus, which would spread quickly, resulting in widespread epidemic disease – a pandemic.

²² The definition of Hazardous Materials comes from the 2020 Pierce County HIRA: Hazardous materials are materials, which because of their chemical, physical or biological properties, pose a potential risk to life, health, the environment, or property when not properly contained. A hazardous materials release then is the release of the material from its container into the local environment. A general rule of thumb for safety from exposure to hazardous material releases is 1000ft; the Emergency Response Guidebook 2016, established by the US Dept of Transportation, contains advice per specific materials. The vulnerability analysis was broken into two sub sections for a better understanding of the hazard using Pierce County’s GIS data with a 500 foot buffer on either side of the railroads and major roadways.

²³ The definition of Pipeline Emergency comes from the 2020 Pierce County HIRA: While there are many different substances transported through pipelines including sewage, water and even beer, pipelines, for the purpose of this chapter, are transportation arteries carrying liquid and gaseous fuels. They may be buried or above ground

²⁴ The definition of Terrorism comes from the 2020 Pierce County HIRA: Terrorism has been defined by the Federal Bureau of Investigation as, “the unlawful use of force or violence against persons or property to intimidate or coerce a Government, the civilian population or any segment thereof, in furtherance of political or social objectives.” These acts can vary considerably in their scope and not all are related to Terrorism which is why Active Threat / Attack Tactics has been added to the Pierce County HIRA as its own chapter.

²⁵ The definition of Transportation Accident comes from the 2020 Pierce County HIRA: Transportation accidents as used in this assessment include accidents involving a method of transportation on the road, rail, air, and maritime

systems within the confines of Pierce County. The vulnerability analysis was broken into three sub sections for a better understanding of the hazard using Pierce County’s GIS data; Commencement Bay to include inland rivers and streams, railroads, and roads. A 200-foot buffer was applied to all the shorelines and a 500-foot buffer on either side of the railroads and roadways.

²⁶ In the Impact to Property, Facilities and Infrastructure, both Tables 4-5a and 4-5b, look at the impact to all property, facilities and infrastructure existing in the jurisdiction, not just to that owned by the jurisdiction.

²⁷ The consideration for each of these hazards, in both Tables 4-5a and 4-5b, as to whether an individual hazard’s consequences exist or not, is based on a possible worst-case scenario. It must also be understood that a “yes” means that there is a good possibility that the consequence it refers to could happen as a result of the hazard, not that it will. Conversely “No” means that it is highly unlikely that consequence will have a major impact, not that there will be no impact at all.

²⁸ While the major volcanic hazard from Mt. Rainier is from a lahar descending the main river valleys surrounding the mountain, it is not the only problem. Most jurisdictions could receive tephra in greater or lesser amounts, sometimes with damaging results. Consequence analyses in this section consider the possibility of tephra deposition in addition to a lahar.

²⁹ The Technological Consequences are added herein to acknowledge the role of human-caused hazards in the health and safety of unincorporated Pierce County. The consequences noted are under the same criteria as natural hazards given their impacts to the departmental assets.

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Section 5

Mitigation Strategy Requirements

Mitigation Strategy---Requirement §201.6(c)(3):

The plan **shall** include a strategy that provides the jurisdiction's blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools.

Local Hazard Mitigation Goals---Requirement §201.6(c)(3)(i):

[The hazard mitigation strategy **shall** include a] description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.

- Does the new or updated plan include a description of mitigation **goals** to reduce or avoid long-term vulnerabilities to the identified hazards?

Identification and Analysis of Mitigation Actions---Requirement §201.6(c)(3) (ii):

[The mitigation strategy **shall** include a] section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure.

Identification and Analysis of Mitigation Actions: National Flood Insurance Program (NFIP) Compliance--Requirement §201.6(c)(3)(ii):

[The mitigation strategy] must also address the jurisdiction's participation in the National Flood Insurance Program (NFIP), and continued compliance with NFIP requirements, as appropriate.

- Does the new or updated plan identify and analyze a **comprehensive range** of specific mitigation actions and projects for each hazard?
- Do the identified actions and projects address reducing the effects of hazards on **new** buildings and infrastructure?
- Do the identified actions and projects address reducing the effects of hazards on **existing** buildings and infrastructure?
- Does the new or updated plan describe the jurisdiction(s) participation in the NFIP?
- Does the mitigation strategy identify, analyze and prioritize actions related to continued compliance with the NFIP?

Implementation of Mitigation Actions---Requirement: §201.6(c)(3) (iii):

[The mitigation strategy section **shall** include] an action plan describing how the actions identified in section (c)(3)(ii) will be prioritized, implemented, and administered by the local jurisdiction. Prioritization **shall** include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.

- Does the new or updated mitigation strategy include how the actions are **prioritized**? (For example, is there a discussion of the process and criteria used?)
- Does the new or updated mitigation strategy address how the actions will be **implemented and administered**, including the responsible department, existing and potential resources and the timeframe to complete each action?
- Does the new or updated prioritization process include an emphasis on the use of **cost-benefit review** to maximize benefits?
- Does the updated plan identify the completed, deleted or deferred mitigation actions as a benchmark for progress, and if activities are unchanged (i.e., deferred), does the updated plan describe why no changes occurred?

SECTION 5

REGION 5 ALL HAZARD MITIGATION PLAN 2020-2025 EDITION CITY OF EDGEWOOD MITIGATION STRATEGY SECTION

Table of Contents

MITIGATION STRATEGY REQUIREMENTS.....	1
TABLE OF CONTENTS	2
MITIGATION MEASURE OVERVIEW	3
PRIORITIZATION OF MEASURES.....	3
STARTUP MITIGATION MEASURES	6
EXISTING MITIGATION ACTIONS	6
PLAN MAINTENANCE	6
HAZARD MITIGATION FORUM.....	7
PIERCE COUNTY HAZARD MITIGATION FORUM.....	7
CITY GOVERNMENT MITIGATION MEASURES	9
CAPABILITY IDENTIFICATION AND EVALUATION.....	9
IMPLEMENT INFRASTRUCTURE IMPROVEMENTS ON STATE ROUTE 161	9
IDENTIFY AND MITIGATE FLOOD PRONE PROPERTY.....	10
CONDUCT ASSESSMENT AND DEVELOP STRATEGY FOR CITY ROADS IMPACTED BY FLOODING.....	11
DEVELOP AND MAINTAIN A CONTINUITY OF GOVERNMENT PLAN FOR THE CITY (COG)	12
CONTINUE DEVELOPMENT OF SHELTER PROGRAM IN CITY	12
DEVELOP COVERAGE AREAS FOR REVERSE 911 SYSTEM (CIVIC READY).....	13
MAINTAIN AND UPDATE CRITICAL AREA REGULATIONS	14
DEVELOP EMERGENCY PLANNING TRANSPORTATION OVERLAYS.....	15
IMPLEMENT JOVITA CORRIDOR IMPROVEMENTS—CULVERT REPLACEMENT	15
SEISMIC REPLACEMENT/RETROFIT OF CITY OWNED INFRASTRUCTURE.....	16
DEVELOP CONTRACT WITH REGIONAL PARTNERS FOR DISASTER RESOURCES.....	17
PUBLIC EDUCATION MITIGATION MEASURES.....	18
CONTINUE HAZARD RELATED TRAINING FOR CITY STAFF	18
CONTINUE HAZARD RELATED TRAINING FOR CITY CHIEF ELECTED OFFICIALS.....	18
CREATE AND PUBLISH HAZARD ARTICLES IN CITY QUARTERLY NEWSLETTER	19
CONDUCT ANNUAL PUBLIC SAFETY INFORMATIONAL BRIEFINGS	20
CONTINUE AND EXPAND PC-NET PROGRAM IN CITY.....	20
HAZARD RELATED EDUCATION AND TRAINING FOR CITY BUSINESSES	21
NATIONAL FLOOD INSURANCE PROGRAM.....	22
ENDNOTES	24

Mitigation Measure Overview

The measures having been identified, defined, and evaluated, the rest of the process involved prioritization. The process relied upon the identified risks and vulnerabilities, the planning team's local expertise, public participation, each organization's needs and capabilities, a cost/benefit review, and input from the chief elected officials. In order to promote implementation of the measures, they were grouped based on the level at which they would be implemented, as described in the Plan Maintenance Section. These levels were:

- **Startup Mitigation Measures:** Those mitigation measures already in existence within the organization and including the maintenance of the Mitigation Plan.
- **Hazard Mitigation Forum (HMF):** Multi-organizational implementation mechanism.
- **Organization-Wide Mitigation Measures:** Mechanism depends on organization.
- **Public Education Mitigation Measures:** Localized level based on targeted communities and their needs and vulnerabilities.

The measures are prioritized within each implementation category. In order to provide consistency, the evaluation process including the eight categories, was used as the basis for the prioritization of measures. This allows for emphasis on the extent to which each measure is cost-effective.

The planning team members from each organization prioritized their organization's potential mitigation measures based on goals addressed with special attention paid to the measure's benefit-cost review, its ability to be implemented, and the extent to which it would mitigate one or multiple relevant hazards.

Prioritization of Measures

The list was prioritized based on the ongoing work and projects within the city. Development is occurring at a rapid pace within the city and the inevitable growth that follows helps and hinders some of the projects and mitigation strategies. We based the city's mitigation measures on what seemed reasonable, possible, and plausible given the abilities and time of the city and its staff members.

Table 5-1 City of Edgewood Mitigation Strategy Matrix

Implementation Mechanism	Mitigation Measure (<i>Hazard(s)</i>) ¹	Lead Jurisdiction(s) / Department(s)	Timeline (years)	Plan Goals					
				Life and Property	Operations Continuity	Partnerships	Natural Resources	Preparedness	Sustainable Economy
<u>Startup</u>	1. Existing Mitigation Actions (<i>E,L,T,V,D,F,WUI,SW,MM</i>)	Edgewood - Administration	Ongoing	✓	✓	✓	✓	✓	✓
	2. Plan Maintenance (<i>E,L,T,V,D,F,WUI,SW,MM</i>)	Edgewood - Administration	Ongoing	✓	✓	✓	✓	✓	✓
<u>HMF</u>	1. Pierce County Hazard Mitigation Forum (<i>E,L,T,V,D,F,WUI,SW,MM</i>)	PC DEM; Edgewood - Administration	Ongoing	✓	✓	✓	✓	✓	✓
<u>City Government</u>	1. Capability Identification and Evaluation - (<i>E,L,T,V,D,F,WUI,SW,MM</i>)	Edgewood	Ongoing	N/A					
	2. Implement Infrastructure Improvements on State Route 161 (<i>E,L,V,F,SW</i>)	Washington State Department of Transportation with Edgewood	Ongoing	✓	✓	✓			✓
	3. Identify and Mitigate Flood Prone Properties (<i>F,SW</i>)	Edgewood	Ongoing	✓		✓	✓		✓
	4. Conduct Assessment and Develop Strategy for City Roads Impacted by Flooding (<i>F,SW</i>)	Edgewood	5	✓	✓	✓	✓		✓
	5. Develop and Maintain a Continuity of Government Plan for the City (COG) (<i>E,L,V,D,F,WUI,SW,MM</i>)	Edgewood with Regional Partners	Ongoing	✓	✓	✓		✓	✓
	6. Continue Development of Shelter Program in the City (<i>E,L,V,F,WUI,SW,MM</i>)	Edgewood and PC DEM	Ongoing	✓	✓	✓		✓	
	7. Develop Coverage Areas for Reverse 911 System (Civic Ready) (<i>E,L,V,F,WUI,SW,MM</i>)	Edgewood	Ongoing	✓	✓	✓	✓	✓	✓
	8. Maintain and Update Critical Area Regulations (<i>E,L,V,F,SW,MM</i>)	Edgewood	Ongoing	✓		✓	✓	✓	✓
	9. Develop Emergency Planning Transportation Overlays (<i>E,L,T,V,F,WUI,SW,MM</i>)	Edgewood and Regional Partners (Fire, County, School)	1-2	✓	✓	✓			✓
	10. Implement Jovita Corridor Improvements- Culvert Replacement -(<i>L,F,SW</i>)	Edgewood	5	✓	✓	✓	✓		✓
	11. Seismic Replacement/Retrofit of City Owned Infrastructure (<i>E,SW</i>)	Edgewood	5	✓	✓	✓			✓
	12. Develop Contract with Regional Partners for Disaster Resources (<i>E,L,V,F,WUI,SW,MM</i>)	Edgewood	5	✓	✓	✓		✓	✓
<u>Public Education</u>	1. Continue Hazard Related Training for City Staff (<i>E,L,V,F,WUI,SW,MM</i>)	Edgewood	Ongoing	✓	✓	✓		✓	✓
	2. Continue Hazard Related Training for City Chief Elected Officials (<i>E,L,V,F,WUI,SW,MM</i>)	Edgewood	Ongoing	✓	✓	✓		✓	✓

Implementation Mechanism	Mitigation Measure <i>(Hazard(s))</i> ¹	Lead Jurisdiction(s) / Department(s)	Timeline (years)	Plan Goals					
				Life and Property	Operations Continuity	Partnerships	Natural Resources	Preparedness	Sustainable Economy
	3. Create and Publish Hazard Articles in City Quarterly Newsletter <i>(E,L,V,D,F,WUI,SW,MM)</i>	Edgewood	Ongoing	✓	✓	✓			
	4. Conduct Annual Public Safety Informational Briefings <i>(E,L,V,F,WUI,SW,MM)</i>	Edgewood	Ongoing	✓	✓	✓		✓	
	5. Continue and Expand PC-NET Program in City of Edgewood <i>(E,L,V,F,WUI,SW,MM)</i>	Edgewood and PC DEM	Ongoing	✓	✓	✓		✓	
	6. Hazard Related Education and Training for City Businesses <i>(E,L,V,F,WUI,SW,MM)</i>	Edgewood with Regional Partners	5	✓	✓	✓		✓	
	7. National Flood Insurance Program	Edgewood and PC DEM	Ongoing	✓	✓	✓	✓	✓	

Startup Mitigation Measures

Existing Mitigation Actions

Hazards: E, L, T, V, D, F, WUI, SW¹, MMError! Bookmark not defined.

The City of Edgewood will integrate the hazard mitigation plan into existing plans, ordinances, and programs to dictate land uses within the jurisdiction. Further, Edgewood will continue to implement existing programs, policies, and regulations as identified in the Capability Identification Section of this Plan. This includes such actions as updating the Critical Area Regulations and any ensuing land use policies with best available science. It also includes continuing those programs that are identified as technical capabilities.

1. **Goal(s) Addressed** = Protect Life and Property; Promote A Sustainable Economy; Ensure Continuity of Operations; Increase Public Preparedness for Disasters; Preserve or Restore Natural Resources; Establish and Strengthen Partnerships for Implementation.
2. **Cost of Measure** = TBD
3. **Funding Source and Situation** = Funding could be accomplished with local budgets or grants.
4. **Lead Jurisdiction(s)** = City of Edgewood - Administration
5. **Timeline** = Ongoing
6. **Benefit** = City-Wide
7. **Life of Measure** = Perpetual
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
	X		
Comments			
This plan is ongoing.			

Origin

Previous Plan	Current Plan
X	X

Plan Maintenance

Hazards: E, L, T, V, D, F, WUI, SW¹, MMError! Bookmark not defined.

Edgewood will adopt those processes outlined in the Plan Maintenance Section of this Plan.

1. **Goal(s) Addressed** = Protect Life and Property; Promote A Sustainable Economy; Ensure Continuity of Operations; Increase Public Preparedness for Disasters; Preserve or Restore Natural Resources; Establish and Strengthen Partnerships for Implementation.
2. **Cost of Measure** = TBD

3. **Funding Source and Situation** = Funding could be obtained through local budget.
4. **Lead Jurisdiction(s)** = City of Edgewood - Administration
5. **Timeline** = Ongoing
6. **Benefit** = City-Wide
7. **Life of Measure** = Perpetual
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
	X		
Comments			
This plan is ongoing.			

Origin

Previous Plan	Current Plan
X	X

Hazard Mitigation Forum

Pierce County Hazard Mitigation Forum

Hazards: E, L, T, V, D, F, WUI, SW¹, MMErrors! Bookmark not defined.

Edgewood will work in conjunction with the County through the Pierce County Hazard Mitigation Forum (HMF). The Forum will continue as a means of coordinating mitigation planning efforts among all jurisdictions within the County that have completed a mitigation plan. This ensures efficient use of resources and a more cooperative approach to making a disaster resistant county. The HMF meets annually; every October. This is addressed in the Plan Maintenance Section of this Plan.

1. **Goal(s) Addressed** = Protect Life and Property; Promote A Sustainable Economy; Ensure Continuity of Operations; Increase Public Preparedness for Disasters; Preserve or Restore Natural Resources; Establish and Strengthen Partnerships for Implementation.
2. **Cost of Measure** = Minor
3. **Funding Source and Situation** = Funding could be obtained through local budget.
4. **Lead Jurisdiction(s)** = PC DEM; City of Edgewood
5. **Timeline** = Ongoing
6. **Benefit** = Regional
7. **Life of Measure** = Perpetual
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
	X		

Comments
This is a continuous work-in-progress.

Origin

Previous Plan	Current Plan
X	X

City Government Mitigation Measures

Capability Identification and Evaluation

Hazards: E, L, T, V, D, F, WUI, SW¹, MMError! Bookmark not defined.

Edgewood will develop a consistent and replicable system for evaluating the City's capabilities. A comprehensive evaluation will lead to specific policy recommendations to more effectively achieve disaster resistant communities. Further, a capability evaluation involves measurable variables so that capabilities may eventually be tracked in conjunction with the implementation of all mitigation measures. This is a key component in evaluating the success of the City's overall mitigation strategy.

1. **Goal(s) Addressed** = N/A. Goals addressed are contingent upon the mitigation measures resulting from this priority.
2. **Cost of Measure** = TBD
3. **Funding Source and Situation** = Funding could be obtained through local budget or grants.
4. **Lead Jurisdiction(s)** = City of Edgewood
5. **Timeline** = Short-term
6. **Benefit** = City-Wide
7. **Life of Measure** = Perpetual
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
	X		
Comments			
This is a work-in-progress.			

Origin

Previous Plan	Current Plan
X	X

Implement Infrastructure Improvements on State Route 161

Hazards: E, L, V, F, SW¹

Edgewood will implement improvements to State Route 161 (Meridian Street) in southern areas of the City. The project will widen the road coming up out of Puyallup Valley to include pedestrian access. Once completed, this project will create more evacuation routes out of the valley and at the same time reduce the vulnerability of the existing transportation infrastructure to the landslide hazard.

1. **Goal(s) Addressed** = Protect Life and Property; Ensure Continuity of Operations; Establish and Strengthen Partnerships for Implementation; Promote A Sustainable Economy.
2. **Cost of Measure** = TBD
3. **Funding Source and Situation** = Funding could be obtained through local budget or grants.
4. **Lead Jurisdiction(s)** = Washington State Department of Transportation with City of Edgewood
5. **Timeline** = Long-term
6. **Benefit** = City of Edgewood, surrounding communities, Regional partners
7. **Life of Measure** = 50 years
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
	X		
Comments			
Traffic flow to and from the city is important for residents of the county and city. Improvements to the existing HWY 161 will help traffic flow for both vehicular traffic and pedestrians. This is a plan for the future with an undetermined time frame.			

Origin

Previous Plan	Current Plan
X	X

Identify and Mitigate Flood Prone Property

Hazards: F, SW¹

Edgewood will identify and mitigate flood prone property. The City has several areas that experience closed depression flooding. Over past few decades, properties within these areas have been flooded. The City will catalog the properties and develop a strategy to mitigate the flooding. The strategy could include such measures as purchasing structures and turning the property back to its natural state or elevating structures on the property.

1. **Goal(s) Addressed** = Protect Life and Property; Establish and Strengthen Partnerships for Implementation; Preserve or Restore Natural Resources; Promote a Sustainable Economy.
2. **Cost of Measure** = Minor
3. **Funding Source and Situation** = Funding could be obtained through local budgets or grants.
4. **Lead Jurisdiction(s)** = City of Edgewood
5. **Timeline** = Long-term
6. **Benefit** = City of Edgewood and Impacted Parcels and other Regional Partners
7. **Life of Measure** = Perpetual for buyout
8. **Community Reaction** = the proposal would be strongly opposed by most.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
	X		

Comments
This mitigation strategy is ongoing.

Origin

Previous Plan	Current Plan
X	X

Conduct Assessment and Develop Strategy for City Roads Impacted by Flooding

Hazards: F, SW¹

Edgewood will identify roads in the City that are impacted by flooding. Once the roads have been identified (such as 114th Street and 36th Street), the City will develop a strategy to mitigate the flooding. This could be done through a number of techniques, such as creating compensatory storage by raising roads, creating retention ponds, or buying out property.

1. **Goal(s) Addressed** = Protect Life and Property; Promote A Sustainable Economy; Ensure Continuity of Operations; Preserve or Restore Natural Resources; Establish and Strengthen Partnerships for Implementation.
2. **Cost of Measure** = TBD
3. **Funding Source and Situation** = Funding could be obtained through local budget or grants.
4. **Lead Jurisdiction(s)** = City of Edgewood
5. **Timeline** = Long-term
6. **Benefit** = City of Edgewood, Regional Partners, residents in impacted areas.
7. **Life of Measure** = Perpetual
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
	X		
Comments			
The city's comprehensive plans, various stormwater plans, and various public and private developments will help identify those areas that are in greatest need of mitigation.			

Origin

Previous Plan	Current Plan
X	X

Develop and Maintain a Continuity of Government Plan for the City (COG)

Hazards: E, L, V, D, F, WUI, SW¹, MMError! Bookmark not defined.

Edgewood will develop a Continuity of Government Plan for the City.

The purpose of this Plan will be to provide guidance for the protection of the City Government's officials and documents, with or without warning of a wide range of potential emergencies, while outlining the City's viable and executable contingency plans for Continuity of Government (COG).

This COG is planted in the foundations of existing fundamentals of Continuity of Government (COG) (i.e., the continued performance of essential department functions and support of the City during emergency or disaster situations.) and Continuity of Operations (COOP) (i.e., providing essential functions to customers from a different location, due to the primary facility becoming unusable, for long or short periods of time). COG is dependent on effective implementation of COOP plans and capabilities by the City.

1. **Goal(s) Addressed** = Protect Life and Property; Ensure Continuity of Operations, Establish and Strengthen Partnerships for Implementation; Increase Public Preparedness for Disasters; Promote a Sustainable Economy.
2. **Cost of Measure** = TBD
3. **Funding Source and Situation** = Funding could be obtained through local budgets.
4. **Lead Jurisdiction(s)** = City of Edgewood with Regional Partners
5. **Timeline** = Long-Term
6. **Benefit** = City of Edgewood, residents and businesses
7. **Life of Measure** = Varies
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
	X		
Comments			
This is a work-in-progress and is subject to change(s) based on staffing and training.			

Origin

Previous Plan	Current Plan
X	X

Continue Development of Shelter Program in City

Hazards: E, L, V, F, WUI, SW¹, MMError! Bookmark not defined.

Edgewood will continue the development of the Shelter Program in the City.

1. **Goal(s) Addressed** = Protect Life and Property; Ensure Continuity of Operations; Establish and Strengthen Partnerships for Implementation; Increase Public Preparedness for Disasters.
2. **Cost of Measure** = TBD
3. **Funding Source and Situation** = Funding could be obtained through local budget.
4. **Lead Jurisdiction(s)** = City of Edgewood and PCDEM
5. **Timeline** = Ongoing
6. **Benefit** = City of Edgewood Residents and Regional Partners
7. **Life of Measure** = Varies
8. **Community Reaction** = the proposal would be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
	X		
Comments			
The City of Edgewood has worked with the American Red Cross to identify shelter locations within the city boundaries and continues to do so.			

Origin

Previous Plan	Current Plan
X	X

Develop Coverage Areas for Reverse 911 System (Civic Ready)

Hazards: E, L, V, F, WUI, SW¹, MMError! Bookmark not defined.

The measure will involve installing software (Civic Ready) which will allow communications to be sent to defined geographic areas within the city. Similar to Reverse 911 systems, these information sharing programs have proven to be invaluable to citizens in areas affected by disasters.

1. **Goal(s) Addressed** = Protect Life and Property; Ensure Continuity of Operations; Establish and Strengthen Partnerships for Implementation; Preserve or Restore Natural Resources; Increase Public Preparedness for Disasters; Promote a Sustainable Economy.
2. **Cost of Measure** = TBD
3. **Funding Source and Situation** = Funding could be obtained through local budget.
4. **Lead Jurisdiction(s)** = City of Edgewood
5. **Timeline** = Ongoing
6. **Benefit** = City of Edgewood Residents and Businesses, and Regional Partners
7. **Life of Measure** = Varies
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
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		X	
Comments			
The software has been purchased but not yet installed.			

Origin

Previous Plan	Current Plan
X	X

Maintain and Update Critical Area Regulations

Hazards: E, L, V, F, SW¹, MM²

Edgewood will maintain and update the City's Critical Area Regulations. The City is required to adopt and implement land use regulations that protect critical or environmentally sensitive areas in the City under the State Growth Management Act. These areas coincide with many natural hazards that impact the City, such as flood hazard areas, volcanic lahar areas, landslide hazard areas, and seismic hazard areas. By protecting these areas and limiting the people and infrastructure in the areas, the vulnerability of the City is reduced, and the environment is protected. As an education component of this process, the City will continue educating the land users of hazards that they are building in. The checklist is developed when a developer goes in for a permit to develop property, and the critical areas are identified. Through the use of the of the critical area's checklist, the City will take the opportunity to educate developers on the hazards that may impact them.

Priority Updates:

- As part of the updating, the City will hire geographic information systems technician to incorporate wetland buffers into City's critical areas, and
 - Partner with water suppliers (Milton, Mt. View, etc.) to develop GIS dataset to incorporate into their water sources in critical areas.
1. **Goal(s) Addressed** = Protect Life and Property; Establish and Strengthen Partnerships for Implementation; Preserve or Restore Natural Resources; Increase Public Preparedness for Disasters; Promote a Sustainable Economy.
 2. **Cost of Measure** = TBD
 3. **Funding Source and Situation** = Funding could be obtained through local budget.
 4. **Lead Jurisdiction(s)** = City of Edgewood
 5. **Timeline** = Ongoing
 6. **Benefit** = City of Edgewood Residents and businesses and Regional Partners
 7. **Life of Measure** = Varies
 8. **Community Reaction** = the proposal would be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
	X		
Comments			

Origin

Previous Plan	Current Plan
X	X

Develop Emergency Planning Transportation Overlays

Hazards: E, L, T, V, F, SW, WUI¹, MMError! Bookmark not defined.

Edgewood will identify various emergency transportation routes throughout the City and map them for planning purposes. Due to the heavy reliance on other jurisdictions for services, this measure will involve input from the City, the Utility Providers, the County, the School Districts and the Fire District to name a few. The routes could include: snow clearing, valley evacuation routes, etc. This measure will build on the Regional Evacuation Plans that are being developed with input from the City.

1. **Goal(s) Addressed** = Protect Life and Property; Promote A Sustainable Economy; Ensure Continuity of Operations; Establish and Strengthen Partnerships for Implementation.
2. **Cost of Measure** = TBD
3. **Funding Source and Situation** = Funding could be obtained through local budget.
4. **Lead Jurisdiction(s)** = City of Edgewood and Regional Partners (Fire, County, School)
5. **Timeline** = Short-term
6. **Benefit** = City of Edgewood and other Regional Partners
7. **Life of Measure** = Perpetual
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
	X		
Comments			
The City of Edgewood is currently looking at all transportation matters throughout the city to include improvement of existing roadways and the planning and development of new possible routes to and from the city.			

Origin

Previous Plan	Current Plan
X	X

Implement Jovita Corridor Improvements—Culvert Replacement

Hazards: L, F, SW¹

Edgewood will implement improvements to Jovita Road in north-eastern area of the City. The project will replace a culvert along the road coming up out of Sumner Area. The culvert will be of a type which will upgrade the current capacity from 12 inches. This project will reduce the flooding in the area, which in turn will reduce the landslide threat. Furthermore, this project will allow for further salmon restoration in the area.

1. **Goal(s) Addressed** = Protect Life and Property; Promote A Sustainable Economy; Ensure Continuity of Operations; Preserve or Restore Natural Resources; Establish and Strengthen Partnerships for Implementation.
2. **Cost of Measure** = TBD
3. **Funding Source and Situation** = Funding could be obtained through local budget, WSDOT Funds or Salmon Recovery Funds
4. **Lead Jurisdiction(s)** = City of Edgewood
5. **Timeline** = Long-term
6. **Benefit** = City of Edgewood and Regional Partners
7. **Life of Measure** = 50 years
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
	X	X	
Comments			
A portion of Jovita has been improved but there is more work yet to be done.			

Origin

Previous Plan	Current Plan
X	X

Seismic Replacement/Retrofit of City Owned Infrastructure

Hazards: E, SW¹

Edgewood will identify and mitigate City owned infrastructure that is in need of a seismic replacement/retrofit. The current City Hall is one such candidate, which would be a good candidate for a seismic replacement.

1. **Goal(s) Addressed** = Protect Life and Property; Promote A Sustainable Economy; Ensure Continuity of Operations; Establish and Strengthen Partnerships for Implementation.
2. **Cost of Measure** = TBD
3. **Funding Source and Situation** = Funding could be obtained through local budget or grants.
4. **Lead Jurisdiction(s)** = City of Edgewood
5. **Timeline** = Long-term
6. **Benefit** = City of Edgewood, Regional Partners, Various by infrastructure
7. **Life of Measure** = 5 years for assessment portion.
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
	X		
Comments			
Working in a seismically safe building (i.e. City Hall) is important for the city and its employees. In order to ensure city operations can continue to operate following a disaster, it is equally important for the residents of the city that they have a seismically safe/sound building too. Retrofitting and/or safety improvements are needed to ensure this safety and a continuity of operations.			

Origin

Previous Plan	Current Plan
X	X

Develop Contract with Regional Partners for Disaster Resources

Hazards: E, L, V, F, WUI, SW¹, MMError! Bookmark not defined.

Edgewood will develop a memorandum of understanding, contract or agreement with Regional Partners for use of resources in an emergency or disaster. The City shares responsibilities with several Regional Partners when emergencies occur. The local fire district, water companies, school districts, county departments, etc. all have resources that could be leveraged in times of emergency or disaster, and this memorandum would formalize this process.

1. **Goal(s) Addressed** = Protect Life and Property; Ensure Continuity of Operations, Establish and Strengthen Partnerships for Implementation; Increase Public Preparedness for Disasters; Promote a Sustainable Economy.
2. **Cost of Measure** = TBD
3. **Funding Source and Situation** = Funding could be obtained through local budget.
4. **Lead Jurisdiction(s)** = City of Edgewood
5. **Timeline** = Long-term
6. **Benefit** = City of Edgewood, residents and businesses
7. **Life of Measure** = Various
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
	X		
Comments			
This is a work-in-progress with a current focus on “Communications” and a continuation of operations.			

Origin

Previous Plan	Current Plan
X	X

Public Education Mitigation Measures

Continue Hazard Related Training for City Staff

Hazards: E, L, V, F, WUI, SW¹, MMError! Bookmark not defined.

Edgewood will continue the Hazard Related Disaster Training for City Staff. This will build on such classes that involve: Preparedness at work, home and on the road; NIMS training; ATC-20 training; and Hazard Awareness Training. Having employees prepared will help ensure City Operations and provide a faster response and recovery when hazards threaten the City.

1. **Goal(s) Addressed** = Protect Life and Property; Ensure Continuity of Operations, Establish and Strengthen Partnerships for Implementation; Increase Public Preparedness for Disasters; Promote a Sustainable Economy.
2. **Cost of Measure** = Varies
3. **Funding Source and Situation** = Funding could be obtained through local budget.
4. **Lead Jurisdiction(s)** = City of Edgewood
5. **Timeline** = Ongoing
6. **Benefit** = City of Edgewood employees, residents and businesses
7. **Life of Measure** = Varies
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
	X		
Comments			
This is a work-in-progress.			

Origin

Previous Plan	Current Plan
X	X

Continue Hazard Related Training for City Chief Elected Officials

Hazards: E, L, V, F, WUI, SW¹, MMError! Bookmark not defined.

Edgewood will continue the Hazard Related Disaster Preparedness Training for City Chief Elected Officials. This will build on such classes that involve: Preparedness at work, home, and on the road, NIMS training, and Hazard Awareness Training. Having chief elected officials prepared will help ensure City Operations and provide a faster response and recovery when hazards threaten the City.

1. **Goal(s) Addressed** = Protect Life and Property; Ensure Continuity of Operations, Establish and Strengthen Partnerships for Implementation; Increase Public Preparedness for Disasters; Promote a Sustainable Economy.
2. **Cost of Measure** = TBD
3. **Funding Source and Situation** = Funding could be obtained through local budget.
4. **Lead Jurisdiction(s)** = City of Edgewood
5. **Timeline** = Short-term
6. **Benefit** = City of Edgewood, residents and businesses
7. **Life of Measure** = Varies
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
	X		
Comments			
This is a work-in-progress.			

Origin

Previous Plan	Current Plan
X	X

Create and Publish Hazard Articles in City Quarterly Newsletter

Hazards: E, L, V, D, F, WUI, SW¹, MMError! Bookmark not defined.

Edgewood will continue the practice of using the City Quarterly Newsletter to educate the public about the hazards in the City. This could include articles about structural renovations of structures, basic preparedness, etc. This is an effective tool in connecting with citizens.

1. **Goal(s) Addressed** = Protect Life and Property; Ensure Continuity of Operations; Establish and Strengthen Partnerships for Implementation.
2. **Cost of Measure** = Minimal
3. **Funding Source and Situation** = Funding could be obtained through local budget.
4. **Lead Jurisdiction(s)** = City of Edgewood
5. **Timeline** = Ongoing
6. **Benefit** = City of Edgewood citizens and Regional Partners
7. **Life of Measure** = Varies
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
	X		
Comments			
When needed/possible and as space allows. It will not be utilized quarterly, though.			

Origin

Previous Plan	Current Plan
X	X

Conduct Annual Public Safety Informational Briefings

Hazards: E, L, V, F, WUI, SW¹, MMError! Bookmark not defined.

Edgewood will conduct an Annual Public Safety Fair. This Fair could be tied into an existing event in the Region or a new event. Regional partners such as Water Companies, the Fire District, the School Districts and others could be involved. The main messages could include educating the public on the hazards in the City, the responsibilities of given jurisdictions, and how to prepare. This message should build on the 3 Days 3 Ways Message listed on the City Website and that is used throughout the Puget Sound.

1. **Goal(s) Addressed** = Protect Life and Property; Ensure Continuity of Operations; Establish and Strengthen Partnerships for Implementation; Increase Public Preparedness for Disasters.
2. **Cost of Measure** = TBD
3. **Funding Source and Situation** = Funding could be obtained through local budget.
4. **Lead Jurisdiction(s)** = City of Edgewood
5. **Timeline** = Short-term
6. **Benefit** = City of Edgewood residents and Regional Partners
7. **Life of Measure** = Varies
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
	X		
Comments			
The City of Edgewood and its Police Department will continue to discuss emergency preparedness at various Community Outreach events. The Edgewood Community Picnic is an annual event which allows for DEM and others to set up booths that may provide information to citizens. National Night Out also allows for DEM personnel to distribute emergency preparedness information.			

Origin

Previous Plan	Current Plan
X	X

Continue and Expand PC-NET Program in City

Hazards: E, L, V, F, WUI, SW¹, MMError! Bookmark not defined.

Edgewood will continue to expand the PC-NET (Pierce County Neighborhood Emergency Teams) in the City.

PCNET is a neighborhood-oriented approach to emergency preparedness and homeland security. It is based on the belief that a cooperative effort between a county and its citizens is the only sure way to protect a neighborhood and to prepare for a major disaster. The program helps individuals and their neighborhoods prepare to mutually assist each other so that lives can be saved, property can be spared, and emergency services can be freed to respond to the most devastated areas. This will be accomplished by organizing block groups into a variety of disaster response teams, each of which has a simple one-page list that clearly outlines necessary tasks. No special skills or equipment are required to participate—and only a minimal time commitment is needed. Such programs are critical to reminding the public of the hazards in Pierce County, and of the necessity of having on hand the supplies and materials to survive independently for a minimum of 72 hours. These programs will be continued and expanded upon.

1. **Goal(s) Addressed** = Protect Life and Property; Ensure Continuity of Operations; Establish and Strengthen Partnerships for Implementation; Increase Public Preparedness for Disasters.
2. **Cost of Measure** = TBD
3. **Funding Source and Situation** = Funding could be obtained through local budget.
4. **Lead Jurisdiction(s)** = City of Edgewood and PCDEM
5. **Timeline** = Ongoing
6. **Benefit** = City of Edgewood, residents, businesses and Regional Partners
7. **Life of Measure** = Varies
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
	X		
Comments			
This program will continue to be discussed at Community Outreach Events along with other Emergency Preparedness topics.			

Origin

Previous Plan	Current Plan
X	X

Hazard Related Education and Training for City Businesses

Hazards: E, L, V, F, WUI, SW¹, MMError! Bookmark not defined.

Edgewood will conduct hazard related education and training for City Businesses. The City businesses play a vital role in the future of the City. By partnering with other regional governmental partners (Fire District, Cities, County, etc.) the businesses will be provided an awareness level introduction to the hazards in the area. Working with local business groups or

the chambers of commerce, this will help build a level of sustainability into the City along with providing a mechanism for leveraging resources before and after an emergency or disaster.

1. **Goal(s) Addressed** = Protect Life and Property; Ensure Continuity of Operations, Establish and Strengthen Partnerships for Implementation; Increase Public Preparedness for Disasters.
2. **Cost of Measure** = TBD
3. **Funding Source and Situation** = Funding could be obtained through local budget.
4. **Lead Jurisdiction(s)** = City of Edgewood with Regional Partners
5. **Timeline** = Short-term
6. **Benefit** = City of Edgewood businesses and residents, Regional Partners
7. **Life of Measure** = Varies
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
	X		
Comments			
This has not been occurring but the benefit to begin doing so is there.			

Origin

Previous Plan	Current Plan
X	X

National Flood Insurance Program

Hazards: F

Edgewood will ensure that the City is compliant with the National Flood Insurance Program by updating floodplain identification and mapping, enforcing the flood damage prevention ordinance, and providing public education on floodplain requirements and impacts. The City of Edgewood will be an active participant in the Pierce County Flood Control District.

1. **Goal(s) Addressed** = Protect life and property; Ensure Continuity of Operations; Increase Public Preparedness; Increase and Strengthen Partnerships; Protect the Environment; Increase Public Preparedness
2. **Cost of Measure** = Staff time, special materials required, permits
3. **Funding Source and Situation** = Funding could be obtained through local budget or grants
4. **Lead Jurisdiction(s)** = Edgewood (Community Development); PC PWU
5. **Timeline** = On-going
6. **Benefit** = City-wide; Regional
7. **Life of Measure** = Perpetual
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
	X		
Comments			
This is an ongoing process.			

Origin

Previous Plan	Current Plan
X	X

Endnotes

¹ Hazard Codes:

Where necessary, the specific hazards addressed are noted as follows:

A:	Avalanche
E:	Earthquake
F:	Flood
D:	Drought
T:	Tsunami
V (L OR T):	Volcanic (lahar or tephra-specific)
SW:	Severe Storm (wind-specific)
L:	Landslide
WUI:	Wildland/Urban Interface Fire
MM:	Manmade to include terrorism
ALL:	All hazards, including some man made. Where only natural hazards are addressed, it is noted.

² While this Plan is strictly a *Natural* hazard mitigation plan, where a measure stems from a facility recommendation (Infrastructure Section) that deals specifically with terrorism, the mitigation strategy will use that analysis. Other measures, such as those that deal with multi-hazard community preparedness or recovery planning, mitigate man-made hazards and are noted as such. It is not the intent of this notation to imply that all measures were analyzed with regards to man-made hazards or that measures were identified with that in mind. Rather, the notation merely illustrates the potential on this template for the inclusion of man-made hazard analysis.

Section 6

Infrastructure Requirements

Assessing Vulnerability: Identifying Structures---Requirement §201.6(c)(2) (ii)(A):

The plan **should** describe vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard areas.

- Does the new or updated plan describe vulnerability in terms of the **types and numbers** of **existing** buildings, infrastructure, and critical facilities located in the identified hazard areas?
- Does the new or updated plan describe vulnerability in terms of the **types and numbers** of **future** buildings, infrastructure, and critical facilities located in the identified hazard areas?

Assessing Vulnerability: Estimating Potential Losses---Requirement §201.6(c)(2) (ii)(B):

The plan **should** describe vulnerability in terms of an] estimate of the potential dollar losses to vulnerable structures identified in paragraph (c)(2)(i)(A) of this section and a description of the methodology used to prepare the estimate.

- Does the new or updated plan estimate **potential dollar losses** to vulnerable structures?
- Does the new or updated plan describe the **methodology** used to prepare the estimate?

SECTION 6

REGION 5 ALL HAZARD MITIGATION PLAN 2020-2025 EDITION CITY OF EDGEWOOD INFRASTRUCTURE SECTION

The Infrastructure Section is exempt from public disclosure pursuant to RCW 42.56.420. Request for public disclosure of this document or parts thereof should be referred immediately to the City of Edgewood's Mayor.

Distribution or changes to this document without the express written consent of the City of Edgewood's Mayor is prohibited.

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Section 7

Plan Maintenance Procedures Requirements

Monitoring, Evaluating, and Updating the Plan---Requirement §201.6(c)(4)(I):

[The plan maintenance process **shall** include a] section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.

- Does the new or updated plan describe the method and schedule for **monitoring** the plan, including the responsible department?
- Does the new or updated plan describe the method and schedule for **evaluating** the plan, including how, when and by whom (i.e. the responsible department)?
- Does the new or updated plan describe the method and schedule for **updating** the plan within the five-year cycle?

Incorporation into Existing Planning Mechanisms---Requirement §201.6(c)(4) (ii):

[The plan **shall** include a] process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans, when appropriate...

- Does the new or updated plan identify other local planning mechanisms available for incorporating the mitigation requirements of the mitigation plan?
- Does the new or updated plan include a process by which the local government will incorporate the mitigation strategy and other information contained in the plan (e.g., risk assessment) into other planning mechanisms, when appropriate?
- Does the updated plan explain how the local government incorporated the mitigation strategy and other information contained in the plan (e.g., risk assessment) into other planning mechanisms, when appropriate?

Continued Public Involvement---Requirement §201.6(c)(4) (iii):

[The plan maintenance process **shall** include a] discussion on how the community will continue public participation in the plan maintenance process.

- Does the new or updated plan explain how continued public participation will be obtained? (For example, will there be public notices, an on-going mitigation plan committee, or annual review meetings with stakeholders?)

SECTION 7

REGION 5 HAZARD MITIGATION PLAN 2020-2025 EDITION CITY OF EDGEWOOD PLAN MAINTENANCE SECTION

Table of Contents

PLAN MAINTENANCE PROCEDURES REQUIREMENTS.....	1
TABLE OF CONTENTS	2
PLAN ADOPTION	3
MAINTENANCE STRATEGY	3
IMPLEMENTATION	4
PLAN EVALUATION AND UPDATE	7
CONTINUED PUBLIC INVOLVEMENT	9
ENDNOTES	10

The planning update process began in the spring of 2019 and continues building on the foundation of breaking the disaster cycle by planning for a disaster resistant City of Edgewood and Pierce County Region 5. This Section details the formal process that will ensure the City of Edgewood Hazard Mitigation Plan remains an active and relevant document. The Plan Maintenance Section includes a description of the documentation citing the Plan's formal adoption by the Edgewood City Council. The Section also describes: the method and schedule of monitoring, evaluating, and updating within a five-year cycle; the process for incorporating the mitigation strategy into existing mechanisms; and, the process for integrating public participation throughout the plan maintenance. The Section serves as a guide for implementation of the hazard mitigation strategy.

Plan Adoption

Upon completion of the Edgewood Plan it will be submitted to Washington State Emergency Management Division (EMD) for a Pre-Adoption Review. The EMD has 30 days to then act on the Plan and forward it to the Federal Emergency Management Agency (FEMA) Region X for review. This review, which is allowed 45 days by law, will address the federal criteria outlined in FEMA Interim Final Rule 44 CFR Part 201.6. In completing this review there may be revisions requested by the EMD and/or FEMA. Revisions could include changes to background information, editorial comments, and the alteration of technical content. Pierce County Department of Emergency Management (PC DEM) will call a Planning Team Meeting to address any revisions needed and resubmit the changes.

The Edgewood City Council is responsible for the adoption of the Plan after the Pre-Adoption Review by the EMD and the FEMA Region X. Once the City adopts the Plan, the City Manager will be responsible for submitting it, with a copy of the resolution, to the State Hazard Mitigation Officer at the Washington State EMD. EMD will then act on the Plan and forward it to the FEMA Region X for final approval. Upon approval by FEMA, the City will gain eligibility for both Hazard Mitigation Grant Program and Pre-Disaster Mitigation Grant Program funds.

Appendix A will list the dates and include a copy of the signed Resolution from the jurisdiction as well as a copy of the FEMA approval of the jurisdiction's Plan. In future updates of the Plan, Appendix C will be used to track changes and/or updates. This plan will have to be re-adopted and re-approved prior to the five-year deadline of July 2025.

Maintenance Strategy

The City of Edgewood's maintenance strategy for implementing, monitoring, and evaluating the plan provides a structure that encourages collaboration, information transference, and innovation. Through a multi-tiered implementation method, the City will provide its citizens a localized approach to loss reduction while serving their needs through coordinated policies and programs. The method's emphasis on all levels of participation promotes public involvement and adaptability to changing risks and vulnerabilities. Finally, it will provide a tangible link between staff, students and the various levels of government service, ranging

from community action to the Department of Homeland Security. Through this strategy, the City of Edgewood will continue to achieve a more disaster resistant community.

Implementation

As noted in Section 4, in the first quarter of 2017, the City of Edgewood adopted FEMA's most current flood maps. Along with the adoption of the maps, the City also updated Title 14 of the Edgewood Municipal Code which established more control over the development on the valley floor. Additionally, the adoption of the Critical Areas Ordinance in 2018 allowed the city to continue to work with landowners to establish Base Flood Elevation (BFE) for properties with closed depression areas. The City of Edgewood is regularly evaluating and monitoring the need for future updates to their plan.

Historically, the City of Edgewood's Comprehensive Plan made passive reference to a Hazard Mitigation Plan; but current capital improvement needs identified here are considered during the City's annual Six-Year Capital Improvement Plan update process.

In order to ensure efficient and effective implementation, the City of Edgewood will make use of its capabilities, infrastructure, and dedicated population. The City will implement its mitigation strategy over the next five years primarily through its annual budget process and varying grant application processes. All programs and entities identified in the Capability Identification Section will serve as the implementing mechanisms within those processes.

Under the direction of the Edgewood City Council, the Mayor will work in conjunction with those departments/agencies/entities identified in both the Capability Identification Section and under each mitigation measure to initiate the mitigation strategy. For example, any infrastructure-related measures will be implemented through the Capital Improvement Plan and the various departments involved through their normal budget schedules. Regulatory and land use measures will continue to be implemented by the City. Through collaboration with the City Planning Department any updates or amendments to the City's Comprehensive Plan will include hazard mitigation, as necessary. Other measures will be implemented through collaboration with the identified jurisdictions/departments listed under each measure's evaluation and through the mechanisms and funding sources identified in the Capability Identification Section.

These efforts fall under a broader implementation strategy that represents a county-wide effort. This strategy must be adaptable to change while being consistent in its delivery.

The mitigation implementation strategy is a three-tiered method that emphasizes localized needs and vulnerabilities while addressing the City of Edgewood's as well as multi-jurisdictional policies and programs. The first tier is implementation through individual citizen level Public Education Programs already existing in the City of Edgewood (for example, at the individual level through Community outreach events, like the Edgewood Community Picnic in conjunction with the Pierce County Emergency Management and at the neighborhood level through PC NET). The second is the City-Wide mechanism for

implementation, in this case the City of Edgewood's Administration. The third tier is a more external and multi-jurisdictional mechanism, the Hazard Mitigation Forum (HMF).

This method ensures that implementation speaks to unique vulnerabilities at the most local level, allows for coordination among and between levels, and promotes collaboration and innovation. Further, it provides a structured system of monitoring implementation. Finally, it is a method that can adapt to the changing vulnerabilities of the City, the region, and the times. These three levels and their means of implementation and collaboration are described below.

Public Education Programs

At the individual citizen level, public education programs provide the City of Edgewood with a localized mechanism for implementation. This approach to mitigation can adapt to the varying vulnerabilities and needs within the growing City and region. Public education programs are also a means for involving the public in mitigation policy development. Departments conducting mitigation-related programs will provide the existing targeted neighborhoods and special-needs populations a catalogue of mitigation measures from which individuals can choose those that would be most effective in their neighborhood. For example, currently the City is working with PC DEM in forming the Edgewood's PC NETs to better prepare for, and respond to, disasters. PC NETs provide a coordinated group of communities through which individuals can implement home and neighborhood level mitigation measures.

Jurisdiction-Wide: City Mayor

Under the policy direction of the Edgewood City Council, the City Mayor will be responsible for implementing the plan. The City Mayor of Edgewood is responsible to the City Council for the day-to-day operations of the City, its departments, the annual budget, and personnel, including the selection, evaluation, and training of all city staff. The City Mayor oversees, coordinates, and administers the activities of all city departments and offices consistent with ordinances, laws, rules and regulations.

Initially, the Edgewood City Council will be responsible for the overall review of the plan and the City Mayor will designate mitigation measures to those departments responsible for their implementation. This will be done with assistance from both the Edgewood Police Chief and Edgewood's Senior Planner. The City Mayor will address the Plan on an annual basis. The Police Chief and the Senior Planner will monitor the plan's implementation throughout the year and report to the City Mayor of Edgewood at this annual meeting. Evaluation and updates will be completed at this meeting. Recommendations will be made to coincide with the normal budgeting processes and provide an ample time period for review and adoption of any necessary changes to the implementation schedule.

Eventually, the City Mayor may choose to cede this responsibility to a Hazard Mitigation/Public Safety Committee. This committee would be composed of representatives from the departments identified in the Capability Identification Section as having a role in hazard mitigation. The Committee would ultimately provide a mechanism for coordination

among those departments engaged in mitigation to ensure that a comprehensive and efficient approach be undertaken in the City's efforts at all-hazards mitigation.

Hazard Mitigation Forum

The PC Hazard Mitigation Forum (HMF) represents a broader and multi-jurisdictional approach to mitigation implementation. The PC HMF will be comprised of representatives from Pierce County and all jurisdictions partially or wholly within its borders that have undertaken mitigation planning efforts. The PC HMF will serve as coordinating body for projects of a multi-jurisdictional nature and will provide a mechanism to share successes and increase the cooperation necessary to break the disaster cycle and achieve a disaster resistant Pierce County. Members of the PC HMF will include the following jurisdictions who have completed, or who have begun the process of completing, DMA 2000 compliant plans:

- City of Bonney Lake
- City of DuPont
- City of Fife
- City of Gig Harbor
- City of Milton
- City of Puyallup
- City of Sumner
- City of University Place
- Town of Eatonville
- Town of Steilacoom
- Unincorporated Pierce County
- East Pierce Fire and Rescue #22
- Graham Fire and Rescue #21
- Orting Valley Fire and Rescue #18
- Riverside Fire and Rescue #14
- Anderson Island Fire and Rescue #27
- West Pierce Fire and Rescue #3
- Clover Park School District
- Eatonville School District
- Franklin Pierce School District
- Pacific Lutheran University
- Puyallup School District
- Sumner School District
- University Place School District
- Crystal River Ranch HOA
- Pierce Transit
- Riviera Community Club
- Clear Lake Water District
- City of Buckley
- City of Edgewood
- City of Fircrest
- City of Lakewood
- City of Orting
- City of Roy
- City of Tacoma
- Town of Carbonado
- Town of South Prairie
- Town of Wilkeson
- Central Pierce Fire and Rescue #6
- Gig Harbor Fire and Medic One #5
- Key Peninsula Fire Department #16
- Browns Point Fire Department #13
- Ashford Elbe Fire District #23
- South Pierce Fire and Rescue #17
- Carbonado School District
- Dieringer School District
- Fife School District
- Orting School District
- Peninsula School District
- Steilacoom School District
- Tacoma School District
- Crystal Village HOA
- Metropolitan Park District
- Port of Tacoma
- Taylor Bay Beach Club
- Firgrove Mutual Water Company

- Fruitland Mutual Water Company
- Lakeview Light and Power
- Mt. View-Edgewood Water Company
- Parkland Light and Water Company
- Spanaway Water Company
- Valley Water District
- Community Health Care
- Kaiser Permanente
- Western State Hospital
- Tacoma Pierce County Health Dept.
- Graham Hill Mutual Water Company
- Lakewood Water District
- Ohop Mutual Light Company
- Peninsula Light Company
- Summit Water and Supply Company
- Cascade Regional Blood Services
- Franciscan Health System
- MultiCare Health System
- Puyallup Tribe of Indians
- Bethel School District

PC HMF will meet annually in November and will be coordinated by PC DEM. The City of Edgewood will be an active participant in the PC HMF and will be represented by the city appointed staff. Only through this level of cooperation can these jurisdictions meet all their mitigation goals.

Regional Mitigation Planning

Pierce County, Region 5 was configured into 5 planning groups based on a commonality in geographical hazards for the 2020-2025 mitigation plan update to foster relationship building and resiliency planning amongst jurisdictions. Although much of the meeting and planning time focused on plan updates and fostered relationship building the resiliency planning component will continue within multi-jurisdictional groups working together to further reduce risk. This provides another opportunity for continued collaboration planning amongst jurisdictions working and partnering together. The meeting frequency will be driven by the mitigation implementation strategy and combines the three-tiered approach. The City of Edgewood will continue to engage within the “north group” geographical planning area and will provide the specific department representative to engage in and implement mitigation activities within this geographical group.

Plan Evaluation and Update

It should be noted this planning process began in early 2019 following the then current CFR 201.6 Hazard Mitigation Planning Requirements. Based on new requirements in the Stafford Act, the City of Edgewood will evaluate and update the plan to incorporate these new requirements as necessary. Furthermore, if there are additional Stafford Act changes affecting CFR 201.6 in the coming years, the planning process will incorporate those as well.

The Edgewood Plan will guide the City of Edgewood’s mitigation efforts for the foreseeable future. The City of Edgewood’s representatives on the Planning Team have developed a method to ensure that regular review and update of the Plan occur within a five-year cycle. The City Mayor of Edgewood will coordinate any reviews through the annual meeting noted above.

PC DEM will collaborate with the City Mayor and the PC HMF to monitor and evaluate the mitigation strategy implementation. PC DEM will track this implementation through Pierce County's GIS database. Findings will be presented and discussed at the annual meeting.

The Police and Planning Departments will provide a report of the Plan's implementation to the Edgewood City Mayor at the annual meeting. This report will drive the meeting agendas and will include the following:

- Updates on implementation throughout the City of Edgewood;
- Updates on the PC HMF and mitigation activities undertaken by neighboring jurisdictions;
- Changes or anticipated changes in hazard risk and vulnerability at the City, county, regional, State, FEMA and Homeland Security levels;
- Problems encountered or success stories;
- Any technical or scientific advances that may alter, make easier, or create measures.

The City Mayor of Edgewood and local experts will decide on updates to the strategy based on the above information and a discussion of:

- The various resources available through budgetary means as well as any relevant grants;
- The current and expected political environment and public opinion;
- Meeting the mitigation goals with regards to changing conditions.

PC DEM will work with the City Mayor of Edgewood to review the Risk Assessment Section to determine if the current assessment should be updated or modified based on new information. This will be done during the regularly scheduled reviews of the Hazard Identification and Vulnerability Assessment and the Comprehensive Emergency Management Plan.

Additional reviews of this Plan will be required following disaster events and will not substitute for the annual meeting. Within ninety days following a significant disaster or an emergency event impacting the City of Edgewood, the City Mayor will provide an assessment that captures any "success stories" and/or "lessons learned." The assessment will detail direct and indirect damages to the City of Edgewood and its infrastructure, response and recovery costs, as part of the standard recovery procedures that use EMD Forms 129, 130, and 140. This process will help determine any new mitigation initiatives that should be incorporated into the Plan to avoid or reduce similar losses due to future hazard events. In this manner, recovery efforts and data will be used to analyze mitigation activities and spawn the development of new measures that better address any changed vulnerabilities or capabilities. Any updates to the Plan will be addressed at the annual November meeting.

As per 44 CFR 201.6, the City of Edgewood must re-submit the Plan to the State and FEMA with any updates every five years. This process will be coordinated by PC DEM through the Pierce County Hazard Mitigation Forum. In 2025 and every five years following at the

Hazard Mitigation Forum, the City Mayor of Edgewood will submit the updated plan to PC DEM. PC DEM's Mitigation and Recovery Program Manager will collect updates from the Region 5 Plan jurisdictions and submit them to the State EMD and FEMA.

Continued Public Involvement

The City of Edgewood is dedicated to continued public involvement and education in review and updates of the Plan. The City Mayor of Edgewood will retain copies of the Plan and will post it on the City of Edgewood's website¹.

The three-tiered implementation method provides an opportunity for continuous public involvement. Public Education campaigns are a means of informing the public on updates and implementation activities. Further, prior to submitting the Plan to WA EMD and FEMA for the five-year review, the City of Edgewood will hold public information and comment meeting. This meeting will provide the public a forum during which they can express their concerns, opinions, or ideas about the Plan. This meeting will be advertised in the City of Edgewood through a variety of media, including the City Newsletter and a posting on the website.

The City of Edgewood will conduct a review on a yearly basis to ensure all elements of the mitigation plan are updated and accurate. Each of the jurisdictions are tasked with providing documentation on public involvement including a brief description for each public hearing held, a summary on attendance, any feedback received from the public and the an overall description of what was accomplished. Even further, the City of Edgewood will provide proof of their attempts for public involvement such as screenshots of websites including date ranges, flyers and other relevant material documenting the public involvement process. Lastly, the City of Edgewood will look for new innovative ways for public involvement.

Endnotes

¹ <http://cityofedgewood.org>

APPENDIX A

REGION 5 ALL HAZARD MITIGATION PLAN 2020-2025 EDITION CITY OF EDGEWOOD

Plan Adoption

The “*Region 5 Hazard Mitigation Plan*” was adopted by the City of Edgewood’s City Council on November 24, 2020 by resolution number 20-0536. The following page shows a copy of that resolution.

RESOLUTION NO. 20- 0536

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EDGEWOOD, PIERCE COUNTY, WASHINGTON, ADOPTING THE REGION 5 ALL HAZARD MITIGATION PLAN – 2020-2025 EDITION AND THE EDGEWOOD ADDENDUM TO THE REGION 5 HAZARD MITIGATION PLAN

WHEREAS, the Federal Disaster Mitigation Act of 2000 requires that for all disasters declared on or after November 1, 2004, applicants for sub-grants following any disaster must have an approved Natural Hazard Mitigation Plan in accordance with 44CFR 201.6 prior to receipt of Hazard Mitigation Grant Program project funding; and

WHEREAS, the Federal Disaster Mitigation Act of 2000 requires that for Pre-Disaster Mitigation grant program project funding on or after November 1, 2003, applicants must have an approved Natural Hazard Mitigation Plan in accordance with 44CFR 201.6 prior to receipt of project funding; and

WHEREAS, the All Hazard Mitigation Plan Update represents the commitment of the City of Edgewood along with other surrounding government entities to reduce the risks from natural, man-made and technological hazards, serving as a guide for decision makers as they commit resources to reducing the affects of hazards, and it is in the public interest to proceed with the planning process in a timely manner; and

WHEREAS, the City of Edgewood has participated with the Pierce County Department of Emergency Management in the development of the City of Edgewood's All Hazard Mitigation Plan Update, and recognizes the economic loss, personal injury, and damage that can arise from these hazards; and

WHEREAS, reduction of these impacts can be achieved through a comprehensive coordinated planning process which includes an updated risk assessment that provides the factual basis for activities proposed in the mitigation strategies to reduce losses and vulnerabilities, a five-year cycle for plan maintenance, and documentation of formal adoption by the City of Edgewood; and

WHEREAS, the 2020-2025 Region 5 All Hazard Mitigation Plan Edition has been completed and approved by the State and the Federal Emergency Management Agency; and

WHEREAS, the City of Edgewood could risk not receiving future disaster funding if the All Hazard Mitigation Plan Update is not adopted;

WHEREAS, The City of Edgewood Council reviewed the All Hazard Mitigation Plan Update; and

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF EDGEWOOD, WASHINGTON, HEREBY RESOLVES AS FOLLOWS:

Section 1. The Region 5 Hazard Mitigation Plan, 2020-2025 Edition, is hereby adopted as set forth in Exhibit A, which is attached.

Section 2. The City of Edgewood Addendum to the Region 5 Hazard Mitigation Plan, an update to the City of Edgewood Natural Hazard Mitigation Plan is hereby adopted and shall be in full force and effect upon passage and signatures hereon.

ADOPTED BY THE CITY COUNCIL THIS 24TH DAY OF, NOVEMBER, 2020.



Daryl Eidinger, Mayor

ATTEST:



Rachel Pitzel, CMC
City Clerk

Approved as to forms



Ann Marie Soto, City Attorney

The plan was reviewed and approved as follows:

AGENCY	REPRESENTATIVE	DATE
Washington State Military Dept., Emergency Management Division	Kevin Zerbe State Mitigation Strategist	Approved—April 16, 2020 August 20, 2020
FEMA Region X	John Schelling Hazard Mitigation Planning Manager	Plan Approved Pending Adoption— August 20, 2020
FEMA Region X	Kristen Meyers, Director Mitigation Division	Approved—November 24, 2020

FEMA letter of pre-approval and letter of approval follows below.

FEMA REGION 10 LOCAL MITIGATION PLAN REVIEW TOOL

The *Local Mitigation Plan Review Tool* demonstrates how the Local Mitigation Plan meets the regulation in [44 CFR §201.6](#) and offers States and FEMA Mitigation Planners an opportunity to provide feedback to participating jurisdictions.

1. The [Multi-Jurisdiction Summary Sheet](#) is used to document how each jurisdiction met the requirements in the Plan.
2. The [Regulation Checklist](#) provides a summary of FEMA's evaluation of whether the Plan has addressed all requirements.
3. The [Plan Assessment](#) identifies the plan's strengths as well as documents areas for future improvement.

The FEMA Mitigation Planner must reference the [Local Mitigation Plan Review Guide](#) when completing this *Local Mitigation Plan Review Tool*.

Jurisdiction: City of Edgewood	Title of Plan: Region 5 All Hazard Mitigation Plan – City of Edgewood	Date of Plan: April 2020
Local Point of Contact: Debbie Bailey	Address: 2501 S 35 th St. Ste. D Tacoma, WA 98409	
Title: Mitigation Coordinator / GIS		
Agency: Pierce County Emergency Management		
Phone Number: (253) 798-6366		
E-Mail: Debbie.bailey@piercecounitywa.gov		

State Reviewer: Kevin Zerbe	Title: Mitigation Strategist	Date: 4/16/2020 / 8/20/2020
---------------------------------------	--	---------------------------------------

FEMA Reviewer: John Schelling	Title: Regional hazard Mitigation Planning Manager	Date: 4/16/2020
Date Received in FEMA Region 10	4/20/2020	
Plan Not Approved	6/2/2020	
Plan Approvable Pending Adoption	8/20/2020	
Plan Approved	11/24/2020	



FEMA

January 27, 2021

The Honorable Bruce Dammeier
Executive, Pierce County
930 Tacoma Avenue South, Room 737
Tacoma, Washington 98402

Dear Mr. Dammeier:

On November 23, 2020, the United States Department of Homeland Security's Federal Emergency Management Agency (FEMA) Region 10, approved the Pierce County Hazard Mitigation Plan as a multi-jurisdictional local plan as outlined in Code of Federal Regulations Title 44 Part 201. This approval provides the below jurisdictions eligibility to apply for the Robert T. Stafford Disaster Relief and Emergency Assistance Act's, Hazard Mitigation Assistance grants through November 22, 2025, through your state.

Town of Eatonville	City of Fife	City of Sumner
Gig Harbor #5	Graham Fire #21	Mt. View-Edgewood
Orting School District	Port of Tacoma	Carbonado School District
Town of Steilacoom	West Pierce Fire #3	City of Bonney Lake
City of Buckley	City of Edgewood	City of Orting
Town of Carbonado		

The updated list of approved jurisdictions that recently adopted their respective addendums to the Pierce County Natural Hazards Mitigation Plan includes the City of Bonney Lake, the City of Buckley, the City of Edgewood, the City of Orting, and the Town of Carbonado. To continue eligibility, jurisdictions must review, revise as appropriate, and resubmit the plan within five years of the original approval date.

If you have questions regarding your plan's approval or FEMA's mitigation grant programs, please contact Kevin Zerbe, State Mitigation Strategist with Washington Emergency Management Division, at 253-512-7467, who coordinates and administers these efforts for local entities.

Sincerely,

**KRISTEN C
MEYERS**

Kristen Meyers, Director
Mitigation Division

Digitally signed by KRISTEN C.
MEYERS
Date: 2021.01.27 12:44:45
-08'00'

cc: Tim Cook, Washington Emergency Management Division

Enclosure

VL:js

www.fema.gov

APPENDIX A

REGION 5 ALL HAZARD MITIGATION PLAN 2015-2020 EDITION CITY OF EDGEWOOD

Plan Adoption

The “Region 5 Hazard Mitigation Plan” was adopted by the City of Edgewood’s City Council on February 24, 2015 by resolution number 15-0324. The following page shows a copy of that resolution.

RESOLUTION NO. 15-0324

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EDGEWOOD, WASHINGTON, ADOPTING THE REGION 5 ALL HAZARD MITIGATION PLAN – 2015-2020 EDITION AND THE CITY OF EDGEWOOD'S ADDENDUM TO THE REGION 5 HAZARD MITIGATION PLAN; AND UPDATING THE 2004 PIERCE COUNTY NATURAL HAZARD MITIGATION PLAN.

WHEREAS, the Federal Disaster Mitigation Act of 2000 requires that for all disasters declared on or after November 1, 2004, applicants for sub-grants following any disaster must have an approved Natural Hazard Mitigation Plan in accordance with 44CFR 201.6 prior to receipt of Hazard Mitigation Grant Program project funding; and

WHEREAS, the Federal Disaster Mitigation Act of 2000 requires that for Pre-Disaster Mitigation grant program project funding on or after November 1, 2003, applicants must have an approved Natural Hazard Mitigation Plan in accordance with 44CFR 201.6 prior to receipt of project funding; and

WHEREAS, the All Hazard Mitigation Plan Update represents the commitment of the City of Edgewood along with other surrounding government entities to reduce the risks from natural, man-made and technological hazards, serving as a guide for decision makers as they commit resources to reducing the affects of hazards, and it is in the public interest to proceed with the planning process in a timely manner; and

WHEREAS, the City of Edgewood has participated with the Pierce County Department of Emergency Management in the development of the City of Edgewood's All Hazard Mitigation Plan Update, and recognizes the economic loss, personal injury, and damage that can arise from these hazards; and

WHEREAS, reduction of these impacts can be achieved through a comprehensive coordinated planning process which includes an updated risk assessment that provides the factual basis for activities proposed in the mitigation strategies to reduce losses and vulnerabilities, a five-year cycle for plan maintenance, and documentation of formal adoption by the City of Edgewood; and

WHEREAS, the 2015-2020 Region 5 All Hazard Mitigation Plan Edition has been completed and approved by the State and the Federal Emergency Management Agency; and

WHEREAS, the City of Edgewood could risk not receiving future disaster funding if the All Hazard Mitigation Plan Update is not adopted;

WHEREAS, the City of Edgewood's City Council reviewed the All Hazard Mitigation Plan Update;

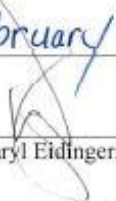
NOW, THEREFORE THE CITY COUNCIL OF THE CITY OF EDGEWOOD, WASHINGTON, HEREBY RESOLVES AS FOLLOWS:

Section 1. The Region 5 Hazard Mitigation Plan, 2015-2020 Edition, is hereby adopted as set forth in Exhibit A, which is attached.

Section 2. The City of Edgewood's Addendum to the Region 5 Hazard Mitigation Plan, an update to the City of Edgewood's Natural Hazard Mitigation Plan is hereby adopted and shall be in full force and effect upon passage and signatures hereon.

Section 3. Effective Date. This resolution will take effect immediately upon passage by the City Council.

ADOPTED THIS 24th DAY OF February, 2015


Daryl Eidinger, Mayor

ATTEST:


Jane Montgomery, Acting City Clerk

Approved as to form


Zach Leil, City Attorney

The plan was reviewed and approved as follows:

AGENCY	REPRESENTATIVE	DATE
Washington State Military Dept., Emergency Management Division	Tim Cook Hazard Mitigation Programs Manager	Approved—
FEMA Region X	Tamra Biasco Chief, Risk Analysis Branch Mitigation Division	Approved— February 2, 2015

FEMA letter of pre-approval and letter of approval follows below.



U.S. Department of Homeland Security
FEMA Region X
Federal Regional Center
130 228th Street, SW
Bothell, WA 98021-8627

FEMA

February 2, 2015

Mr. Tim Cook
Hazard Mitigation Programs Manager
Washington State Emergency Management Division
Building 20, MS TA-20
Camp Murray, Washington 98430-5122

Dear Mr. Cook:

As requested, the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) has completed a pre-adoption review of the *Region 5 Hazard Mitigation Plan*. The plan successfully contains the required criteria, excluding the adoption, for hazard mitigation plans, as outlined in 44 CFR Part 201. This letter serves as Region 10's commitment to approve the plan upon receiving documentation of its adoption by the participating jurisdictions.

The plan will not be formally approved by FEMA until it is adopted. Each jurisdiction is not eligible for mitigation project grants until the plan is formally approved by FEMA.

Please contact our Regional Mitigation Planning Manager, Kristen Meyers, at (425) 487-4543 with any questions.

Sincerely,

Tamra Biasco
Chief, Risk Analysis Branch
Mitigation Division

KM:bb

www.fema.gov

U.S. Department of Homeland Security
FEMA Region 10
130 228th Street, SW
Bothell, Washington 98021-8627



FEMA

October 9, 2018

The Honorable Douglas Richardson
Chair, Pierce County Council
930 Tacoma Avenue South
Tacoma, Washington 98402

Dear Chair Richardson:

On July 23, 2015, the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) Region 10, approved the *Region 5 (Pierce County) Hazard Mitigation Plan* as a multi-jurisdictional local plan as outlined in Code of Federal Regulations Title 44 Part 201. This approval provides the below jurisdictions eligibility to apply for the Robert T. Stafford Disaster Relief and Emergency Assistance Act's, Hazard Mitigation Assistance grants through July 22, 2020, through your state.

COUNTY / CITIES / TOWNS

City of Bonney Lake	City of Lakewood	Town of Eatonville
City of Buckley	City of Milton	Town of Carbonado
City of DuPont	City of Orting	Town of South Prairie
City of Edgewood	City of Roy	Town of Steilacoom
City of Fife	City of Sumner	Town of Wilkeson
City of Fircrest	City of Tacoma	Pierce County
City of Gig Harbor	City of Puyallup	

FIRE PROTECTION DISTRICTS

Anderson Island Fire & Rescue (PCFD #27)-	East Pierce Fire and Rescue	Orting Valley Fire & Rescue (PCFD #18)
Ashford Fire (PCFD #23)-	Gig Harbor Fire & Medic One (PCFD #5)	South Pierce Fire & Rescue (PCFD #17)
Browns Point – Dash Point Fire (PCFD #13)	Graham Fire & Rescue (PCFD #21)	Riverside Fire & Rescue (PCFD #14)
Central Pierce Fire & Rescue (PCFD #6)	Key Peninsula Fire (PCFD #16)	West Pierce Fire & Rescue (PCFD #3)

SCHOOL AND PARK DISTRICTS

Carbonado SD	Franklin Pierce SD	Steilacoom Historic SD No. 1
Clover Park SD	Metro Parks Tacoma	Sumner SD
Dieringer SD	Orting SD	Tacoma SD #10
Eatonville SD	Peninsula SD	University Place SD
Fife SD	Puyallup SD	White River SD

WATER DISTRICTS AND OTHERS

Clear Lake WD	Lakewood Water District	Pierce Transit
Port of Tacoma	Community Health Care	

www.fema.gov

Chair Richardson
October 9, 2018
Page 2

The updated list of approved jurisdictions includes the City of Puyallup and Community Health Care that recently adopted the City of Puyallup Addendum to the *Region 5 (Pierce County) Hazard Mitigation Plan*. To continue eligibility, jurisdictions must review, revise as appropriate, and resubmit the plan within five years of the original approval date.

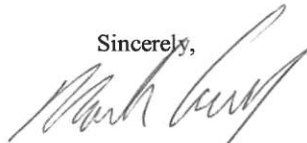
Additionally, this letter acknowledges that the following organizations, while not local governments, participated in, and adopted the plan. These organizations may be eligible to apply for the Hazard Mitigation Grant Program as private non-profits.

OTHER PLAN PARTICIPANTS

Pacific Lutheran University	Firgrove Mutual Inc.	Fruitland Mutual Water Company
Graham Hill Mutual Water Co., Inc.	Mt. View-Edgewood Water Company	Ohop Mutual Light Company
Spanaway Water Company	Summit Water & Supply Company	Tanner Electric Company
Herron Island Homeowners Association	Crystal Village Homeowners Association	Taylor Bay Beach Club
Raft Island Improvement Association	Riviera Community Club	Crystal River Ranch Association
Cascade Regional Blood Services	Dynamic Partners	Group Health Cooperative
Western State Hospital	Lakeview Light & Power	Franciscan Health System

If you have questions regarding your plan's approval or FEMA's mitigation grant programs, please contact Derrick Hiebert, State Mitigation Strategist with Washington Emergency Management Division, at (253) 512-7142, who coordinates and administers these efforts for local entities.

Sincerely,



Mark Carey, Director
Mitigation Division

Enclosures

cc: Tim Cook, Washington Emergency Management Division

KS:rg

APPENDIX A

REGION 5 HAZARD MITIGATION PLAN 2008-2013 EDITION CITY OF EDGEWOOD

Plan Adoption

The “Region 5 Hazard Mitigation Plan” was adopted by the City of Edgewood’s City Council on October 28, 2008 by resolution number 08-245. The following page shows a copy of that resolution.

RESOLUTION NO. 08-245

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EDGEWOOD,
WASHINGTON, ADOPTING A NATURAL HAZARD MITIGATION PLAN FOR THE
CITY**

WHEREAS, The City of Edgewood's geology and natural history demonstrate its vulnerability to natural hazards and disasters arising from physical features;

WHEREAS, The City Council recognizes the economic loss, personal injury and damage that can arise from these natural hazards;

WHEREAS, The Federal Emergency Management Agency (FEMA), pursuant to the disaster Mitigation Act of 2000 (DMA2K) requires that local governments prepare natural hazard mitigation plans as a condition of future project funding; and

WHEREAS, The City of Edgewood cooperated with Pierce County to develop a joint Natural Hazard Mitigation Plan for the City of Edgewood;

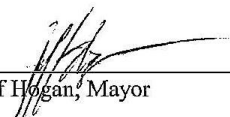
**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF EDGEWOOD,
WASHINGTON, HEREBY RESOLVES AS FOLLOWS:**

Section 1. Contract Authorization. The City Council of the City of Edgewood hereby adopts the "Natural Hazard Mitigation Plan" set forth in exhibit "A" which is attached hereto and incorporated herein by reference.

Section 2. Effective Date. This Resolution will take effect immediately upon passage by the City Council.

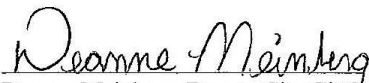
Presented to Council on October 28, 2008

ADOPTED this 28th day of October, 2008.



Jeff Hogan, Mayor

ATTEST:



Deanne Meinberg, Deputy City Clerk

The plan was reviewed and approved as follows:

AGENCY	REPRESENTATIVE	DATE
FEMA Region X	Mark Carey Mitigation Division Director	Approved—November 24, 2008

Letter of approval follows below.



FEMA

January 30, 2009

Mr. Steven C. Bailey, Director
Pierce County Department of Emergency Management
2501 South 35th Street
Tacoma, Washington 98409-7405

Dear Mr. Bailey:

On November 28, 2008, the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) approved the **Region 5 Hazard Mitigation Plan** as a multi-jurisdictional local plan as outlined in 44 CFR Part 201. With approval of this plan, the following entities are now eligible to apply for the Robert T. Stafford Disaster Relief and Emergency Assistance Act's hazard mitigation project grants through November 28, 2013:

Cities and Towns:	Fire Districts:	School Districts:	Utilities:
City of Buckley	Lakewood Fire Department (PCFD #2)	Carbonado SD	Clear Lake Water District
City of Dupont	<i>Gig Harbor Fire & Medic One (PCFD #5)</i>	Dieringer SD	<i>Fruitland Mutual Water Company</i>
City of Edgewood	<i>Central Pierce Fire & Rescue (PCFD #6)</i>	Eatonville SD	<i>Graham Hill Mutual Water Company</i>
City of Fife	PCFD #8	Fife SD	<i>Lakeview Light and Power</i>
City of Fircrest	PCFD #13	Franklin Pierce SD	Lakewood Water District
City of Gig Harbor	<i>South Pierce Fire & Rescue (PCFD #15)</i>	Orting SD	Mt. View-Edgewood Water Company
City of Orting	<i>Key Peninsula Fire Department (PDFD #16)</i>	Peninsula SD	Port of Tacoma
Town of Eatonville	<i>Graham Fire and Rescue (PCFD #21)</i>	University Place SD	Summit Water and Supply Company
Town of South Prairie	PCFD #23	White River SD	
Town of Wilkeson		Pacific Lutheran University	

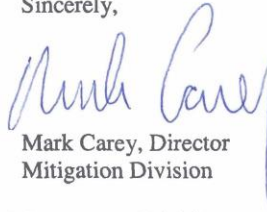
The list of approved jurisdictions has been updated to include the jurisdictions in italics above, which have recently adopted the Region 5 Hazard Mitigation Plan. To continue eligibility, the plan must be reviewed, revised as appropriate, and resubmitted within five years of the original approval date.

www.fema.gov

Mr. Steven C. Bailey, Director
January 30, 2009
Page 2

If you have questions regarding your plan's approval or FEMA's mitigation grant programs, please contact our State counterpart, Washington Emergency Management Division, which coordinates and administers these efforts for local entities.

Sincerely,

A handwritten signature in blue ink, appearing to read "Mark Carey".

Mark Carey, Director
Mitigation Division

cc: Mark Stewart, Washington Emergency Management Division

KM:bb

APPENDIX B

REGION 5 ALL HAZARD MITIGATION PLAN 2020-2025 EDITION CITY OF EDGEWOOD

Region 5 Hazard Mitigation Planning Team

City of Edgewood

NAME	TITLE	JURISDICTION-DEPARTMENT
Micah Lundborg	Police Chief	City of Edgewood – Police Department
Daryl Eidingen	Mayor	City of Edgewood
Dave Gray	Assistant City Administrator	City of Edgewood
Jeremy Metzler	Public Works Director	City of Edgewood – Public Works

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APPENDIX C

REGION 5 ALL HAZARD MITIGATION PLAN 2020-2025 EDITION CITY OF EDGEWOOD

Plan Revisions

RECORD OF CHANGES			
Change Number	Description of Change (with page numbers)	Date	Authorized by:

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APPENDIX D

REGION 5 ALL HAZARD MITIGATION PLAN

2020-2025 EDITION

CITY OF EDGEWOOD AND PIERCE COUNTY SCENARIO

OVERVIEW

This appendix contains the spatial results from the Hazus Earthquake Scenario results showing the Essential Facilities for 90% functionality for Day 1 and Day 7 following an earthquake event based on three earthquakes scenarios. Information was based on ShakeMaps developed by U.S. Geological Survey for a 7.1M earthquake occurring on the Tacoma Fault, 7.2M earthquake on the Nisqually Fault and a 7.2M earthquake on the SeaTac Fault. There was a total of four Essential Facilities that were modeled; fire stations, police stations, schools and hospitals. Additional information can be found in the Risk Assessment Section of the Pierce County All Hazard Mitigation Plan.

Inherent Errors

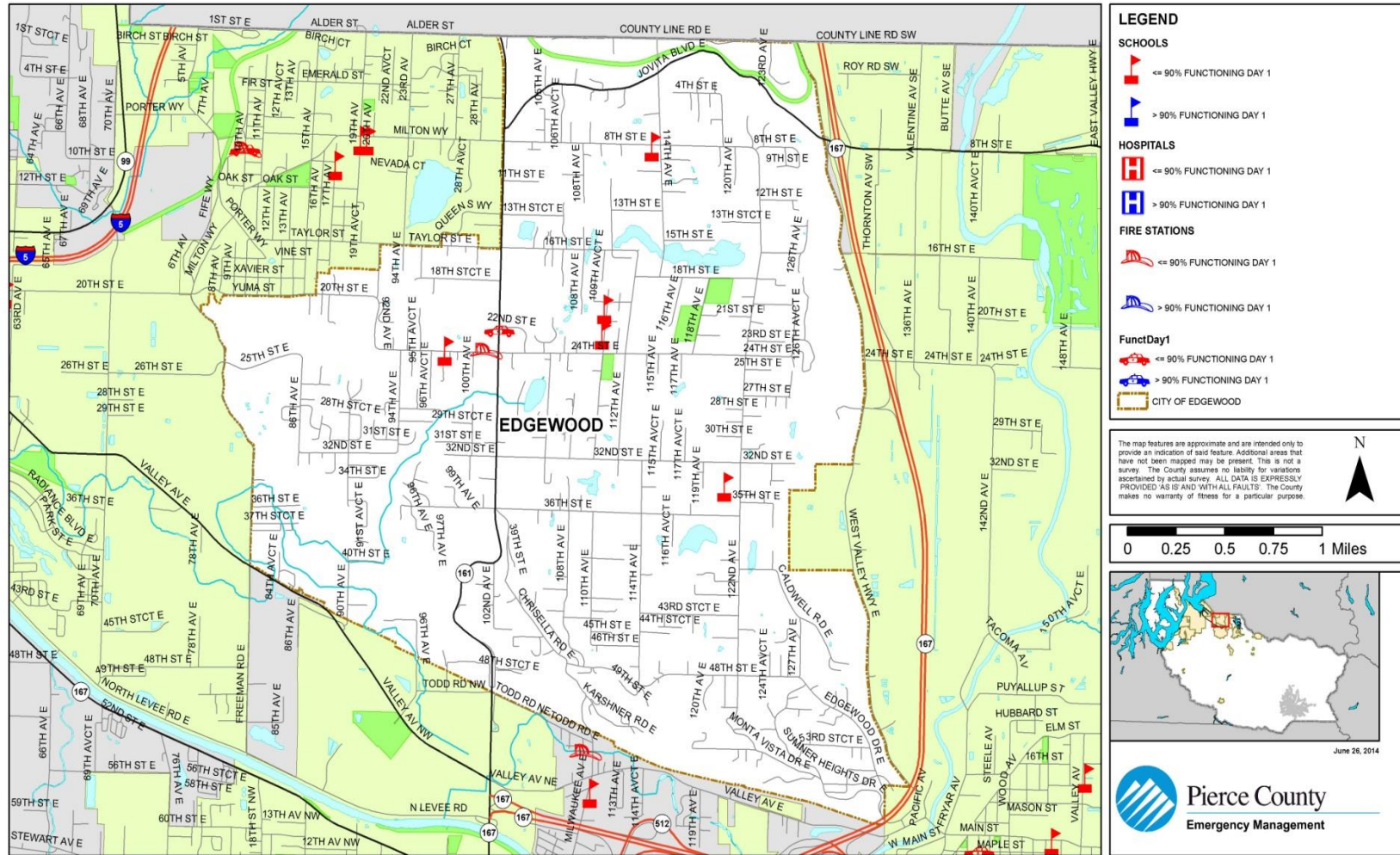
As a special note to the Gig Harbor and Key Peninsula areas St. Anthony's Hospital is not identified on Maps D-12, D-13, D-21, D-22, D-30 or D-31 due to the recent construction of St. Anthony's Hospital and lack of data. With future updates of the Region 5 All Hazard Mitigation Plan, St. Anthony's Hospital will be included in the scenario analysis. If this information becomes available prior to the five-year update in 2020, revised analysis will be done and the revised maps will be distributed to the City of Gig Harbor, Gig Harbor Fire & Medic One and the Key Peninsula Fire Department.

It has been identified that the police station located to the west side of Orting is not in the correct location as seen on Maps: D-10, D-11, D-19, D-20, D-28 and D-29. The police department shares a building with the Fire District #18 at 401 Washington Ave S, which is located in the middle of town. As Hazus-MH is updated the police station will show a co-location with the fire station at this same location. If this information becomes available prior to the five-year update in 2020, revised analysis will be done and the revised maps will be distributed to the City of Orting and to Pierce County Fire District #18.

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Map D-1 City of Edgewood Tacoma Fault Scenario Essential Facilities Day 1

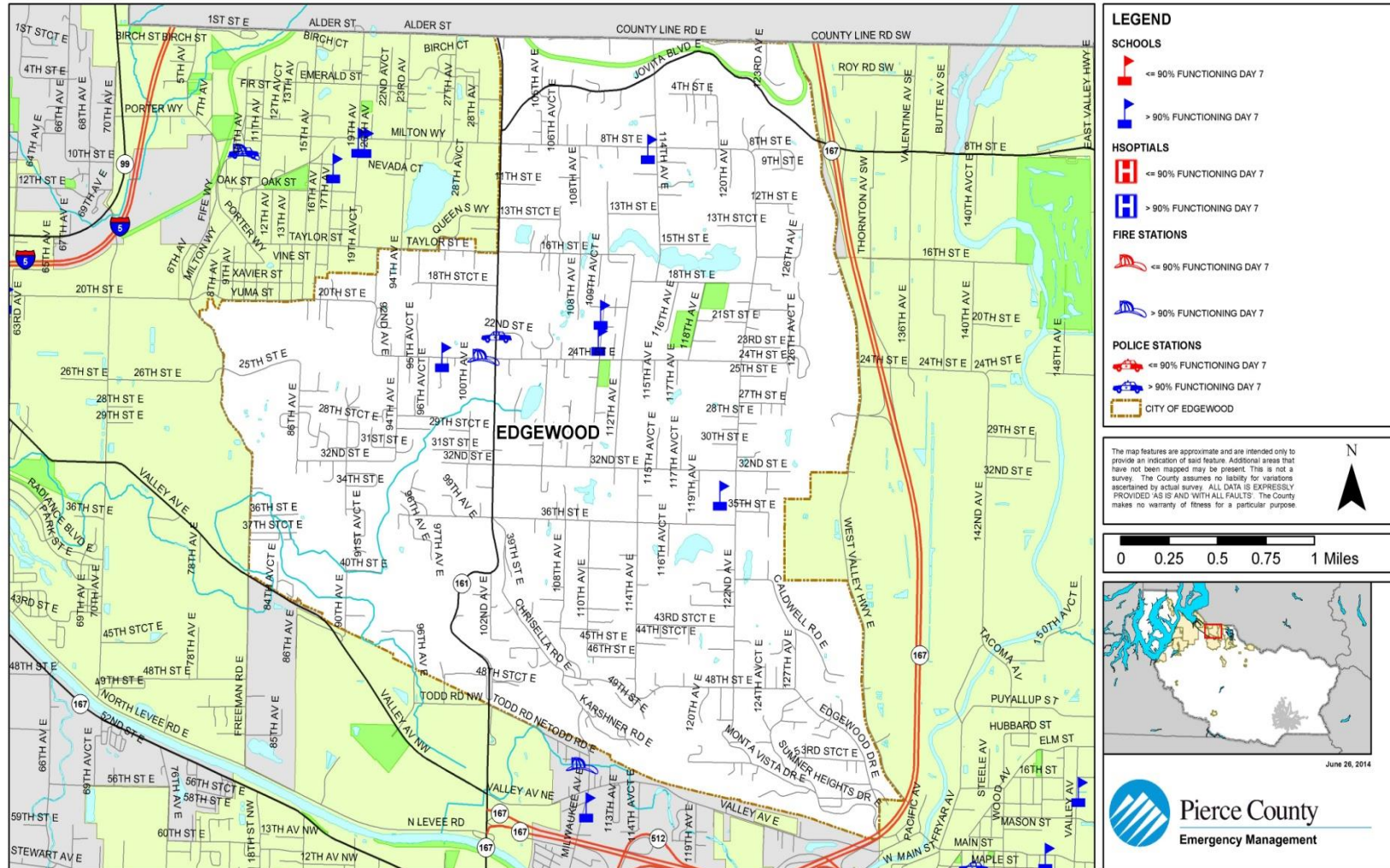
CITY OF EDGEWOOD - 7.1M TACOMA EARTHQUAKE SCENARIO - ESSENTIAL FACILITIES



APPENDIX D-3

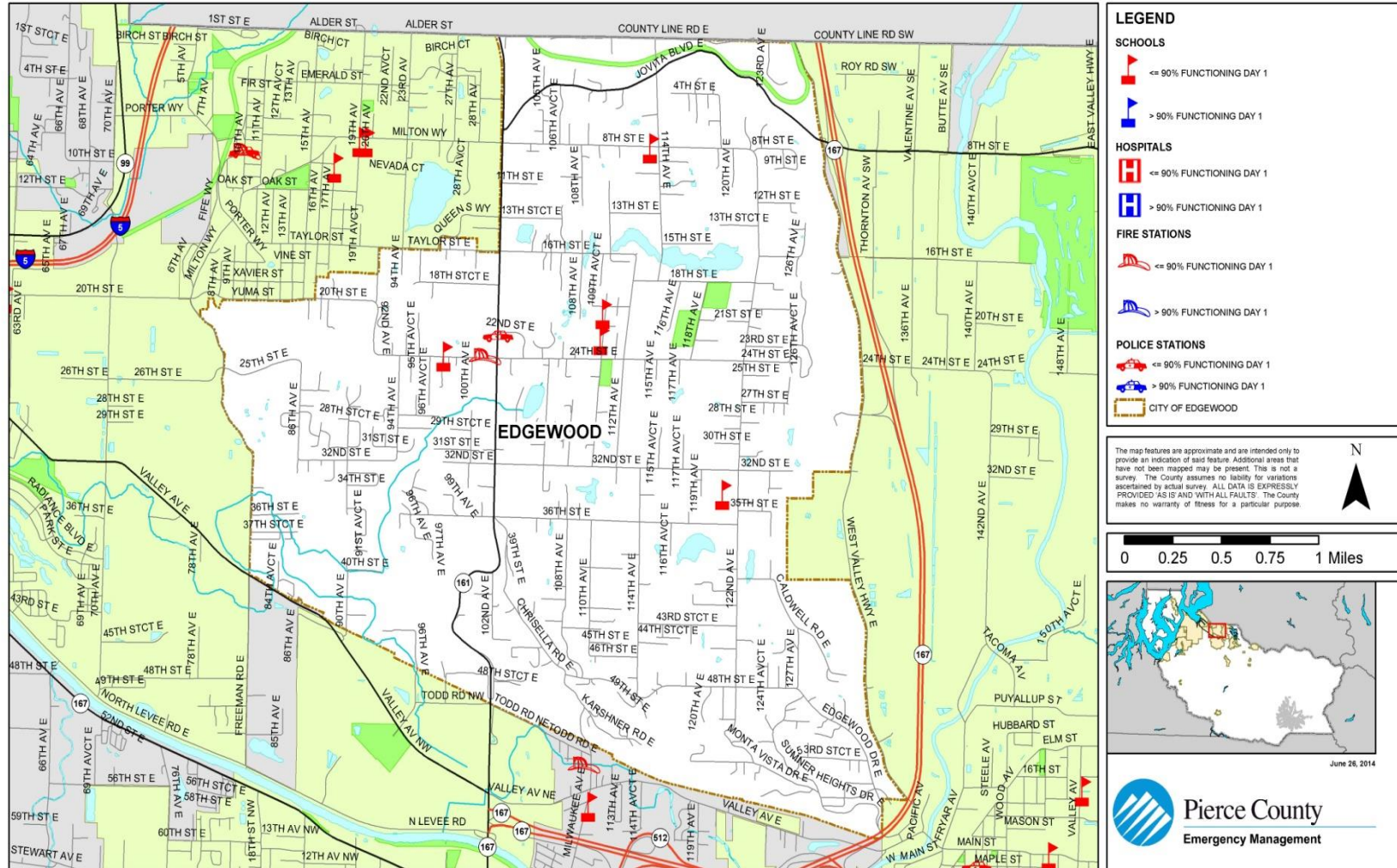
REGION 5 ALL HAZARD MITIGATION PLAN – 2020-2025 EDITION CITY OF EDGEWOOD ADDENDUM

CITY OF EDGEWOOD - 7.1M TACOMA EARTHQUAKE SCENARIO - ESSENTIAL FACILITIES

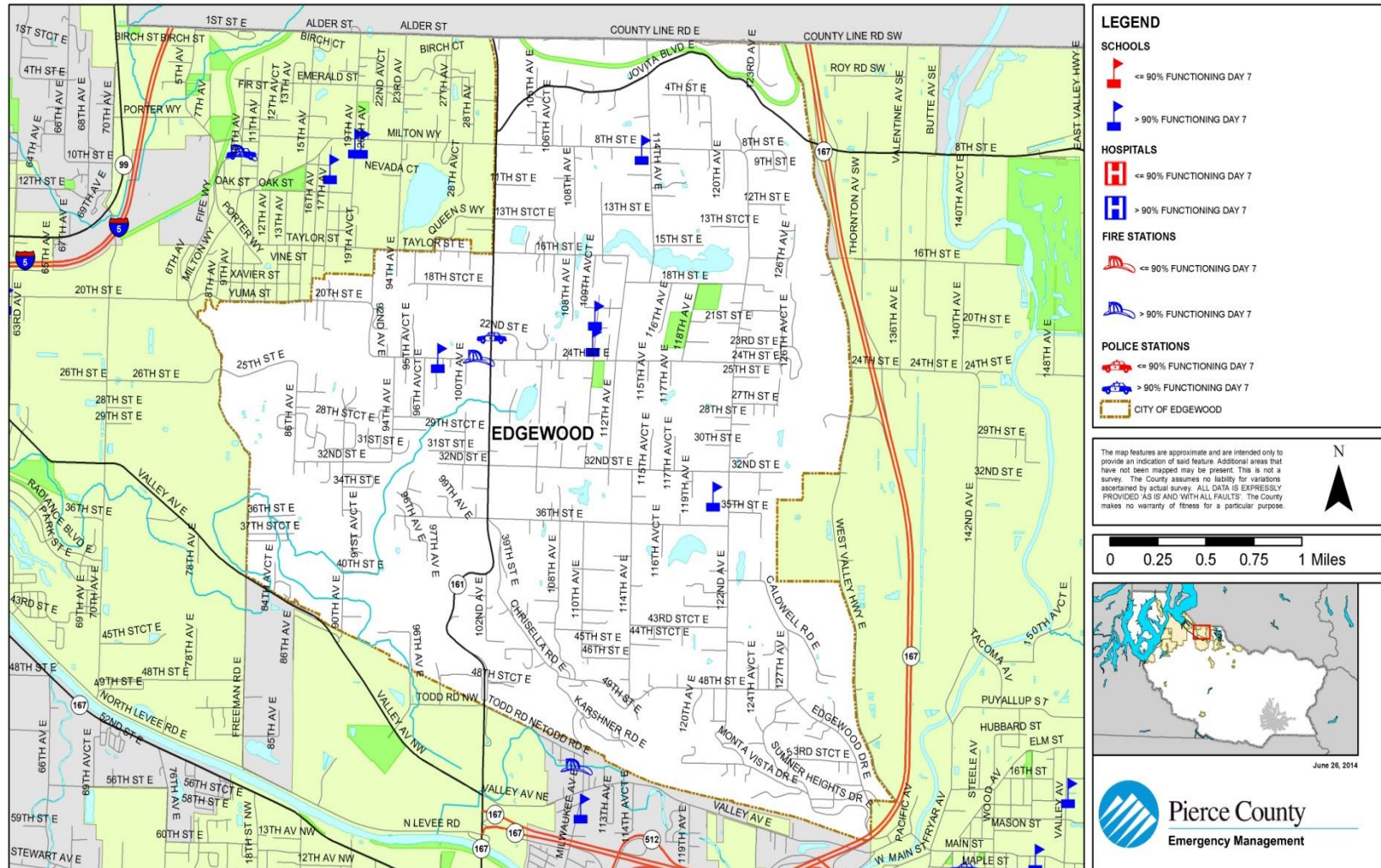


APPENDIX D-4

CITY OF EDGEWOOD - 7.2M NISQUALLY EARTHQUAKE SCENARIO - ESSENTIAL FACILITIES



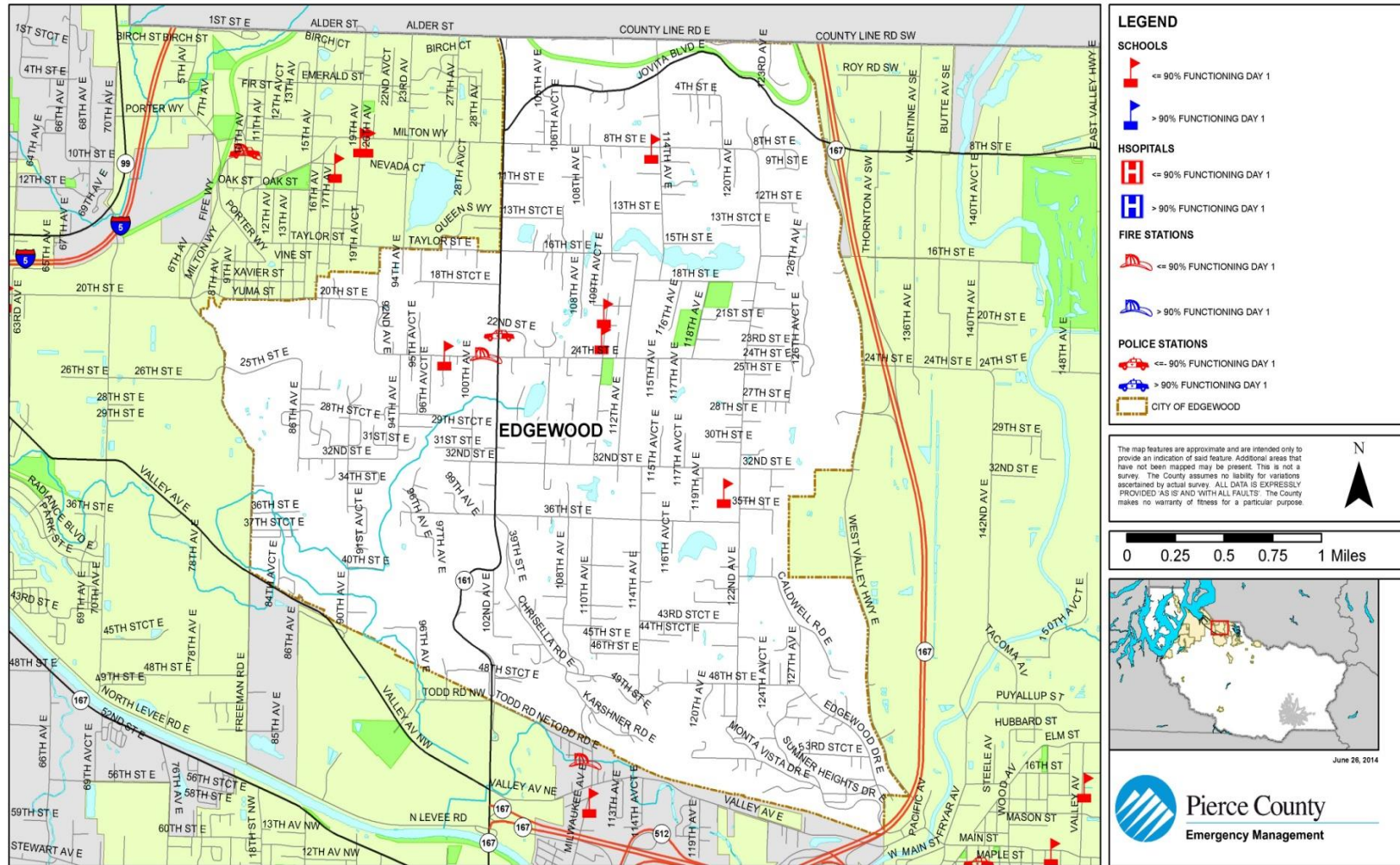
CITY OF EDGEWOOD - 7.2M NISQUALLY EARTHQUAKE SCENARIO - ESSENTIAL FACILITIES



APPENDIX D-6

REGION 5 ALL HAZARD MITIGATION PLAN – 2020-2025 EDITION CITY OF EDGEWOOD ADDENDUM

CITY OF EDGEWOOD - 7.1M SEATAC EARTHQUAKE SCENARIO - ESSENTIAL FACILITIES

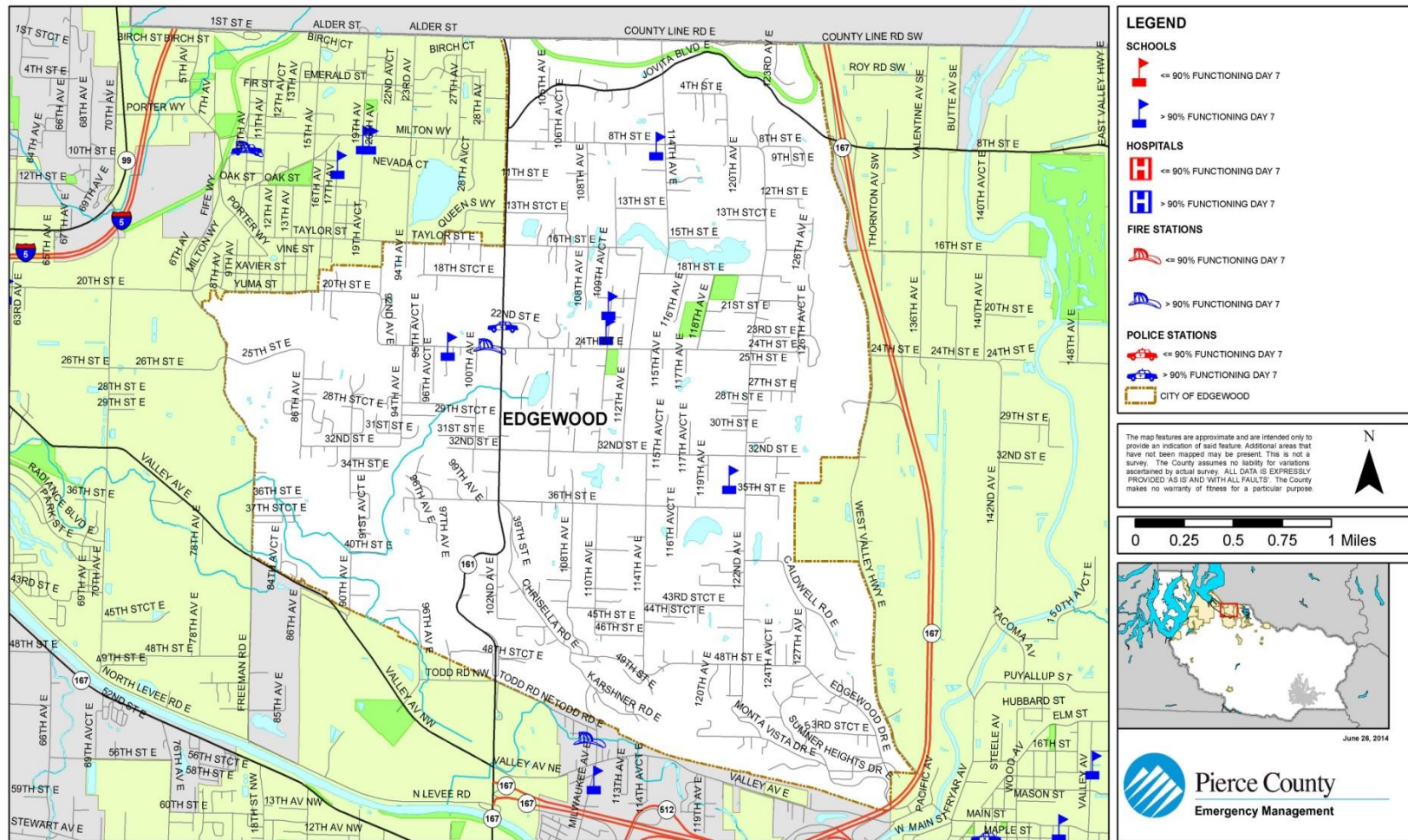


APPENDIX D-7

REGION 5 ALL HAZARD MITIGATION PLAN – 2020-2025 EDITION CITY OF EDGEWOOD ADDENDUM

Map D-6 City of Edgewood SEATAC Fault Scenario Essential Facilities Day 7

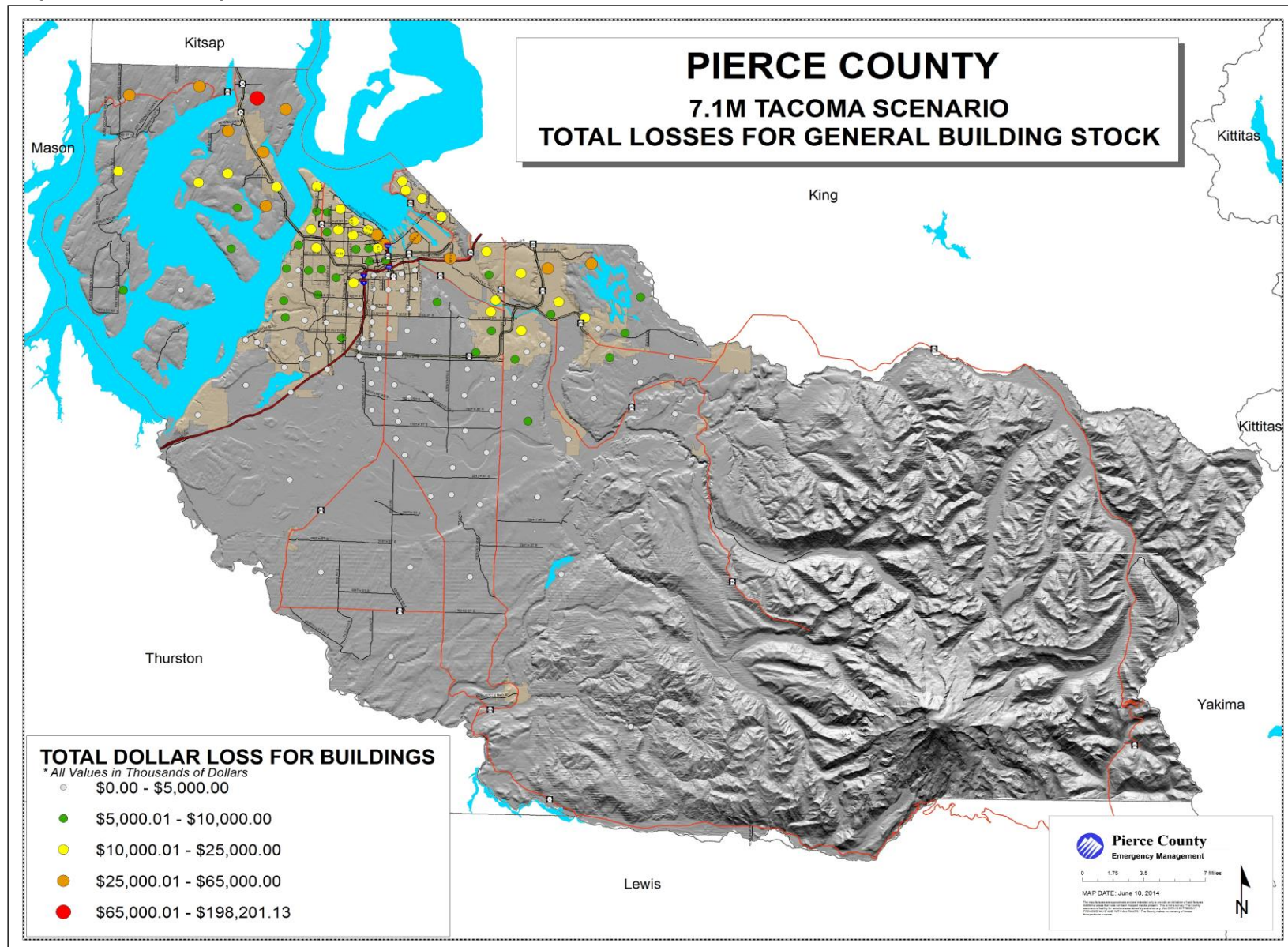
CITY OF EDGEWOOD - 7.1M SEATAC EARTHQUAKE SCENARIO - ESSENTIAL FACILITIES



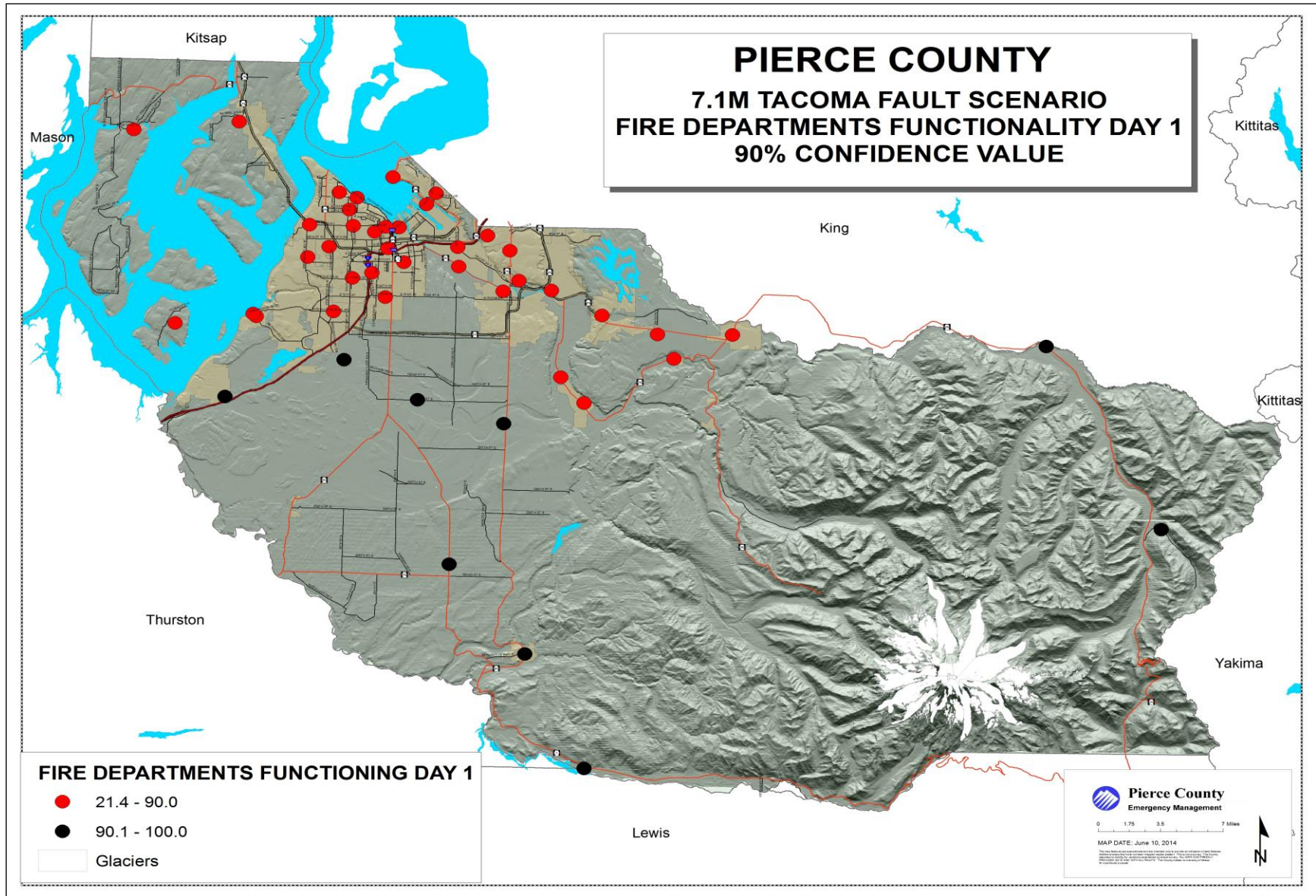
APPENDIX D-8

REGION 5 ALL HAZARD MITIGATION PLAN – 2020-2025 EDITION CITY OF EDGEWOOD ADDENDUM

Map D-7 Pierce County Tacoma Fault Scenario Total Losses



Map D-8 Pierce County Tacoma Fault Scenario Fire Department Functionality Day 1



PIERCE COUNTY
7.1M TACOMA FAULT SCENARIO
FIRE DEPARTMENTS FUNCTIONALITY DAY 7
90% CONFIDENCE VALUE

FIRE DEPARTMENTS FUNCTIONING DAY 7

- ≤ 90.00
- > 90.00 AND Functioning Day 7 ≤ 100.00
- Glaciers

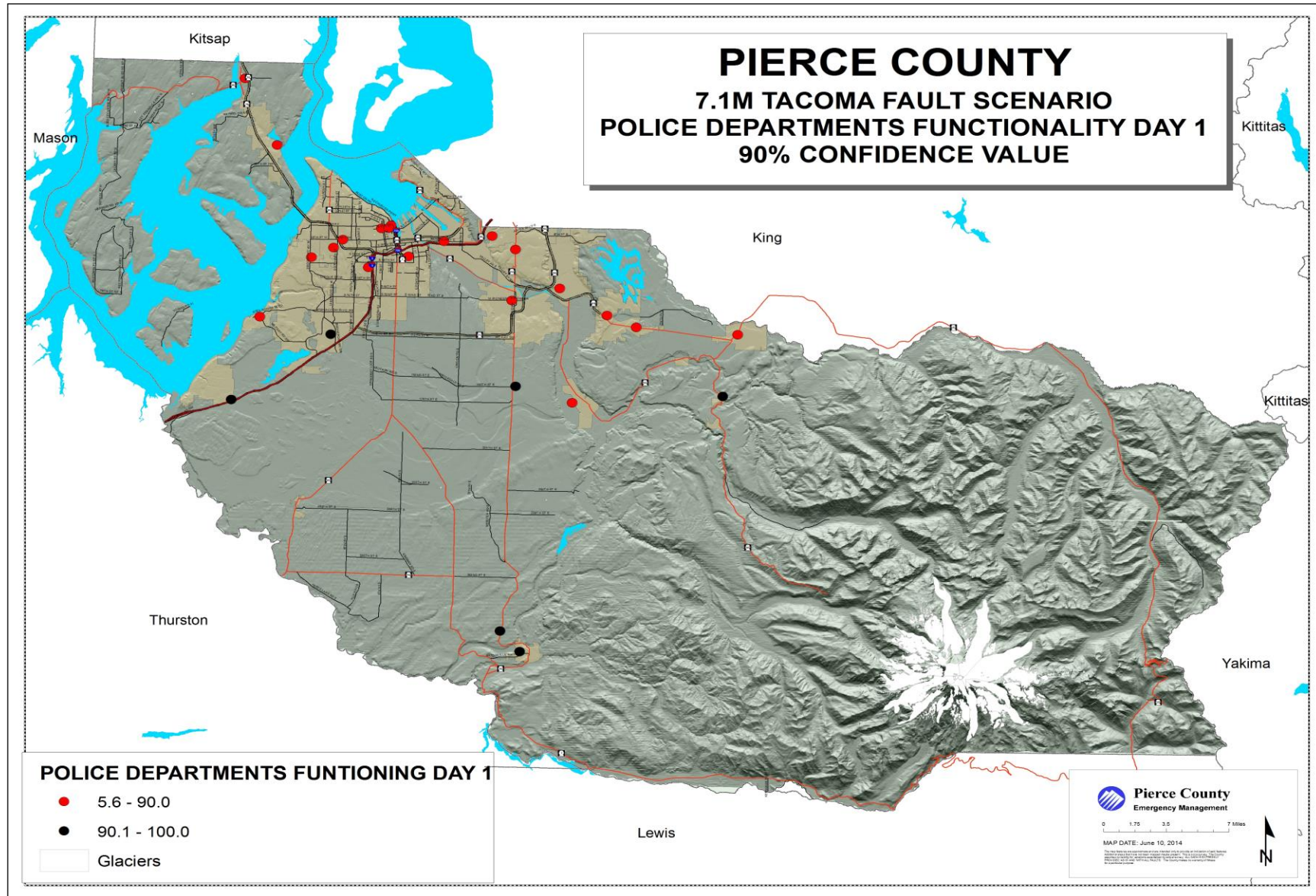
Map Date: June 10, 2014

Pierce County
 Emergency Management

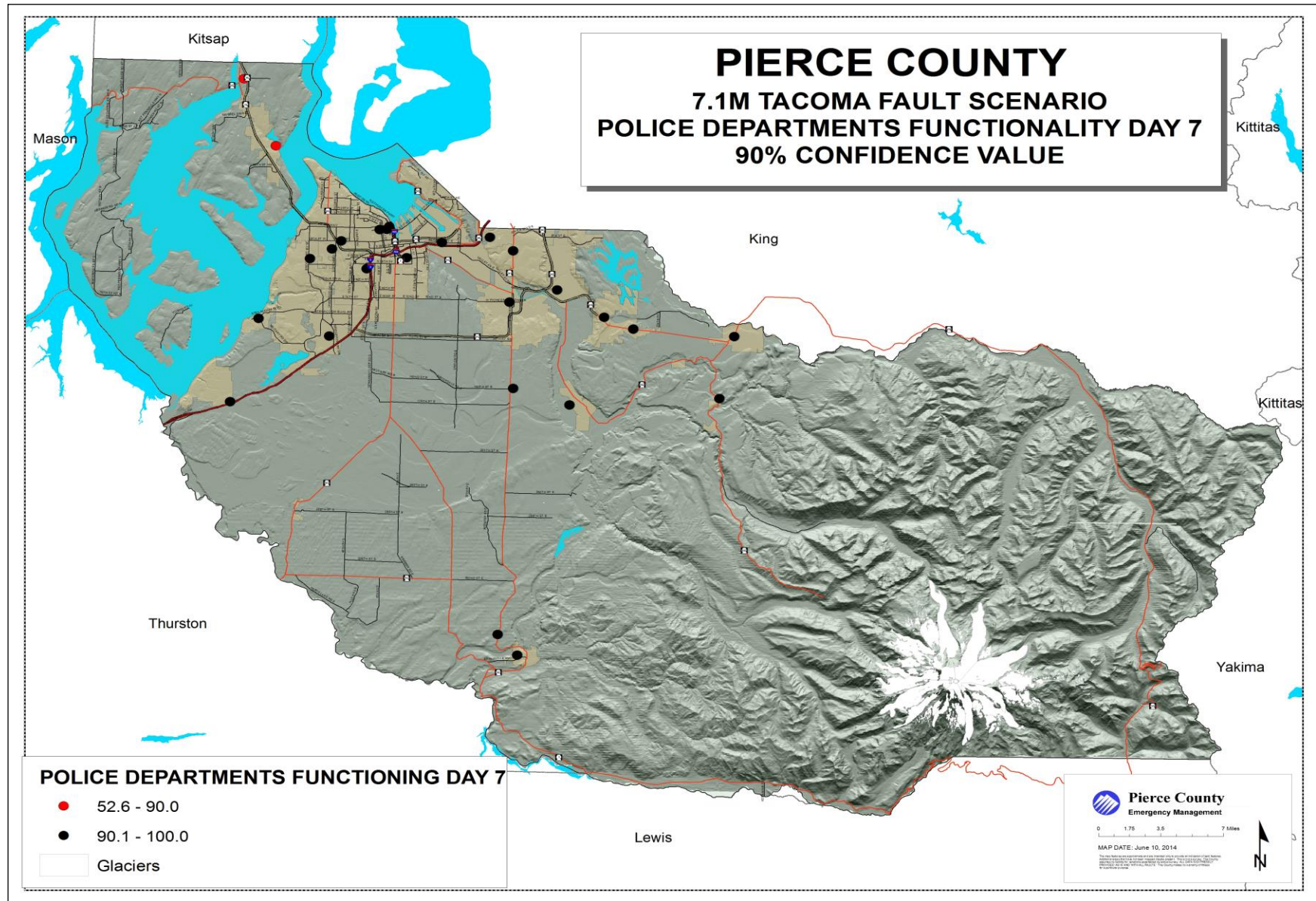
0 1.75 3.5 7 Miles

North Arrow

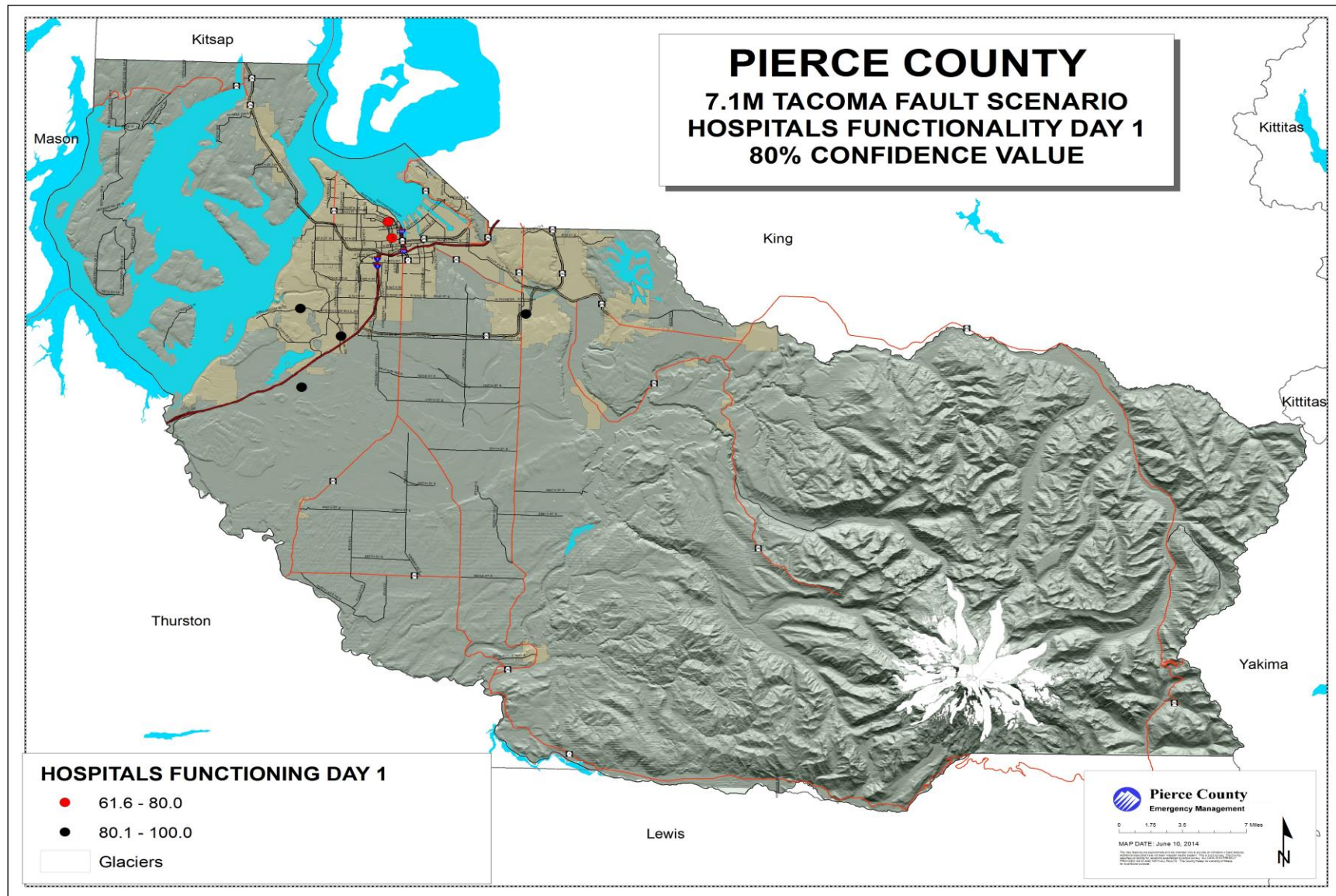
Map D-10 Pierce County Tacoma Fault Scenario Police Department Functionality Day 1¹



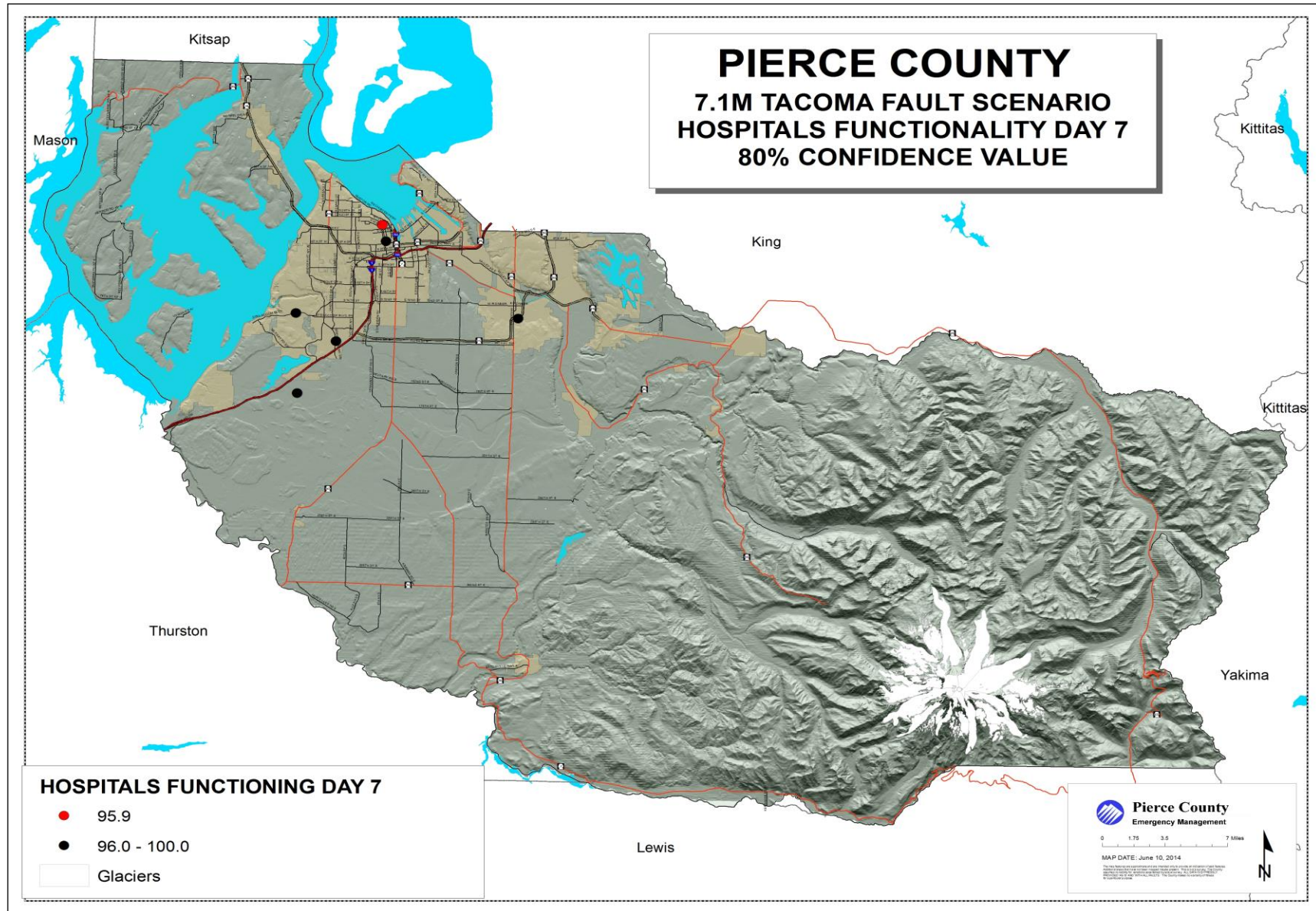
Map D-11 Pierce County Tacoma Fault Scenario Police Department Functionality Day 7²



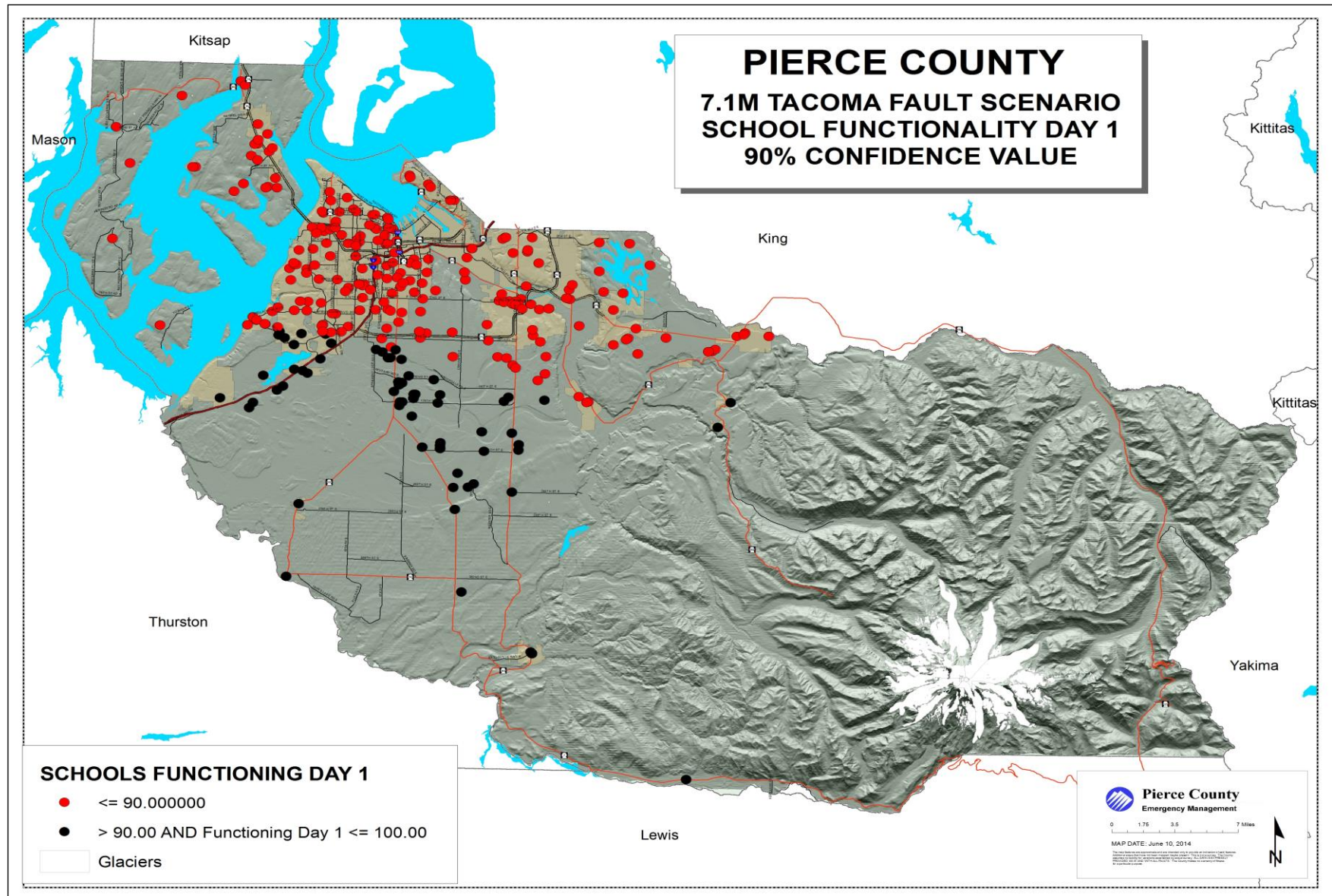
Map D-12 Pierce County Tacoma Fault Scenario Hospitals Functionality Day 1³



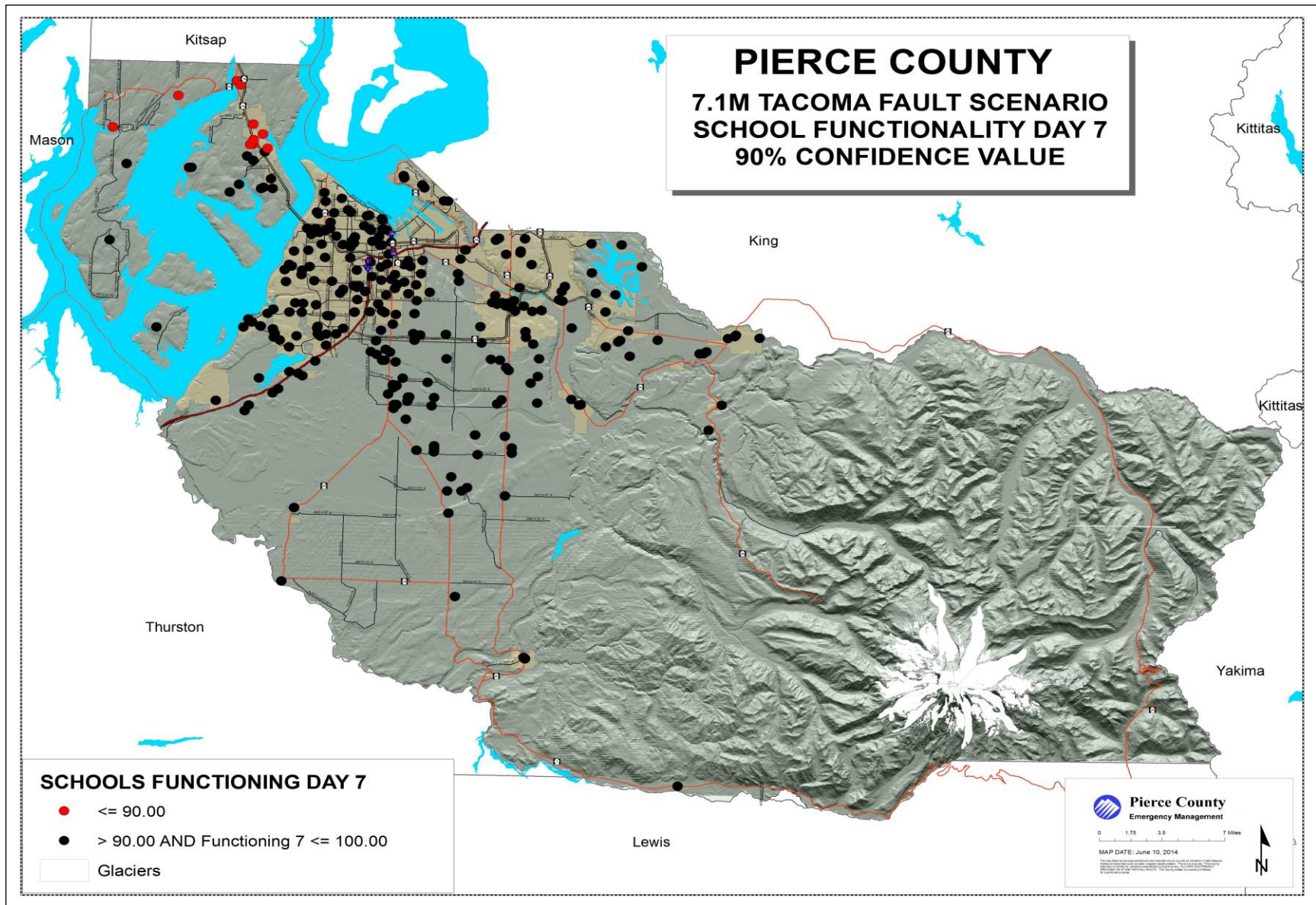
Map D-13 Pierce County Tacoma Fault Scenario Hospitals Functionality Day 7⁴



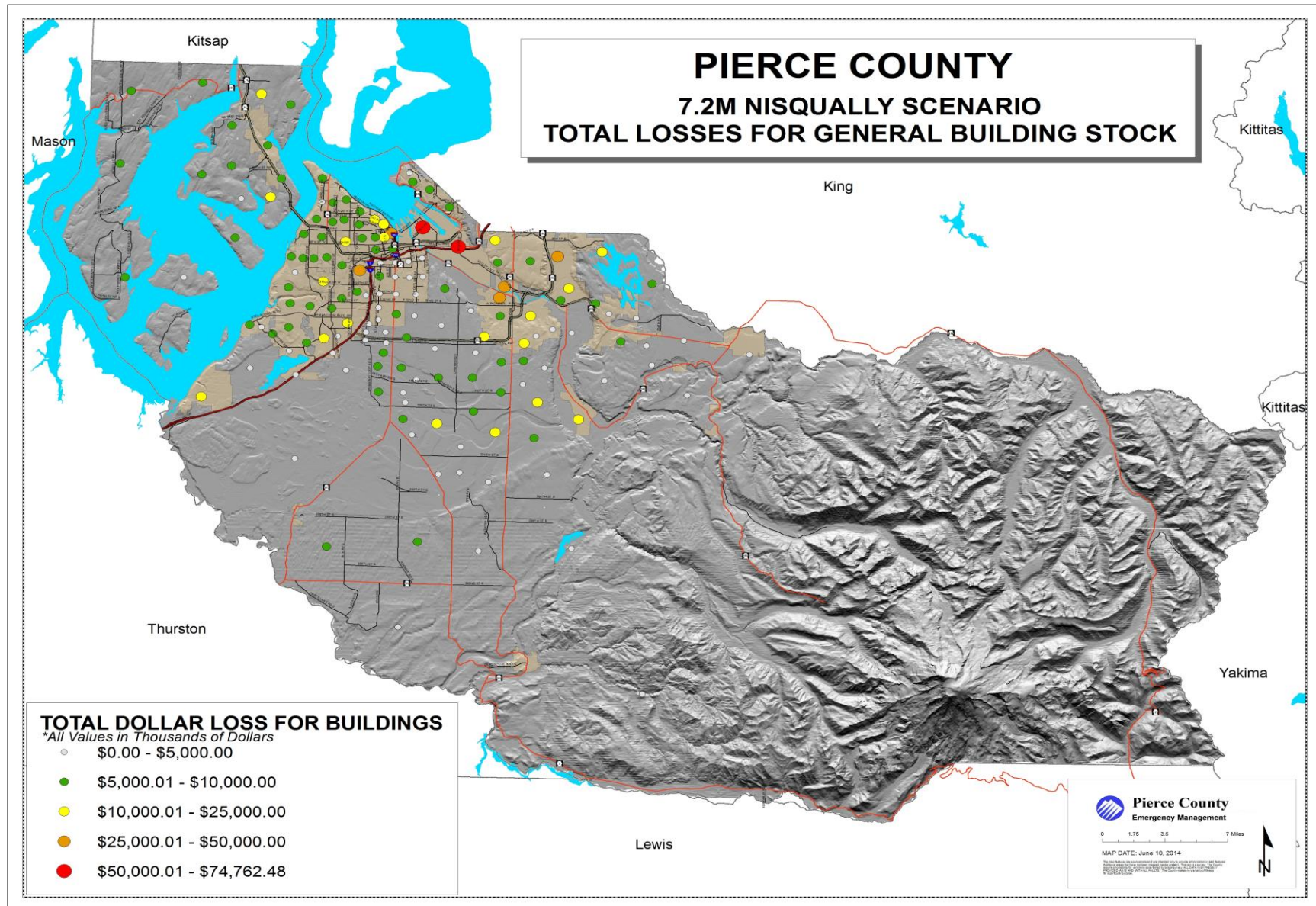
Map D-14 Pierce County Tacoma Fault Scenario School Functionality Day 1



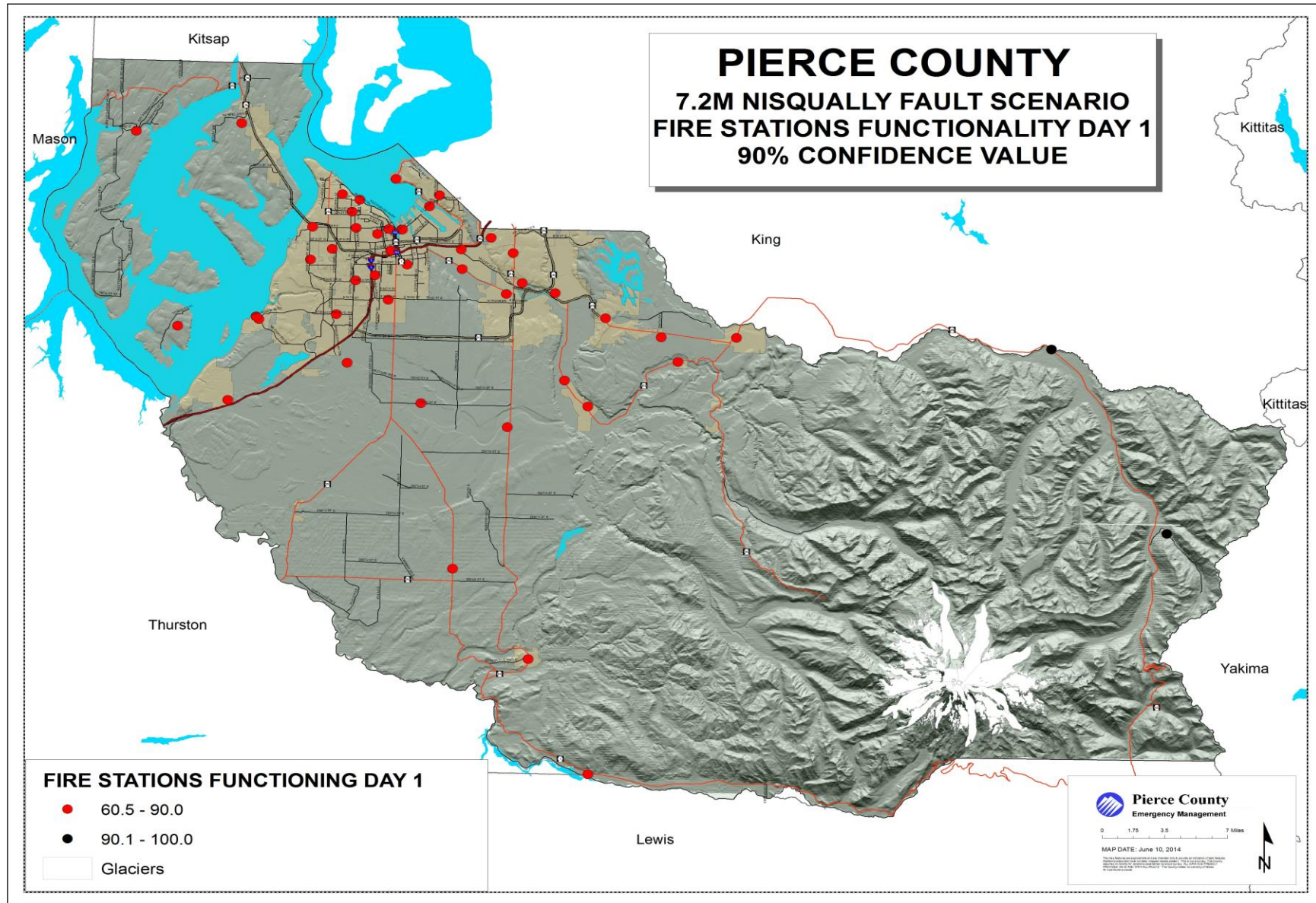
Map D-15 Pierce County Tacoma Fault Scenario School Functionality Day 7



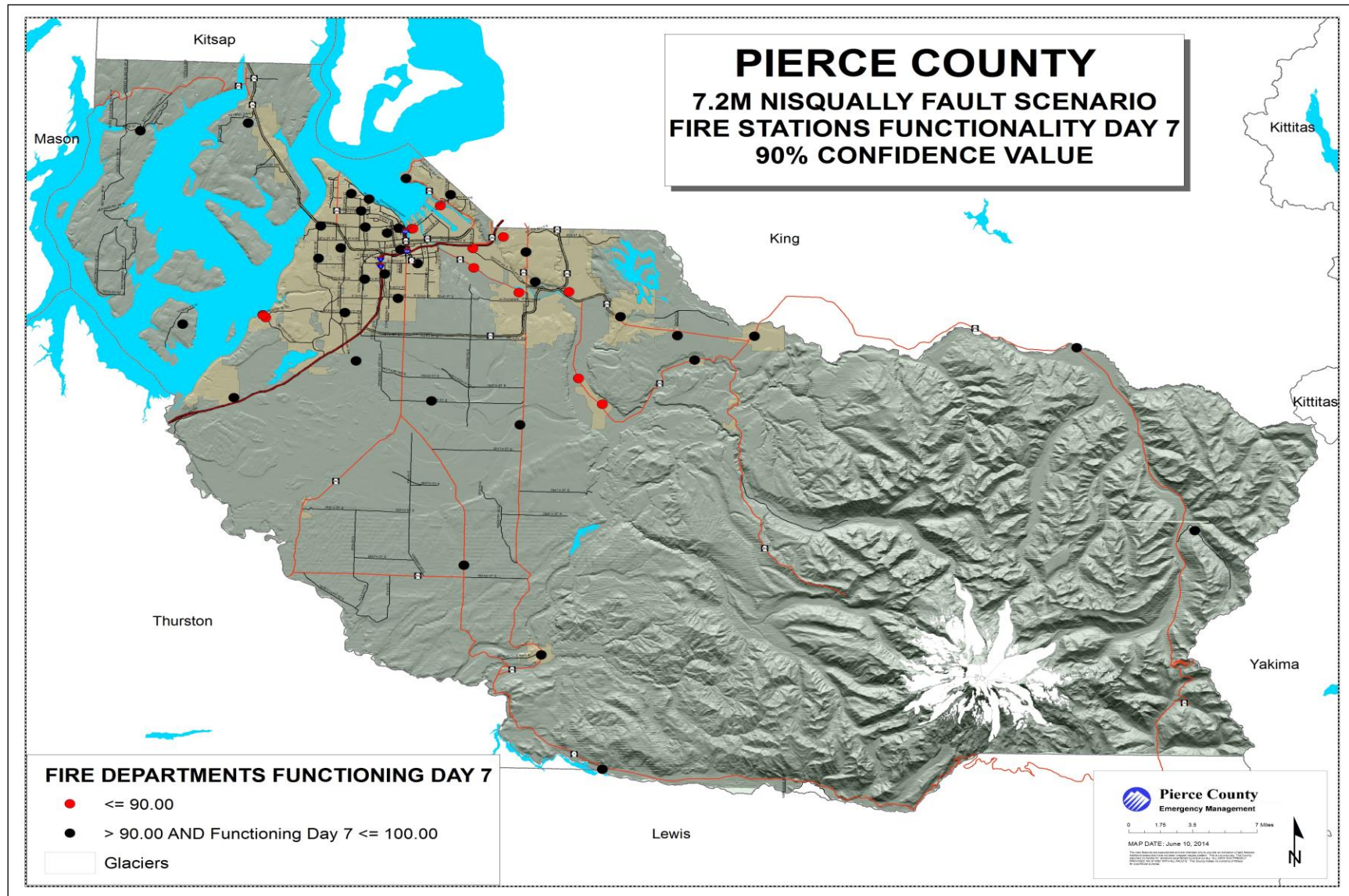
Map D-16 Pierce County Nisqually Fault Scenario Total Losses



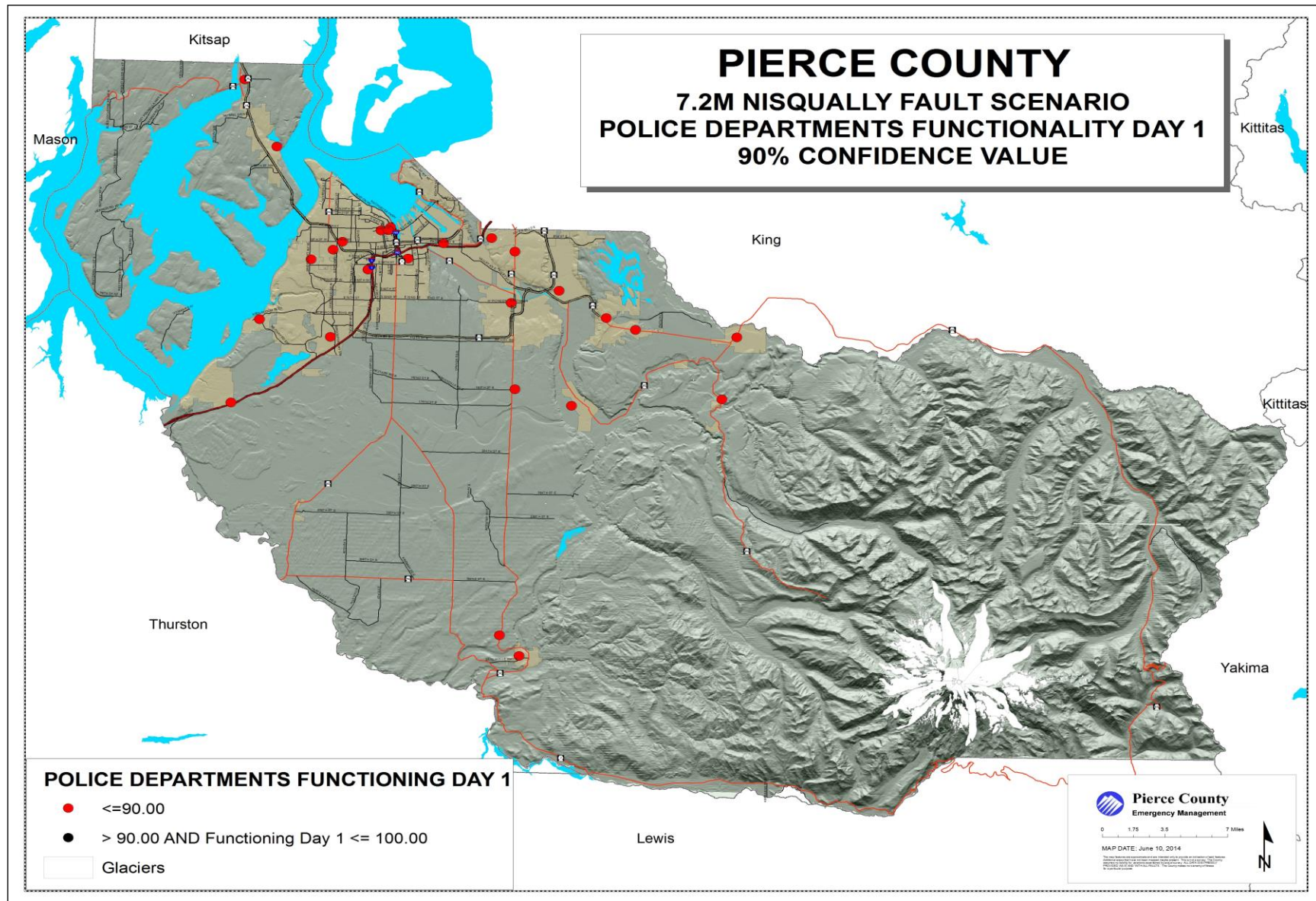
Map D-17 Pierce County Nisqually Fault Scenario Fire Stations Functionality Day 1



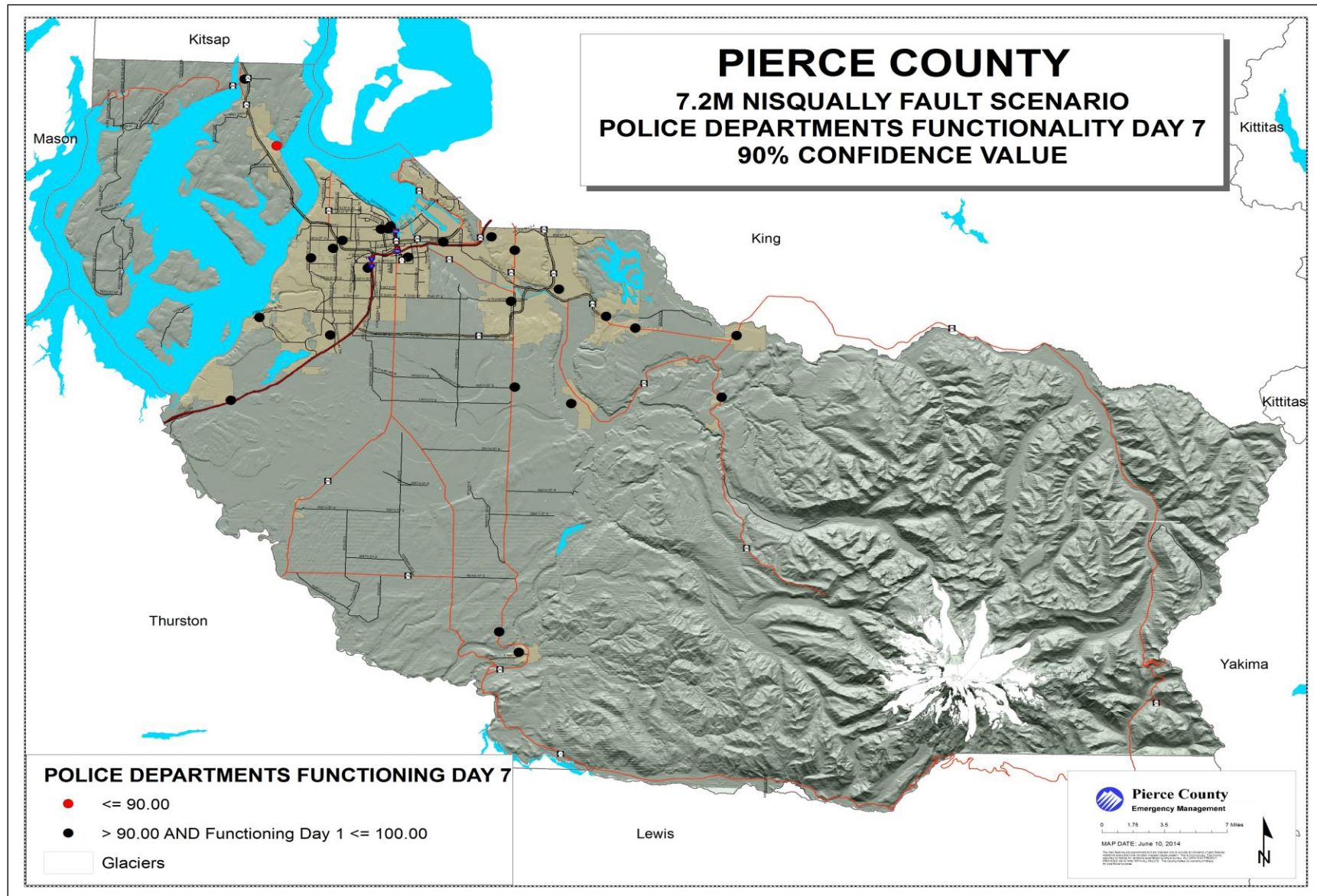
Map D-18 Pierce County Nisqually Fault Scenario Fire Stations Functionality Day 7



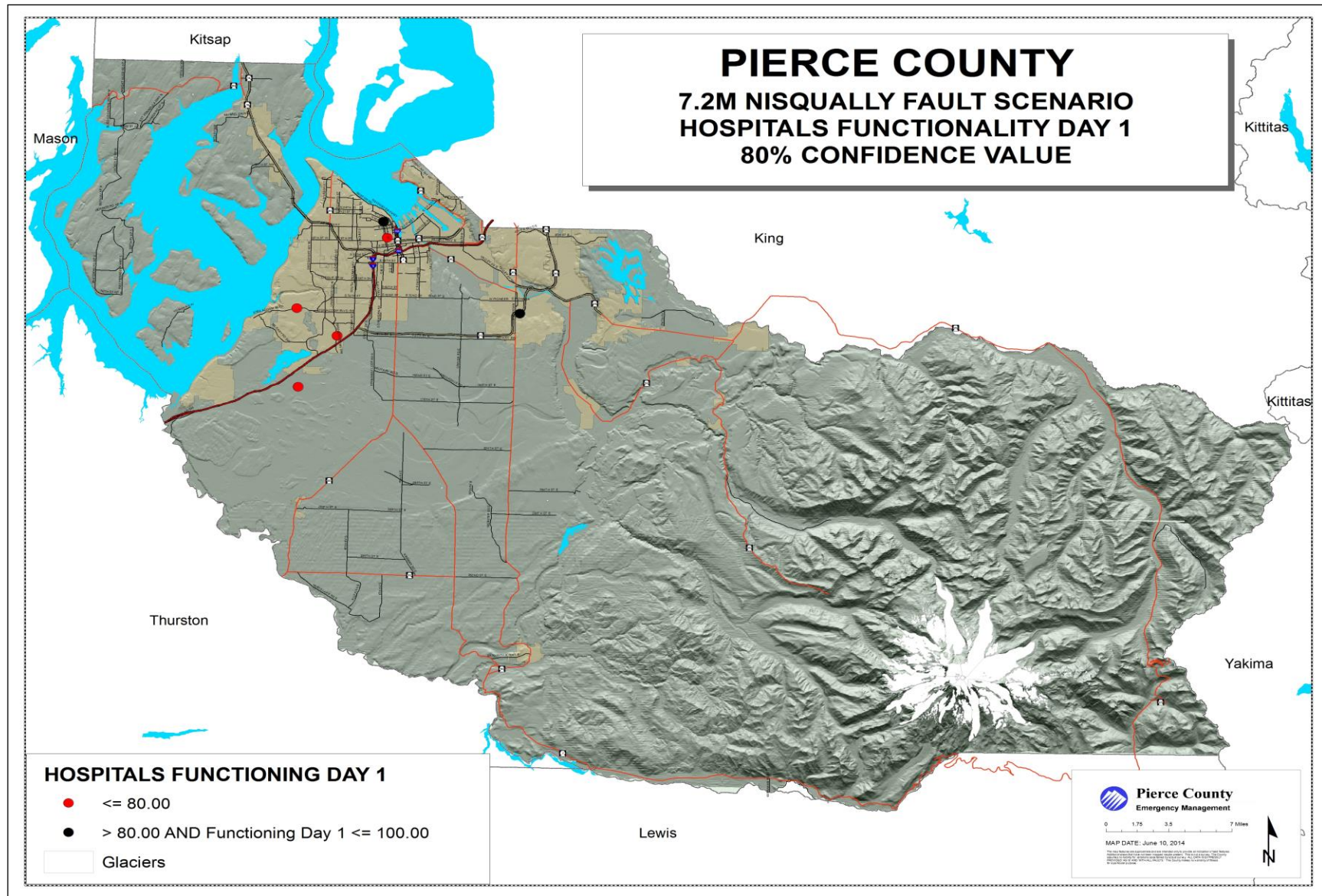
Map D-19 Pierce County Nisqually Fault Scenario Police Departments Functionality Day 1 ⁵



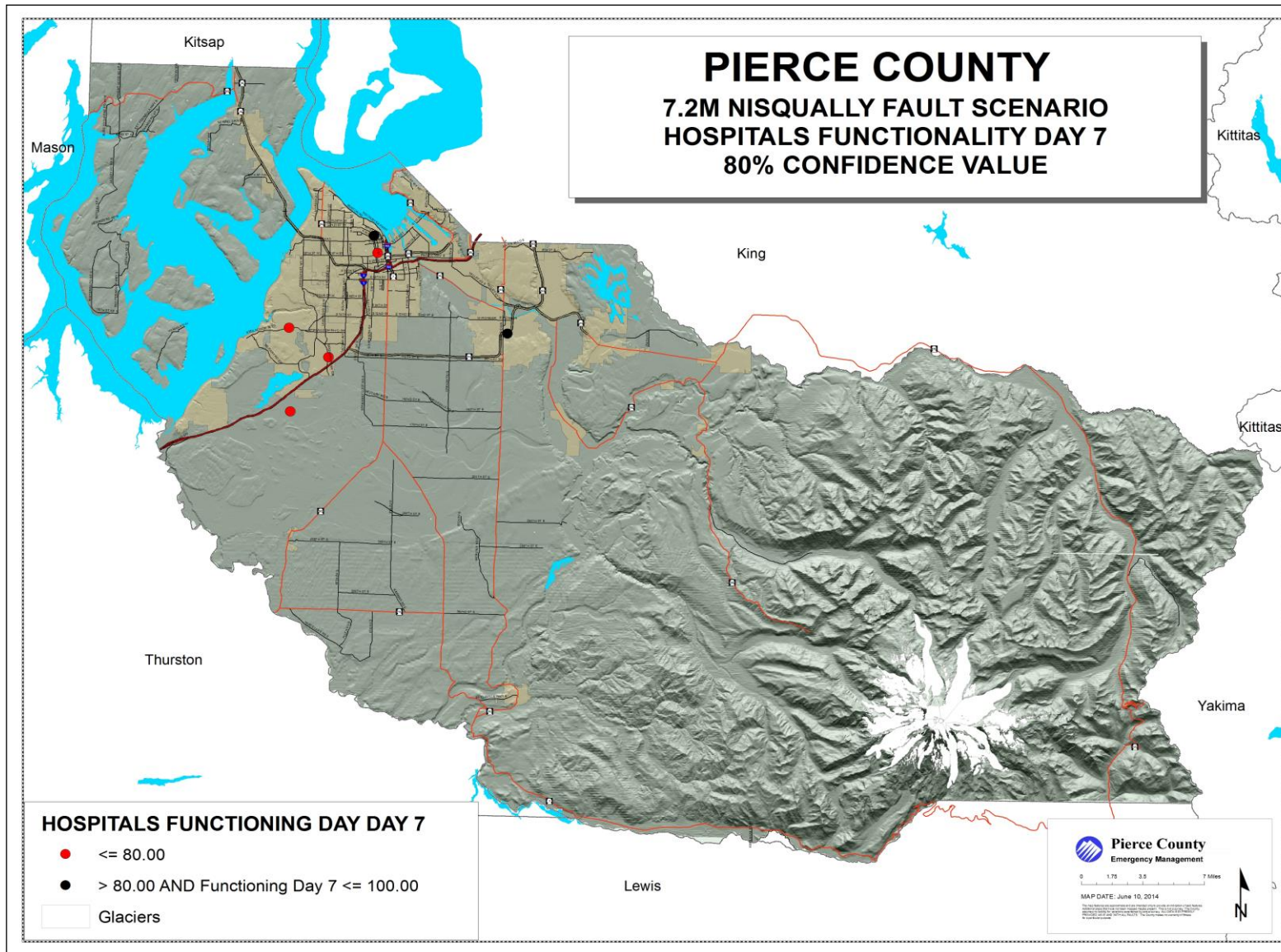
Map D-20 Pierce County Nisqually Fault Scenario Police Departments Functionality Day 7 ⁶



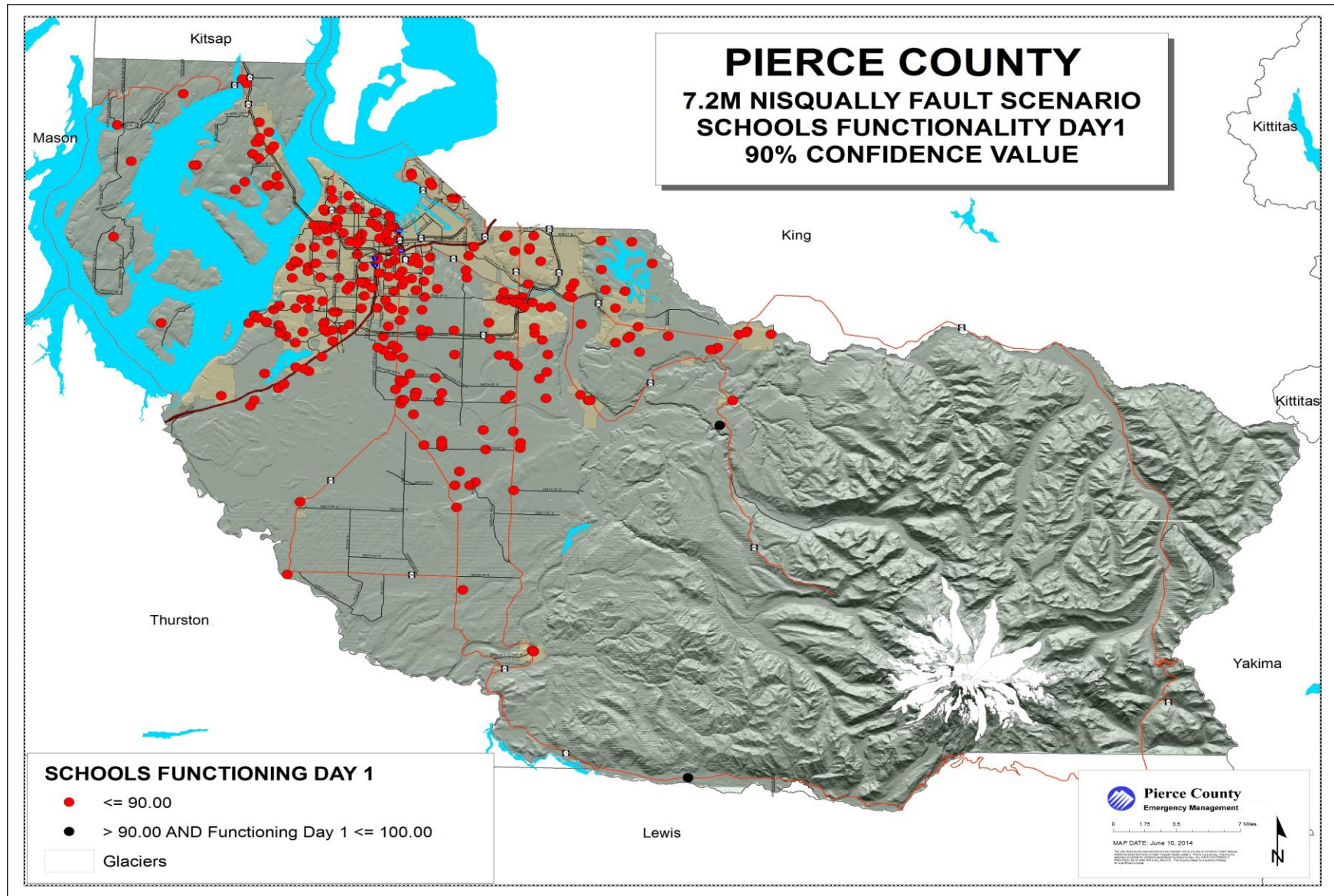
Map D-21 Pierce County Nisqually Fault Scenario Hospital Functionality Day 1 ⁷



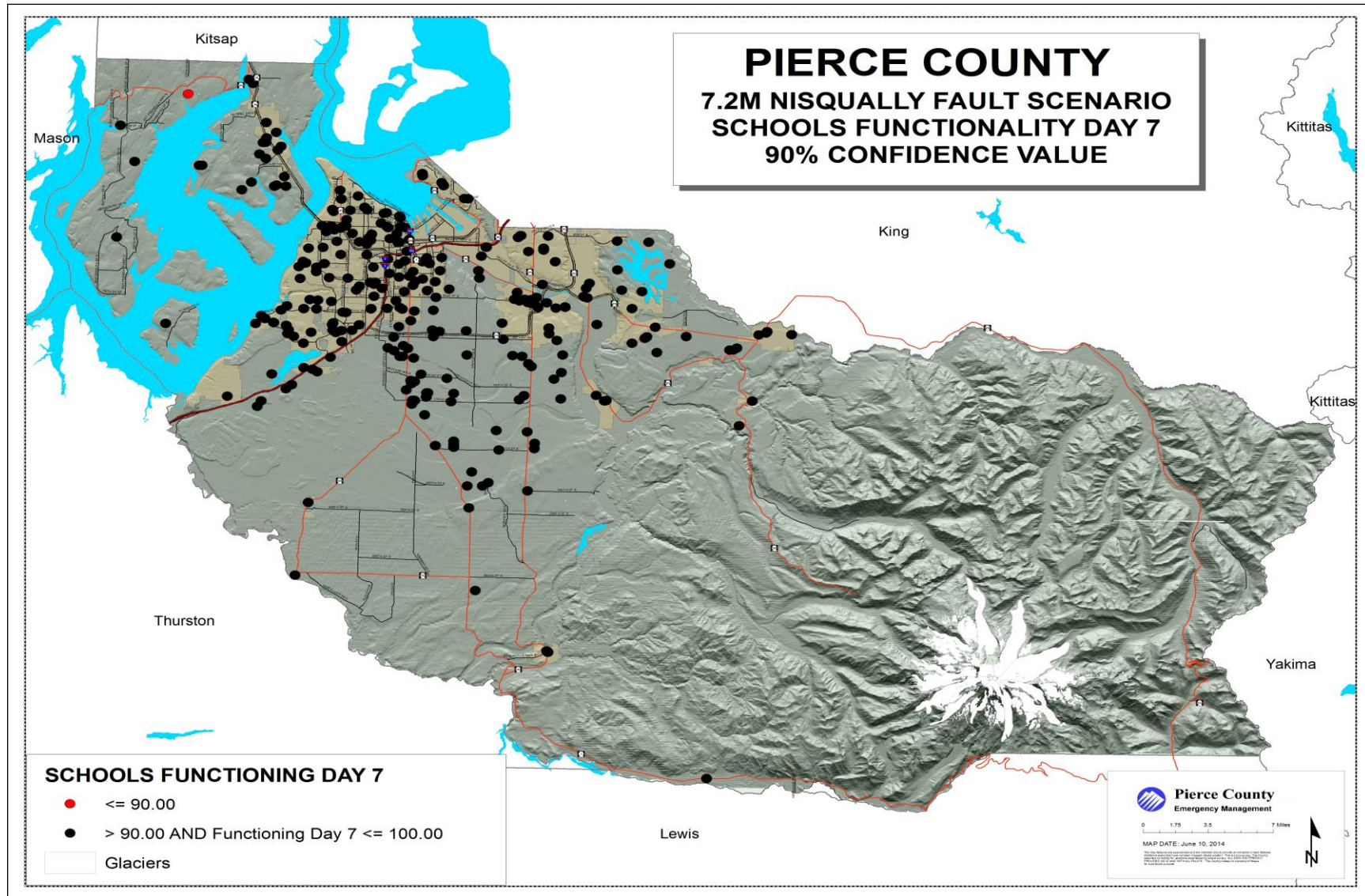
Map D-22 Pierce County Nisqually Fault Scenario Hospital Functionality Day 7⁸



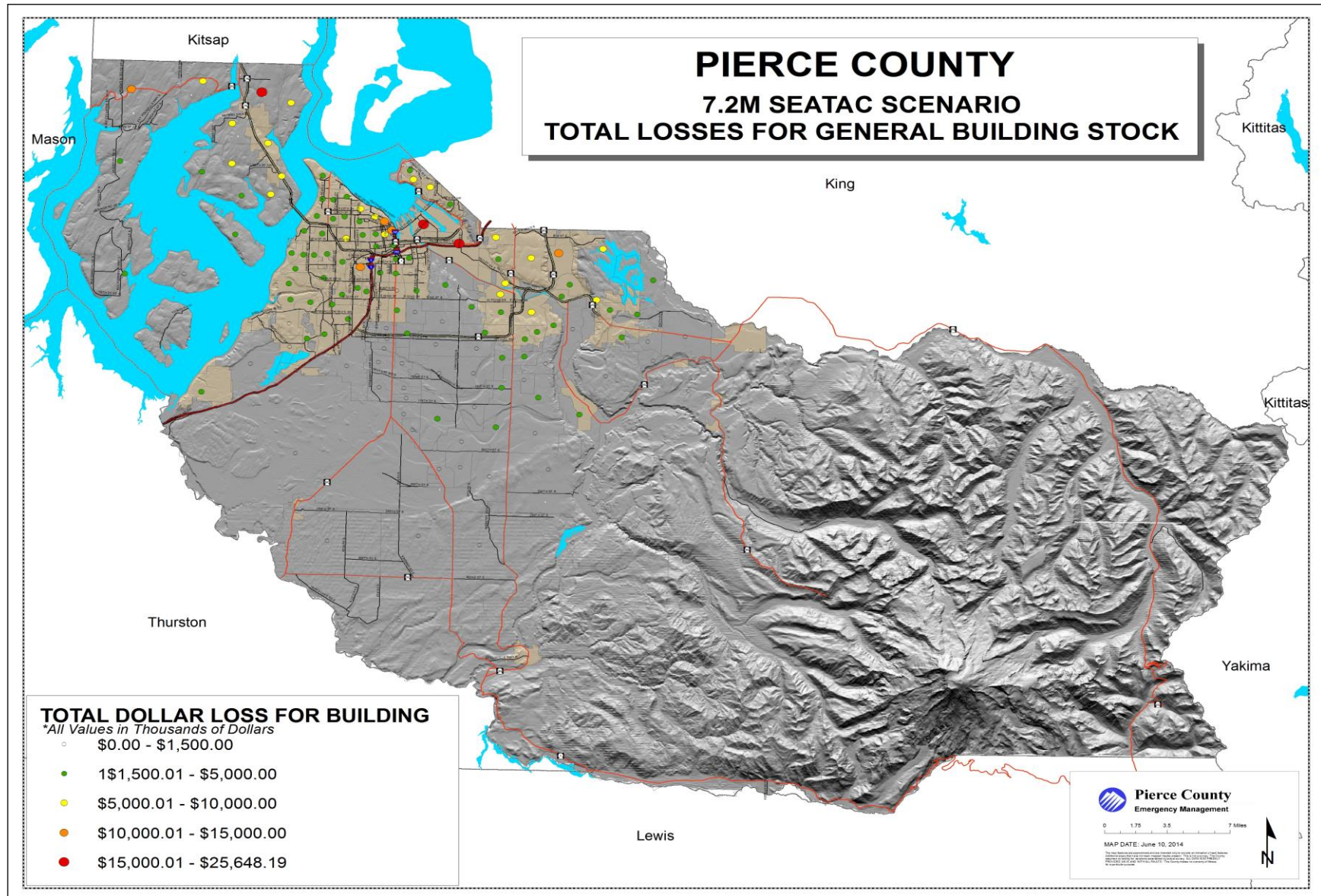
Map D-23 Pierce County Nisqually Fault Scenario Schools Functionality Day 1



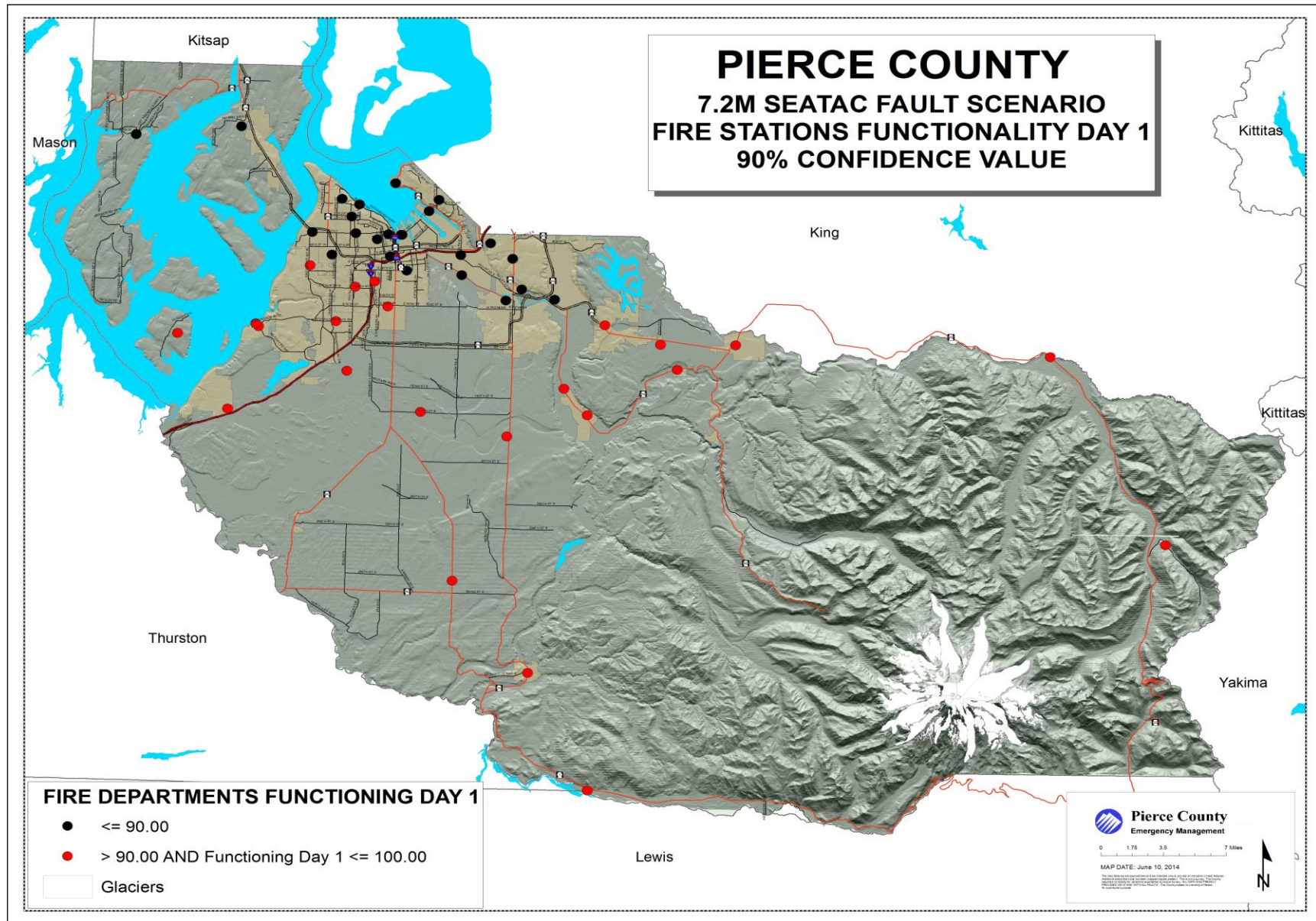
Map D-24 Pierce County Nisqually Fault Scenario Schools Functionality Day 7



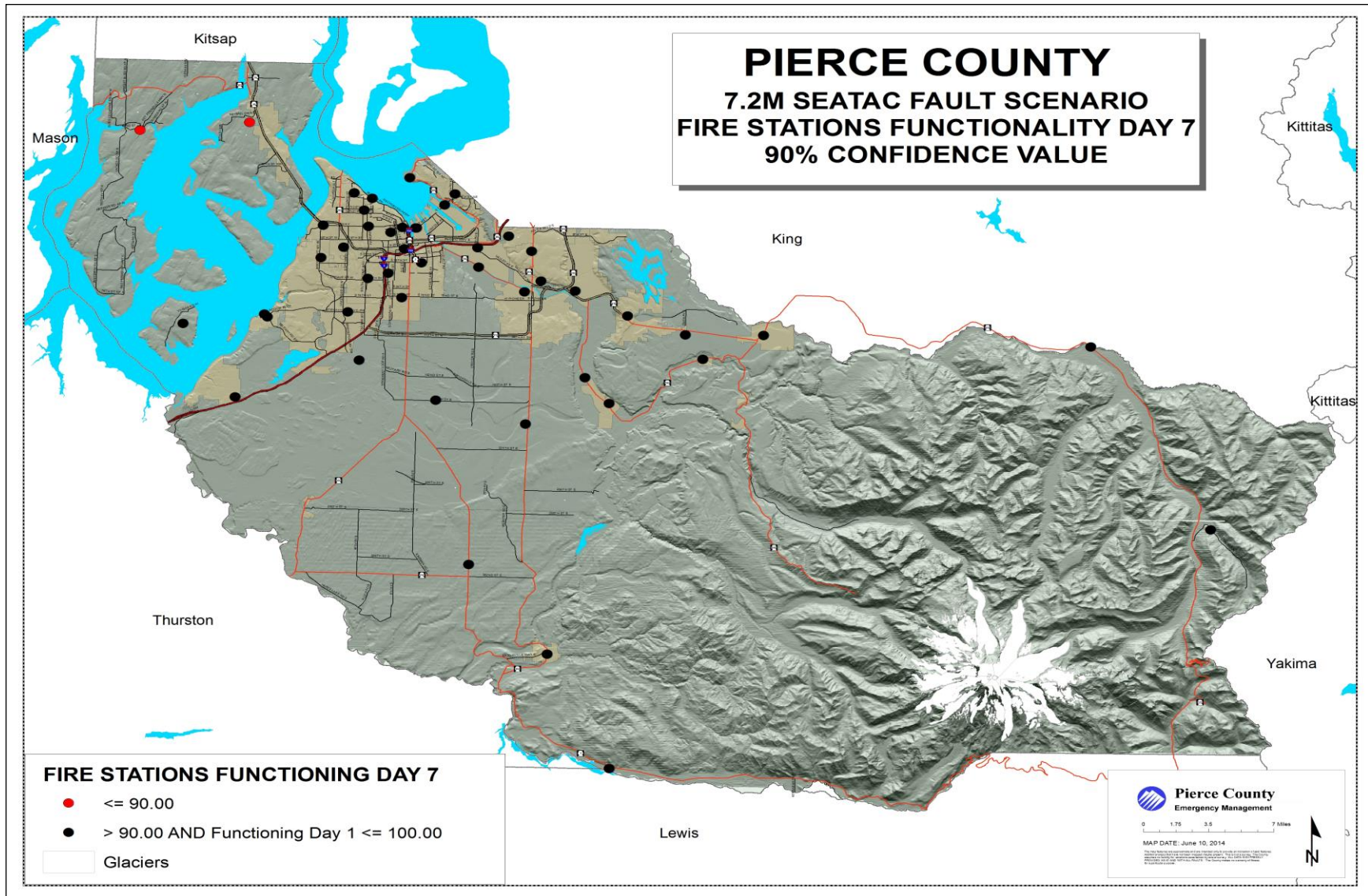
Map D-25 Pierce County SEATAC Fault Scenario Total Losses



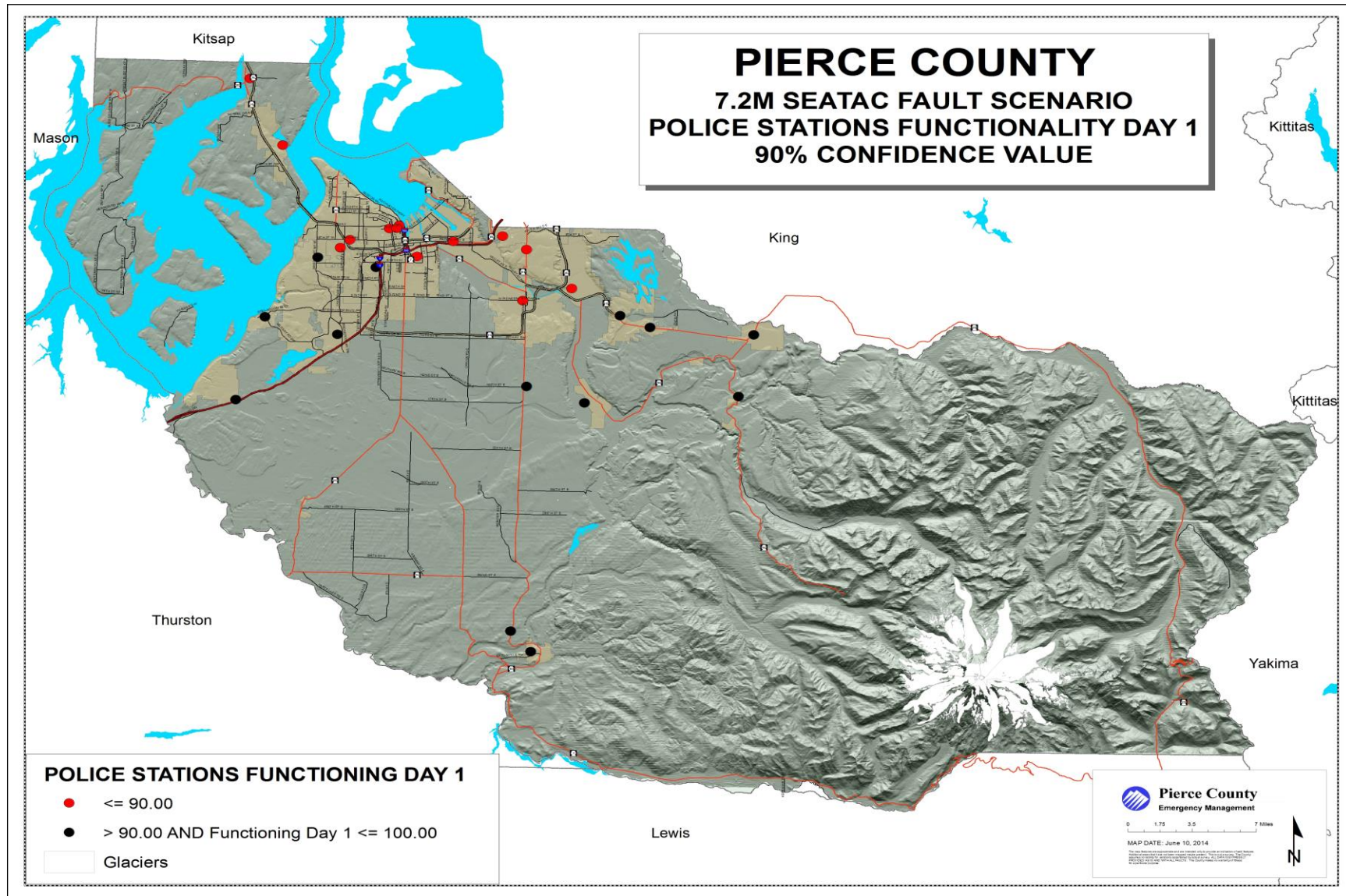
Map D-26 Pierce County SEATAC Fault Scenario Fire Stations Functionality Day 1



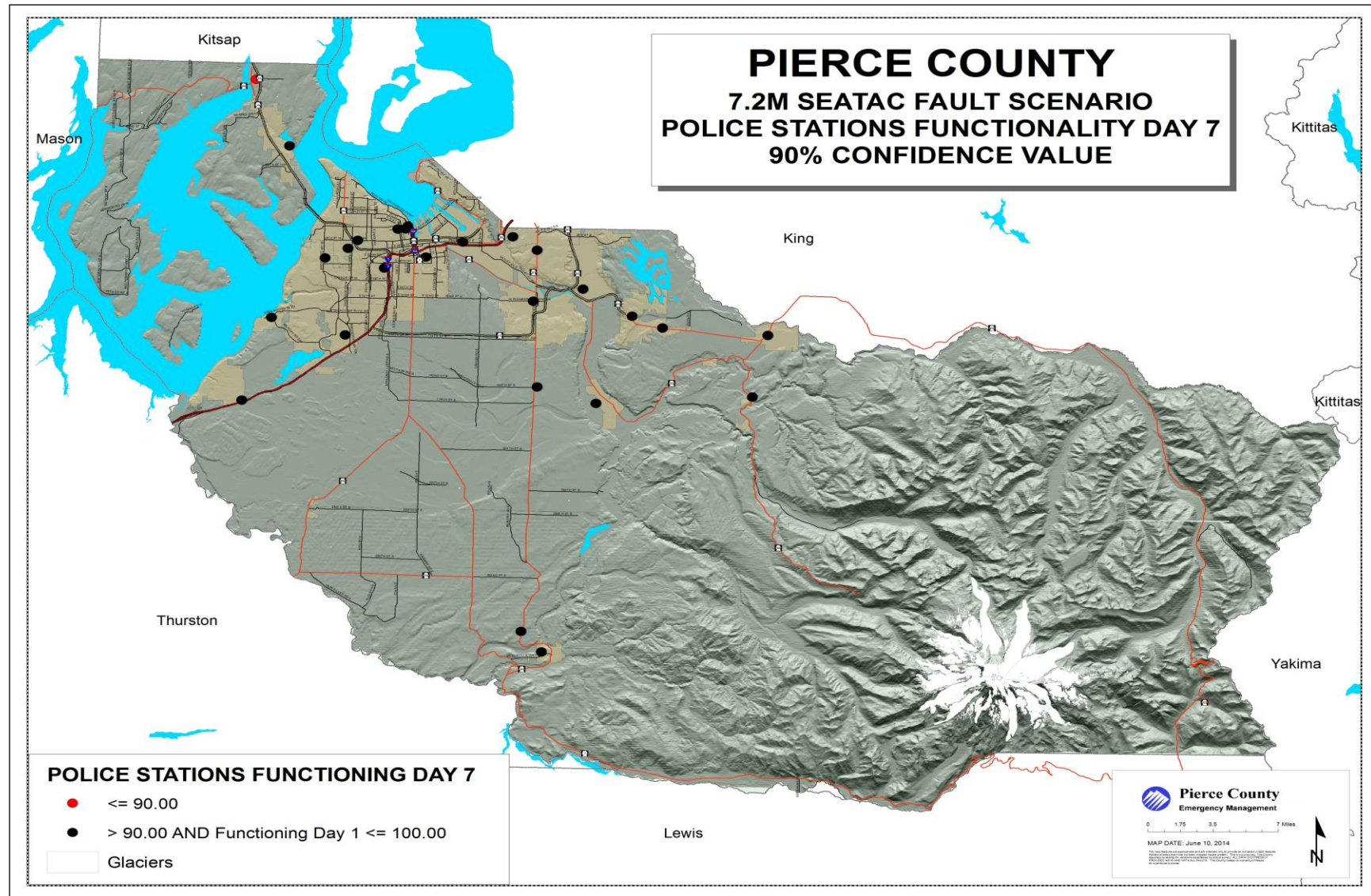
Map D-27 Pierce County SEATAC Fault Scenario Fire Stations Functionality Day 7



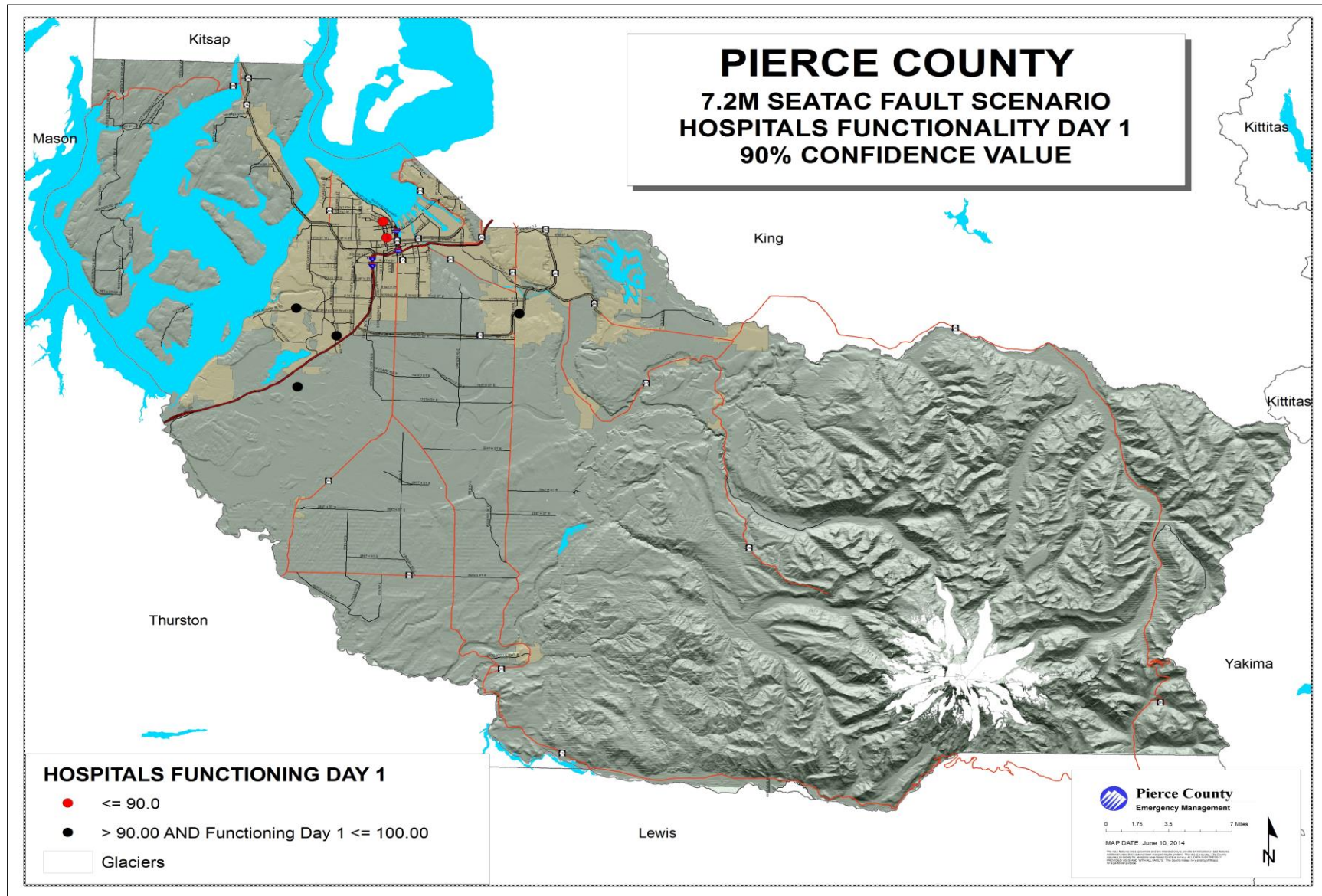
Map D-28 Pierce County SEATAC Fault Scenario Police Department Functionality Day 1 ⁹



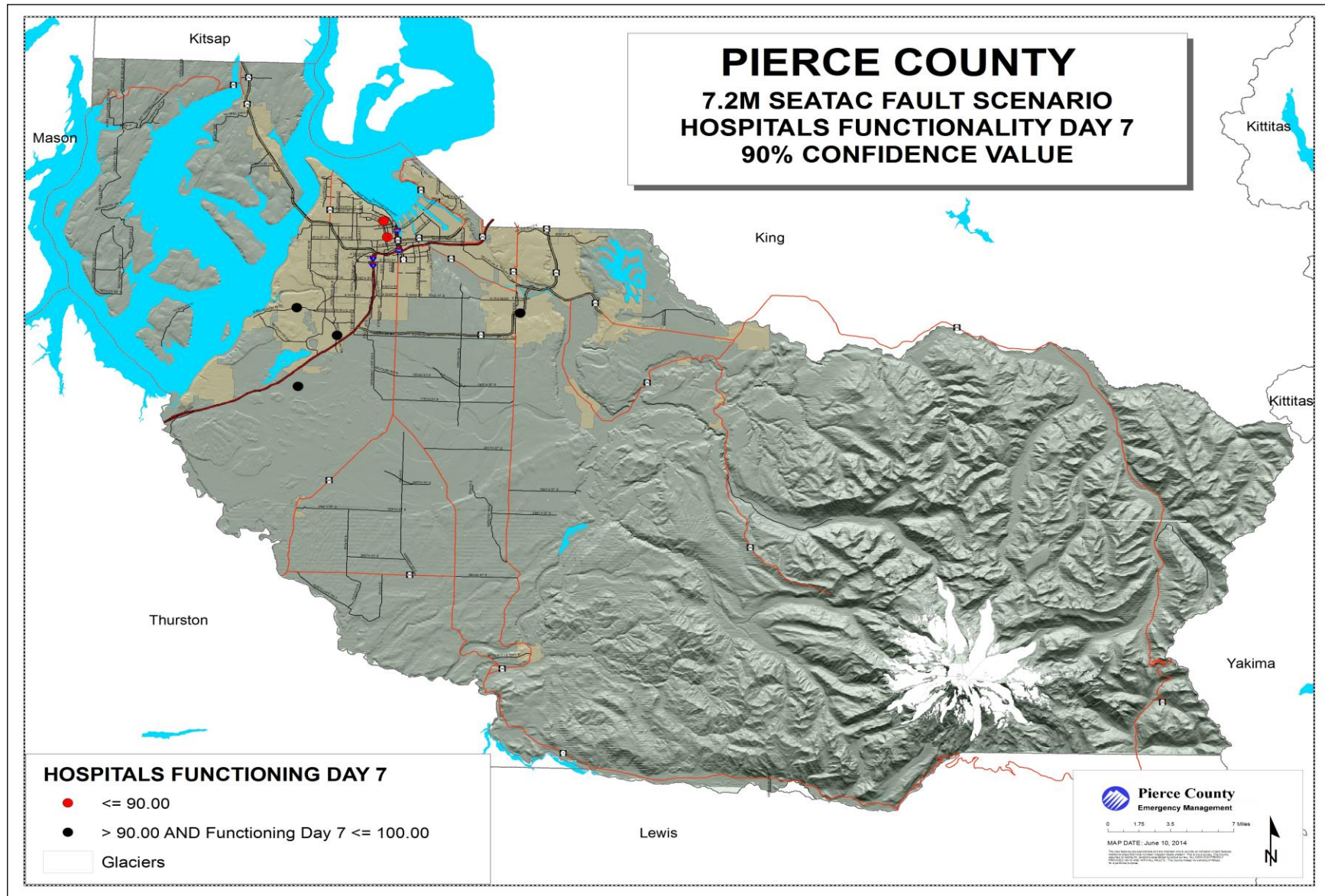
Map D-29 Pierce County SEATAC Fault Scenario Police Department Functionality Day 7¹⁰



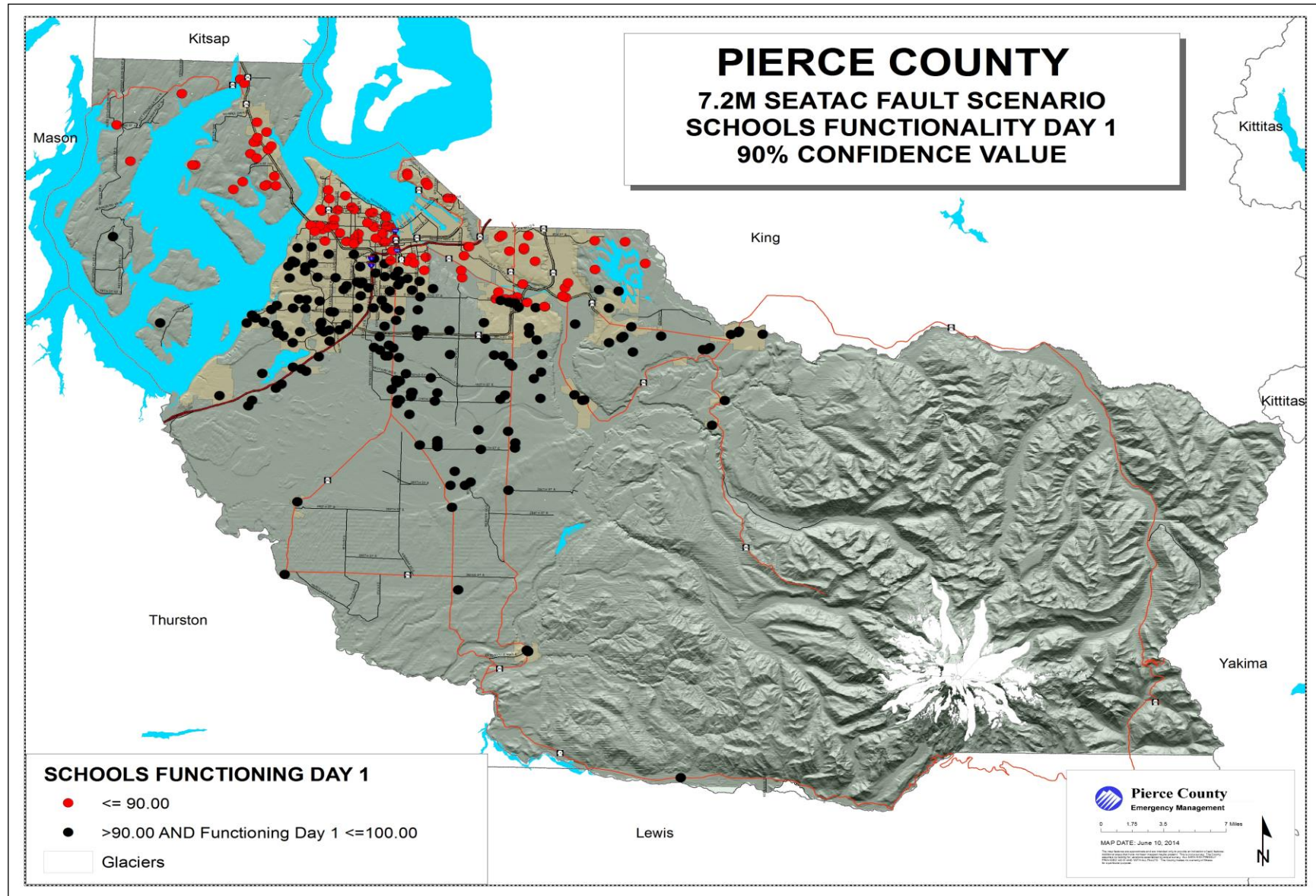
Map D-30 Pierce County SEATAC Fault Scenario Hospital Functionality Day 1 Map¹¹



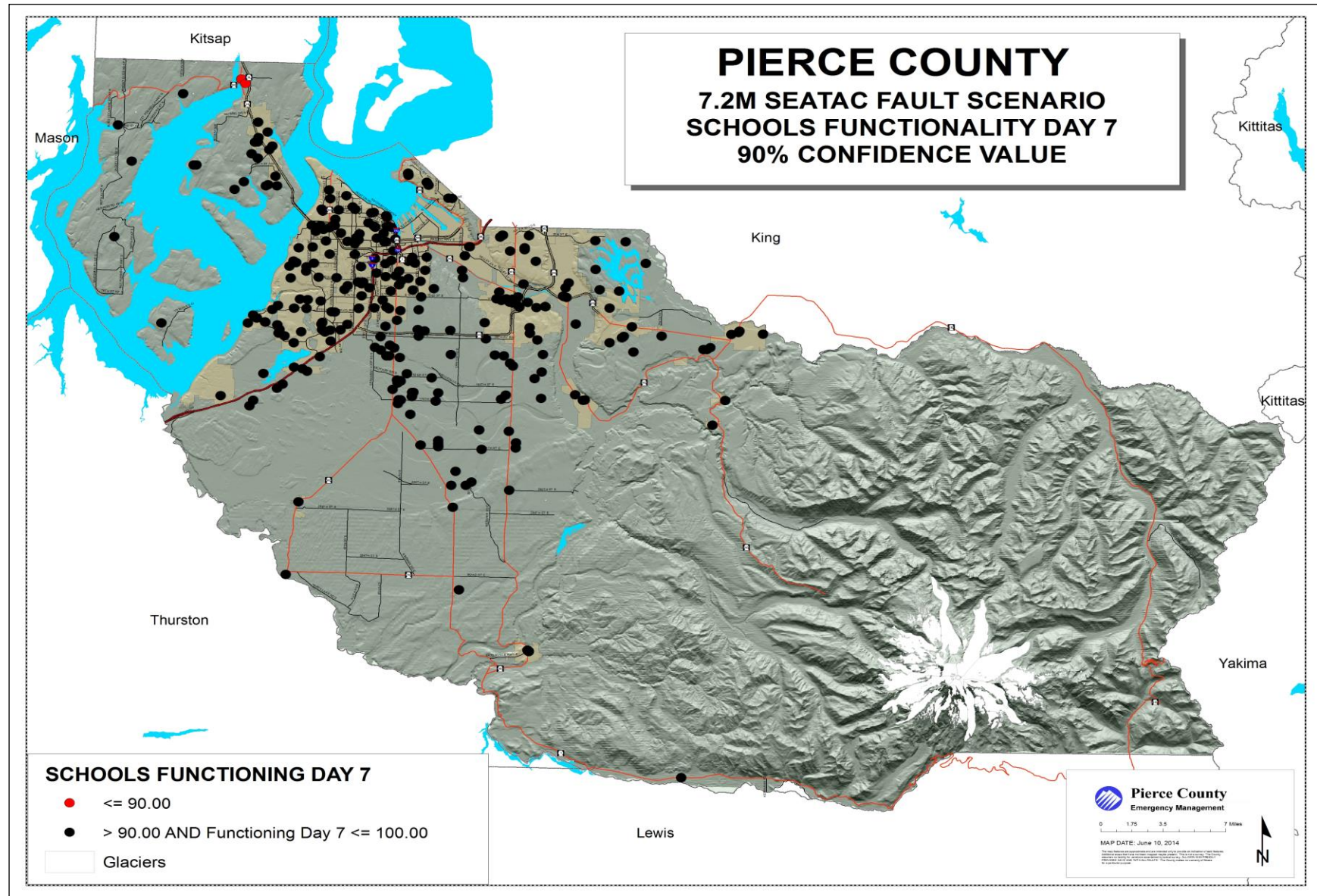
Map D-31 Pierce County SEATAC Fault Scenario Hospital Functionality Day 7¹²



Map D-32 Pierce County SEATAC Fault Scenario Schools Functionality Day 1



Map D-33 Pierce County SEATAC Fault Scenario Schools Functionality Day 7



Endnotes

¹ Hazus has placed the police station location incorrectly for the City of Orting. It should be located in the middle of the city with Fire District #18 as they share the same building.

² Hazus has placed the police station location incorrectly for the City of Orting. It should be located in the middle of the city with Fire District #18 as they share the same building.

³ St. Anthony's Hospital is not included on the map due to the recent construction of the hospital lack of data at the time the analysis was done.

⁴ St. Anthony's Hospital is not included on the map due to the recent construction of the hospital lack of data at the time the analysis was done.

⁵ Hazus has placed the police station location incorrectly for the City of Orting. It should be located in the middle of the city with Fire District #18 as they share the same building.

⁶ Hazus has placed the police station location incorrectly for the City of Orting. It should be located in the middle of the city with Fire District #18 as they share the same building.

⁷ St. Anthony's Hospital is not included on the map due to the recent construction of the hospital lack of data at the time the analysis was done.

⁸ St. Anthony's Hospital is not included on the map due to the recent construction of the hospital lack of data at the time the analysis was done.

⁹ Hazus has placed the police station location incorrectly for the City of Orting. It should be located in the middle of the city with Fire District #18 as they share the same building.

¹⁰ Hazus has placed the police station location incorrectly for the City of Orting. It should be located in the middle of the city with Fire District #18 as they share the same building.

¹¹ St. Anthony's Hospital is not included on the map due to the recent construction of the hospital lack of data at the time the analysis was done.

¹² St. Anthony's Hospital is not included on the map due to the recent construction of the hospital lack of data at the time the analysis was done.

APPENDIX E

**REGION 5 ALL HAZARD MITIGATION PLAN
2020-2025 EDITION
CITY OF EDGEWOOD
DOCUMENTATION RECORDS**

TABLE OF CONTENTS

TABLE OF CONTENTS	1
PUBLIC COMMENT DOCUMENTATION.....	3
PUBLIC MEETINGS FOR 2020-2025 EDITION.....	3

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PUBLIC COMMENT DOCUMENTATION

Public Meetings for 2020-2025 Edition

The City of Edgewood held its first Public Involvement and Comment Meeting on January 15, 2019 for the update of the current All Hazard Mitigation Plan at the City of Edgewood's City Hall from 7:00pm to 8:00pm. The meeting capitalized on the City Council's Study Session and was therefore open to the public and City Council for comments and questions regarding the Hazard Mitigation Plan and discussing the hazards the City of Edgewood faces. For efficiency, the Hazard Mitigation Plan was presented to the City Council at this meeting to acquire pre-approval from the jurisdiction's governing body. Additionally, preparedness information was also available to the public as a public outreach component to the meeting. The City of Edgewood had representation from the Police Department and assistance from Pierce County Department of Emergency Management. The citizens that attended the meeting were engaged and understood the hazards the City of Edgewood faces. The meeting was posted on the City's website for further outreach. The Planning Team will evaluate their methodologies to see ways to increase public participation with future Public Comment Meetings.

Figure E-1 Preparedness Handout at Meeting



The City of Edgewood provided a second opportunity to the public to gather feedback for the final review of the plan through an online survey. The Community Preparedness Survey was developed to determine how prepared a jurisdiction's citizens are and collect any suggestions provided for mitigating local hazards. The City of Edgewood posted the survey link to their website and several residents participated, mostly ranging from age 46-55, with a few over 55 years old. All respondents were aware of their local hazards; everyone was mainly concerned with earthquakes, but also listed lahars, landslides, severe winter storms, and wildfires as hazards that posed a threat to their community. All but one resident said they had discussed an emergency plan with their family and collected important documents in a safe location. The main sources of emergency information for the community are internet, television, radio, and social media apps. These respondents chose not to provide suggestions or feedback for mitigation strategies for the City, but the option was available to them. A screenshot of two survey questions and the results are shown on the following page.


The Community Preparedness Survey has been available November 11, 2019 through May 31, 2020 to all residents of Pierce County. The first question in the survey asks residents what jurisdiction they live in so that individual's responses can be counted for a specific jurisdiction. Pierce County Department of Emergency Management has access to the database of survey results and monitors them regularly to provide updates to jurisdictions that have advertised the link on their website and/or social media. This method of public outreach provides a more inclusive approach to communities that may not be able to attend in-person meetings like traditional outreach events that have been held in the past. Providing both a physical meeting and an online option ensures that the whole community is being involved in the planning process for the City of Edgewood's All Hazard Mitigation Plan.

CONTINUED PUBLIC INVOLVEMENT

The City of Edgewood continues with Public Involvement with outreach events planned during 2020. A picnic scheduled for July 18th will include Pierce County Emergency Management and another Emergency Preparedness community meeting scheduled for September 26th. These events provide a great opportunity to bring the community together to learn, collaborate on ideas and strengthening community relationships.


Figure E-2 Example Survey Results

3) Have you or a member of your household:

 [Graph this question](#)

	Yes	No	Total
Attended meetings or received information on disasters/emergency preparedness?	132 (44.15%)	167 (55.85%)	299
Discussed an emergency plan?	204 (68.00%)	96 (32.00%)	300
Started or completed an emergency supply kit?	182 (61.69%)	113 (38.31%)	295
Been trained on First Aid or Cardio-Pulmonary Resuscitation (CPR) during this last year?	170 (57.43%)	126 (42.57%)	296
Been trained in the last 3 years in Disaster First Aid or Wilderness First Aid?	46 (15.65%)	248 (84.35%)	294
Collected important documents in a safe location?	205 (68.11%)	96 (31.89%)	301
Signed up for Pierce County ALERT?	129 (43.14%)	170 (56.86%)	299
2 skipped this question [View]	Total responses 303		99.34%

4) Have you or a member of your household:

 [Graph this question](#)

	Yes	No	Does Not Apply	Total
Fit your gas appliances with flexible connections?	98 (32.89%)	67 (22.48%)	133 (44.63%)	298
Used fire-resistant building or roofing materials?	142 (47.97%)	92 (31.08%)	62 (20.95%)	296
Secured your home to its foundation?	147 (50.17%)	72 (24.57%)	74 (25.26%)	293
Braced unreinforced masonry, concrete walls, and chimney?	74 (25.26%)	89 (30.38%)	130 (44.37%)	293
Elevated your home in preparation for floods?	31 (10.58%)	117 (39.93%)	145 (49.49%)	293
Secured your water heater, cabinets, bookcases, and pictures to the wall?	149 (50.17%)	131 (44.11%)	17 (5.72%)	297
2 skipped this question [View]	Total responses 303			99.34%

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APPENDIX F
COMPLETED/DEFERRED MITIGATION STRATEGIES

REGION 5 ALL HAZARD MITIGATION PLAN
2020-2025 EDITION
CITY OF EDGEWOOD
MITIGATION STRATEGY SECTION

Table of Contents

DEFERRED MITIGATION MEASURES4

 JOIN NATIONAL FLOOD INSURANCE PROGRAM COMMUNITY RATING SYSTEM4

 IDENTIFY AND IMPLEMENT CHRISSELLA ROAD EAST IMPROVEMENTS5

 IDENTIFY AND IMPLEMENT EDGEWOOD DRIVE AND SUMNER HEIGHTS ROAD IMPROVEMENTS.....5

ENDNOTES.....7

Deferred or Completed Mitigation Strategies

The following mitigation strategies were removed from the Section 5 Mitigation Plan and placed in Appendix F to retain them. They have either been deferred or completed. In the future as mitigation strategies are completed, they will be moved to this location to provide a history of accomplishments. Deferred mitigation strategies can be moved back into the “working” mitigation strategies of Section 5 at any time.

Table 5-1 City of Edgewood Mitigation Strategy Matrix

Implementation Mechanism	Mitigation Measure (<i>Hazard(s)</i>) ¹	Lead Jurisdiction(s) / Department(s)	Timeline (years)	Plan Goals					
				Life and Property	Operations Continuity	Partnerships	Natural Resources	Preparedness	Sustainable Economy
<u>City Government</u>	1. Join National Flood Insurance Program Community Rating System (CRS) (<i>E,L,V,D,F,SW,WUI</i>)	Edgewood	Ongoing	✓		✓	✓	✓	✓
	2. Identify and Implement Chrisella Road East Improvements (<i>E,L,T,V,F,SW</i>)	Port of Tacoma, Edgewood, Regional Partners	5	✓	✓	✓			✓
	3. Identify and Implement Edgewood Drive and Sumner Heights Road Improvements (<i>E,L,F,SW</i>)	Edgewood	6-8	✓	✓	✓	✓		✓

Deferred Mitigation Measures

Join National Flood Insurance Program Community Rating System

Hazards: E, L, V, D, F, WUI, SW¹

This will involve the City joining the National Flood Insurance Program's (NFIP) Community Rating System (CRS). This is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community actions meeting the three goals of the CRS: 1) reduce flood losses; 2) facilitate accurate insurance rating; and 3) promote the awareness of flood insurance.

For CRS participating communities, flood insurance premium rates are discounted in increments of 5%; i.e., a Class 1 community would receive a 45% premium discount, while a Class 9 community would receive a 5% discount (a Class 10 is not participating in the CRS and receives no discount). The CRS classes for local communities are based on 18 creditable activities, organized under four categories: i) Public Information, ii) Mapping and Regulations, iii) Flood Damage Reduction, and iv) Flood Preparedness.

1. **Goal(s) Addressed** = Protect Life and Property; Establish and Strengthen Partnerships for Implementation; Preserve or Restore Natural Resources; Increase Public Preparedness for Disasters; Promote A Sustainable Economy.
2. **Cost of Measure** = TBD
3. **Funding Source and Situation** = Funding could be obtained through local budget or grants.
4. **Lead Jurisdiction(s)** = City of Edgewood
5. **Timeline** = Long-term
6. **Benefit** = City of Edgewood, Residents, Businesses
7. **Life of Measure** = Varies
8. **Community Reaction** = the proposal would be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
			X
Comments			
This project is deferred at this time.			

Origin

Previous Plan	Current Plan
X	X

Identify and Implement Chrisella Road East Improvements

Hazards: E, L, T, V, F, SW¹

Edgewood will identify and implement improvements to Chrisella Road East in southern area of the City. This project will look at elevating the road above the railroad tracks and other structural improvements as the road leaves the valley and climbs the plateau of the City. This project will be a joint project under the Freight Action Strategy (FAST) Corridor Program.

1. **Goal(s) Addressed** = Protect Life and Property; Promote A Sustainable Economy; Ensure Continuity of Operations; Establish and Strengthen Partnerships for Implementation.
2. **Cost of Measure** = TBD
3. **Funding Source and Situation** = Funding could be obtained through local budgets or FAST Program grants.
4. **Lead Jurisdiction(s)** = Port of Tacoma, City of Edgewood, Regional Partners
5. **Timeline** = Long-Term
6. **Benefit** = City of Edgewood and Regional Partners
7. **Life of Measure** = 50 years
8. **Community Reaction** = the proposal would be somewhat controversial.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
			X
Comments			
Conversations with the Port of Tacoma and other stakeholders may occur as time and resources allow.			

Origin

Previous Plan	Current Plan
X	X

Identify and Implement Edgewood Drive and Sumner Heights Road Improvements

Hazards: E, L, F, SW¹

Edgewood will identify and implement improvements to Edgewood Drive and Sumner Heights Road in south-eastern area of the City. The project will look at such issues involving landslide and flood related vulnerabilities along with improving the area as a pedestrian evacuation route from the valley floor. This project will improve these roads in order to continue to provide the services needed.

1. **Goal(s) Addressed** = Protect Life and Property; Promote A Sustainable Economy; Ensure Continuity of Operations; Preserve or Restore Natural Resources; Establish and Strengthen Partnerships for Implementation.
2. **Cost of Measure** = TBD
3. **Funding Source and Situation** = Funding could be obtained through local budget and grants.
4. **Lead Jurisdiction(s)** = City of Edgewood
5. **Timeline** = Long-Term
6. **Benefit** = City of Edgewood and Regional Partners
7. **Life of Measure** = 50 years
8. **Community Reaction** = the proposal would benefit those affected, with no adverse reaction from others.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
			X
Comments			
A portion of this plan is part of the Comprehensive Plan for the city. Some work is tentatively planned for 2026.			

Origin

Previous Plan	Current Plan
X	X

Endnotes

¹ Hazard Codes:

Where necessary, the specific hazards addressed are noted as follows:

A:	Avalanche
E:	Earthquake
F:	Flood
D:	Drought
T:	Tsunami
V (l or t):	Volcanic (lahar or tephra-specific)
SW:	Severe Storm (wind-specific)
L:	Landslide
WUI:	Wildland/Urban Interface Fire
MM:	Manmade to include terrorism
All:	All hazards, including some man made. Where only natural hazards are addressed, it is noted.

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